Risk Factors Comparison 2023-10-30 to 2022-10-31 Form: 10-K

Legend: **New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

Any of these sanctions could also result in higher than anticipated costs or lower than anticipated sales of any Rafael Medical Devices' device (s) that receives approval **, marketing authorization,** or clearance and adversely affect our business, results of operations, and financial condition. Even if Rafael Medical Devices receives regulatory approval **, marketing authorization,** or clearance for any device candidate, they will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Any regulatory approvals **, marketing authorizations,** or clearances that Rafael Medical Devices may receive for their ~~product~~ **device** candidates will require the regular submission of reports to regulatory authorities and surveillance to monitor the safety and effectiveness of the medical device, may contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, and may include burdensome post- approval study requirements. If the FDA or a comparable foreign regulatory authority approves **, issues a marketing authorization for,** or clears a device candidate, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export, and recordkeeping for Rafael Medical Devices' devices **, if any,** will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post- marketing information and reports, registration, as well as continued compliance with cGMP and GCP requirements for any clinical trials that are conducted post- approval. Manufacturers of approved devices and their facilities are subject to continual review and periodic, unannounced inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. Later discovery of previously unknown problems with marketed devices, including adverse events of unanticipated severity or frequency, or with third- party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things: ● restrictions on the marketing or manufacturing of any Rafael Medical Devices' device that receives approval or clearance, withdrawal of the device from the market or voluntary or mandatory device recalls; ● requirements to conduct post- marketing studies or clinical trials; ● fines, restitutions, disgorgement of profits or revenue, warning letters, untitled letters or holds on clinical trials; ● refusal by the FDA to approve or clear pending applications or supplements to approved applications filed by Rafael Medical Devices or suspension or revocation of approvals, if any; ● product seizure or detention, or refusal to permit the import or export of Rafael Medical Devices' devices; and ● injunctions or the imposition of civil or criminal penalties. The occurrence of any event or penalty described above may inhibit Rafael Medical Devices' ability to commercialize their device candidates and generate revenue and could require Rafael Medical Devices to expend significant time and resources in response and could generate negative publicity. In addition, the FDA' s and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval **, marketing authorization,** or clearance of Rafael Medical Devices' device candidates. We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, the results of the 2020 United States Presidential Election impacted our business and industry. Namely, the Trump Administration took several Executive Actions, including the issuance of a number of Executive Orders, that imposed significant burdens on, or otherwise materially delayed, the FDA' s ability to engage in routine oversight activities, such as implementing statutes through rulemaking, issuance of guidance, and review and approval of applications seeking approval **, marketing authorization,** or clearance of device candidates. It is difficult to predict whether or how these orders will be rescinded and replaced under the Biden Administration. The policies and priorities of any administration are unknown and could materially impact the regulations governing our device candidates. If we or Rafael Medical Devices are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or they are not able to maintain regulatory compliance as a result of a changing regulatory landscape or otherwise, we or they may be subject to enforcement action, may lose any regulatory approval (s) **, marketing authorization (s),** or clearance (s) that they obtain, if any, or fail to obtain new regulatory approvals **, marketing authorizations,** or clearances, and they may not be able to achieve or sustain profitability, which would adversely affect our business, prospects, financial condition, and results of operations. Rafael Medical Devices is dependent upon third parties for a variety of functions. These arrangements may not provide Rafael Medical Devices with the benefits they expect. Rafael Medical Devices relies on third parties to perform a variety of functions. Rafael Medical Devices is party to numerous agreements that place substantial responsibility on clinical research organizations, contract manufacturing organizations, consultants, and other service providers for the development of Rafael Medical Devices' device candidates. Rafael Medical Devices also relies on medical and academic institutions to perform aspects of its clinical trials of device candidates. In addition, an element of Rafael Medical Devices' research and development strategy has been to in- license technology and device candidates from academic and government institutions in order to minimize or eliminate investments in early research. Rafael Medical Devices may not be able to enter new arrangements without undue delays or expenditures or on favorable terms, and these arrangements may not allow Rafael Medical Devices to compete successfully. Moreover, if third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct clinical trials in accordance with regulatory requirements or applicable protocols, Rafael Medical Devices' device candidates may not be approved **, receive marketing authorization,** or **be** cleared for marketing and commercialization or such approval **, marketing authorization,** or clearance may be delayed. If that occurs, Rafael Medical Devices or its collaborators will not be able, or may be delayed in their efforts, to commercialize Rafael Medical Devices' device candidates. Product liability lawsuits against Rafael Medical Devices or their collaborators **or us** could cause substantial liabilities and could limit commercialization of any medical devices that

Rafael Medical Devices or their collaborators may develop. Rafael Medical Devices and their collaborators **and we** face an inherent risk of product liability exposure related to the testing and manufacturing of Rafael Medical Devices' device candidates in human clinical trials and will face an even greater risk if Rafael Medical Devices or they commercially sell any medical devices that Rafael Medical Devices or they may develop that secure regulatory approval **, marketing authorization,** or clearance. Rafael Medical Devices' device candidates are designed to affect, and any future devices will be designed to affect, important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with Rafael Medical Devices' device candidates or devices could result in patient injury or death. The medical device industry has historically been subject to extensive litigation over product liability claims, and we cannot assure you that we will not face product liability claims. We may be subject to product liability claims if Rafael Medical Devices' device candidates or devices cause, or merely appear to have caused, patient injury or death, even if such injury or death was as a result of supplies or components that are produced by third- party suppliers. Product liability claims may be brought against us by consumers, healthcare providers or others selling or otherwise coming into contact with our products, among others. If Rafael Medical Devices or their collaborators **, or we,** cannot successfully defend themselves **or ourselves** against product liability claims that Rafael Medical Devices' device candidates or devices caused injuries, Rafael Medical Devices **and we** could incur substantial liabilities and reputational harm. Regardless of merit or eventual outcome, liability claims may result in: ● decreased demand for any device candidates or devices that Rafael Medical Devices may develop; ● injury to Rafael Medical Devices' reputation and significant negative media attention; ● withdrawal of clinical trial participants; ● significant costs to defend the related litigation; ● substantial monetary awards to trial participants or patients; ● loss of revenue; ● product recalls or withdrawals from the market; ● reduced resources of Rafael Medical Devices' management to pursue Rafael Medical Devices' business strategy, and diverted time and attention from executing on that strategy; and ● the inability to commercialize any devices that Rafael Medical Devices may successfully develop, if any. Although Rafael Medical Devices **and we** ~~maintains~~ **maintain** product liability and **/ or** clinical study liability insurance coverage that they **and we** believe is appropriate, this insurance is subject to deductibles and coverage limitations, and it may not be adequate to cover all liabilities that Rafael Medical Devices may incur. Rafael Medical Devices' **and our** current product liability insurance may not continue to be available to them **or us** on acceptable terms, if at all. If Rafael Medical Devices ~~is~~ **or we are** unable to obtain insurance at an acceptable cost or on acceptable terms or otherwise protect against potential product liability claims, they **or we** could be exposed to significant liabilities. We anticipate that Rafael Medical Devices will need to increase their insurance coverage as they continue to run clinical trials and if they successfully commercialize any device that receives regulatory approval **, marketing authorization,** or clearance. Insurance coverage in this setting is increasingly expensive. Rafael Medical Devices **or we** may not be able to maintain insurance coverage at a reasonable cost **, if at all,** or in an amount adequate to protect them **or us** against any product liability claim that may arise. In addition, if one of Rafael Medical Devices' collaboration partners were to become subject to product liability claims or were unable to successfully defend themselves against such claims, any such collaboration partner could be more likely to terminate such relationships and could potentially seek indemnification from Rafael Medical Devices, and therefore substantially limit the commercial potential of Rafael Medical Devices' device candidates. A product liability claim, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could adversely affect our business, results of operations, and financial condition. If Rafael Medical Devices fails to comply with environmental, health and safety laws and regulations, they could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of their businesses. Rafael Medical Devices is subject to numerous environmental, health **,** and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Rafael Medical Devices' operations involve the use of hazardous materials, including chemical materials. Rafael Medical Devices' operations also produce hazardous waste products. Rafael Medical Devices generally contracts with third parties for the disposal of these materials and wastes. Rafael Medical Devices cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from their use of hazardous materials, Rafael Medical Devices could be held liable for any resulting damages, and any liability could exceed their resources. Rafael Medical Devices also could incur significant costs associated with civil or criminal fines and penalties. Although Rafael Medical Devices maintains workers' compensation insurance to cover them for costs and expenses they may incur due to injuries to their employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. Rafael Medical Devices may not maintain adequate insurance for environmental liability or toxic tort claims that may be asserted against them in connection with their storage or disposal of hazardous materials. In addition, Rafael Medical Devices may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair Rafael Medical Devices' research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions. Risks Related to Reliance on Third Parties The ~~Healthcare~~ **Investment** Companies currently rely on, and plan to rely on in the future, third parties to conduct and support their preclinical studies and clinical trials. If these third parties do not properly and successfully carry out their contractual duties or meet expected deadlines, the ~~Healthcare~~ **Investment** Companies and may not be able to obtain regulatory approval of or commercialize their product candidates. The ~~Healthcare~~ **Investment** Companies have utilized and plan to continue to utilize and depend upon independent investigators and collaborators, such as medical institutions, CROs, CMOs, and strategic partners to conduct and support their preclinical studies and clinical trials under written agreements. The ~~Healthcare~~ **Investment** Companies will generally have to negotiate budgets and contracts with CROs, trial sites, and CMOs, and they may not be able to do so on favorable terms, **if at all,** which may result in delays to anticipated development timelines and increased costs. We expect that the ~~Healthcare~~ **Investment** Companies will rely heavily on these third parties over the course of their preclinical studies and clinical trials, and they will control only certain aspects of their activities. As a result, the ~~Healthcare~~ **Investment** Companies will have less direct control over the conduct, timing **,** and completion of these preclinical studies and clinical trials and the management of data developed through preclinical studies and clinical trials than would be the case if they were relying entirely upon their own staff. Nevertheless, the ~~Healthcare~~ **Investment** Companies are responsible for ensuring that each of their studies is conducted in accordance with the applicable protocol, legal and regulatory requirements, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. The ~~Healthcare~~ **Investment** Companies and these third parties are required to comply with GLP and GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GLP and GCP requirements through periodic inspections, both announced and unannounced, of trial sponsors, principal investigators, and trial sites, and the corresponding books and records of such parties. If the Pharmaceutical Companies or Rafael Medical Devices or any of these third parties fail to comply with applicable GLP or GCP regulations, the preclinical data generated in their preclinical studies and / or the clinical data generated in their clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require them to **repeat clinical trials and / or to** perform additional preclinical studies and / or clinical trials before approving any marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of the Pharmaceutical Companies' or Rafael Medical Devices **'** preclinical studies and / or clinical trials comply with the GLP or GCP regulations. In addition, such clinical trials must be conducted with pharmaceutical product or a medical device produced under cGMP regulations and will require a large number of test patients. The Pharmaceutical Companies' or Rafael Medical Devices' failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require ~~us or~~ them to repeat clinical trials **and / or to perform additional clinical studies** , which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws. Any third parties conducting the Pharmaceutical Companies' or Rafael Medical Devices' preclinical studies and clinical trials will not be their employees and, except for remedies available to them under our agreements with such third parties, the ~~Healthcare~~ **Investment** Companies cannot control whether or not any third- party personnel will devote sufficient time and resources to the Pharmaceutical Companies' product candidates or Rafael Medical Devices' device candidates. These third parties may also have relationships with other commercial entities, including competitors, for whom they may also be conducting clinical trials or other product development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced, or if the quality or accuracy of the preclinical and / or clinical data they obtain is compromised due to the failure to adhere to preclinical or clinical protocols or regulatory requirements or for other reasons, the Pharmaceutical Companies' and Rafael Medical Devices' preclinical studies and clinical trials may be extended, delayed or terminated, and they may not be able to complete development of, obtain regulatory approval of, or successfully commercialize their product candidates or device candidates. As a result, our financial results and commercial prospects would be adversely affected, our costs could increase, and our ability to generate revenue could be delayed. The ~~Healthcare~~ **Investment** Companies currently rely and expect to rely in the future on the use of manufacturing suites in third- party facilities or on third parties to manufacture our product candidates and device candidates, and we may rely on third parties to produce and process our products, if approved. Our business could be adversely affected if we are unable to use third- party manufacturing suites or if the third- party manufacturers fail to provide us with sufficient quantities of our product candidates or device candidates or fail to do so **in a cGMP- compliant manner,** at acceptable quality levels or **at acceptable** prices. We do not currently own any facility that may be used as a clinical- scale manufacturing and processing facility and must currently rely on outside vendors to manufacture the Pharmaceutical Companies' product candidates and Rafael Medical Devices' device candidates. The ~~Healthcare~~ **Investment** Companies have not yet caused their product candidates or device candidates to be manufactured on a commercial scale and may not be able to do so. We expect that ~~our Healthcare~~ **the Investment** Companies will need to negotiate and maintain contractual arrangements with these outside vendors for the supply of our product candidates and device candidates, and they may not be able to do so on favorable terms. The facilities used by contract manufacturers to manufacture approved products must also be approved by the FDA or other comparable foreign regulatory authorities following inspections **for any such approved products** that **generally** will be conducted after the Pharmaceutical Companies or Rafael Medical Devices submit an application to the FDA or other comparable foreign regulatory authorities. **Such inspections also could occur, for other products being manufactured by contract manufacturers, before the Pharmaceutical Companies or Rafael Medical Devices submit an application to the FDA or other comparable foreign regulatory authorities, and any adverse regulatory findings from such inspections could adversely impact a contract manufacturer' s ability to be a contract manufacturer for the Investment Companies.** The ~~Healthcare~~ **Investment** Companies may not control the manufacturing process of, and may be completely dependent on, contract manufacturing partners for compliance with cGMP requirements and any other regulatory requirements of the FDA or other regulatory authorities for the manufacture of product candidates and device candidates and of any products that receive regulatory approval or clearance. Beyond periodic audits, the ~~Healthcare~~ **Investment** Companies have no control over the ability of their contract manufacturers to maintain adequate quality control, quality assurance, and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of any approved or cleared products or if they withdraw any approval in the future, the ~~Healthcare~~ **Investment** Companies may need to find alternative manufacturing facilities, which would require the incurrence of significant additional costs and materially adversely affect the ability to develop, obtain regulatory approval or clearance for or market any product candidates or device candidates, if approved or cleared. Similarly, if any third- party manufacturers on which the Pharmaceutical Companies or Rafael Medical Devices will rely fail to manufacture quantities of their product candidates or device candidates at quality levels necessary to meet regulatory requirements and at a scale sufficient to meet anticipated demand at a cost that allows them to achieve profitability, our business, financial condition **,** and prospects could be materially and adversely affected. The anticipated reliance on a limited number of third- party manufacturers exposes us to a number of risks, including the following: ● the Pharmaceutical Companies may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited, and the FDA must inspect any manufacturers for cGMP compliance as part of our marketing applications; ● a new manufacturer would have to be educated in, or develop substantially equivalent processes for, the production of the Pharmaceutical Companies' product candidates and Rafael Medical Devices' device candidates; ● third- party manufacturers might be unable to timely manufacture Pharmaceutical Companies' product candidates and Rafael Medical Devices' device candidates or produce the quantity and quality required to meet their clinical and commercial needs, if any; ● contract manufacturers may not be able to execute the Pharmaceutical Companies' and Rafael Medical Devices' manufacturing procedures and other logistical support requirements appropriately; ● future contract manufacturers may not perform as agreed, may not devote sufficient resources to the Pharmaceutical Companies product candidates or Rafael Medical Devices' device candidates, or may not remain in the contract manufacturing business for the time required to supply clinical trials or to successfully produce, store, and distribute approved or cleared products, if any; ● manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies and foreign regulatory authorities to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards, and the Healthcare Companies have no control over third- party manufacturers' compliance with these regulations and standards; ● the Healthcare Companies may not own, or may have to share, the intellectual property rights to any improvements made by any third- party manufacturers in the manufacturing process for the Pharmaceutical Companies' product candidates and Rafael Medical Devices' device candidates; ● third- party manufacturers could breach or terminate their agreements with us, the Pharmaceutical Companies or Rafael Medical Devices; ● raw materials and components used in the manufacturing process, particularly those for which the Healthcare Companies have no other source or supplier, may not be available or may not be suitable or acceptable for use due to material or component defects; ● contract manufacturers and critical reagent suppliers may be subject to inclement weather, as well as natural or man- made disasters; and ● contract manufacturers may have unacceptable or inconsistent product quality success rates and yields, and the Pharmaceutical Companies will have no direct control over contract manufacturers' ability to maintain adequate quality control, quality assurance, and qualified personnel. Our business could be materially adversely affected by business disruptions caused by third- party providers that could materially adversely affect our potential future revenue and financial condition and increase our costs and expenses. Each of these risks could delay or prevent the completion of the Pharmaceutical Companies' and Rafael Medical Devices' clinical trials or the approval of any of the Pharmaceutical Companies' product candidates or Rafael Medical Devices' device candidates by the FDA, result in higher costs, or adversely impact commercialization of any product candidates in the event that they were to receive regulatory approval or clearance. We may, in the future, form or seek collaborations or strategic alliances or enter into licensing arrangements, and we may not realize the benefits of such collaborations, alliances or licensing arrangements. We may, in the future, form or seek strategic alliances, create joint ventures or collaborations, or enter into licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to the Pharmaceutical Companies' product candidates, any future product candidates that we or they may develop, Rafael Medical Devices' device candidates, and any future device candidates that we or they may develop. Any of these relationships may require us to incur non- recurring and other charges, increase our near and long- term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process is time- consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for any product candidates because they may be deemed to be at too early of a stage of development for collaborative effort, and third parties may not view such product candidates as having the requisite potential to demonstrate safety and efficacy and obtain regulatory approval. Further, collaborations involving our product candidates and device candidates are subject to numerous risks, which may include the following: ● collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration; ● collaborators may not pursue development and commercialization of our product candidates or device candidates or may elect not to continue or renew development or commercialization of our product candidates or device candidates based on clinical trial results, changes in their strategic focus due to the acquisition of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities; ● collaborators may delay clinical trials, provide insufficient funding for a clinical trial, stop a clinical trial, abandon a product candidate or device candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate or device candidate for clinical testing; ● collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with the Pharmaceutical Companies' product candidates and Rafael Medical Devices' device candidates; ● a collaborator with marketing and distribution rights to one or more product candidates or device candidates may not commit sufficient resources to their marketing and distribution in the event that they were to receive regulatory approval or clearance; ● collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability; ● disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of a product candidate or device candidate, or that result in costly litigation or arbitration that diverts management attention and resources; ● collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates or device candidates; and ● collaborators may own or co- own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property. As a result, if we enter into future collaboration agreements and strategic partnerships or out- license the Pharmaceutical Companies' product candidates or Rafael Medical Devices' device candidates, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. Furthermore, if conflicts arise between our future corporate or academic collaborators or strategic partners and us, the other party may act in a manner adverse to us and could limit our ability to implement our strategies. Any delays in entering into future collaborations or strategic partnership agreements related to our product candidates or device candidates could delay the development and commercialization of our product candidates and device candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations. The Pharmaceutical Companies' and Rafael Medical Devices' relationships with customers, physicians and third- party payors may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, health information privacy and security laws, and other healthcare laws and regulations. If the Pharmaceutical Companies or Rafael Medical Devices or their respective employees, independent contractors, consultants, commercial partners, or vendors violate these laws, they could face substantial penalties. The Pharmaceutical Companies' and Rafael Medical Devices' relationships with customers, physicians, and third- party payors may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, health information privacy and security laws, and other healthcare laws and regulations. These laws may impact, among other things, our clinical research program, as well as our proposed and future sales, marketing, and education programs. In particular, the promotion, sales **,** and marketing of healthcare items and services is subject to extensive laws and regulations designed to prevent fraud, kickbacks, self- dealing, and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive, and other business arrangements. The ~~Healthcare~~ **Investment** Companies may also be subject to federal, state, and foreign laws governing the privacy and security of identifiable patient information. The U. S. healthcare laws and regulations that may affect their ability to operate include, but are not limited to: ● the federal Anti- Kickback Statute, which prohibits, among other things, any person or entity from knowingly and willfully, offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, the purchasing, leasing, ordering or arranging for the purchase, lease, or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term " remuneration " has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly. Practices that may be alleged to be intended to induce prescribing, purchases or recommendations, include any payments of more than fair market value, and may be subject to scrutiny if they do not qualify for an exception or safe harbor. In addition, a person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation; ● federal civil and criminal false claims laws, including the federal civil False Claims Act, and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal government programs that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government, including federal healthcare programs. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti- Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act and the civil monetary penalties statute; ● the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal civil and criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, including private third- party payors, and knowingly and willfully falsifying, concealing or covering up by any trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statements in connection with the delivery of, or payment for, healthcare benefits, items or services. Similar to the federal Anti- Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation; ● HIPAA, as amended by the Health Information Technology for Economic and Clinical Health At, and their respective implementing regulations, which impose requirements on certain healthcare providers, health plans, and healthcare clearinghouses, known as covered entities, and their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable protected health information as well as their covered subcontractors, including breach notification regulations; ● analogous state data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal, and protection of personal information, such as social security numbers, medical and financial information, and other information, including data breach laws that require timely notification to individuals, and at times regulators, the media or credit reporting agencies, if a company has experienced the unauthorized access or acquisition of personal information, as well as the California Consumer Privacy Act or CCPA, which, among other things, contains new disclosure obligations for businesses that collect personal information about California residents and affords those individuals numerous rights relating to their personal information that may affect companies' ability to use personal information or share it with business partners, and the California Privacy Rights Act, or CPRA, which expands the scope of the CCPA, imposes new restrictions on behavioral advertising and establishes a new California Privacy Protection Agency that will enforce the law and issue regulations, and is scheduled to become " operative " on January 1, 2023, with a 12- month " lookback provision, " and the various state laws and regulations may be more restrictive and not preempted by United States federal laws; ● analogous foreign data protection laws, including among others the EU General Data Protection Regulation, or the GDPR, and EU member states' implementing legislation, which imposes data protection requirements that include strict obligations and restrictions on the ability to collect, analyze, and transfer EU personal data, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances, and possible substantial fines for any violations (including possible fines for certain violations of up to the greater of 20 million Euros or 4 % of total worldwide annual turnover of the preceding financial year), with legal requirements in foreign countries relating to the collection, storage, processing, and transfer of personal data continuing to evolve; and ● the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children' s Health Insurance Program (with certain exceptions) to report annually to CMS information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, such reporting obligations will include payments and other transfers of value provided during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists, and certified nurse- midwives. The ~~Healthcare~~ **Investment** Companies may also be subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope. For example, we may be subject to the following: state anti- kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third party payors, including private insurers, or that apply regardless of payor; state laws that require pharmaceutical companies to comply with the pharmaceutical industry' s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state laws that require drug and device manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers, marketing expenditures, or drug pricing; state and local laws requiring the registration of pharmaceutical and device sales and medical representatives; and state and foreign laws, such as the GDPR governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. Additionally, we may be subject to federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers. Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities, or our arrangements with physicians, could be subject to challenge under one or more of such laws. It is not always possible to identify and deter employee misconduct or business noncompliance, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If the Pharmaceutical Companies or Rafael Medical Devices or their respective employees, independent contractors, consultants, commercial partners, and vendors violate these laws, we may be subject to investigations, enforcement actions and / or significant penalties, including the imposition of significant civil, criminal, and administrative penalties, damages, disgorgement, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and / or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non- compliance with these laws, and curtailment of the Pharmaceutical Companies' and Rafael Medical Devices' operations, any of which could adversely affect their ability to operate their business and their results of operations. In addition, the approval or clearance and commercialization of any of the Pharmaceutical Companies' product candidates or Rafael Medical Devices' device candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws. Risks Related to our Commercial Real Estate Business We may be unable to renew leases or relet space as leases expire. If tenants decide not to renew their leases upon expiration, we may not be able to relet the space. Even if tenants do renew or we can relet the space, the terms of a renewal or new lease, taking into account among other things, the cost of improvements to the property and leasing commissions, may be less favorable than the terms in the expired leases. In addition, changes in space utilization by tenants may impact our ability to renew or relet space without the need to incur substantial costs in renovating or redesigning the internal configuration of the relevant property. If we are unable to promptly renew the leases or relet the space at similar rates or if we incur substantial costs in renewing or reletting the space, our cash flow and ability to service debt obligations and pay dividends and distributions to security holders could be adversely affected. We face ~~significant~~ competition for tenants. The leasing of real estate is highly competitive. The principal competitive factors are rent, location, services provided and the nature and condition of the property to be leased. We directly compete with all owners, developers and operators of similar space in the areas in which our properties are located. There are number of competitive office properties **the areas** in which our property is located, which may be newer or better located than our property and could have a material adverse effect on our ability to lease office space at our property, and on the effective rents we are able to charge. Risks Related to Intellectual Property If **the companies in which** we **hold interests** are unable to adequately **maintain or** protect ~~our~~ **their** proprietary technology and product candidates, if the scope of the patent protection obtained is not sufficiently broad, or if the terms of ~~our~~ patents are insufficient to protect ~~our~~ product candidates for an adequate amount of time, ~~our~~ competitors could develop and commercialize technology and products similar or identical to **that technology** ~~ours, and our~~ - **or those product candidates and the** ability to successfully commercialize **technology** ~~our~~ - **or** product candidates may be materially impaired. We rely primarily upon a combination of patents, trademarks, trade secret protection, and other intellectual property rights as well as nondisclosure, confidentiality **,** and other contractual agreements to protect the intellectual property related to our brands, product **candidates and device** candidates, and other proprietary technologies. Our success depends on our ability to develop, manufacture, market **,** and sell our product candidates, if approved, and use our proprietary technologies without alleged or actual infringement, misappropriation or other violation of the patents and other intellectual property rights of third parties. There have been many lawsuits and other proceedings asserting patents and other intellectual property rights in the biopharmaceutical industries. We cannot assure you that our product **candidates and device** candidates will not infringe existing or future third- party patents. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, there may be applications now pending of which we are unaware and which may later result in issued patents that we may infringe by commercializing our product candidates **or device candidates if they receive approval or clearance** . There may also be issued patents or pending patent applications that we are aware of, but that we think are irrelevant to our product candidates **or device candidates** , which may ultimately be found to be infringed by the manufacture, sale, or use of our product **candidates or device** candidates. Moreover, we may face claims from non- practicing entities that have no relevant product revenue and against whom our own patent portfolio may thus have no deterrent effect. In addition, many of our product candidates have a complex structure that makes it difficult to conduct a thorough search and review of all potentially relevant third- party patents. Because we have not yet conducted a formal freedom to operate analysis for patents related to our product candidates **or device candidates** , we may not be aware of issued patents that a third party might assert are infringed by one of our current or future product candidates **or device candidates** , which could materially impair our ability to commercialize our product **candidates or device** candidates. Even if we diligently search third- party patents for potential infringement by our products or product ~~candidate~~ **candidates , or devices or device candidates** , we may not successfully find patents that our products or product candidates **devices or device candidates** may infringe. If we are unable to secure and maintain freedom to operate, others could preclude us from commercializing our product **candidates or device** candidates. The process of obtaining patent protection is expensive and time- consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations or products and may choose not to pursue patent protection in certain jurisdictions, and **,** under the laws of certain jurisdictions, patents or other intellectual property rights may be unavailable or limited in scope and, in any event, any patent protection we obtain may be limited. As a result, in some jurisdictions **,** some of our products currently or in the future may not be ~~,~~ protected by patents. We generally apply for patents in those countries where we intend to make, have made, use, offer for sale, or sell products and where we assess the risk of infringement to justify the cost of seeking patent protection. However, we may not accurately predict all the countries where patent protection would ultimately be desirable. If we fail to timely file a patent application in any such country or major market, we may be precluded from doing so at a later date. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories in which we have patent protection that may not be sufficient to terminate infringing activities. In addition, the actual protection afforded by a patent varies on a product- by- product basis, from country to country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory- related extensions, the availability of legal remedies in a particular country **,** and the validity and enforceability of the patent. Furthermore, we cannot guarantee that any patents will be issued from any pending or future owned or licensed patent applications, or that any current or future patents will **be valid or enforceable or** provide us with any meaningful protection or competitive advantage. Even if issued, existing or future patents may be challenged, including with respect to ownership, narrowed, invalidated, held unenforceable or circumvented, any of which could limit our ability to prevent competitors and other third parties from developing and marketing similar products or limit the length of terms of patent protection we may have for our product **candidates or device** candidates. Moreover, should we be unable to obtain meaningful patent coverage for clinically relevant infusion rates in jurisdictions with commercially significant markets, our ability to extend and reinforce patent protection for these product candidates in those jurisdictions may be adversely impacted, which could limit our ability to prevent competitors and other third parties from developing and marketing similar products or limit the length of terms of patent protection we may have for those product candidates. Other companies may also design around technologies we have patented, licensed or developed. In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our products or practicing our own patented technology. The patent positions of biopharmaceutical companies can be highly uncertain and involve complex legal, scientific **,** and factual questions for which important legal principles remain unresolved. As a result, the issuance, scope, validity, enforceability **,** and commercial value of our patent rights may be uncertain. The standards that the United States Patent and Trademark Office, or the USPTO, and its foreign counterparts use to grant patents are not always applied predictably or uniformly. Changes in either the patent laws, implementing regulations or the interpretation of patent laws may diminish the value of our rights. The legal systems of certain countries do not protect intellectual property rights to the same extent as the laws of the United States **, if at all** , and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. For example, patent laws in various jurisdictions, including significant commercial markets such as Europe, restrict the patentability of methods of treatment of the human body more than United States law does. In addition, many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties (for example, the patent owner has failed to " work " the invention in that country, or the third party has patented improvements). In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patent and other intellectual property protection, which makes it difficult to stop infringement. Because patent applications in the United States, Europe **,** and many other jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in scientific literature lag behind actual discoveries, we cannot be certain that we were the first to conceive or reduce to practice the inventions claimed in our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in our patents or pending patent applications. We can give no assurance that all of the potentially relevant art relating to our patents and patent applications has been found; overlooked prior art could be used by a third party to challenge the validity, enforceability **,** and scope of our patents or prevent a patent from issuing from a pending patent application. As a result, we may not be able to obtain or maintain protection for certain inventions. Therefore, the validity, enforceability **,** and scope of our patents in the United States, Europe **,** and in other countries cannot be predicted with certainty and, as a result, any patents that we own or license may not provide sufficient protection against our competitors. Third parties may challenge any existing patent or future patent we own or license through adversarial proceedings in the issuing offices or in court proceedings, including as a response to any assertion of our patents against them. In any of these proceedings, a court or agency with jurisdiction may find our patents invalid and / or unenforceable, or even if valid and enforceable, insufficient to provide protection against competing products and services sufficient to achieve our business objectives. We may be subject to a third- party pre- issuance submission of prior art to the USPTO, or reexamination by the USPTO if a third party asserts a substantial question of patentability against any claim of a U. S. patent we own or license. The adoption of the Leahy- Smith America Invents Act, or the Leahy- Smith Act, in September 2011 established additional opportunities for third parties to invalidate U. S. patent claims, including inter partes review and post- grant review proceedings. Outside of the United States, patents we own or license may become subject to patent opposition or similar proceedings, which may result in loss of scope of some claims or the entire patent. In addition, such proceedings are very complex and expensive, and may divert our management' s attention from our core business. If any of our patents are challenged, invalidated, circumvented by third parties or otherwise limited or expire prior to the commercialization of our products, and if we do not own or have exclusive rights to other enforceable patents protecting our products or other technologies, competitors and other third parties could market products and use processes that are substantially similar ~~to~~, or superior ~~to~~, **to** ours **,** and our business would suffer **. The entities in which we hold interests or in which we may invest may not make necessary payments or take other actions to protect intellectual property or other rights that they license or have acquired from third parties, which could result in the loss or impairment of those rights and the reduction of the value of our interests** . The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep a competitive advantage. For example: ● others may be able to develop products that are similar to, or better than, ours in a way that is not covered by the claims of our patents; ● might not have been the first to conceive or reduce to practice the inventions covered by our patents or pending patent applications; ● we might not have been the first to file patent applications for our inventions; ● any patents that we obtain may not provide us with any competitive advantages or may ultimately be found invalid or unenforceable; **and /** or ● we may not develop additional proprietary technologies that are patentable. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license as we are for intellectual property that we own. We currently in-license certain intellectual property from third parties to be able to use such intellectual property in our products and product candidates and to aid in our research activities. In the future, we may in- license intellectual property from additional licensors. We may rely on certain of these licensors to file and prosecute patent applications and maintain, or assist us in the maintenance of, patents and otherwise protect the intellectual property we license from them. We may have limited control over these activities or any other intellectual property that may be related to our in- licensed intellectual property. For example, we cannot be certain that such activities by these licensors have been or will be conducted diligently or in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. We may have limited control over the manner in which our licensors initiate, or support our efforts to initiate, an infringement proceeding against a third-party infringer of the intellectual property rights, or defend certain of the intellectual property that is licensed to us. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer. We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time- consuming **,** and unsuccessful. Competitors may infringe, misappropriate or otherwise violate our patents, trademarks, copyrights, trade secrets or other intellectual property, or those of our licensors. To counter infringement, misappropriation, unauthorized use or other violations, we may be required to file legal claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. In some cases, it may be difficult or impossible to detect third- party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult. We may not be able to prevent, alone or with our licensees or any future licensors, infringement, misappropriation or other violations of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a third party or a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates. Such a loss of patent protection could harm our business. In addition, in a patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from exploiting the claimed subject matter at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent' s claims narrowly or decide that we do not have the right to stop the other party from exploiting its technology on the grounds that our patents do not cover such technology. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making, using, importing **,** and selling similar or competitive products. Any of these occurrences could adversely affect our competitive business position, business prospects **,** and financial condition. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question **or has not infringed them** . In this case, we could ultimately be forced to cease use of such trademarks. In any infringement, misappropriation or other intellectual property litigation, any award of monetary damages we receive may not be commercially valuable. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings. We may not be able to detect or prevent misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in litigation the prevailing party does not offer us a license on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees. Our commercial success depends significantly on our ability to operate without infringing upon the intellectual property rights of third parties. The biopharmaceutical industries are subject to rapid technological change and substantial litigation regarding patent and other intellectual property rights. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained **,** or may in the future apply for or obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use **,** and sell our product candidates ~~and~~ **, device candidates,** services **, and technologies** . Numerous third- party patents exist in the fields relating to our products and services, and it is difficult for industry participants, including us, to identify all third- party patent rights relevant to our product candidates, **device candidates,** services **,** and technologies. As the biopharmaceutical industries expand and more patents are issued, the risk increases that our product **candidates or device** candidates may give rise to claims of infringement of the patent rights of others. Moreover, because some patent applications are maintained as confidential for a certain period of time, we cannot be certain that third parties have not filed patent applications that cover our product candidates, **device candidates,** services **,** and technologies. Therefore, it is uncertain whether the issuance of any third- party patent would require us to alter our development or commercial strategies for our product **candidates, device** candidates, or processes, or to obtain licenses or cease certain activities. Patents could be issued to third parties that we may ultimately be found to infringe. Third parties may have or obtain valid and enforceable patents or proprietary rights that could block us from developing products using our technology. If any third- party patents were held by a court of competent jurisdiction to cover the manufacturing process of our product candidates, constructs or molecules used in or formed during the manufacturing process, ~~or~~ any final product itself **, or our device candidates** , the holders of any such patents may be able to block our ability to commercialize the product **candidate or device** candidate unless we obtain a license under the applicable patents, or until such patents expire or they are determined to be held invalid or unenforceable. Our failure to obtain or maintain a license to any technology that we require to develop or commercialize our current and future product candidates **and device candidates** , may materially harm our business, financial condition **,** and results of operations. Furthermore, we would be exposed to a threat of litigation. From time to time, we may be party to, or threatened with, litigation or other proceedings with third parties, including non- practicing entities, who allege that our product candidates, components of our product **candidates, device candidates, components of our device** candidates, services, and / or proprietary technologies infringe, misappropriate or otherwise violate their intellectual property rights. The types of situations in which we may become a party to such litigation or proceedings include: ● we or our collaborators may initiate litigation or other proceedings against third parties seeking to invalidate the patents held by those third parties or to obtain a judgment that our product **candidates, device** candidates, or processes do not infringe those third parties' patents; ● we or our collaborators may participate at substantial cost in International Trade Commission proceedings to abate importation of third- party products that would compete unfairly with our products; ● if our competitors file patent applications that claim technology also claimed by us or our licensors, we or our licensors may be required to participate in interference, derivation or opposition proceedings to determine the priority of invention, which could jeopardize our patent rights and potentially provide a third party with a dominant patent position; ● if third parties initiate litigation claiming that our processes or product candidates, infringe their patent or other intellectual property rights, we and our collaborators will need to defend against such proceedings; ● if third parties initiate litigation or other proceedings, including inter partes reviews, oppositions or other similar agency proceedings, seeking to invalidate patents owned by or licensed to us or to obtain a declaratory judgment that their products, services, or technologies do not infringe our patents or patents licensed to us, we will need to defend against such proceedings; ● we may be subject to ownership disputes relating to intellectual property, including disputes arising from conflicting obligations of consultants or others who are involved in developing our product candidate; and ● if a license to necessary technology is terminated, the licensor may initiate litigation claiming that our processes or product candidates infringe or misappropriate its patent or other intellectual property rights and / or that we breached our obligations under the license agreement, and we and our collaborators would need to defend against such proceedings. These lawsuits and proceedings, regardless of merit, are time- consuming and expensive to initiate, maintain, defend or settle, and could divert the time and attention of managerial and technical personnel, which could materially adversely affect our business. Any such claim could also force use to do one or more of the following: ● incur substantial monetary liability for infringement or other violations of intellectual property rights, which we may have to pay if a court decides that the product candidate, service, or technology at issue infringes or violates the third party' s rights, and if the court finds that the infringement was willful, we could be ordered to pay up to treble damages and the third party' s attorneys' fees; ● pay substantial damages to our customers or end users to discontinue use or replace infringing technology with non- infringing technology; ● stop manufacturing, offering for sale, selling, using, importing, exporting or licensing the product or technology incorporating the allegedly infringing technology or stop incorporating the allegedly infringing technology into such product, service, or technology; ● obtain from the owner of the infringed intellectual property right a license, which may require us to pay substantial upfront fees or royalties to sell or use the relevant technology and which may not be available on commercially reasonable terms, or at all; ● redesign our product candidates, services, and technology so they do not infringe or violate the third party' s intellectual property rights, which may not be possible or may require substantial monetary expenditures and time; ● enter into cross- licenses with our competitors, which could weaken our overall intellectual property position; ● lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property against others; ● find alternative suppliers for non-infringing products and technologies, which could be costly and create significant delay; or ● relinquish rights associated with one or more of our patent claims, if our claims are held invalid or otherwise unenforceable Some of our competitors may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity, adversely impact prospective customers, cause product shipment delays, or prohibit us from manufacturing, marketing or otherwise commercializing our products, services **,** and technology. Any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operation, financial condition or cash flows. In addition, we may indemnify our customers and distributors against claims relating to the infringement of intellectual property rights of third parties related to our product **candidates or device** candidates. Third parties may assert infringement claims against our customers or distributors. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers or distributors, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers, suppliers or distributors, or may be required to obtain licenses for the product candidates, or services they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products or services. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments, which could have a material adverse effect on the price of our common stock. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock. The occurrence of any of these events may have a material adverse effect on our business, results of operation, financial condition or cash flows. If we are unable to protect the confidentiality of our trade secrets, our business and competitive position may be harmed. In addition to patent and trademark protection, we also rely on trade secrets, including unpatented know- how, technology and other proprietary information, to maintain our competitive position. Because we expect to rely on third parties to manufacture our product candidates, and we expect to continue to collaborate with third parties on the development of our product candidates, we must, at times, share trade secrets with them. We seek to protect our trade secrets, in part, by entering into non- disclosure and confidentiality agreements with parties who have access to them prior to disclosing our proprietary information, such as our consultants and vendors, or our former or current employees. These agreements typically limit the rights of third parties to use or disclose our confidential information, including our trade secrets. We also enter into confidentiality and invention assignment agreements with our employees and consultants. Despite these efforts, however, any of these parties may breach the agreements and disclose our trade secrets and other unpatented or unregistered proprietary information, and once disclosed, we are likely to lose trade secret protection. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for any such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive **,** and time- consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to enforce trade secret protection. A competitor' s discovery of our trade secrets would impair our competitive position and have an adverse impact on our business, operating results **,** and financial condition. Additionally, we cannot be certain that competitors will not gain access to our trade secrets and other proprietary confidential information or independently develop substantially equivalent information and techniques. Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our existing and future product candidates and processes. As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industries involves both technological and legal complexity, and is therefore costly, time consuming, and inherently uncertain. In addition, the United States has recently enacted and is currently implementing wide- ranging patent reform legislation. Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy- Smith Act was signed into law. The Leahy- Smith Act includes a number of significant changes to U. S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and switched the United States patent system from a " first- to- invent " system to a " first-to- file " system. Under a " first- to- file " system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had conceived or reduced to practice the invention earlier. The USPTO recently developed new regulations and procedures to govern administration of the Leahy- Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, in particular, the first- to- file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy- Smith Act will have on the operation of our business. The Leahy- Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition. In addition, patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement and defense of our patents and pending patent applications. Recent U. S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. Furthermore, the U. S. Supreme Court and the U. S. Court of Appeals for the Federal Circuit have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. Similarly, foreign courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by United States and foreign legislative bodies. Those changes may materially affect our patents or patent applications and our ability to obtain additional patent protection in the future. The United States federal government retains certain rights in inventions produced with its financial assistance under the Patent and Trademark Law Amendments Act, or the Bayh- Dole Act. The federal government retains a " nonexclusive, nontransferable, irrevocable, paid- up license " for its own benefit. The Bayh- Dole Act also provides federal agencies with " march- in rights. " March- in rights allow the government, in specified circumstances, to require the contractor or successors in title to the patent to grant a " nonexclusive, partially exclusive, or exclusive license " to a " responsible applicant or applicants. " If the patent owner refuses to do so, the government may grant the license itself. We partner with a number of universities, including the University of Iowa and the University of Texas Southwestern Medical Center, with respect to certain of our research, development **,** and manufacturing. While it is our policy to avoid engaging our university partners in projects in which there is a risk that federal funds may be commingled, we cannot be sure that any co- developed intellectual property will be free from government rights pursuant to the Bayh- Dole Act. If, in the future, we co- own or license in technology which is critical to our business that is developed in whole or in part with federal funds subject to the Bayh- Dole Act, our ability to enforce or otherwise exploit patents covering such technology may be adversely affected. If we do not obtain patent term extensions in the United States under the Hatch- Waxman Act and in foreign countries under similar legislation with respect to our product candidates, thereby potentially extending the term of marketing exclusivity for such product candidates, our business may be harmed. In the United States, a patent that covers an FDA- approved drug or biologic may be eligible for a term extension designed to restore the period of the patent term that is lost during the premarket regulatory review process conducted by the FDA. Depending upon the timing, duration **,** and conditions of FDA regulatory approval of our product candidates, one or more of our U. S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch- Waxman Act, which permits a patent term extension of up to a maximum of five years beyond the normal expiration of the patent if the patent is eligible for such an extension under the Hatch- Waxman Act as compensation for patent term lost during development and the FDA regulatory review process, which is limited to the approved indication (and potentially additional indications approved during the period of extension) covered by the patent. This extension is limited to only one patent that covers the approved product, the approved use of the product, or a method of manufacturing the product. However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. We may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Even if we are granted such extension, the duration of such extension may be less than our request **,** and the patent term may still expire before or shortly after we receive FDA marketing approval. If we are unable to extend the expiration date of our existing patents or obtain new patents with longer expiry dates, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to obtain approval of competing products following our patent expiration and launch their product earlier than might otherwise be the case. Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment **,** and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non- compliance with these requirements. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. In addition, periodic maintenance fees on issued patents often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent. While an unintentional lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non- compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non- payment of fees **,** and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our product **candidates, device** candidates, or procedures, we may not be able to stop a competitor from marketing products that are the same as or similar to our own, which would have a material adverse effect on our business. If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected. We have not yet registered trademarks for a commercial trade name for **all of** our product candidate (s) **or device candidates** , including in the United States or elsewhere. During trademark registration proceedings, our trademark application (s) may be rejected. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties can oppose pending trademark applications and seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Moreover, any name we propose to use with our product candidate (s) in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties **,** and be acceptable to the FDA. Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We may not be able to protect our rights in these trademarks and trade names, which we need in order to build name recognition with potential partners or customers in our markets of interest. In addition, third parties have used trademarks similar and identical to our trademarks in foreign jurisdictions, and have filed or may in the future file for registration of such trademarks. If they succeed in registering or developing common law rights in such trademarks, and if we are not successful in challenging such third- party rights, we may not be able to use these trademarks to market our products in those countries. In any case, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may not be able to adequately protect our intellectual property rights throughout the world. Certain of our key patent families have been filed in the United States, as well as in numerous jurisdictions outside the United States. However, our intellectual property rights in certain jurisdictions outside the United States may be less robust. The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. For example, the requirements for patentability may differ in certain countries, particularly developing countries, and we may be unable to obtain issued patents that contain claims that adequately cover or protect our current or future product candidates **or device candidates** . Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to life sciences. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore, while we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market current or future product candidates **or device candidates** . Consequently, we may not be able to prevent third parties from practicing our technology in all countries outside the United States, or from selling or importing products made using our technology in and into those other jurisdictions where we do not have intellectual property rights. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but where enforcement is not as strong as that in the United States. These products may compete with our product candidates **or device candidates** , and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain and enforce adequate intellectual property protection for our technology. We may not identify relevant third- party patents or may incorrectly interpret the relevance, scope or expiration of a third- party patent **,** which might adversely affect our ability to develop and market our product candidates. We cannot guarantee that any of our or our licensors' patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third- party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product **candidates or device** candidates. For example, U. S. patent applications filed before November 29, 2000 and certain U. S. patent applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates **or device candidates** could have been filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates **, device candidates,** or the use of our products. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent **,** and the patent' s prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our product candidates **or device candidates** . We may incorrectly determine that our product **candidates or device** candidates are not covered by a third- party patent or may incorrectly predict whether a third party' s pending patent application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates, ~~and~~ **device candidates,** services **, and technologies** . Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our product candidates, ~~and~~ **device candidates,** services **, and technologies** . If we fail to identify and correctly interpret relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of our product candidates **or device candidates** that are held to be infringing. We might, if possible, also be forced to redesign products, product **candidates, devices, device** candidates, or services so that we no longer infringe the third- party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business. Patent terms may be inadequate to protect our competitive position on our product **candidates or device** candidates for an adequate amount of time. Patents have a limited lifespan, and the protection patents afford is limited. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U. S. non-provisional filing date. Even if patents covering our product **candidates and device** candidates are obtained, once the patent life has expired for patents covering a product or product candidate, **a device or a device candidate,** we may be ~~open~~ **subject** to competition from competitive products and services. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. Intellectual property rights do not necessarily address all potential threats to our business **.** While we seek broad coverage under our existing patent applications, there is always a risk that an alteration to products or processes may provide sufficient basis for a competitor to avoid infringing our patent claims. In addition, patents, if granted, expire and we cannot provide any assurance that any potentially issued patents will adequately protect our product **candidates or device** candidates. Once granted, patents may remain open to invalidity challenges including opposition, interference, re- examination, post- grant review, inter partes review, nullification or derivation action in court or before patent offices or similar proceedings for a given period after allowance or grant, during which time third parties can raise objections against such grant. In the course of such proceedings, which may continue for a protracted period of time, the patent owner may be compelled to limit the scope of the allowed or granted claims thus attacked, or may lose the allowed or granted claims altogether. In addition, the degree of future protection afforded by our intellectual property rights is uncertain because even granted intellectual property rights have limitations, and may not adequately protect our business, provide a **lawful** barrier to entry against our competitors or potential competitors or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative: ● others may be able to develop and / or practice technology that is similar to our technology or aspects of our technology, but that are not covered by the claims of the patents that we own or control, assuming such patents have issued or do issue; ● we or our licensors or any future strategic partners might not have been the first to conceive or reduce to practice the inventions covered by the issued patents or pending patent applications that we own or have exclusively licensed; ● we or our licensors or any future strategic partners might not have been the first to file patent applications covering certain of our inventions; ● others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights; ● it is possible that our pending patent applications will not lead to issued patents; ● issued patents that we own or have exclusively licensed may not provide us with any competitive advantage, or may be held invalid or unenforceable, as a result of legal challenges by our competitors; ● our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets; ● third parties performing manufacturing or testing for us using our product candidates, including technologies could use the intellectual property of others without obtaining a proper license; ● parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights over that intellectual property; ● we may not develop or in- license additional proprietary technologies that are patentable; ● we may not be able to obtain and maintain necessary licenses on commercially reasonable terms, or at all; and ● the patents of others may have an adverse effect on our business. Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects. We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of their former employers or other third parties. We do and may employ individuals who were previously employed at universities or other biopharmaceutical companies, including our licensors, competitors or potential competitors. Although we try to ensure that our employees, consultants **,** and independent contractors do not use the proprietary information or know- how of others in their work for us, and we are not currently subject to any claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties, we may in the future be subject to such claims. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or product candidates. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees, and could result in customers seeking other sources for the technology ~~,~~ or ~~in~~ ceasing from doing business with us. Our intellectual property agreements with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology. Certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, while we typically require our employees, consultants and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact conceives or develops intellectual property that we regard as our own. To the extent that we fail to obtain such assignments, such assignments do not contain a self- executing assignment of intellectual property rights or such assignment agreements are breached, we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property **,** and this may interfere with our ability to capture the commercial value of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our management and scientific personnel. Disputes regarding ownership or inventorship of intellectual property can also arise in other contexts, such as collaborations and sponsored research. We may be subject to claims that former collaborators or other third parties have an ownership interest in our patents or other intellectual property. If we are subject to a dispute challenging our rights in or to patents or other intellectual property, such a dispute could be expensive and time- consuming. If we are unsuccessful, we could lose valuable rights in intellectual property that we regard as our own. We may not be successful in obtaining necessary intellectual property rights to future products through acquisitions and in- licenses. Although we intend to develop products and technology through our own internal research, we may also seek to acquire or in-license technologies to grow our product offerings and technology portfolio. However, we may be unable to acquire or in-license intellectual property rights relating to, or necessary for, any such products or technology from third parties on commercially reasonable terms or at all. In that event, we may be unable to develop or commercialize such products or technology. We may also be unable to identify products or technology that we believe are an appropriate strategic fit for our Company and protect intellectual property relating to, or necessary for, such products and technology. The in- licensing and acquisition of third- party intellectual property rights for product candidates **and device candidates** is a competitive area, and a number of more established companies are also pursuing strategies to in- license or acquire third- party intellectual property rights for products that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, cash resources **,** and greater clinical development and commercialization capabilities. Furthermore, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. If we are unable to successfully obtain rights to additional technologies or products, our business, financial condition, results of operations and prospects for growth could suffer. In addition, we expect that competition for the in- licensing or acquisition of third- party intellectual property rights for products and technologies that are attractive to us may increase in the future, which may mean fewer suitable opportunities for us as well as higher acquisition or licensing costs. We may be unable to in- license or acquire the third- party intellectual property rights for products or technology on terms that would allow us to make an appropriate return on our investment. Risks Related to Employee Matters, Managing Our Growth **,** and Other Risks Related to Our Business Our success is highly dependent on our ability to attract and retain highly skilled executive officers and employees.To succeed,we must recruit,retain,manage ~~,~~ and motivate qualified clinical,scientific,technical ~~,~~ and management personnel,and we face significant competition for experienced personnel.We are highly dependent on the principal members of our management and scientific and medical staff.If we do not succeed in attracting and retaining qualified personnel,particularly at the management level,it could adversely affect our ability to execute our business plan and harm our operating results.In particular,the loss of one or more of our executive officers could be detrimental to us if we cannot recruit suitable replacements in a timely manner.The competition for qualified personnel in the biopharmaceutical field is intense and ~~,~~ as a result,we may be unable to continue to attract and retain qualified personnel necessary for the future success of our business.We could in the future have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment and retention efforts.Many of the other biopharmaceutical companies that we compete against for qualified personnel have greater financial and other resources,different risk profiles ~~,~~ and a longer history in the industry than we do.They also may provide more diverse opportunities and better prospects for career advancement.Some of these characteristics may be more appealing to high- quality candidates than what we have to offer.If we are unable to continue to attract and retain high-quality personnel,the rate and success at which we can discover,develop ~~,~~ and commercialize our product candidates ~~and device candidates~~ will be limited ~~,~~ and the potential for successfully growing our business will be harmed.The requirements of being a public company may strain our resources,result in more litigation ~~,~~ and divert management' s attention.As a public company,we are and will continue to be subject to the reporting requirements of the Securities Exchange Act of 1934,as amended,or the Exchange Act,the Sarbanes- Oxley Act of 2002,or the Sarbanes- Oxley Act,the Dodd- Frank Wall Street Reform and Consumer Protection Act,or the Dodd- Frank Act,the listing requirements of Nasdaq ~~,~~ and other applicable securities rules and regulations.Complying with these rules and regulations has increased and will ~~continue to~~ increase our legal and financial compliance costs,make some activities more difficult,time consuming or costly ~~,~~ and increase demand on our systems and resources.The Exchange Act requires,among other things,that we file annual,quarterly ~~,~~ and current reports with respect to our business and operating results.The Sarbanes- Oxley Act requires,among other things,that we maintain effective disclosure controls and procedures and internal ~~controls~~ - **control** over financial reporting.We are required to disclose changes made in our internal ~~controls~~ - **control** over financial reporting on a quarterly basis.In order to maintain and,if required,improve our disclosure controls and procedures and internal ~~controls~~ - **control** over financial reporting to meet this standard,significant resources and management oversight may be required.As a result,management' s attention may be diverted from other business concerns,which could adversely affect our business and operating results.We may also need to hire additional employees or engage outside consultants to comply with these requirements,which will increase our costs and expenses.In addition,changing laws,regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies,increasing legal and financial compliance costs ~~,~~ and making some activities more time consuming.These laws,regulations ~~,~~ and standards are subject to varying interpretations,in many cases due to their lack of specificity and,as a result,their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies.This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.We have invested and intend to continue to invest in resources to comply with evolving laws,regulations ~~,~~ and standards,and this investment may result in increased general and administrative expenses and a diversion of management' s time and attention from revenue- generating activities to compliance activities.If our efforts to comply with new laws,regulations ~~,~~ and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice,regulatory authorities may initiate legal proceedings against us and our business may be adversely affected.These new rules and regulations may make it more expensive for us to obtain director and officer liability insurance and, ~~during certain periods~~ **in the future** , ~~including currently,~~ we may **be required to** ~~utilize alternatives for such coverage,~~ accept reduced coverage or incur substantially higher costs to obtain coverage.These factors could also make it more difficult for us to attract and retain qualified members of our board of directors,particularly to serve on our audit committee and compensation committee,and qualified executive officers.By disclosing information in filings required of us as a public company,our business and financial condition will continue to become more visible,which we believe may result in threatened or actual litigation,including by competitors and other third parties.If those claims are successful,our business could be seriously harmed.Even if the claims do not result in litigation or are resolved **in our favor,the time and resources needed to resolve them could divert our management' s resources and seriously harm our business.** Public health threats could have an adverse effect on the Company' s operations and financial results. In 2020, a strain of novel coronavirus disease, COVID- 19, was declared a pandemic and spread across the world, including throughout the United States, Europe **,** and Asia. The pandemic and government measures taken in response have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred **, clinical trials have been suspended** , supply chains have been disrupted, and facilities and production have been suspended. The impacts on the operations and specifically the ongoing clinical trials of the Pharmaceutical Companies have been actively managed by respective pharmaceutical management teams who have worked closely with the appropriate regulatory agencies to continue clinical trial activities with as minimal impact as possible, including receiving waivers for certain clinical trial activities from the respective regulatory agencies to continue the studies. In the earlier days of the pandemic' s impact, Cornerstone experienced certain delays in enrollment in certain ~~of~~ clinical trials. We believe, however, that those trials' enrollment goals were ultimately attained in a timely manner. We have implemented a number of measures to protect the health and safety of our workforce **,** including a mandatory work- from- home policy for our workforce who can perform their jobs from home as well as restrictions on business travel and workplace and in- person meetings. As a result of the COVID- 19 pandemic, we may experience further disruptions that could severely impact our business, preclinical studies **,** and clinical trials, including: ● delays in receiving approval from local regulatory authorities to initiate our planned clinical trials; ● delays or difficulties in enrolling patients in our clinical trials; ● delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff; ● diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials; ● risk that participants enrolled in our clinical trials or related staff will acquire COVID- 19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events; ● interruption of key clinical trial activities, such as clinical trial site data monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others or interruption of clinical trial subject visits and study procedures (such as endoscopies that are deemed non- essential), which may impact the integrity of subject data and clinical study endpoints; ● interruption or delays in the operations of the FDA, which may impact approval timelines; ● interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing or supply shortages, production slowdowns, global shipping delays or stoppages and disruptions in delivery systems; ● limitations on employee resources that would otherwise be focused on the conduct of our preclinical studies and clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people; ● refusal of the FDA to accept data from clinical trials in affected geographies; ● impacts from prolonged remote work arrangements, such as increased cybersecurity risks and strains on our business continuity plans; and ● delays or difficulties with equity offerings due to disruptions and uncertainties in the securities market. The COVID- 19 pandemic could also negatively impact our real estate business in a number of ways, including: ● the financial condition of our tenants and their ability or willingness to pay rent in full on a timely basis; ● the impact on rents and demand for office and retail space; ● a complete or partial closure of operations resulting from government action; ● the impact of new regulations or norms on physical space needs and expectations; ● the effectiveness of governmental measures aimed at slowing and containing the spread; ● the extent and terms associated with governmental relief programs; ● the ability of debt and equity markets to function and provide liquidity; ● the ability to avoid delays or cost increases associated with building materials or construction services necessary for development, redevelopment and tenant improvements; and ● our tenants' ability to ensure business continuity in the event a continuity of operations plan is not effective or improperly implemented. Due to both known and unknown risks, including quarantines, closures **,** and other restrictions resulting from the outbreak, our operations and those of our holdings may be adversely impacted. Additionally, as there is an evolving nature to the COVID- 19 situation, we cannot reasonably assess or predict at this time the full extent of the negative impact that the COVID- 19 pandemic **or a subsequent variant** may have on our business, financial condition, results of operations **,** and cash flows. The impact will depend on future developments **,** such as the ultimate duration and the severity of the spread of the COVID- 19 pandemic **and any subsequent variant** in the U. S. and globally, the effectiveness of federal, state, local **,** and foreign government actions on mitigation and spread of COVID- 19 **and any subsequent variant** , the pandemic' s impact on the U. S. and global economies, changes in our customers' behavior emanating from the pandemic and how quickly we can resume our normal operations, among others. For all these reasons, we may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business. Our success is highly dependent on our...... resources and seriously harm our business. If we fail to implement and maintain an effective system of internal controls, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock. Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation **,** could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes- Oxley Act of 2002, or Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock. We are required to disclose changes made in our internal controls and procedures on a quarterly basis and ~~our management~~ **to disclose any changes and material weaknesses in those internal controls. A material weakness** is **a deficiency** ~~required to assess the effectiveness of these controls annually. However~~ , ~~for~~ **or a combination** ~~as long as we are an emerging growth company, our independent registered public accounting firm will not be required to attest to the effectiveness~~ of ~~our~~ **deficiencies, in** internal controls over financial reporting ~~pursuant to Section 404~~ **, such that there is a reasonable possibility that a material misstatement of the company' s annual or interim financial statements will not be prevented or detected on a timely basis** . We ~~could~~ **cannot** be **certain** ~~an emerging growth company until the end of the fiscal year ending after the fifth anniversary of our initial registration statement filed related to our Spin- Off from IDT, or such earlier time~~ that we ~~are no longer~~ **will continue to maintain** an ~~emerging growth company and, if we do, the information that we provide stockholders may be different than you might receive from other public companies in which you hold equity. We would cease to be an emerging growth company if we have more than $ 1. 07 billion in annual revenue, have more than $ 700 million in market value of our shares of common stock held by non- affiliates, or issue more than $ 1. 0 billion of non- convertible debt over a three- year period. An independent assessment of the effectiveness~~ ---- **effective system** of ~~our~~ internal controls over **our** financial reporting **in future periods. Any failure to maintain such internal controls** could **adversely impact** ~~detect problems that~~ our ~~management' s assessment might~~ **ability to report our financial results on a timely and accurate basis. If our financial statements are** not **accurate, investors may not have a complete understanding of our operations** . ~~Undetected~~ **Likewise, if our financial statements are not filed on a timely basis as required by the Securities and Exchange Commission and The New York Stock Exchange, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock. We have identified** material weaknesses in our internal controls over financial reporting ~~could lead to restatements of our financial statements and require us to incur the expense of remediation~~ . **Maintaining** ~~Additionally, ineffective~~ -- **effective** internal ~~control~~ **controls** over financial reporting ~~could expose~~ **is necessary for** us to **produce reliable financial statements. In** ~~increased risk of fraud or misuse of corporate assets and subject us to potential delisting from~~ the **past,** ~~stock exchange on which~~ we ~~list, regulatory investigations and civil or criminal sanctions. We~~ have identified material weaknesses in our internal ~~control~~ **controls** over financial reporting **which** ~~. Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial statements. We~~ have **since** ~~identified two material weaknesses in our internal control over financial reporting related to the accounting for the allocation of losses to our noncontrolling interests and the calculation of weighted average shares outstanding used in earnings per share as of October 31, 2021. Both of these material weaknesses were determined to have~~ been remediated ~~by April 30, 2022. As a result, our management has concluded that our disclosure controls and procedures were effective as of April 30, 2022~~ . If additional material weaknesses in our internal ~~control~~ **controls** over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results. **Conditions in Israel, including the recent terrorist attack by Hamas and other terrorist organizations from the Gaza Strip and Israel' s war against them, may adversely affect our real estate holding and operations of our Investment Companies, which would lead to a decrease in revenues. On October 7, 2023, Hamas terrorists and members of other terrorist organizations infiltrated Israel' s southern border from the Gaza Strip and conducted a series of terror attacks on civilian and military targets. Thereafter, these terrorists launched extensive rocket attacks on Israeli population and industrial centers located along the Israeli border with the Gaza Strip. It is possible that other terrorist organizations will join the hostilities as well, including Hezbollah in Lebanon, and Palestinian military organizations in the West Bank. Our real estate holding in Jerusalem and operations of Lipomedix and Day Three in Jerusalem and Rosh Haayin, respectively, are not only within the range of rockets from the Gaza Strip, but also within the range of rockets that can be fired from Lebanon, Syria or elsewhere in the Middle East. Our lone real estate holding can be damaged as a result of hostile action or hostilities or the ongoing operations of Lipomedix and Day Three may be disrupted. Our commercial insurance does not cover losses that may occur as a result of events associated with war and terrorism. Although the Israeli government currently covers the reinstatement value of direct damages that are caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or that it will sufficiently cover our potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. As a result of the Israeli security cabinet' s decision to declare war against Hamas, several hundred thousand Israeli reservists were drafted to perform immediate military service. Certain of our employees and consultants in Israel, in addition to employees of our service providers located in Israel, have been called for service in the current war with Hamas as of the date of this registration statement, and such persons are expected may be absent for an extended period of time. As a result, operations of Lipomedix and Day Three may be disrupted by such absences, which may materially and adversely affect their business and results of operations.** The relationships between Howard S. Jonas and IDT Corporation, Genie Energy **,** and Cornerstone Pharmaceuticals could conflict with our stockholders' interests. Howard S. Jonas, Chairman of our Board of Directors and Executive Chairman and former Chief Executive Officer **,** is also the chairman of IDT Corporation and Chairman of the Board of Genie and holds certain direct and indirect interests in Cornerstone **and serves as Chairman of its Board** in addition to his interests through ownership of our common stock. These relationships may cause a conflict of interest with our stockholders. Insurance policies are expensive and protect us only from some business risks, which leaves us exposed to uninsured liabilities. Some of the insurance policies we currently maintain **, or which we have**

maintained in the past, include general liability, employment practices liability, property, product liability, workers' compensation, umbrella, and directors' and officers' insurance. These policies may not adequately cover all categories of risk that our business may encounter. Any additional product liability insurance coverage we acquire in the future may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and **,** in the future **,** we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If we obtain regulatory approval **or clearance** for any of the ~~Healthcare~~ **Investment** Companies' product **candidates or device** candidates, we intend to acquire insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. A successful product liability claim or series of claims brought against us could cause our share price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business, including preventing or limiting the development and commercialization of any product candidates **or device candidates** we develop. We may not carry adequate specific biological or hazardous waste insurance coverage, and our property, casualty **,** and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended. We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and **, during certain periods, including currently,** we may ~~be required to~~ **utilize alternatives for such coverage,** accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our cash position and results of operations. We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cyber security incidents, could harm our ability to operate our ~~and the Healthcare Companies' businesses~~ -- **business and that of the companies in which we hold interests** effectively. Despite the implementation of security measures, our and the ~~Healthcare~~ **Investment** Companies' internal computer systems and those of third parties with which we and the ~~Healthcare~~ **Investment** Companies contract are vulnerable to damage from cyber- attacks, computer viruses, unauthorized access, natural disasters, terrorism, war **,** and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our and the ~~Healthcare~~ **Investment** Companies' operations, and could result in a material disruption of their clinical and commercialization activities and business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data could result in delays ~~in~~ **inf** ~~our and~~ the ~~Healthcare~~ **Investment** Companies' regulatory approval efforts and significantly increase their costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our or the ~~Healthcare~~ **Investment** Companies' data or applications, or inappropriate disclosure of confidential or proprietary information, we and the ~~Healthcare~~ **Investment** Companies could incur liability and their product research, development **,** and commercialization efforts could be delayed. Furthermore, we and our third- party providers rely on electronic communications and information systems to conduct our operations. We and our third- party providers have been, and may continue to be, targeted by parties using fraudulent e- mails and other communications in attempts to misappropriate bank accounting information, passwords, or other personal information or to introduce viruses or other malware to our information systems. In October 2021, we experienced a cybersecurity incident where a related party' s email was hacked which led to payment of two invoices. As of the date of this filing, one of the ~~invoices~~ - **invoice payments** had been recovered by the Company. We continue to explore a range of steps to enhance our security protections and prevent future unauthorized activity. Although we endeavor to mitigate these threats, such cyber- attacks against us or our third- party providers and business partners remain a serious issue. The pervasiveness of cybersecurity incidents in general and the risks of cyber- crime are complex and continue to evolve. Although we are making significant efforts to maintain the security and integrity of our information systems and are exploring various measures to manage the risk of a security breach or disruption, there can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging. Our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption, failure or security breach. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and could have high deductibles in any event, and defending a suit, regardless of its merit, could be costly and divert management attention. Failure to complete the merger could subject us to litigation. We could be subject to litigation related to any failure to complete the proposed merger with Cornerstone or related to any proceeding to specifically enforce our obligations under the merger agreement. If any of these risks materialize, they may materially and adversely affect our business, financial condition, financial results **,** and stock prices. Risks Related to Ownership of our Common Stock We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation of the value of our common stock. We have never declared or paid any cash dividends on our equity securities. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to any appreciation in the value of our common stock, which is not certain. ~~Eight trusts for~~ **We are controlled by our principal stockholder, which limits the ability of** ~~the~~ **other** ~~benefit~~ **stockholders to affect the management** of **the Company.** ~~sons and daughters of~~ Howard S. Jonas, our ~~former Chief Executive Officer,~~ **Chairman of our Board of Directors and our** Executive Chairman ~~and Chairman of the Board of Directors~~ , **controls** ~~hold shares that, in the aggregate, represent more than~~ a majority of the ~~combined~~ voting power of our ~~outstanding~~ capital stock ~~, which may limit the ability of other stockholders to affect our management~~ . **As** ~~Eight trusts for~~

~~the benefit~~ of ~~sons and daughters of Howard S~~ **October 27, 2023, Mr** . Jonas **has** ~~, or the Trusts, our former Chief Executive Officer, Executive Chairman, and Chairman of the Board, collectively have~~ voting power over ~~5, 126, 612 shares of our common stock (which includes~~ 787, 163 shares of our Class A common stock ~~,~~ **(** which are convertible into shares of our Class B common stock on a 1- for- 1 basis ~~,~~ **)** and ~~4~~ **665** , **247** ~~339, 449~~ shares of our Class B common stock ~~)~~, representing approximately ~~59~~ **51** % of the combined voting power of our outstanding capital stock ~~, as of July 31, 2022~~ . **Mr** ~~In addition, as of July 31, 2022, Howard S~~ . Jonas **will** ~~holds 1, 053, 830 shares of our Class B common stock. Each of the Trusts has a different, independent trustee. We are not aware of any voting agreement between or among any of the Trusts and / or Howard S. Jonas, but if such a voting agreement or other similar arrangement exists or were to be consummated, or if all or several or all of the Trusts were to act in concert, certain or all of the Trusts and / or Howard S. Jonas would~~ be able to control matters requiring approval by our stockholders, including the election of all of the directors and the approval of significant corporate matters, including any merger, consolidation or sale of all or substantially all of our assets. As a result, the ability of any of our other stockholders to influence our management **is** ~~may be~~ limited. Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall. Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Outstanding shares of our common stock may be freely sold in the public market at any time to the extent permitted by Rules 144 and 701 under the Securities Act, or to the extent that such shares have already been registered under the Securities Act and are held by non- affiliates of ours. Moreover, holders of a substantial number of shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also have registered all shares of common stock that we may issue under our equity compensation plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance **,** and once vested, subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline. We are ~~an " emerging growth company, " and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors. We are an " emerging growth company, " as defined in the JOBS Act. We will remain an emerging growth company until the earlier of (a) the last day of the fiscal year in which we have total annual gross revenues of $ 1. 07 billion or more, (b) the last day of the fiscal year following the fifth anniversary of the date of the completion of our Spin- Off (July 31, 2023), (c) the date on which we have issued more than $ 1 billion in nonconvertible debt during the previous three years, or (d) the date on which we are deemed to be a large accelerated filer under the rules of the SEC, which means the market value of our common stock that is held by non- affiliates exceeds $ 700 million as of the last business day of our most recently completed second fiscal quarter. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include: ● not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes- Oxley Act of 2002, or Section 404; ● an exemption from compliance with the requirement of the Public Company Accounting Oversight Board regarding the communication of critical audit matters in the auditor' s report on the financial statements; ● reduced disclosure obligations regarding executive compensation; and ● exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may choose to take advantage of some, but not all, of the available exemptions. In particular, we have not included all of the executive compensation information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our shares price may be more volatile. Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We intend to take advantage of the extended transition period for adopting new or revised accounting standards under the JOBS Act as an emerging growth company. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. We are~~ a " smaller reporting company **,** " and the reduced disclosure requirements applicable to smaller reporting companies may make our common stock less attractive to investors. We are considered a " smaller reporting company. " We are therefore entitled to rely on certain reduced disclosure requirements, such as an exemption from providing selected financial data and executive compensation information. These exemptions and reduced disclosures in our SEC filings due to our status as a smaller reporting company may make it harder for investors to analyze our results of operations and financial prospects. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock prices may be more volatile. General Risk Factors If we engage in future acquisitions or strategic collaborations, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks. From time to time, we may evaluate various acquisition opportunities and strategic collaborations, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including: ● increased operating expenses and cash requirements; ● the assumption of additional indebtedness or contingent liabilities; ● the issuance of our equity securities; ● assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel; ● the diversion of our management' s attention from our existing programs and initiatives in pursuing such a strategic merger or acquisition; ● retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships; ● risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and ● our inability to generate revenue from acquired technology and / or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs. In addition, if we undertake acquisitions or pursue collaborations in the future, we may issue dilutive securities, assume or incur debt obligations, incur large one- time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities, and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business. Investors may suffer dilution. We may engage in equity financing to fund our future operations and growth or issue equity securities in commercial or other transactions. If we raise additional funds by issuing equity securities, or issue equity securities for other purposes, stockholders may experience significant dilution of their ownership interest (both with respect to the percentage of total securities held, and with respect to the book value of their securities) and such securities may have rights senior to those of the holders of our common stock. In addition. if we do not provide our ~~Healthcare~~ **Investment** Companies with the capital they require, they may seek capital from other sources, which would result in dilution and possible subordination or other diminution in value of our interests in those companies. The trading price of the shares of our Class B common stock is likely to remain volatile, and purchasers of our Class B common stock could incur substantial losses. Our stock price is likely to remain volatile. The stock market in general and the market for ~~healthcare~~ **Investment** ~~companies~~ **Companies** in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their Class B common stock at or above the price paid for the shares. The market price for our Class B common stock may be influenced by many factors, including: ● actual or anticipated variations in quarterly operating results; ● changes in financial estimates by us or by any securities analysts who might cover our stock; ● conditions or trends in our industry; ● stock market price and volume fluctuations of other publicly traded companies and, in particular, those that operate in the real estate or healthcare industries; ● announcements by us or our competitors of the results of clinical trials, new product or service offerings, or significant acquisitions; ● strategic collaborations or divestitures; ● announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us; ● capital commitments; ● additions or departures of key personnel; and ● sales of our common stock, including sales by our directors and officers or specific stockholders. In addition, in the past, stockholders have initiated class action lawsuits against companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management' s attention and resources The realization of any of the above risks or any of a broad range of other risks, including those described in this " Risk Factors " section, could have a dramatic and adverse impact on the market price of our common stock. If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline. The trading market for our common stock will rely in part on the research and reports that equity research analysts may publish about us and our business. We do not currently have analyst coverage and may never obtain research coverage by equity research analysts. Equity research analysts may elect not to provide research coverage of our common stock and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts or others downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline. We may be subject to securities litigation, which is expensive and could divert management attention. The market price of our common stock may be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management' s attention from other business concerns, which could seriously harm our business. Item 1B. Unresolved Staff Comments. None. Item 2. Properties. Our principal executive office is located in 520 Broad Street, Newark, New Jersey. ~~Barer' s rents private lab and office space at 3675 Market Street in Philadelphia, Pennsylvania, with total annual rental costs of approximately $ 193, 000.~~ LipoMedix has a Research and Services Agreement with Shaare Zedek Scientific Ltd. by which laboratory space at Shaare Zedek Medical Center is used for R & D activities. This agreement is conditioned to grant support for the Shaare Zedek Nano- Oncology research center either directly from LipoMedix or indirectly through the Israel Innovation Authority Fund (Israel Chief Scientist Office). This arrangement has been in place since 2012, and the grant support is negotiable and renewed on an annual basis. However, there can be no guarantees that Shaare Zedek will continue this agreement in the future. LipoMedix leased an administrative office in Giv' at Ram Hi- Tech Park from the Hebrew University. Rent was $ 3, 600 annually, and the lease agreement ran through September 30, 2022. See Item 1 — " Real Estate " for a discussion of properties held by the Company for investment purposes and Item 8 — " Financial Statements and Supplemental Data, " for a detailed listing of such facilities. Item 3. Legal Proceedings **Legal proceedings disclosure is presented** ~~. On December 31, 2019, an employee of the Company filed a complaint~~ in **Note 19 to our Consolidated Financial Statements** ~~connection with the incident for personal injuries against the Company~~ and ~~other parties~~ in **Item 8** ~~the New Jersey Supreme Court for an incident that took place on January 31, 2019 at 520 Broad Street, Newark, New Jersey. The Company intends~~ to ~~vigorously defend~~ **Part II of** this **Annual Report** ~~matter. The loss is considered remote and no accrual has been recorded~~ . The Company may from time to time be subject to legal proceedings that may arise in the ordinary course of business. Although there can be no assurance in this regard, other than noted above, the Company does not expect any of those legal proceedings to have a material adverse effect on the Company' s results of operations, cash flows or financial condition. Item 4. Mine Safety Disclosures. Not applicable. ~~Part II~~ Item 5. Market for Registrant' s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities PRICE RANGE OF COMMON STOCK Our Class B common stock trades on the New York Stock Exchange under the symbol " RFL. " Trading commenced on the NYSE American on March 27, 2018 and the Company uplisted and commenced trading on the New York Stock Exchange on November 21, 2019. On October ~~25~~ **27** , ~~2022~~ **2023** , there were ~~265~~ **262** holders of record of our Class B common stock and ~~eight~~ **one** ~~holders~~ **holder** of record of our Class A common stock. ~~All~~ **Howard Jonas has voting and dispositive power over all** shares of Class A common stock ~~are beneficially owned by eight trusts for the benefit of sons and daughters of Howard Jonas~~ . The number of holders of record of our Class B common stock does not include the number of persons whose shares are in nominee or in " street name " accounts through brokers. On October ~~28~~ **27** , ~~2022~~ **2023** , the last sales price reported on the NYSE for the Class B common stock was $ 1. ~~83~~ **55** per share. We do not anticipate paying dividends on our common stock until we achieve sustainable profitability (after satisfying all of our operational needs) and retain certain minimum cash reserves. Distributions will be subject to the need to retain earnings for investment in growth opportunities or the acquisition of complementary assets. The payment of dividends in any specific period will be at the sole discretion of our Board of Directors. The information required by Item 201 (d) of Regulation S- K will be contained in our Proxy Statement for our Annual Stockholders Meeting, which we will file with the Securities and Exchange Commission within 120 days after July 31, ~~2022~~ **2023** , and which is incorporated by reference herein. Performance Graph of Stock We are a smaller reporting company as defined by Rule 12b- 2 of the Securities and Exchange Act of 1934 and are not required to provide the information under this item. Issuer Repurchases of Equity Securities Item 6. **[** Reserved **]** . Item 7. Management' s Discussion and Analysis of Financial Condition and Results of Operations ~~.~~ This Annual Report contains forward- looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that contain the words " believes, " " anticipates, " " expects, " " plans, " " intends " and similar words and phrases. These forward- looking statements are subject to risks and uncertainties that could cause actual results to differ materially from the results projected in any forward- looking statement. In addition to the factors specifically noted in the forward- looking statements, other important factors, risks and uncertainties that could result in those differences include, but are not limited to, those discussed under Item 1A to Part I " Risk Factors " in this Annual Report. The forward- looking statements are made as of the date of this Annual Report, and we assume no obligation to update the forward- looking statements, or to update the reasons why actual results could differ from those projected in the forward- looking statements. Investors should consult all of the information set forth in this report and the other information set forth from time to time in our reports filed with the Securities and Exchange Commission pursuant to the Securities Act of 1933 and the Securities Exchange Act of 1934, including our reports on Forms 10- Q and 8- K. The following discussion should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in Item 8 of this Annual Report. Overview Rafael Holdings, Inc. (NYSE: RFL), (" Rafael Holdings ", " we " or the " Company "), a Delaware corporation, is a holding company with interests in clinical and early- stage pharmaceutical companies (the " Pharmaceutical Companies "), ~~through~~ **including** an investment in Cornerstone Pharmaceuticals, Inc., formerly known as Rafael Pharmaceuticals Inc., a cancer metabolism- based therapeutics company **,** a majority equity interest in LipoMedix Pharmaceuticals Ltd. (" LipoMedix "), a clinical stage pharmaceutical company, the ~~activities of the~~ Barer Institute Inc. (" Barer "), a wholly- owned preclinical cancer metabolism research operation, ~~and~~ **an investment in Cyclo Therapeutics, Inc. (Nasdaq: CYTH) (" Cyclo Therapeutics " or " Cyclo), a clinical- stage biotechnology company dedicated to developing life- changing medicines for patients and families living with challenging diseases through its lead therapeutic asset, Trappsol ® Cyclo ™., an investment in Day Three Labs, Inc. (" Day Three "), a company which reimagines existing cannabis offerings with pharmaceutical- grade technology and innovation like Unlokt ™ to bring to market better, cleaner, more precise and predictable products in the cannabis industry, and a majority interest in** Rafael Medical Devices, **LLC,** ~~Inc. (" Rafael Medical Devices " and~~ **an** ~~together with the Pharmaceutical Companies, the " Healthcare Companies "), a wholly- owned~~ orthopedic- focused medical device company developing instruments to advance minimally invasive surgeries **(" Rafael Medical Devices " and Day Three Labs together with the Pharmaceutical Companies, represent our " Investment Companies "). In November 2022, the Company resolved to curtail its early- stage development efforts, including pre- clinical research at Barer. The decision was taken to reduce spending as the Company focuses on exploring strategic opportunities** . The Company' s primary focus **is** ~~to date, has been to invest in and fund, discover and develop novel cancer therapies, and we further seek~~ to expand our **investment** portfolio through opportunistic **and strategic** investments ~~in~~ **including** therapeutics which address high unmet medical needs ~~including through acquisitions, strategic investments, or in- licensing assets~~ . **The** ~~Historically, the Company owned real estate assets. In 2020, the Company sold an office building located in Piscataway, New Jersey and following the end of Fiscal 2022, the Company sold the building at 520 Broad Street in Newark, New Jersey and an associated public garage. Currently, the~~ Company holds ~~a portion of a commercial building in Jerusalem, Israel as its remaining real estate asset. The Company has~~ debt and equity investments in Cornerstone ~~Pharmaceuticals, Inc., or Cornerstone Pharmaceuticals~~ , that include preferred and common equity interests and a warrant to purchase additional equity. On June 17, 2021, the Company entered into a merger agreement to acquire full ownership of Cornerstone ~~Pharmaceuticals~~ in exchange for issuing Company Class B common stock to the other stockholders of Cornerstone ~~Pharmaceuticals~~ **(" Merger Agreement " or " Merger ")** . On October 28, 2021, the Company announced that the AVENGER 500 Phase 3 clinical trial for CPI- 613 ® (devimistat), Cornerstone ~~Pharmaceuticals~~ ' **s** lead product candidate, did not meet its primary endpoint of significant improvement in overall survival in patients with metastatic adenocarcinoma of the pancreas **. In addition** , ~~and~~ following a pre- specified interim analysis, the independent data monitoring committee for the ARMADA 2000 Phase 3 study for devimistat recommended the trial to be stopped due to a determination that it was unlikely to achieve the primary endpoint (the " Data Events "). In light of the Data Events, the Company concluded that the prospects for CPI- 613 were uncertain and ~~has~~ fully impaired in its financial statements for the year ended July 31, 2022, the value of its loans, receivables, and investment in Cornerstone ~~Pharmaceuticals~~ based upon its valuation of Cornerstone ~~Pharmaceuticals~~ . On September 24, 2021, the Company entered into a Line of Credit Loan Agreement (the " Line of Credit Agreement ") with Cornerstone ~~Pharmaceuticals~~ under which Cornerstone ~~Pharmaceuticals~~ borrowed $ 25 million from the Company. Due to the Data Events, the Company recorded a full reserve on the $ 25 million due the Company from Cornerstone ~~Pharmaceuticals~~ . On February 2, 2022, the Company terminated the Merger Agreement with Cornerstone Pharmaceuticals, effective immediately, in accordance with its terms. Subsequently, on February 2, 2022, the Company withdrew its Registration Statement on Form S- 4 related to the proposed Merger. **On March 21, 2023, the Company loaned $ 2. 0 million to Cornerstone which debt is represented by a Promissory Note made by Cornerstone (the “ Promissory Note ” or “ Note ”). The Note, which bears interest at a rate of seven and one- half percent (7. 5 %) per annum, was originally due and payable on May 22, 2023. On May 22, 2023, the Promissory Note was amended to extend the maturity date to November 30, 2023 and to waive any increase in the interest rate provided for in the Note, provided that the entire principal amount and all accrued interest thereon is repaid in cash or converted into equity securities of Cornerstone no later than November 30, 2023. Cornerstone is in the process of a comprehensive restructuring transaction including, an equity investment by the Company of $ 1. 5 million with other stockholders having the right to invest amounts on the same terms to avoid dilution, the conversion and modification of other Cornerstone debt obligations, the extension of the Cornerstone debt held by RP Finance, a reverse stock split, the conversion of all outstanding preferred stock of Cornerstone into common stock and the adoption of certain governance measures. This transaction is subject to a number of conditions which are beyond the Company’ s control.** In 2019, the Company established the Barer Institute **Inc.** ~~(“ Barer ”)~~ , an early- stage small molecule research operation focused on developing a pipeline of novel therapeutic compounds, including compounds to regulate cancer metabolism with potentially broader application in other indications beyond cancer. Barer ~~is~~ **was** led by a team of scientists and academic advisors considered to be among the leading experts in cancer metabolism, chemistry, and drug development. In addition to its own internal discovery efforts, Barer **pursued** ~~is pursuing~~ collaborative research agreements and in- licensing opportunities with leading scientists from top academic institutions. Farber Partners, LLC (“ Farber ”) was formed to support agreements with Princeton University’ s Office of Technology Licensing for technology from the laboratory of Professor Joshua Rabinowitz, in the Department of Chemistry, Princeton University, including an exclusive worldwide license to its SHMT (serine hydroxymethyltransferase) inhibitor program. The Company also holds a majority equity interest in LipoMedix ~~Pharmaceuticals Ltd. (“ LipoMedix ”)~~ , a clinical stage oncological pharmaceutical company based in Israel. In addition, the Company has invested in other early- stage pharmaceutical ventures. **In 2016, the Company first invested in LipoMedix Pharmaceuticals Ltd. (“ LipoMedix ”), a clinical stage pharmaceutical company. On February 9, 2023, the Company entered into a Share Purchase Agreement with LipoMedix in which LipoMedix sold 70, 000, 000 ordinary shares to the Company at a price per share of $ 0. 03 and an aggregate sale price of approximately $ 2. 1 million. Subsequent to this transaction, the Company owns 95 % of LipoMedix. On April 7, 2023, the Company entered into a Common Stock Purchase Agreement (the “ Day Three Purchase Agreement ”) with Day Three. Day Three is a cannabinoid ingredient manufacturer specializing in the development and commercialization of novel cannabis product solutions. Pursuant to the Day Three Purchase Agreement, the Company purchased 4, 302, 224 shares of common stock representing 38 % of the outstanding shares of common stock of Day Three (33. 333 % on a fully diluted basis), for a purchase price of $ 3. 0 million. The Company also received a warrant exercisable for 7, 528, 893 shares of common stock at an aggregate purchase price of $ 3. 0 million, which expires five years from the date of issuance or earlier based on the occurrence of certain events as defined in the Day Three Purchase Agreement** As of July 31, ~~2022~~ **2023** , **the Company had not exercised the warrant. Refer to Note 8 to our accompanying consolidated financial statements for further detail. On May 2, 2023, the Company entered into a Securities Purchase Agreement (the “ Cyclo SPA ”) with Cyclo. Cyclo is a clinical stage biotechnology company, whose common stock is listed on the Nasdaq Capital Market under the symbol CYTH, that develops cyclodextrin- based products for the treatment of neurodegenerative diseases. The Company purchased from Cyclo (i) 2, 514, 970 common shares (the “ Purchased Shares ”) and (ii) a warrant to purchase 2, 514, 970 common shares with an exercise price of $ 0. 71 per share (the “ Cyclo Warrant ”), at a combined purchase price equal to $ 0. 835 per Purchased Share and Cyclo Warrant to purchase one share, for an aggregate purchase price of $ 2. 1 million. The Cyclo Warrant is exercisable for a period of seven years from the date of issuance. On August 1, 2023, the Company purchased an additional 4, 000, 000 shares of common stock (the “ Cyclo II Shares ”), and a warrant to purchase an additional 4, 000, 000 Shares (the “ Cyclo II Warrant ”), for an aggregate purchase price of $ 5, 000, 000. The Cyclo II Warrant has an exercise price of $ 1. 25 per share and is exercisable until July 31, 2030. The August 1, 2023 investment increased** the Company’ s ~~commercial~~ **percentage ownership of Cyclo common stock to 34 %. On October 20, 2023, the Company exercised the Cyclo Warrant to purchase 2, 514, 970 common shares at an exercise price of $ 0. 71 per share, pursuant to a Securities Purchase Agreement dated October 20, 2023, and in consideration received a new warrant to purchase an additional 2, 766, 467 common shares at an exercise price of $ 0. 95 per share which are exercisable for a period of four years following the issuance date (the “ Cyclo III Warrant ”), for an aggregate purchase price of $ 1, 785, 629. During the fourth quarter of fiscal 2023, Rafael Medical Devices received $ 825 thousand as a deposit from outside third party investors for the purchase of membership units. On August 1, 2023, the Company received an additional $ 100 thousand. Following these investments, the Company holds 53. 4 % (on a fully diluted basis) of the ownership interests in Rafael Medical Devices. As of July 31, 2023, the Company recorded the funds received within prepaid expenses and other current assets and other current liabilities within the consolidated balance sheets. Historically, the Company owned** real estate ~~holdings consisted of a~~ **assets. In 2020, the Company sold an office building located in Piscataway, New Jersey and on August 22, 2022, the Company sold the** building at 520 Broad Street in Newark, New Jersey ~~(“ 520 Property ”) that serves as headquarters for the Company and certain other entities and tenants~~ and an associated ~~800- car~~ public garage **. Currently** , ~~and~~ **the Company holds** a portion of a commercial building in **Jerusalem,** Israel **as its remaining real estate asset** ~~. On August 22, 2022, the Company completed the sale of the 520 Property for a purchase price of approximately $ 49. 4 million and realized net proceeds of approximately $ 33 million~~ . On July 1, 2022, the Company determined that the 520 Property met the held- for- sale criteria and the Company has therefore classified the 520 Property as held- for- sale in the consolidated balance ~~sheets~~ **sheet** at July 31, 2022 ~~and 2021~~. The sale of the 520 Property also represents a significant strategic shift that will have a major effect on the Company' s operations and financial results. Therefore, the Company has classified the results of operations related to the 520 Property as discontinued operations in the consolidated statements of operations and comprehensive loss. Depreciation on the 520 Property ~~has~~ ceased ~~on~~ **effective** July 1, 2022, as a result of the 520 Property being classified as held- for- sale. See Note ~~2~~ **3** to our accompanying consolidated financial statements for further information regarding discontinued operations. **As** ~~Business Update- COVID- 19, War in Ukraine In late 2019, a novel strain~~ of ~~coronavirus~~ **July 31**, ~~SARS- CoV, which causes COVID- 19, was identified and has proved to be highly contagious. It has since spread extensively throughout the world, including the United States, and was declared a global pandemic by the World Health Organization in March 2020~~ **2023**. ~~The Company actively monitors the outbreak~~, ~~including the spread of new variants of interest, and its potential impact on~~ the Company' s ~~operations and those~~ **commercial real estate holdings consisted** of **a portion of a commercial building in Israel. On August 22, 2022,** the Company **completed** ~~' s holdings. Even with growing availability of testing and vaccines and~~ the ~~relaxation~~ **sale** of ~~public health measures~~ **the building at 520 Broad Street in Newark, New Jersey** that **serves as headquarters for** ~~were implemented to limit the spread of the pandemic, there~~ - **the** ~~continues to be uncertainty around the COVID- 19 pandemic and its impact. The~~ Company **for** ~~had implemented~~ a ~~number~~ **purchase price** of **approximately $ 49** ~~measures to protect the health and safety of the Company' s workforce including a voluntary work- from- home policy for the Company' s workforce who can perform their jobs from home as well as restrictions on discretionary business travel~~. **4 million** ~~Most of our employees have returned to working from the office on a part- time basis. The full impact of the COVID- 19 pandemic on the Company will depend on factors such as the length of time of the pandemic; the responses of federal, state and local governments; the impact of future variants that may emerge; vaccination rates among the population; the efficacy of the COVID- 19 vaccines; the longer- term impact of the pandemic on the economy and consumer behavior; and the effect on our employees, vendors, and other partners. The short and long- term implications of Russia' s invasion of Ukraine are difficult to predict at this time. The imposition of sanctions and counter sanctions may have an~~ **and realized net proceeds of approximately $ 33 million.** ~~adverse effect on the economic markets generally and could impact our business and the companies in which we have investments, financial condition, and results~~ **Results** of ~~operations~~ **Operations** ~~. Because of the highly uncertain and dynamic nature of these events, it is not currently possible to estimate the impact of the Russian – Ukraine war on our business and the companies in which we have investments.~~ Our business consists of two reportable segments- Healthcare and Real Estate. We evaluate the performance of our Healthcare segment based primarily on research and development efforts and results of clinical trials, and our Real Estate segment based primarily on results of operations. Accordingly, the income and expense line items below loss from operations are only included in the discussion of consolidated results of operations. Healthcare Segment Our consolidated expenses for our Healthcare segment were as follows: Year Ended July 31, Change **2023** 2022 ~~2021~~ $ % (in thousands) General and administrative $ (**8, 794) $ (** 16, 818) **8** ~~$ (16~~, **024 48** ~~902) 84 —~~ % Research and development (**6, 312) (** 8, 742) **2** ~~(4~~, **430 28** ~~907) (3, 835) (78)~~ % Depreciation (**15) (** 3) (**12** ~~2) (1~~) — % Provision for loss on receivable **from Cornerstone Pharmaceuticals** pursuant to line of credit **—** (25, 000) ~~— (~~25, 000 ~~)~~ (100) % Provision for losses on related party receivables **—** (10, 095) ~~— (~~10, 095 ~~)~~ (100) ~~% Impairment – Altira — (7, 000) 7, 000 100~~ % Loss from ~~continuing~~ operations $ (**15, 121) $ (** 60, 658) **45** ~~$ (28~~, **537 75** ~~811) (31, 847) (111)~~ % To date, the Healthcare segment has not generated any revenues. The entirety of the expenses in the Healthcare segment relate to the activities of LipoMedix, Barer, Farber, and Rafael Medical Devices. As of July 31, ~~2022~~ **2023**, we held a 100 % interest in Barer, ~~an 84~~ **a 95** % interest in LipoMedix, a 93 % interest in Farber, and a 100 % interest in Rafael Medical Devices. **On August 1, 2023, the Rafael Medical Devices closed on the sale of membership units in exchange of $ 925, 000, and following that sale, the Company holds 53. 4 % (on a fully diluted basis) of the outstanding equity interests in Rafael Medical Devices, on a fully- diluted basis. As of July 31, 2023, the Company recorded the funds received within prepaid expenses and other current assets and other liabilities of $ 825, 000 within the consolidated balance sheets.** General and administrative expenses. General and administrative expenses consist mainly of payroll, ~~severance,~~ stock **- based** compensation expense, benefits, facilities, consulting and professional fees. The ~~slight~~ decrease in general and administrative expenses ~~for~~ **during** the year ended July 31, ~~2022~~ **2023** compared to the year ended July 31, ~~2021~~ **2022** is primarily due to **a net decrease in** severance expense of approximately $ 5. ~~9~~ **0** million, ~~an~~ **a** ~~increase~~ **decrease** in ~~salary~~ **payroll** ~~expenses~~ - **expense** of approximately $ ~~2~~ **3**. ~~2~~ **4** million, ~~an~~ **a** ~~increase~~ **decrease in legal expense of approximately $ 1. 1 million, a decrease** in professional fees of approximately $ 1. **2 million and a decrease in other general and administrative expenses of approximately $** 0 **. 7** million, **partially** offset by a net ~~decrease~~ **increase** in stock- based compensation expense of approximately $ ~~7~~ **3**. ~~9~~ **6** million **due to** ~~(inclusive of~~ a **material** forfeiture of **granted equity interests** ~~restricted stock units of approximately $ 19. 0 million) and a decrease~~ in ~~bonus pay of approximately $ 1. 4 million. The majority of these increases were related to pre- launch activities for CPI- 613 ® which are not expected to be recurring in light of the Data Events. Research and development expenses. Research and development expenses increased for~~ the year ended July 31, 2022 ~~as compared to~~ **. Research and development expenses. Research and development expenses decreased for** the year ended July 31, ~~2021~~ **2023** ~~due primarily~~ **as compared** to ~~increased~~ **the corresponding period in fiscal 2022. Research and development expenses are derived from** activity at Barer, LipoMedix, Farber, and Rafael Medical Devices ~~during the periods~~. **In November 2022, the Company resolved to curtail its early- stage development efforts, including pre- clinical research at the** Barer ~~also~~ **Institute. The decision was taken to reduce spending** ~~has~~ - **as** ~~additional management this period which also attributed to~~ the ~~increase~~ **Company focuses on exploring strategic opportunities**. Loss on line of credit. Due to the Data Events, in the year ended July 31, 2022, the Company recorded a full reserve on the $ 25 million due to the Company from Cornerstone Pharmaceuticals related to the Line of Credit Agreement. Loss on related party receivables. Due to the Data Events, in the year ended July 31, 2022, the Company recorded a loss of approximately $ 10. 1 million related to the full reserve recorded on the RP Finance receivable of $ 9. 375 million, **an equity method investment (see Note 6),** and a full reserve recorded on the Cornerstone Pharmaceuticals receivable **, see (Note 4)** of $ ~~0.~~ 720 **thousand** ~~million. Impairment expense- Altira. The Company recorded an impairment loss of $ 7 million related to the Company' s investment in 33. 333 % of Altira during year ended July 31, 2021. The Company' s initial investment in Altira was impaired in fiscal year 2020~~. Real Estate Segment The revenue and expenses of the 520 Property have been excluded from the real estate segment in the figures below due to its classification of held- for- sale and discontinued operations ~~as~~ **, and the sale** of ~~July 31~~ **the 520 Property on August 22**, 2022. The Real Estate segment consists of a portion of a commercial building in Israel. ~~Our consolidated~~ **Consolidated** income and expenses for our Real Estate segment were as follows: Year Ended July 31, Change **2023** 2022 ~~2021~~ $ % (in thousands) Rental – Third Party $ **171 $** 179 ~~$ 214~~ (~~35~~ **8**) (~~16~~ **4**) % Rental – Related Party **108** 111 ~~108~~ **(** 3 **) (** 3 **)** % Other ~~-~~ **—** Related Party **—** 120 ~~480~~ (~~360~~ **120**) (~~75~~ **100**) % ~~Selling, general~~ **General** and administrative (**138) (** 160) ~~(122~~ - **22 14** ~~) (38) (31)~~ % Depreciation and amortization (**63) (** 69) **6 9** ~~(68) (1) (1)~~ % Income from ~~continuing~~ operations $ **78 $** 181 ~~$ 612~~ (~~431~~ **103**) ~~70~~ **57** % ~~Revenues~~ **Other- Related Party**. ~~Rental~~ **Other – related party** revenues decreased by approximately $ ~~32~~ **120** thousand ~~in~~ **during** the year ended July 31, ~~2022~~ **2023**, compared to ~~the prior year, primarily attributable to one month' s worth of rental revenue from the building in Piscataway, New Jersey that was earned in fiscal 2021 prior to its August 2021 sale compared to no corresponding revenue in fiscal 2022. Other- Related Party. Other- Related Party revenues decreased by approximately $ 360 thousand during~~ the year ended July 31, 2022 ~~, compared to the prior year ended July 31, 2021~~. During the year ended July 31, 2022, the Company only billed Cornerstone Pharmaceuticals $ 120 thousand for the first quarter of 2022 for administrative, finance, accounting, tax, and legal services. As of July 31, **2023 and** 2022, Cornerstone Pharmaceuticals owed the Company $ 720 thousand **which relates to administrative and back- office services**, for which a full allowance for uncollectibility has been recorded ~~and included in Due from Cornerstone Pharmaceuticals~~. ~~Selling, general~~ **General** and administrative expenses. ~~Selling, general~~ **General** and administrative expenses consist mainly of payroll, benefits, facilities, consulting and professional fees. The ~~increase~~ **decrease** in ~~selling,~~ general and administrative expenses of approximately $ ~~38~~ **22** thousand during the year ended July 31, ~~2022~~ **2023** compared to the year ended July 31, ~~2021~~ **2022** is primarily due to ~~an~~ **a** ~~increase~~ **decrease** in professional fees ~~and building operating expenses, coupled with other increases in administrative expenses on IDT R. E. Holdings Ltd~~. Consolidated Operations Our consolidated income and expense line items below ~~income~~ **loss** from operations were as follows: ~~For the Years~~ - **Year** Ended July 31, Change **2023** 2022 ~~2021~~ $ % (in thousands) Loss from **continuing** operations $ (**15, 043) $ (** 60, 477) **45** ~~$ (28~~, **434 75** ~~199) (32, 278) (114)~~ % Interest expense **—** (6) ~~(12)~~ 6 ~~50~~ **100** % Interest income **3, 253** 201 ~~2 199~~ **3, 052** (**1518** ~~9950) % Gain on sale of building — 749 (749) (100~~) % Impairment of investments- Other Pharmaceuticals **(334)** — (~~724~~ **334**) ~~724~~ **(** 100 **)** % Impairment of cost method investment- Cornerstone Pharmaceuticals **—** (79, 141) ~~— (~~ 79, 141 ~~)~~ (100) % Realized **gain (** loss **)** on available- for- sale securities **154** (45) **199 (442) % Realized gain on investment in equity securities 309** — **309** ~~(45)~~ (100) % Unrealized **gain on investment in equity securities 33 — 33** (~~loss~~ **100**) **% Unrealized** gain on investments- **Cyclo Therapeutics Inc. 2, 663 — 2, 663 (100) % Unrealized gain (loss) on investments-** Hedge Funds **220** (504) **724** ~~4, 758~~ (**144** ~~5, 262) (111~~) % Loss from continuing operations before income taxes (**8, 745) (** 139, 972) **131** ~~(23~~, **227 94** ~~426) (116, 546) (498)~~ % ~~Provision for~~ **Benefit from** income taxes **255** — **255** (~~18~~ **100**) ~~18~~ **% Equity in loss of Day Three Labs Inc. (203) — (203)** 100 % Equity in ~~(~~ loss ~~) earnings~~ of RP Finance **—** (575) ~~383~~ **575** (~~958~~ **100**) ~~250~~ % Consolidated **net** loss from continuing operations (**8, 693) (** 140, 547) **131** ~~(23~~, **854 94** ~~061) (117, 486) (509)~~ % **Income (** ~~Loss~~ **loss)** from discontinued operations related to 520 Property **6, 478** (1, 830) **8** ~~(1~~, **308 454** ~~705) (125) (7)~~ % Net loss attributable to noncontrolling interests (**339) (** 17, 719) ~~(222) (~~ 17, **380 98** ~~497) (7882)~~ % Net loss attributable to Rafael Holdings, Inc. $ (**1, 876) $ (** 124, 658) $ **122** ~~(24~~, **782 98** ~~544) (100, 114) (408)~~ % Interest income. Interest income was $ **3. 3 million and $** 201 ~~thousand and $ 2~~ thousand for the years ended July 31, **2023 and** 2022 ~~and 2021~~, respectively. The increase is primarily due to the interest income earned **and accretion of the discount** on **the face value of** our investments in available- for- sale securities **whose balance increased to** ~~. Gain on sale of building. In August 2020, we sold a building located in Piscataway, New Jersey, and recognized a gain on the sale of approximately~~ $ **57. 7 million at** ~~749 thousand for the year ended~~ July 31, ~~2021~~ **2023 from $ 36. 7 million at July 31, 2022**. Impairment of investments- Other Pharmaceuticals. We recorded an impairment loss of $ ~~724~~ **334** thousand ~~related to our investment in Nanovibronix using the measurement alternative~~ for the year ended July 31, ~~2021~~ **2023 , related to an investment in securities in another entity using the measurement alternative**. Impairment of cost method investment- Cornerstone Pharmaceuticals. In connection with the Data Events, during the year ended July 31, 2022, we recorded a full impairment charge to our cost method investment in Cornerstone Pharmaceuticals in the amount of ~~approximately~~ $ 79 million. Realized **gain (** loss **)** on available- for- sale securities **. We recorded a realized gain of approximately $ 154 thousand related to the sale of available- for- sale securities for the year ended July 31, 2023**. We recorded a realized loss of approximately $ 45 thousand related to ~~maturities~~ **the sale** of available- for- sale securities for the year ended July 31, 2022. **Realized gain on investment in equity securities. We recorded a realized gain of approximately $ 309 thousand related to the sale of equity securities for the year ended July 31, 2023.** Unrealized **gain on investment- Cyclo. We recorded an unrealized gain of approximately $ 2. 7 million related to the change in fair value in our investment in Cyclo for the year ended July 31, 2023. Unrealized gain** (loss) ~~gain~~ on investments- Hedge Funds. We recorded unrealized **gains of approximately $ 220 thousand and** losses of approximately $ 504 thousand ~~and gains of approximately $ 4. 8 million~~ for the years ended July 31, **2023 and** 2022 ~~and 2021~~, respectively **. Benefit from income taxes. Our benefit from income taxes was approximately $ 255 thousand and $ 0 for the years ended July 31, 2023 and 2022, respectively. The increase is primarily attributed to approximately $ 274 thousand in proceeds for the sale of the Company' s 2018 and 2019 New Jersey tax credits. These benefits were realized by utilizing the New Jersey Technology Business Tax Certificate Transfer Program whereby the State of New Jersey allows us to sell a portion of our state net operating loss carryforwards**. Equity in ~~(~~ loss ~~) earnings~~ of ~~RP Finance~~ **Day Three Labs, Inc**. We recognized a loss of **approximately $ 203 thousand from our ownership interest in Day Three due to operating results for the year ended July 31, 2023. As of July 31, 2023, the equity method investment in Day Three on our balance sheet is**

approximately $ 2. 8 million. Equity in loss of RP Finance. We recognized a loss of $ 575 ~~thousand and earnings of $ 383~~ thousand from our ownership interest in RP Finance **due to operating results** for the ~~years~~ - **year** ended July 31, 2022 ~~and~~ **. As of July 31,** ~~2021~~ **2022** , ~~respectively.~~ **the equity method investment in RP Finance on our balance sheet was $ 0, and no additional equity** ~~Loss~~ **loss of RP Finance was recorded subsequent to the year ended July 31, 2022. Income (loss)** from discontinued operations related to 520 Property ~~, net of tax~~ . Discontinued operations ~~includes~~ - **include:** (i) rental and parking revenues, (ii) payroll, benefits, ~~facility~~ **facilities** ~~costs, real estate taxes~~ , consulting and professional fees dedicated to ~~the~~ 520 Property, ~~and~~ (iii) depreciation and amortization expenses ~~on July 31~~ , ~~2022 and~~ (iv) interest (including amortization of debt issuance costs) on the note payable **that was secured by a mortgage** on the **520 Property, and (v) gain on the disposal of the 520** Property. The operating results of these items are presented in our consolidated statements of operations and comprehensive loss as discontinued operations for all periods presented. The increase in the net ~~loss~~ **income** attributable to discontinued operations **for the year ended July 31, 2023 as compared to the year ended July 31, 2022** was due to **a gain on the sale of the 520 Property of $ 6. 8 million,** an approximate $ ~~330~~ **1. 4 million decrease in interest expense, partially offset by a $ 3. 3 million decrease in rental revenue, a $ 2. 2 million decrease in general and administrative expenses (which is primarily comprised of a decrease in real estate taxes, utilities other building related repairs, maintenance expenses, and other expenses totaling approximately $ 2. 4 million, slightly offset by a $ 129** thousand increase in **expense related to the write-off of deferred** rental ~~revenue~~ **income)** , **and** a $ **1. 3 million** ~~157 thousand increase in other income, a $ 709 thousand decrease in selling, general and administrative expenses and $ 73 thousand~~ decrease in depreciation and amortization expense due to **no** ~~only 11 months of~~ depreciation expense during **the year ended July 31,** ~~2022~~ **2023** as depreciation stopped as of July 1, 2022 when the 520 Property was classified as held- for- sale. ~~This is offset by an approximate $ 1. 39 million increase in interest expense.~~ See Note ~~2~~ **3** to our accompanying consolidated financial statements for further information regarding discontinued operations. Net loss attributable to noncontrolling interests. The change in the net loss attributable to noncontrolling interests was due to an approximate $ 17. 3 million loss related to the Cornerstone Pharmaceuticals impairment loss (the total impairment loss was approximately $ 79 million) which was applicable to noncontrolling interests in certain of the Company' s subsidiaries and was allocated to the ~~minority~~ holders of interests in CS Pharma and Pharma Holdings in the approximate amounts of $ 10. 4 million and $ 6. 9 million, respectively, for the year ended July 31, 2022. **Liquidity** ~~The additional change is related to the losses from LipoMedix~~ and **Capital Resources As of** ~~Farber for the year ended~~ July 31, **Change 2023** 2022 ~~. Liquidity and Capital Resources For the years ended July 31, Change 2022 2021~~ $ % **(in thousands)** Balance Sheet Data: ~~(in thousands)~~ Cash and cash equivalents $ **21, 498 $** 26, 537 ~~$ 7~~ **(5** , ~~854 18, 683 238~~ **039) (19)** % ~~Restricted cash~~ **Convertible note receivable, related party 1, 921** — ~~5~~ **1** , **921** ~~000 (5, 000) (~~ 100 ~~)~~ % Working capital **80, 796** 87, 321 (~~2~~ **6** , ~~539~~ **525**) ~~89, 860~~ (~~3539~~ **7**) % Total assets **98, 829** 118, 320 ~~154, 055~~ (~~35~~ **19** , ~~735~~ **491**) (~~23~~ **16**) % Note payable, net of debt issuance costs, held- for- sale **—** 15, 000 ~~14~~ **(15** , ~~528 472 3~~ **000) (100)** % Total equity attributable to Rafael Holdings, Inc. 100, **293 100,** 515 ~~122, 286~~ (**222** ~~21, 771~~) **—** ~~(18)~~ % Noncontrolling interests (3, **664) (3,** 309) ~~14, 418~~ (**355** ~~17, 727~~) **11** ~~(123)~~ % Total equity **96, 629** 97, 206 ~~136, 704~~ (**577** ~~39, 498~~) (~~29~~ **1**) % For the ~~years~~ **Years** ~~ended~~ **Ended** July 31, Change ~~2022~~ **2023** 2022 $ % **(in thousands)** Cash flows (used in) provided by ~~(in thousands)~~ Operating activities **of** ~~used in~~ continuing operations $ (**10, 247) $ (** 26, 038) ~~$ (~~ 15, **791** ~~314)~~ (**61** ~~10, 724~~) ~~70~~ % Investing activities **of** ~~used in~~ continuing operations (**26, 960) (** 63, 683) **36** ~~(7~~ , **723** ~~921)~~ (**58** ~~55, 762~~) ~~704~~ % Financing activities **of** ~~provided by~~ continuing operations **(218)** 103, 864 ~~15~~ **(104** , ~~798 88, 066 557~~ **082) (100)** % Effect of exchange rates on cash and cash equivalents (**146) (** 306) ~~122~~ **160** (**52** ~~428) (351~~) % **Operating, investing, and financing activities of** ~~Discontinued~~ **discontinued** operations ~~- 520 Property~~ **32, 532** (154) ~~13~~ **32** , ~~963~~ **686** (~~14~~ **21** , **224** ~~117) (101~~) % **(Decrease)** ~~Increase~~ **increase** in cash and cash equivalents $ **(5, 039) $** 13, 683 ~~$ 6~~ **(18** , ~~648 7, 035 106~~ **722) (137)** % **Capital Resources** As of July 31, ~~2022~~ **2023** , we held cash and cash equivalents of approximately $ ~~26~~ **21** . 5 million **,** and available- for- sale securities valued at approximately $ ~~36~~ **57** . 7 million **. On August 22** , ~~and investment in hedge funds valued at~~ **2022, the Company received net proceeds of** approximately $ **33** ~~4. 8~~ million **in connection with the sale of the 520 Property (see Note 3 to our accompanying consolidated financial statements for further details)** . ~~We~~ **The Company** ~~expect~~ **expects** ~~the~~ **its** balance of cash and cash equivalents, ~~investment in corporate bonds,~~ and ~~investment in hedge funds~~ **available- for- sale- securities,** to be sufficient to ~~at least~~ meet our obligations for **at least** the ~~period through October 31, 2023~~ **12 months from the filing of this Annual Report on Form 10- K** . Operating Activities The ~~increase~~ **decrease** in cash used in operating activities for the year ended July 31, ~~2022~~ **2023** as compared to the year ended July 31, ~~2021~~ **2022** was primarily related to the ~~net~~ **lower** loss from continuing operations of $ ~~141~~ **8. 7 million in fiscal 2023 as compared to the corresponding period in fiscal 2022 due to an impairment of cost method investment in Cornerstone Pharmaceuticals of approximately $ 79 million, a provision for loss on receivable from Cornerstone Pharmaceuticals of $ 25 million, and a provision for losses on related party receivables of approximately $ 10 million in fiscal 2022, coupled with the impact from non- cash items, primarily $ 1. 2 million in accretion of discount on available- for- sale securities, $ 0. 2 million in net unrealized (gain) loss on investments- Hedge Funds, $ 0. 2 million in realized (gain) loss on available- for- sale securities, offset by impairment of investments- other pharmaceuticals of $ 0. 3 million and stock- based compensation of $ 2. 2 million. The decrease was also impacted by a decrease in prepaid expenses and other current assets of $ 0. 4 million and a decrease in accounts payable and accrued expenses of $ 0. 8 million, as well as other changes in assets and liabilities. Cash used in operating activities for the year ended July 31, 2022 was primarily related to the loss from continuing operations of $ 140. 5** million and an increase in prepaid expenses and other current assets of $ 3. 5 million, partially offset by the impact from noncash items **included in the loss from operations** , principally the impairment of the Company' s cost method investment in Cornerstone Pharmaceuticals of $ 79 million, the reserve on the amounts due the Company from Cornerstone Pharmaceuticals related to the Line of Credit Agreement of $ 25 million, the reserve on receivables due from Cornerstone Pharmaceuticals totaling $ 10. 1 million, changes in other current liabilities of $ 3. 6 million, as well as other changes in assets and liabilities. Investing Activities Cash used in investing activities for the year ended July 31, ~~2022~~ **2023** was primarily ~~related~~ **due** to purchases of available- for- sale securities of approximately $ ~~65~~ **204. 8** million, ~~amounts~~ **the investment in Day Three of $ 3. 0 million, the purchase of investment in Cyclo of $ 2. 1 million, the** ~~loaned~~ -- **loan of $ 2. 0 million** to Cornerstone ~~Pharmaceuticals of approximately $ 25 million pursuant to the Line of Credit Agreement~~ and the **purchase** ~~payments to fund our portion~~ of **equity securities** ~~advances under the line~~ of ~~credit between RP Finance and Cornerstone Pharmaceuticals in the amount of approximately~~ $ 1. ~~9~~ **6** million ~~,~~ **. This is** partially offset by proceeds of $ ~~28~~ **185** . ~~5~~ **1** million from the **sale and** maturities of available- for- sale **securities and proceeds of $ 1. 3 million from the sale of equity** securities. Cash used in investing activities for the year ended July 31, ~~2021~~ **2022** was primarily related to ~~the purchase~~ **purchases** of ~~7. 3~~ **available- for- sale securities of approximately $ 65** million ~~shares of Rafael~~ **, amounts loaned to Cornerstone** Pharmaceuticals **of approximately** ~~' Series D Preferred Stock for~~ $ **25** ~~9. 1~~ million ~~,~~ **pursuant to the Line of Credit Agreement and** the payments to fund our portion of advances under the line of credit between RP Finance and ~~Rafael~~ **Cornerstone** Pharmaceuticals ~~for~~ **in the amount of approximately** $ ~~7~~ **1. 9 million, partially offset by proceeds of $ 28** . 5 million ~~, the payments of an aggregate of $ 2 million towards the acquisition of a second 33. 333 % membership interest in Altira, offset by the proceeds of $ 7 million~~ from the ~~liquidation~~ **maturities** of **available- for-** ~~hedge funds and $ 3. 7 million from the~~ sale **securities** ~~of the building in Piscataway, New Jersey in August 2020~~ . Financing Activities **Cash used in financing activities for the year ended July 31, 2023 was primarily related to repayment of the $ 15 million note payable in connection with the sale of 520 Property and for payment of taxes related to shares withheld for employee taxes on vesting of shares granted to employees.** Cash provided by financing activities for the year ended July 31, 2022 was primarily related to proceeds of approximately $ 110 million related to the sale of our common stock to investors and a related party, partially offset by payment of transaction costs of $ 6. 2 million ~~. Cash provided by financing activities for the year ended July 31, 2021 was primarily related to proceeds of $ 13. 0 million for the sale of 567, 437 shares of our Class B common stock and warrants to purchase an additional 113, 487 shares of Class B common stock. Additionally, there were approximately $ 2. 0 million in proceeds provided by the exercise of 87, 298 warrants to purchase Class B common stock~~ . We do not anticipate paying dividends on our common stock until we achieve sustainable profitability and retain certain minimum cash reserves. The payment of dividends in any specific period will be at the sole discretion of our Board of Directors. Operating **, Financing,** and ~~investing~~ **Investing** ~~activities~~ **Activities** ~~from~~ **of** ~~discontinued~~ **Discontinued** ~~operations~~ **Operations** The cash flows from discontinued operations ~~—~~ **-** 520 Property represents the net ~~loss~~ **income** excluding non- cash depreciation and amortization **, as well as the proceeds from the sale of the 520 Property** . ~~We don' t anticipate a material impact on future liquidity and capital resources due to~~ **For the year ended July 31, 2023, net cash used in operating activities of** discontinued operations **totaled $ 0. 6 million. Net cash provided by investing activities of discontinued operations of $ 48. 2 million related to proceeds from sale of the 520 Property of $ 49. 4 million, slightly offset by payment of transaction costs of $ 1. 2 million. Net cash used in financing activities of discontinued operations of $ 15. 0 million related to the payment of the Note Payable in connection with sale of the 520 Property** . For **the year ended July 31** ~~further information see Note 2. Trends and Uncertainties – COVID- 19~~ , ~~War~~ **2022, net cash used** in ~~Ukraine~~ **operating activities of discontinued operations totaled $ 41 thousand, and net cash used in investing activities of discontinued operations totaled $ 113 thousand.** Critical Accounting Estimates We have chosen accounting policies that we believe are appropriate to accurately and fairly report our operating results and financial condition in conformity with U. S. GAAP. We apply these accounting policies in a consistent manner. Our significant accounting policies are discussed in Note ~~1~~ **2** , " ~~Description of Business and~~ Summary of Significant Accounting Policies, " in our accompanying consolidated financial statements. The application of critical accounting policies requires that we make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures. These estimates and assumptions are based on historical and other factors believed to be reasonable under the circumstances. We evaluate these estimates and assumptions on an ongoing basis and may retain outside consultants to assist in our evaluation. If actual results ultimately differ from previous estimates, the revisions are included in results of operations in the period in which the actual amounts become known. The critical accounting policies that involve the most significant management judgments and estimates used in preparation of our consolidated financial statements, or are the most sensitive to change from outside factors, are discussed below **. Corporate Bonds The Company' s marketable securities are considered to be available- for- sale as defined under ASC 320, Investments- Debt and Equity Securities, and are recorded at fair value based on the quoted price in active markets for similar assets and inputs that are observable for the asset. Unrealized gains or losses are included in accumulated other comprehensive income. Realized gains or losses are released from accumulated other comprehensive income and into earnings on the consolidated statements of operations and comprehensive loss. Convertible Note Receivable, Related Party The Convertible Note Receivable is classified as available- for- sale as defined under ASC 320, Investments- Debt and Equity Securities, and is recorded at fair value. Subsequent changes in fair value are recorded in accumulated other comprehensive loss. The fair value of the Convertible Note Receivable is estimated using a scenario- based analysis based on the probability- weighted present value of future investment returns, considering each of the possible outcomes available to the Company, including cash repayment, equity conversion, and collateral transfer scenarios. Estimating the fair value of the Convertible Note Receivable requires the development of significant and subjective estimates that may, and are likely to, change over the duration of the instrument with related changes in internal and external market factors** . Stock- based Compensation We record stock- based compensation for options granted and restricted stock units awarded to employees, non- employees, and to members of the board of directors for their services on the board of directors based on the grant date fair value of awards issued, and the expense is recorded on a straight- line basis over the requisite service period. Forfeitures are recognized when they occur. The fair value of restricted stock units is determined by the grant date market price of our common shares. We use the Black- Scholes- Merton option pricing model to determine the fair value of stock options. The use of the Black- Scholes- Merton option pricing model requires management to make assumptions with respect to the expected term of the option, the expected volatility of the common stock consistent with the expected life of the option, risk- free interest rates and expected dividend yields of the common stock. We have concluded that its historical share option exercise experience does not provide a reasonable basis upon which to estimate expected term. Therefore, the expected term was determined according to the simplified method, which is the average of the vesting tranche dates and the contractual term. Due to the lack of Company- specific historical and implied volatility data, the estimate of expected volatility is primarily based on the historical volatility of a group of similar companies that are publicly traded. For these analyses, companies with comparable characteristics are selected, including enterprise value and position within the industry, and with historical share price information sufficient to meet the expected life of the stock- based awards. We compute the historical volatility data using the daily closing prices for the selected companies' shares during the equivalent period of the calculated expected term of its stock- based awards. The risk- free interest rate is determined by reference to U. S. Treasury zero- coupon issues with remaining maturities similar to the expected term of the options. We have not paid, and do not anticipate paying, cash dividends on shares of our common stock. Investments – Hedge Funds We account for our investments in hedge funds in accordance with ASC 321, Investments – Equity Securities. Unrealized gains and losses resulting from the change in fair value of these securities is included in unrealized (loss) gain on investments – Hedge Funds in the consolidated statements of operations and comprehensive loss. Hedge funds classified as Level 3 include investments and securities which may not be based on readily observable data inputs. The availability of observable inputs can vary from security to security and is affected by a wide variety of factors, including, for example, the type of security, whether the security is new and not yet established in the marketplace, the liquidity of markets, and other characteristics particular to the security. The fair value of these assets is estimated based on information provided by the fund managers or the general partners. Therefore, these assets are classified as Level 3. Investments – Cost Method We periodically evaluate our investments for impairment due to declines considered to be other than temporary. If we determine that a decline in fair value is other than temporary, then a charge to earnings is recorded in the accompanying consolidated statements of operations and comprehensive loss, and a new basis in the investment is established. **Investments – Fair Value Method The method of accounting applied to long- term investments in equity securities involves an evaluation of the significant terms of each investment that explicitly grant or suggest evidence of control or influence over the operations of the investee and also include the identification of any variable interests in which the Company is the primary beneficiary. The consolidated financial statements include the Company' s controlled affiliates. All significant intercompany accounts and transactions between the consolidated affiliates are eliminated. Investments in equity securities may be accounted for using (i) the fair value option if elected, (ii) fair value through earnings if fair value is readily determinable or (iii) for equity investments without readily determinable fair values, the measurement alternative to measure at cost adjusted for any impairment and observable price changes, as applicable. The election to use the measurement alternative is made for each eligible investment. The Company has elected the fair value option to account for its investment in Cyclo Therapeutics Inc. over which the Company has significant influence. The fair value option is irrevocable once elected. The Company measured its initial investment in Cyclo at fair value and shall record all subsequent changes in fair value in earnings in the consolidated statement of operations. The Company believes the fair value option best reflects the underlying economics of the investment. See Note 9, " Investments, " in our accompanying consolidated financial statements for further details.** Off- Balance Sheet Arrangements We do not have any " off- balance sheet arrangements, " as defined in relevant SEC regulations **,** that are reasonably likely to have a current or future effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources. Discontinued Operations In accordance with the Financial Accounting Standards Board, ASC 205- 20, Presentation of Financial Statements **– -** Discontinued Operations, the results of operations of a component of an entity or a group or component of an entity that represents a strategic shift that has, or will have, a major effect on the reporting company' s operations that has either been disposed of or is classified as held- for- sale are required to be reported as discontinued operations in a company' s consolidated financial statements. In order to be considered a discontinued operation, both the operations and cash flows of the discontinued component must have been (or will be) eliminated from the ongoing operations of the ~~company~~ **Company** and the ~~company~~ **Company** will not have any significant continuing involvement in the operations of the discontinued component after the disposal transaction. As a result of the agreement to sell the 520 Property, the accompanying consolidated financial statements reflect the activity related to the sale of the 520 Property as discontinued operations. See Note ~~2~~ **3** to our consolidated financial statements for additional information regarding the results, major classes of assets and liabilities, significant ~~noncash~~ **non- cash** operating items, and capital expenditures of discontinued operations ~~. Recent Accounting Standards For information on recent accounting standards, see Note 1, " Description of Business and Summary of Significant Accounting Policies, " in our consolidated financial statements~~. Item 7A. Quantitative and Qualitative Disclosures about Market ~~Risk~~ **Risks** ~~.~~ FOREIGN CURRENCY RISK Revenue from tenants located in Israel represented ~~7~~ **53** % and 7 % of our consolidated revenues, inclusive of revenue from discontinued operations, for the years ended July 31, **2023 and** 2022 ~~and 2021~~, respectively. The entirety of these revenues is in currencies other than the U. S. Dollar. Our foreign currency exchange risk is somewhat mitigated by our ability to offset a portion of these non- U. S. Dollar- denominated revenues with operating expenses that are paid in the same currencies. While the impact from fluctuations in foreign exchange rates affects our revenues and expenses denominated in foreign currencies, the net amount of our exposure to foreign currency exchange rate changes at the end of each reporting period is generally not material. INVESTMENT RISK In addition to, but separate from our primary business, we will hold a portion of our assets in hedge funds and a passive investment in another entity. Investments in hedge funds carry a degree of risk and depend to a great extent on correct assessments of the future course of price movements of securities and other instruments. There can be no assurance that our investment managers will be able to accurately predict these price movements. The securities markets have in recent years been characterized by great volatility and unpredictability. Our passive interests in other entities are not currently liquid and we cannot assure that we will be able to liquidate them when we desire, or ever. Accordingly, the value of our investments may go down as well as up and we may not receive the amounts originally invested upon redemption. Item 8.

Financial Statements and Supplementary Data. The Consolidated Financial Statements of the Company and the report of the independent registered public accounting firm thereon starting on page F- 1 are included herein. Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure. Item 9A. Controls and Procedures. Evaluation of Disclosure Controls and ~~ProceduresAn~~ -- **Procedures An** evaluation was performed under the supervision and with the participation of the Company' s management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company' s disclosure controls and procedures (as defined in Rule 13a- 15 (e) promulgated under the Securities and Exchange Act of 1934, as amended) as of July 31, ~~2022~~ **2023** . Based on that evaluation, the Company' s management, including the President and Chief Executive Officer and Chief Financial Officer, concluded that the Company' s disclosure controls and procedures were effective. Management' s Annual Report on Internal Control over Financial Reporting The Company' s management is responsible for establishing and maintaining adequate internal control over financial reporting. The internal control process has been designed under management' s supervision to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company' s financial statements for external reporting purposes in accordance with U. S. GAAP. Management conducted an assessment of the effectiveness of the Company' s internal control over financial reporting as of July 31, ~~2022~~ **2023** utilizing the framework established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has determined that the Company' s internal control over financial reporting as of July 31, ~~2022~~ **2023** is effective. The Company' s internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that accurately and fairly reflect, in reasonable detail, transactions and dispositions of assets; and provide reasonable assurances that: (1) transactions are recorded as necessary to permit preparation of financial statements in accordance with U. S. GAAP; (2) receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and (3) unauthorized acquisition, use, or disposition of the Company' s assets that could have a material effect on the Company' s financial statements are prevented or timely detected. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Changes in Internal Control over Financial Reporting **There were no significant changes made** ~~As previously disclosed, the Company' s management, including its Certifying Officers identified a material weakness~~ in the Company' s internal control over financial reporting during the ~~three months ended October 31, 2021 related to the Company' s design of the control around the application of authoritative guidance related to earnings per share in accordance with generally accepted accounting principles in the United States. As a result of the material weaknesses identified as related to earnings per share and the accounting for items of income (loss) attributable to the noncontrolling interests, the Company filed a restatement of its quarterly report on Form 10- Q for the quarter ended October 31, 2021. The Company has expanded and enhanced its design of the control related to the accounting for items of income (loss) attributable to the non- controlling interests to address the material weakness identified as described above. Specifically, no direct postings outside of the general ledger system will be recorded to the Company' s financial statements, and all entries identified during the Company' s close process will be entered into the appropriate legal entity' s general ledger prior to the preparation of the consolidated financial information. The enhanced control procedures were implemented during the quarter ended April 30, 2022, and Company' s management, including its Certifying Officers, determined that we fully remediated the material weakness as of April 30, 2022. There were no significant changes made in the Company' s internal control over financial reporting during the~~ fourth quarter of the year ended July 31, ~~2022~~ **2023** that have materially affected, or are reasonably likely to materially affect, the Company' s internal control over financial reporting. Attestation Report of the Independent Registered Public Accounting Firm This Annual Report on Form 10- K does not include an attestation report of our independent registered public accounting firm due to an exemption established by the JOBS Act for " emerging growth companies. " Item 9B. Other Information. Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections. Part III Item 10. Directors, Executive Officers and Corporate Governance. The following is a list of our directors and executive officers as of October ~~1~~ **27** , ~~2022~~ **2023** , along with the specific information required by Rule 14a- 3 of the Securities Exchange Act of 1934: **Executive Officers** Howard S. Jonas — Executive Chairman William Conkling — Chief Executive Officer ~~Patrick Fabbio~~ **David Polinsky** — Chief Financial Officer Howard S. Jonas — Chairman of the Board Stephen Greenberg ~~Rachel Jonas~~ Mark McCamish ~~Dr. Boris C. Pasche~~ Dr. Michael J. Weiss The remaining information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, ~~2022~~ **2023** , and which is incorporated by reference herein. **Corporate Governance** We have included as exhibits to this Annual Report on Form 10- K certificates of our Chief Executive Officer and Chief Financial Officer certifying the quality of our public disclosure. We make available free of charge through the investor relations page of our web site (http: / / rafaelholdings. irpass. com /) our Annual Reports on Form 10- K, Quarterly Reports on Form 10- Q, Current Reports on Form 8- K and all amendments to those reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10 % of our equity, as soon as reasonably practicable after such reports are electronically filed with the Securities and Exchange Commission. We have adopted codes of business conduct and ethics for all of our employees, including our principal executive officer, principal financial officer and principal accounting officer. Copies of the codes of business conduct and ethics are available on our web site. Our web site and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10- K or our other filings with the Securities and Exchange Commission. Item 11. Executive Compensation. The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, ~~2022~~ **2023** , and which is incorporated by reference herein. Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters. Item 13. Certain Relationships and Related Transactions, and Director Independence. Item 14. Principal Accounting Fees and Services. Part IV Item 15. Exhibits, Financial Statement Schedules. (a) The following documents are filed as part of this Report: Report of Independent Registered Public Accounting Firm on Consolidated Financial Statements. Consolidated Financial Statements covered by Report of Independent Registered Public Accounting Firm. Financial Statement Schedules. All schedules have been omitted since they are either included in the Notes to Consolidated Financial Statements or not required or not applicable. Exhibits. The exhibits listed in paragraph (b) of this item are filed, furnished, or incorporated by reference as part of this Form 10- K. Certain of the agreements filed as exhibits to this Form 10- K contain representations and warranties by the parties to the agreements that have been made solely for the benefit of the parties to the agreement. These representations and warranties: ● may have been qualified by disclosures that were made to the other parties in connection with the negotiation of the agreements, which disclosures are not necessarily reflected in the agreements; ● may apply standards of materiality that differ from those of a reasonable investor; and ● were made only as of specified dates contained in the agreements and are subject to subsequent developments and changed circumstances. Accordingly, these representations and warranties may not describe the actual state of affairs as of the date that these representations and warranties were made or at any other time. Investors should not rely on them as statements of fact. (b) Exhibits. Exhibit Number Description 3. 1 (1) Amended and Restated Certificate of Incorporation of Rafael Holdings, Inc. 3. 2 (2) Third Amended and Restated By- Laws of Rafael Holdings, Inc. 4. 2 * Description of the Registrant' s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 10. 1 (3) ~~2021~~ Equity Incentive Plan **, as amended and restated** 10. 2 (2) Employment Agreement dated as of June 13, 2022, between the Company and Howard S. Jonas. 10. 3 (4) Letter Agreement dated January 20, 2022, between the Company and William Conkling. 10. ~~4~~ **6** (5 ~~) Letter Agreement dated September 10, 2021, between the Company and Patrick Fabbio. 10. 5 (6) Amended Letter Agreement dated November 22, 2022, between the Company and Patrick Fabbio. 10. 6 (7~~) Securities Purchase Agreement, dated August 19, 2021, by and among Rafael Holdings, Inc. and the Investors named therein. 10. 7 (~~7~~ **5**) Securities Purchase Agreement, dated August 19, 2021, by and among Rafael Holdings, Inc. and I9 Plus, LLC. 10. 8 (~~7~~ **5**) Registration Rights Agreement, dated August 19, 2021, by and among Rafael Holdings, Inc. and the Investors named therein. 10. 9 (~~8~~ **6**) Contract of Sale between Broad Atlantic Associates LLC and 520 Broad Street Propco LLC, dated February 18, 2022. (schedules, exhibits and similar attachments to the Contract of Sale that are not material have been omitted pursuant to Item 601 (b) (2) of Regulation S- K. The Company will furnish supplementally a copy of any omitted schedule, exhibit or similar attachment to the Securities and Exchange Commission upon request). 21. 01 * Subsidiaries of the Registrant 23. 1 * Consent of CohnReznick LLP, Independent Registered Public Accounting Firm 31. 01 * Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002 31. 02 * Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002 32. 01 * Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes- Oxley Act of 2002 32. 02 * Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes- Oxley Act of 2002 101. INS * Inline XBRL Instance Document ~~.~~ 101. SCH * Inline XBRL Taxonomy Extension Schema Document ~~.~~ 101. CAL * Inline XBRL Taxonomy Extension Calculation Linkbase Document ~~.~~ 101. DEF * Inline XBRL Taxonomy Extension Definition Linkbase Document ~~.~~ 101. LAB * Inline XBRL Taxonomy Extension Label Linkbase Document ~~.~~ 101. PRE * Inline XBRL Taxonomy Extension Presentation Linkbase Document ~~.~~ 104 * Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101). ~~Cover Page Interactive Data File (embedded within the Inline XBRL document)~~ * Filed or furnished herewith. (1) Incorporated by reference to Form 10- 12G / A, filed March 26, 2018. (2) Incorporated by reference to Form 8- K, filed June 14, 2022. (3) Incorporated by reference to Exhibit A of the Company' s Definitive Proxy Statement, filed with the Commission on November ~~24~~ **28** , ~~2021~~ **2022** . (4) Incorporated by reference to Form 8- K, filed January 21, 2022. (5) Incorporated by reference to Form 8- K, filed ~~September 14, 2021. (6) Incorporated by reference to Form 8- K, filed November 22, 2021. (7) Incorporated by reference to Form 8- K, filed~~ August 24, 2021. (~~8~~ **6**) Incorporated by reference to Form 8- K, filed May 9, 2022. Item 16. Form 10- K Summary Signatures Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10- K to be signed on its behalf by the undersigned, thereunto duly authorized. Rafael Holdings, Inc. By: / s / William Conkling William Conkling Chief Executive OfficerDate: October ~~31~~ **30** , ~~2022~~ **2023** Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10- K has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated. Signature Titles Date / s / William Conkling **President and** Chief Executive Officer October ~~31~~ **30** , ~~2022~~ **2023** William Conkling (Principal Executive Officer) / s / ~~Patrick Fabbio~~ **David Polinsky** Chief Financial Officer October ~~31~~ **30** , ~~2022~~ **2023** ~~Patrick Fabbio~~ **David Polinsky** (Principal Financial Officer and Principal Accounting Officer) / s / Howard S. Jonas Director, Chairman of the Board and **Executive Chairman** October ~~27~~ **30** , ~~2022~~ **2023** Howard S. Jonas ~~Executive Chairman~~ / s / Stephen Greenberg Director October ~~27~~ **30** , ~~2022~~ **2023** Stephen Greenberg ~~/ s / Rachel Jonas Director October 27, 2022 Rachael Jonas~~ / s / Mark McCamish Director October ~~27~~ **30** , ~~2022~~ **2023** Mark McCamish ~~/ s / Boris C. Pasche Director October 27, 2022 Dr. Boris C. Pasche~~ / s / Michael J. Weiss Director October ~~27~~ **30** , ~~2022~~ **2023** Dr. Michael J. Weiss **Rafael Holdings, Inc.** Index to Consolidated Financial Statements Report of Independent Registered Public Accounting Firm (PCAOB ID 596) F- 2 Consolidated Balance Sheets as of July 31, **2023 and** 2022 ~~and 2021~~ F- 3 Consolidated Statements of Operations and Comprehensive Loss for the years ended July 31, **2023 and** 2022 ~~and 2021~~ F- 4 Consolidated Statements of Equity for the years ended July 31, **2023 and** 2022 ~~and 2021~~ F- 5 Consolidated Statements of Cash Flows for the years ended July 31, **2023 and** 2022 ~~and 2021~~ F- ~~6~~ **7** Notes to Consolidated Financial Statements F- ~~7~~ **8** REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM **The** Board of Directors and ~~Shareholders~~ **Stockholders** Opinion on the **Consolidated** Financial Statements We have audited the accompanying consolidated balance sheets of Rafael Holdings, Inc. as of July 31, **2023 and** 2022 ~~and 2021~~ , and the related consolidated statements of operations and comprehensive loss, equity and cash flows for the years then ended, and the related notes (collectively referred to as the " consolidated financial statements ").

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Rafael Holdings, Inc. as of July 31, **2023 and** 2022 ~~and 2021~~, and the results of its operations and its cash flows for the years then ended, in conformity with ~~,~~accounting principles generally accepted in the United States of America. Basis for Opinion These consolidated financial statements are the responsibility of the Company' s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (" PCAOB ") and are required to be independent with respect to Rafael Holdings, Inc. in accordance with the U. S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Rafael Holdings, Inc. is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company' s internal control over financial reporting. Accordingly, we express no such opinion. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion. / s / CohnReznick LLP We have served as Company' s auditor since 2019. New York, New York **October 30** ~~Audit firm – CohnReznick LLP Location – New York~~ , ~~New York~~ **2023 PART I. FINANCIAL INFORMATION** RAFAEL HOLDINGS, INC. CONSOLIDATED BALANCE SHEETS (in thousands, except share and per share data) Year Ended July 31, **2023** 2022 ~~2021~~ ASSETS CURRENT ASSETS Cash and cash equivalents $ **21, 498 $** 26, 537 ~~$ 7, 854 Restricted cash — 5, 000~~ Available- for- sale securities **57, 714** 36, 698 ~~—~~Interest receivable **387** 140 **Convertible note receivable, related party 1, 921** — ~~Trade accounts~~ **Accounts** receivable, net of allowance for doubtful accounts of $ **245 and $** 197 ~~and $ 193~~ at July 31, ~~2022~~ **2023** and July 31, ~~2021~~ **2022** , respectively **213** 157 ~~235 Due from Cornerstone Pharmaceuticals, net of allowance for losses on related party receivables of $ 720 and $ 0 at July 31, 2022 and July 31, 2021, respectively — 600~~ Prepaid expenses and other current assets **914** 4, 621 ~~1, 075~~ Assets held- for- sale **—** 40, 194 **Investment in equity securities 294** — Total current assets **82, 941** 108, 347 ~~14, 764~~ Property and equipment, net 1, **695 1,** 770 ~~1, 840 Equity investment – RP Finance LLC — 575 Due from RP Finance LLC, net of allowance for losses on related party receivables of $ 9, 375 and $ 0 at July 31, 2022 and July 31, 2021, respectively — 7, 500 Investments – Cornerstone Pharmaceuticals — 79, 141~~ Investments – Other Pharmaceuticals ~~477~~ **65** 477 Investments – Hedge Funds 4, **984 4,** 764 ~~5~~ **Investment- Day Three Labs Inc. 2** , ~~268~~ **797 — Investments- Cyclo Therapeutics Inc. 4, 763 —** In- process research and development and patents 1, 575 1, 575 Other assets **9** 1, 387 ~~1, 517 Non- current assets held- for- sale — 41, 398~~ TOTAL ASSETS $ **98, 829 $** 118, 320 ~~$ 154, 055~~ LIABILITIES AND EQUITY CURRENT LIABILITIES ~~Trade accounts~~ **Accounts** payable $ **333 $** 564 ~~$ 1, 160~~ Accrued expenses **763** 1, 875 ~~1, 227~~ Other current liabilities **1, 023** 3, 518 ~~252~~ Due to related parties **26** 69 ~~136~~ Note payable, net of debt issuance costs, held- for- sale **—** 15, 000 ~~14, 528~~ Total current liabilities **2, 145** 21, 026 ~~17, 303~~ Other liabilities **55** 88 ~~48~~ TOTAL LIABILITIES **2, 200** 21, 114 ~~17, 351~~ COMMITMENTS AND CONTINGENCIES EQUITY Class A common stock, $ 0. 01 par value; 35, 000, 000 shares authorized, 787, 163 shares issued and outstanding as of July 31, ~~2022~~ **2023** and July 31, ~~2021~~ **2022** , respectively 8 8 Class B common stock, $ 0. 01 par value; 200, 000, 000 shares authorized, 23, ~~712~~ **635** , ~~449~~ **709** issued and 23, ~~687~~ **490** , ~~964~~ **527** outstanding as of July 31, ~~2022~~ **2023** , and ~~16~~ **23** , ~~947~~ **712** , ~~066~~ **449 shares** issued and ~~16~~ **23** , ~~936~~ **687** , ~~864~~ **964 shares** outstanding as of July 31, ~~2021~~ **2022 236** 237 ~~169~~ Additional paid- in capital **264, 010** 262, 023 ~~159, 136~~ Accumulated deficit (**167, 333) (** 165, 457 ~~) (40, 799~~) Accumulated other comprehensive loss related to unrealized loss on available- for- sale securities (**353) (** 63) ~~—~~Accumulated other comprehensive income related to foreign currency translation adjustment 3, **725 3,** 767 ~~3, 772~~ Total equity attributable to Rafael Holdings, Inc. 100, **293 100,** 515 ~~122, 286~~ Noncontrolling interests (3, **664) (3,** 309) ~~14, 418~~ TOTAL EQUITY **96, 629** 97, 206 ~~136, 704~~ TOTAL LIABILITIES AND EQUITY $ **98, 829 $** 118, 320 ~~$ 154, 055~~ See accompanying notes to **the** consolidated financial statements. CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS Year Ended July 31, **2023** 2022 ~~2021~~ REVENUE Rental – Third Party $ **171 $** 179 ~~$ 214~~ Rental – Related Party **108** 111 ~~108~~ Other – Related Party **—** 120 ~~480~~ Total revenue **279** 410 ~~802~~ COSTS AND EXPENSES ~~Selling, general~~ **General** and administrative **8, 932** 16, 978 ~~17, 024~~ Research and development **6, 312** 8, 742 ~~4, 907~~ Depreciation and amortization **78** 72 ~~70~~ Provision for loss on receivable from Cornerstone Pharmaceuticals pursuant to line of credit **—** 25, 000 ~~—~~Provision for losses on related party receivables **—** 10, 095 ~~— Impairment – Altira — 7, 000~~ Loss from operations (**15, 043) (** 60, 477 ~~) (28, 199~~) Interest expense **—** (6 ~~) (12~~) Interest income **3, 253** 201 ~~2 Gain on sale of building — 749~~ Impairment of investments- Other Pharmaceuticals **(334)** — ~~(724)~~ Impairment of cost method investment- Cornerstone Pharmaceuticals **—** (79, 141) ~~—~~Realized **gain (** loss **)** on available- for- sale securities **154** (45) **Realized gain on investment in equity securities 309** — Unrealized ~~(loss)~~ **gain on investment in equity securities 33 — Unrealized** gain on investments- **Cyclo Therapeutics Inc. 2, 663 — Unrealized gain (loss) on investments-** Hedge Funds **220** (504) ~~4, 758~~ Loss from continuing operations before income taxes (**8, 745) (** 139, 972) **Benefit from** ~~(23, 426) Provision for~~ income taxes **255** — ~~(18)~~ Equity in ~~(~~loss **of Day Three Labs Inc. (203**) ~~earnings~~ **— Equity in loss** of RP Finance **—** (575) ~~383~~ Consolidated **net** loss from continuing operations (**8, 693) (** 140, 547 ~~) (23, 061~~) Discontinued Operations (Note ~~2~~ **3**) Loss from discontinued operations related to 520 Property (**306) (** 1, 830) **Gain** ~~(1, 705) Loss~~ on **disposal of 520 Property 6, 784 — Income (loss) from** discontinued operations **6, 478** (1, 830 ~~) (1, 705~~) Consolidated net loss (**2, 215) (** 142, 377 ~~) (24, 766~~) Net loss attributable to noncontrolling interests (**339) (** 17, 719 ~~) (222~~) Net loss attributable to Rafael Holdings, Inc. $ (**1, 876) $ (** 124, 658 ~~) $ (24, 544~~) OTHER COMPREHENSIVE LOSS Consolidated net loss $ (**2, 215) $ (** 142, 377 ~~) $ (24, 766~~) Unrealized loss on available- for- sale securities (**290) (** 63) ~~—~~ Foreign currency translation adjustment (**42) (** 5) ~~10~~ Total comprehensive loss (**2, 547) (** 142, 445 ~~) (24, 756~~) Comprehensive loss attributable to noncontrolling interests (**336) (** 17, 746 ~~) (37~~) Total comprehensive loss attributable to Rafael Holdings, Inc. $ (**2, 211) $ (** 124, 699) ~~$ (24, 793)~~ **Loss per share attributable to common stockholders Basic and diluted:** Continuing operations **$ (0. 36) $ (6. 22) Discontinued operations 0. 28 (0. 09) Total basic and diluted** loss per share ~~Loss from continuing operations~~ $ (~~140, 547~~ **0. 08**) $ (~~23, 061) Loss attributable to noncontrolling interests (17, 719) (222) Numerator for loss per share from continuing operations $ (122, 828) $ (22, 839) Discontinued operations loss per share Loss from discontinued operations $ (1, 830) $ (1, 705) Loss per share Continuing operations- basic and diluted $ (~~ 6. ~~22) $ (1. 38) Discontinued operations- basic and diluted (0. 09) (0. 11) Loss per common share- basic and diluted $ (6.~~ 31 ~~) $ (1. 49~~) Weighted average number of shares used in calculation of loss per share Basic and diluted **23, 263, 211** 19, 767, 342 ~~16, 522, 686~~ CONSOLIDATED STATEMENTS OF EQUITY (in thousands, except share data) Year Ended July 31, ~~2022~~ **2023** Common Stock, Series A Common Stock, Series B Additional ~~Paid~~ **paid** - in **-** Accumulated Accumulated other comprehensive Noncontrolling Total Shares Amount Shares Amount ~~Capital~~ **capital** ~~Deficit~~ **deficit income interests Equity Balance at August 1, 2022 787, 163 $ 8 23, 687, 964 $ 237 $ 262, 023 $ (165, 457) $ 3, 704 $ (3, 309) $ 97, 206 Net loss for the year ended July 31, 2023 — — — — — (1, 876) — (339) (2, 215) Stock- based compensation — — 220, 019 2 3, 089 — — — 3, 091 Forfeiture of restricted stock — — (296, 759) (2) (901) — — — (903) Shares withheld for payroll taxes — — (120, 697) (1) (217) — — — (218) Unrealized loss on available- for- sale securities — — — — — — (290) — (290) Acquisition of additional ownership interest in LipoMedix — — — — 16 — — (16) — Foreign currency translation adjustment — — — — — — (42) — (42) Balance at July 31, 2023 787, 163 $ 8 23, 490, 527 $ 236 $ 264, 010 $ (167, 333) $ 3, 372 $ (3, 664) $ 96, 629 Year Ended July 31, 2022 Common Stock, Series A Common Stock, Series B Additional paid- in- Accumulated Accumulated other comprehensive Noncontrolling Total Shares Amount Shares Amount capital deficit** income interests Equity Balance at August 1, 2021 787, 163 $ 8 16, 936, 864 $ 169 $ 159, 136 $ (40, 799) $ 3, 772 $ 14, 418 $ 136, 704 Net loss for the year ended July 31, 2022 — — — — — (124, 658) — (17, 719) (142, 377) Stock- based compensation — — 1, 533, 311 16 18, 045 — — — 18, 061 Forfeiture of restricted stock — — (943, 305) (9) (18, 969) — — — (18, 978) Common stock sold to investors — — 2, 833, 425 28 99, 142 — — — 99, 170 Transaction costs incurred in connection with sale of common stock — — — — (6, 228) — — — (6, 228) **Common stock sold to related party — — 3, 338, 307 33 10, 964 — — — 10, 997** Acquisition of additional ownership interest in LipoMedix — — — — 8 — — (8) — ~~Common stock sold to related party — — 3, 338, 307 33 10, 964 — — — 10, 997~~ Shares withheld for payroll taxes — — (10, 638) — (75) — — — (75) Unrealized loss on available- for- sale securities — — — — — — (63) — (63) Foreign currency translation adjustment — — — — — — (5) — (5) Balance at July 31, 2022 787, 163 $ 8 23, 687, 964 $ 237 $ 262, 023 $ (165, 457) $ 3, 704 $ (3, 309) $ 97, 206 **F** ~~Year Ended July 31, 2021 Common Stock, Series A Common Stock, Series B Additional Paid - in Accumulated Accumulated other comprehensive Noncontrolling Total Shares Amount Shares Amount Capital Deficit income interests Equity Balance at August 1, 2020 787, 163 $ 8 15, 028, 536 $ 149 $ 129, 136 $ (16, 255) $ 3, 762 $ 13, 728 $ 130, 528 Net loss for the year ended July 31, 2021 — — — — — (24, 544) — (222) (24, 766) Stock- based compensation — — 965, 938 10~~ 6 ~~, 623 — — — 6, 633 Shares issued- Investment in Altira — — 280, 323 3 8, 498 — — — 8, 501 Shares issued- Securities Purchase Agreement — — 567, 437 6 12, 994 — — — 13, 000 Shares withheld for payroll taxes — — (7, 214) — (185) — — — (185) Warrants exercised — — 87, 298 1 1, 999 — — — 2, 000 Stock options exercised — — 14, 546 — 71 — — — 71 Capital contribution for noncontrolling interest — — — — — — — 912 912 Foreign currency translation adjustment — — — — — — 10 — 10 Balance at July 31, 2021 787, 163 $ 8 16, 936, 864 $ 169 $ 159, 136 $ (40, 799) $ 3, 772 $ 14, 418 $ 136, 704~~ CONSOLIDATED STATEMENTS OF CASH FLOWS **(in thousands)** Year Ended July 31, **2023** 2022 ~~2021~~ Operating activities Consolidated net loss $ (**2, 215) $ (** 142, 377) ~~$ (24, 766)~~ Less: **Income (** ~~Loss~~ **loss)** from discontinued operations **6** , **478** ~~net of tax~~ (1, 830 ~~) (1, 705~~) Loss from continuing operations (**8, 693) (** 140, 547 ~~) (23, 061~~) Adjustments to reconcile consolidated net loss to net cash used in operating activities Depreciation and amortization **78** 72 ~~70 Deferred income taxes — 6~~ Net unrealized **(gain)** loss ~~(gain)~~ on investments- Hedge Funds **(220)** 504 **Unrealized gain on equity securities** (**33** ~~4, 758~~) **— Unrealized gain in equity investments- Cyclo Therapeutics Inc. (2, 663) —** Realized **(gain)** loss on available- for- sale securities **(154)** 45 **Amortization of discount on available- for- sale securities (1, 195)** — Impairment of investments- Other Pharmaceuticals **334** — ~~724~~ Impairment of cost method investment- Cornerstone Pharmaceuticals **—** 79, 141 ~~— Impairment – Altira — 7, 000~~ Provision for loss on receivable from Cornerstone Pharmaceuticals pursuant to line of credit **—** 25, 000 ~~—~~ Equity in loss ~~(earnings)~~ of RP Finance **—** 575 ~~(383)~~ **Equity in loss of Day Three Labs Inc. 203 —** Provision for losses on related party receivables **—** 10, 095 ~~—~~ Provision for doubtful accounts **—** 4 ~~193~~ Stock- based compensation ~~(credit) expense~~ **, net 2, 188** (917 ~~) 6, 633 Gain on sale of building — (749~~) Change in assets and liabilities, net of effects from discontinued operations: ~~Interest receivable (140) —~~ Trade accounts receivable **(117)** 74 **Interest receivable** (~~161~~ **247) (140**) Prepaid expenses and other current assets **373** (3, 545 ~~) (802~~) Other assets **(27)** 130 ~~63~~ Accounts payable and accrued expenses **(827)** 52 ~~164~~ Other current liabilities **781** 3, 566 ~~137~~ Due to related parties (**43) (** 67 ~~) 136 Due from related parties — (482~~) Due from Cornerstone Pharmaceuticals **—** (120) ~~—~~ Other liabilities **15** 40 ~~(44)~~ Net cash used in continuing operations (**10, 247) (** 26, 038 ~~) (15, 314~~) Net cash used in discontinued operations (**639) (** 41 ~~) (287~~) Net cash used in operating activities (**10, 886) (** 26, 079 ~~) (15, 601~~) Investing activities **Payment to Cornerstone Pharmaceuticals pursuant to Line of Credit —** (**25, 000)** Purchases ~~) dispositions~~ of property and equipment **—** (2) ~~44~~ Payment to fund RP Finance Line of Credit **—** (1, 875) ~~(7, 500) Payment to Cornerstone Pharmaceuticals pursuant to Line of Credit (25, 000) —~~ Purchases of available- for- sale securities (**204, 798) (** 65, 306 **) Proceeds from the sale and maturities of available- for- sale securities 185, 121 28, 500 Issuance of convertible note receivable, related party (2, 000**) — Proceeds from **investments** ~~maturities of available - for- sale~~ **Other Pharmaceuticals 78 — Purchases of equity** securities ~~28~~ **(1** , ~~500~~ **586)** — Proceeds from ~~sale~~ **sales** of ~~building~~ **equity securities 1, 325** — ~~3, 658 Proceeds from sale of Hedge Funds — 7, 000~~ Purchase of Investment in ~~Altira~~ **Day Three Labs Inc. (3, 000)** — **Purchase of** ~~(2, 000)~~ Investment in ~~Rafael Pharmaceuticals~~ **Cyclo**

Therapeutics Inc. (2, 100) — ~~(9, 123)~~ Net cash used in investing activities of continuing operations (**26, 960) (** 63, 683 ~~) (7, 921~~) Net cash **provided by (** used in **)** investing activities of discontinued operations **48, 171** (113 ~~) (250~~) Net cash **provided by (** used in **)** investing activities **21, 211** (63, 796 ~~) (8, 171~~) Financing activities ~~Contribution from noncontrolling interest of consolidated entity — 912 Proceeds from exercise of options — 71 Proceeds from exercise of warrants — 2, 000~~ Proceeds from issuance of common stock **—** 99, 170 ~~13, 000~~ Proceeds from issuance of common stock from related party **—** 10, 997 **—** Payment of transaction costs incurred in connection with sale of common stock **—** (6, 228) ~~—~~ Payments for taxes related to shares withheld for employee taxes (**218) (** 75 ~~) (185~~) Net cash **(used in) provided by continuing operations (218) 103, 864 Net cash used in financing activities of discontinued operations (15, 000) — Net cash (used in)** provided by financing activities ~~of continuing operations~~ **(15, 218)** 103, 864 ~~15, 798 Net cash provided by financing activities of discontinued operations — 14, 500 Net cash provided by financing activities 103, 864 30, 298~~ Effect of exchange rate changes on cash and cash equivalents (**146) (** 306) ~~122~~ Net **(decrease)** increase in cash and cash equivalents ~~and restricted cash~~ **(5, 039)** 13, 683 ~~6, 648~~ Cash and cash equivalents, ~~and restricted cash,~~ beginning of year **26, 537** 12, 854 ~~6, 206~~ Cash and cash equivalents, ~~and restricted cash,~~ end of year $ **21, 498 $** 26, 537 **Non- cash** ~~$ 12, 854 Supplemental~~ **supplemental disclosure** ~~schedule of noncash investing and financing activities Common shares issued for payment of purchase price for Altira equity $ — $ 8, 501~~ Acquisition of additional ownership interest in LipoMedix $ **16 $** 8 **RAFAEL HOLDINGS** ~~$ — Reconciliation of cash and restricted cash Cash and cash equivalents $ 26~~ , **INC.** ~~537 $ 7, 854 Restricted cash — 5, 000 Total cash and cash equivalents and restricted cash shown in statement of cash flows $ 26, 537 $ 12, 854~~ NOTES TO CONSOLIDATED FINANCIAL STATEMENTS NOTE 1 – DESCRIPTION OF BUSINESS **Description of Business** ~~AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES~~ Rafael Holdings, Inc. (NYSE: RFL), (" Rafael Holdings ", " we " or the " Company "), a Delaware corporation, is a holding company with interests in clinical and early- stage pharmaceutical companies (the " Pharmaceutical Companies "), ~~through~~ **including** an investment in Cornerstone Pharmaceuticals, Inc. **(" Cornerstone ")** , formerly known as Rafael Pharmaceuticals Inc., a cancer metabolism- based therapeutics company **,** a majority equity interest in LipoMedix Pharmaceuticals Ltd. (" LipoMedix "), a clinical stage pharmaceutical company, the ~~activities of the~~ Barer Institute Inc. (" Barer "), a wholly- owned preclinical cancer metabolism research operation, ~~and~~ - **an investment in Cyclo Therapeutics Inc. (Nasdaq: CYTH), (" Cyclo Therapeutics " or " Cyclo "), a clinical- stage biotechnology company dedicated to developing life- changing medicines for patients and families living with challenging diseases through its lead therapeutic asset, Trappsol ® Cyclo ™., an investment in Day Three Labs, Inc. (" Day Three "), a company which reimagines existing cannabis offerings with pharmaceutical- grade technology and innovation like Unlokt ™ to bring to market better, cleaner, more precise and predictable products in the cannabis industry, and a majority interest in** Rafael Medical Devices, **LLC,** ~~Inc. (" Rafael Medical Devices " and~~ - **an** ~~together with the Pharmaceutical Companies, the " Healthcare Companies "), a wholly- owned~~ orthopedic- focused medical device company developing instruments to advance minimally invasive surgeries **(" Rafael Medical Devices " and Day Three Labs together with the Pharmaceutical Companies, represent our " Investment Companies "). In November 2022, the Company resolved to curtail its early- stage development efforts, including pre- clinical research at Barer. The decision was taken to reduce spending as the Company focuses on exploring strategic opportunities** . The Company' s primary focus **is** ~~to date has been to invest in and fund, discover and develop novel cancer therapies, and we further seek~~ to expand our **investment** portfolio through opportunistic **and strategic** investments ~~in~~ **including** therapeutics which address high unmet medical needs ~~including through acquisitions, strategic investments, or in- licensing assets~~ . Historically, the Company owned **multiple** real estate assets. In 2020, the Company sold an office building located in Piscataway, New Jersey and ~~following the end of Fiscal~~ **, on August 22,** 2022, the Company sold the building at 520 Broad Street in Newark, New Jersey **that serves as headquarters for the Company and several tenants** and an associated public garage **(the " 520 Property "). See Note 3 for further details on the sale transaction** . Currently, the Company holds a portion of a commercial building in Jerusalem, Israel as its remaining real estate asset. The Company ~~has~~ **holds** debt and equity investments in Cornerstone Pharmaceuticals ~~, formerly known as Rafael Pharmaceuticals Inc., or Rafael Pharmaceuticals,~~ that includes preferred and common equity interests and a warrant to purchase additional equity. On June 17, 2021, the Company entered into a merger agreement to acquire full ownership of Cornerstone Pharmaceuticals in exchange for issuing Company Class B common stock to the other stockholders of Cornerstone Pharmaceuticals **(" Merger Agreement " or " Merger ")** . On October 28, 2021, the Company announced that the AVENGER 500 Phase 3 clinical trial for CPI- 613 ® (devimistat), Cornerstone Pharmaceuticals' lead product candidate, did not meet its primary endpoint of significant improvement in overall survival in patients with metastatic adenocarcinoma of the pancreas **. In addition** , ~~and~~ following a pre- specified interim analysis, the independent data monitoring committee for the ARMADA 2000 Phase 3 study for devimistat recommended the trial to be stopped due to a determination that it was unlikely to achieve the primary endpoint (the " Data Events "). In connection with the preparation of the Company' s **financial statements for the** first quarter ~~financial statements~~ **ended October 31, 2021** , accounting principles generally accepted in the United States of America (" U. S. GAAP ") required that the Company assess the impact of the Data Events and determine whether the carrying values of the Company' s assets were impaired based upon the Company' s expectations to realize future value. In light of the Data Events, the Company concluded that the likelihood of further development of and prospects for CPI- 613 is uncertain and ~~has~~ fully impaired in the first quarter ended October 31, 2021 the value of its loans, receivables, and investment in Cornerstone Pharmaceuticals based upon its valuation of Cornerstone Pharmaceuticals. On February 2, 2022, the Company terminated the Merger Agreement with Cornerstone Pharmaceuticals, effective immediately, in accordance with its terms. Subsequently, on February 2, 2022, the Company withdrew its Registration Statement on Form S- 4 related to the proposed Merger. **On March 21, 2023, the Company loaned $ 2. 0 million to Cornerstone which debt is represented by a Promissory Note made by Cornerstone (the " Promissory Note " or " Note "). Cornerstone is in the process of a comprehensive restructuring transaction including, the conversion of the debt under the Line of Credit Agreement and the Promissory Note held by the Company, the**

conversion and modification of other Cornerstone debt obligations, the extension of the Cornerstone debt held by RP Finance, a reverse stock split, the conversion of all outstanding preferred stock of Cornerstone into common stock and the adoption of certain governance measures. This transaction is subject to a number of conditions which are beyond the Company' s control. In May 2023, the Company invested in Cyclo Therapeutics. Cyclo is a clinical stage biotechnology company that develops cyclodextrin- based products for the treatment of neurodegenerative diseases. Cyclo' s lead drug candidate is Trappsol ® Cyclo ™ (hydroxypropyl beta cyclodextrin), a treatment for Niemann- Pick Type C disease (" NPC "). NPC is a rare and fatal autosomal recessive genetic disease resulting in disrupted cholesterol metabolism that impacts the brain, lungs, liver, spleen, and other organs. In January 2017, the FDA granted Fast Track designation to Trappsol ® Cyclo ™ for the treatment of NPC. Initial patient enrollment in the U. S. Phase I study commenced in September 2017, and in May 2020 Cyclo announced Top Line data showing a favorable safety and tolerability profile for Trappsol ® Cyclo ™ in this study. Cyclo is currently conducting a Phase 3 Clinical Trial Evaluating Trappsol ® Cyclo ™ in Pediatric and Adult Patients with Niemann- Pick Disease Type C1. In 2019, the Company established Barer, a preclinical ~~caner~~ **cancer** metabolism research operation, to focus on developing a pipeline of novel therapeutic compounds, including compounds to regulate cancer metabolism with potentially broader application in other indications beyond cancer. Barer ~~is~~ **has been** comprised of scientists and academic advisors that are experts in cancer metabolism, chemistry, and drug development. In addition to its own internal discovery efforts, Barer **pursued** ~~is pursuing~~ collaborative research agreements and in- licensing opportunities with leading scientists from top academic institutions. Barer **' s** subsidiary, Farber Partners, LLC (" Farber "), was formed around one such agreement with Princeton University' s Office of Technology Licensing for technology from the laboratory of Professor Joshua Rabinowitz, in the Department of Chemistry, Princeton University, for an exclusive worldwide license to its SHMT (serine hydroxymethyltransferase) inhibitor program. **In November 2022, the Company resolved to curtail its early- stage development efforts, including pre- clinical research at the Barer Institute. In 2016, the Company first invested in LipoMedix, a clinical stage pharmaceutical company and holds a majority of the common stock. In April 2023, the Company invested in Day Three Labs, the majority- owner of Day three Labs Manufacturing, a company which reimagines existing cannabis offerings with pharmaceutical- grade technology and innovation like Unlokt ™ to bring to market better, cleaner, more precise and predictable products in the cannabis industry. In May 2021, the Company formed Rafael Medical Devices, an orthopedic- focused medical device company developing instruments to advance minimally invasive surgeries. In August 2023, the Company raised $ 925, 000 from third parties in exchange for 31. 62 % ownership of Rafael Medical Devices.** The Company also holds a ~~majority equity interest~~ **95 % investment** in LipoMedix ~~Pharmaceuticals Ltd. (" LipoMedix ")~~, a ~~clinical~~ **development-** stage ~~oncological pharmaceutical~~ **, privately held Israeli** company **focused on the development of an innovative, safe and effective cancer therapy** based ~~in Israel. In addition, the Company has recently initiated efforts to develop other early- stage pharmaceutical ventures. As of July 31, 2022, the Company' s commercial real estate holdings consisted of a building at 520 Broad Street in Newark, New Jersey (the " 520 Property ") that serves as headquarters for the Company and several tenants and an associated 800- car public garage, and a portion of a commercial building in Israel. The Company sold the 520 Property~~ on **liposome delivery** ~~August 22, 2022~~. ~~Refer to Notes 1, 2 and 19 for further details. Basis of Presentation~~ The " Company " in these consolidated financial statements refers to Rafael Holdings and its subsidiaries on a consolidated basis. All majority- owned subsidiaries are consolidated with all intercompany transactions and balances eliminated in consolidation.In addition to Rafael Holdings,Inc.,the subsidiaries included in these consolidated financial statements are as follows:Company Country of Incorporation Percentage Owned **Rafael Holdings,Inc.United States – Delaware %** Broad Atlantic Associates,LLC United States – Delaware ~~100~~ % IDT R.E.Holdings Ltd.Israel ~~100~~ % Rafael Holdings Realty,Inc.United States – Delaware ~~100~~ % Barer Institute,Inc.United States – Delaware ~~100~~ % ~~*~~ **Hillview Avenue Realty,JV United States – Delaware % Hillview Avenue Realty,LLC United States – Delaware % Rafael Medical Devices,Inc.United States – Delaware %** The Barer Institute,LLC United States – Delaware ~~100 % * Hillview Avenue Realty,JV United States – Delaware 100 % Hillview Avenue Realty,LLC United States – Delaware 100 % Rafael Medical Devices,Inc.United States – Delaware 100~~ % Levco Pharmaceuticals Ltd.Israel ~~95~~ % ~~* *~~ * Farber Partners,LLC United States – Delaware ~~93~~ % Pharma Holdings,LLC United States – Delaware ~~90~~ % LipoMedix Pharmaceuticals Ltd.Israel ~~95~~ % ~~* * * *~~ Altira Capital & Consulting,LLC United States – Delaware ~~67~~ % CS Pharma Holdings,LLC United States – Delaware ~~45~~ % * * * ~~In November~~ **During Fiscal** 2022, **we discontinued further material investment in Levco** ~~the Company resolved to curtail its early- stage development efforts,including pre- clinical research at Barer~~. ~~The decision was taken to reduce spending as the Company focuses on exploring strategic opportunities.F- 9~~ * * 50 % of CS Pharma Holdings,LLC is owned by Pharma Holdings,LLC.We have a 90 % ownership in Pharma Holdings,LLC and,therefore,an effective 45 % interest in CS Pharma Holdings,LLC.The Company,along with CS Pharma and Pharma Holdings,collectively own securities representing 51 % of the outstanding capital stock of Cornerstone Pharmaceuticals and ~~42~~ **41** % of the capital stock on a fully diluted basis (excluding the remainder of the Warrant).Refer to Note ~~4~~ **3** for further details. ~~* * * During Fiscal 2022,the Company discontinued further material investment in Levco.* * * * On February 9,2023,the Company increased its ownership interest in LipoMedix Pharmaceuticals Ltd.an additional 11 % from 84 % to 95 %.~~ On March 15, **2022,the Company dissolved IDT 225 Old NB Road,LLC.F- 8 Reclassifications During the third quarter of fiscal 2022,the Company determined that it would revise the presentation of interest expense and interest income on its consolidated statements of operations and comprehensive loss.The revised presentation is comprised of a reclassification of interest income out of interest expense,net and presentation of the two figures as separate line items on the consolidated statements of operations and comprehensive loss for all periods presented.** The Company' s fiscal year ends on July 31 of each calendar year. Each reference below to a fiscal year refers to the fiscal year ending in the calendar year indicated (e. g., fiscal year ~~2022~~ **2023** refers to the fiscal year ended July 31, ~~2022~~ **2023**). The accompanying consolidated financial statements of the Company and its subsidiaries have been prepared in accordance with U. S. GAAP. The accompanying consolidated financial statements reflect the activity related to the 520 Property as discontinued operations. All majority- owned subsidiaries are consolidated...... comprehensive loss for all periods presented. Use of Estimates The preparation of financial statements in conformity with U. S. GAAP requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the balance sheet and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ significantly from those estimates. As of July 31, ~~2022~~ **2023** , the Company had cash and cash equivalents of **approximately** $ ~~26~~ **21** . 5 million, **and** available- for- sale securities valued at **approximately** $ ~~36~~ **57** . 7 ~~million, and an investment in hedge funds valued at $ 4. 8~~ million. On August 22, 2022, the Company received net proceeds of approximately $ 33 million in connection with the sale of the 520 Property (see Note ~~19~~ **3** for further details). The Company expects the balance of cash and cash equivalents, **and** available- for- sale securities ~~, and investment in hedge funds~~ to be sufficient to meet ~~our~~ **its** obligations for **at least** the next 12 months from the issuance of these consolidated financial statements ~~. Risks and Uncertainties- COVID- 19, War in Ukraine In late 2019, a novel strain of coronavirus, SARS- CoV, which causes COVID- 19, was identified and has proved to be highly contagious. It has since spread extensively throughout the world, including the United States, and was declared a global pandemic by the World Health Organization in March 2020. The Company actively monitors the outbreak, including the spread of new variants of interest, and its potential impact on the Company' s operations and those of the Company' s holdings. The short and long- term implications of Russia' s invasion of Ukraine are difficult to predict at this time. The imposition of sanctions and counter sanctions may have an adverse effect on the economic markets generally and could impact our business and the companies in which we have investments, financial condition, and results of operations. Because of the highly uncertain and dynamic nature of these events, it is not currently possible to estimate the impact of the Russian – Ukraine war on our business and the companies in which we have investments~~ . Concentration of Credit Risk and Significant Customers The Company routinely assesses the financial strength of its customers. As a result, the Company believes that its accounts receivable credit risk exposure is limited. For the year ended July 31, ~~2022~~ **2023** , including revenue from discontinued operations, related parties represented ~~58~~ **42** % of the Company' s revenue **. As** ~~, and as~~ of July 31, ~~2022~~ **2023** , **there were** two customers ~~, one of~~ which ~~is a related party,~~ represented ~~24~~ **27** % and 47 % of the Company' s accounts receivable balance ~~, respectively~~ . For the year ended July 31, ~~2021~~ **2022 , including revenue from discontinued operations** , related parties represented ~~65~~ **58** % of the Company' s revenue, and as of July 31, ~~2021~~ **2022** , two customers, one of which is a related party, represented ~~45~~ **24** % and ~~33~~ **47** % of the Company' s accounts receivable balance, respectively. ~~F- 9~~ Cash and Cash Equivalents The Company considers all liquid investments with an original maturity of three months or less when purchased to be cash equivalents. **Reserve** ~~Restricted Cash Restricted cash represented escrow funds held in bank accounts owned by the Company to be used to pay the severance due the chief executive officer~~ for **Receivables** ~~termination without cause, pursuant to his employment agreement.~~ The Company ~~did not have the right to use this cash balance~~ **evaluates accounts receivable, loans, interest and fees receivable** for ~~any other purpose. During February 2022~~ **impairment under Accounting Standards Codification (" ASC ") 310** , ~~the~~ **Receivables. The** Company **also evaluates** ~~paid $ 5 million, from~~ the ~~restricted cash balance~~ **reserve for losses and estimates collectability of accounts receivable** , **loans** ~~in severance pay to Ameet Mallik~~ , ~~former CEO~~ **interest and fees receivable based on historical bad debt experience** , ~~in accordance~~ **management' s assessment of the financial condition of individual companies** with ~~his separation~~ **which the Company conducts business, current market conditions,** and ~~release agreement~~ **reasonable and supportable forecasts of future economic conditions** . **F- 10** ~~Allowance for Doubtful Accounts~~ The allowance for doubtful accounts reflects the Company' s best estimate of probable losses inherent in the accounts receivable balance. The allowance is determined based on known troubled accounts, historical experience and other currently available evidence. Doubtful accounts are written off upon final determination that the trade accounts will not be collected. The computation of this allowance is based on the tenants' or parking customers' payment histories, as well as certain industry or geographic specific credit considerations. If the Company' s estimates of collectability differ from the cash received, then the timing and amount of the Company' s reported revenue could be impacted. The credit risk is mitigated by the high quality of the Company' s existing tenant base, inclusive of related parties, which represented **42 % and** 58 ~~% and 65~~ % of the Company' s total revenue for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively. The Company recorded bad debt expense of approximately $ **110 thousand and $** 4 thousand ~~and $ 193 thousand, respectively,~~ for the years ended July 31, **2023 and** 2022 ~~and 2021~~ **, respectively** . ~~Reserve for~~ **Convertible Note** ~~Receivables~~ - **Receivable, Related Party** The **Convertible Note** ~~Company evaluates accounts receivable, loans, interest and fees receivable for impairment under Accounting Standards Codification (" ASC ") 310, Receivables~~ - **Receivable** ~~. The Company also evaluates the reserve for losses and estimates collectability of accounts receivable, loans, interest and fees receivable based on historical bad debt experience, management' s assessment of the financial condition of individual companies with which the Company conducts business, current market conditions, and reasonable and supportable forecasts of future economic conditions. The method of accounting applied to long- term investments, whether consolidated, equity or cost, involves an evaluation of the significant terms of each investment that explicitly grant or suggest evidence of control or influence over the operations of the investee and also include the identification of any variable interests in which the Company~~ is **classified** ~~the primary beneficiary. The consolidated financial statements include the Company' s controlled affiliates. All significant intercompany accounts and transactions between the consolidated affiliates are eliminated. Investments in businesses that the Company does not control, but in which the Company has~~ - **as** the ability to exercise significant influence over...... s marketable securities are considered to be available- for- sale as defined under ASC 320, Investments- Debt and Equity Securities, and ~~are~~ **is** recorded at fair value. ~~Unrealized gains or losses~~ **Subsequent changes in fair value** are ~~included~~ **recorded** in accumulated other comprehensive ~~income. Realized gains or losses~~ -- **loss. The fair value of the Convertible Note Receivable is estimated using a scenario- based analysis based on the probability- weighted present value of future investment returns, considering each of the possible outcomes available to the Company, including cash repayment, equity conversion, and collateral transfer scenarios. Estimating the fair value of**

the convertible note requires the development of significant and subjective estimates that may, and are **likely to, change over the duration of the instrument with** ~~released~~ - **related changes in internal** ~~from accumulated other comprehensive income~~ and **external market factors** ~~into earnings on the consolidated statements of operations and comprehensive loss~~ . Variable Interest Entities In accordance with ASC 810, Consolidation, the Company assesses whether it has a variable interest in legal entities in which it has a financial relationship and, if so, whether or not those entities are variable interest entities (“ VIEs ”). For those entities that qualify as VIEs, ASC 810 requires the Company to determine if the Company is the primary beneficiary of the VIE, and if so, to consolidate the VIE. If an entity is determined to be a VIE, the Company evaluates whether the Company is the primary beneficiary. The primary beneficiary analysis is a qualitative analysis based on power and economics. The Company consolidates a VIE if both power and benefits belong to the Company – that is, the Company (i) has the power to direct the activities of a VIE that most significantly influence the VIE’ s economic performance (power), and (ii) has the obligation to absorb losses of, or the right to receive benefits from, the VIE that could potentially be significant to the VIE (benefits). The Company consolidates VIEs whenever it is determined that the Company is the primary beneficiary. ~~of~~ the ~~investment.See Note 9~~ **ability to exercise significant influence over operating and financial matters** , ~~“ Investments~~ **are accounted for using the equity method** . ~~” F- 11~~ Investments in which the Company does not have the ability to exercise significant influence over operating and financial matters are accounted for in accordance with ASC 321,Investments- Equity Securities.Investments without readily determinable fair values are accounted for using the measurement alternative which is at cost minus impairment,if any,plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.The Company periodically evaluates its investments for impairment due to declines considered to be other than temporary.If the Company determines that a decline in fair value is other than temporary,then a charge to earnings is recorded in the accompanying consolidated statements of operations and comprehensive loss,and a new basis in the investment is established. **F- 10** Investments- Hedge Funds The Company accounts for its investments in hedge funds in accordance with ASC 321,Investments – Equity Securities.Unrealized gains and losses resulting from the change in fair value of these securities is included in unrealized (loss) gain on investments – Hedge Funds in the consolidated statements of operations and comprehensive loss.Corporate Bonds ~~and US Treasury Bills~~ The Company’ s marketable securities are considered to be ~~available- for-~~ Cost Method ~~Investments~~ - **Investment** ~~–~~ The Company has determined that Cornerstone Pharmaceuticals (see Note ~~3~~ **4**) is a VIE; however, the Company has determined that it is not the primary beneficiary as the Company does not have the power to direct the activities of Cornerstone Pharmaceuticals that most significantly impact Cornerstone Pharmaceuticals’ economic performance. ~~The Company’ s investment in Cornerstone Pharmaceuticals is presented as “ Investments- Cornerstone Pharmaceuticals. ”~~ Equity Method Investments ~~–~~ The Company has determined that **each of** RP Finance, LLC (“ RP Finance ”) **and Day Three Labs, Inc. (“ Day Three ”, RP Finance and Day Three, collectively, the “ Equity Method Investees ” and the Company’ s investments in RP Finance and Day Three, collectively, the “ Equity Method Investments ”),** (see Note ~~5~~ **6 and Note 8**) ~~is~~ **, are each** a VIE; however, the Company has determined that it is not the primary beneficiary as the Company does not have the power to direct the activities of ~~RP Finance~~ **the Equity Method Investees** that most significantly impact ~~RP Finance~~ **the Equity Method Investees** ’ ~~s~~ economic performance and, therefore, is not required to consolidate ~~RP Finance~~ **the Equity Method Investees** . The Company accounts for ~~its~~ **the Equity Method** ~~investment~~ **Investments** ~~in RP Finance~~ using the equity method of accounting. Long- Lived Assets Equipment, buildings, leasehold improvements, and furniture and fixtures are recorded at cost and are depreciated on a straight- line basis over their estimated useful lives, which range as follows: Classification Years Building and improvements ~~40~~ Tenant improvements 7- 15 Other (primarily equipment and furniture and fixtures) ~~5 F- 11 Long- lived assets are reviewed for impairment when circumstances indicate that the carrying value of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the assets to the future net cash flows estimated by the Company to be generated by such assets. If such assets are considered to be impaired, the impairment to be recognized is the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of by sale are recorded as held- for- sale at the lower of carrying value or estimated net realizable value. Tests for impairment or recoverability are performed at least annually and require significant management judgment and the use of estimates which the Company believes are reasonable and appropriate at the time of the impairment test. Future unanticipated events affecting cash flows and changes in market conditions could affect such estimates and result in the need for an impairment charge. The Company also re- evaluates the periods of amortization to determine whether circumstances warrant revised estimates of current useful lives. No impairment losses were identified or recorded in the fiscal years ended July 30, 2022 and 2021 on the Company’ s other intangible assets.~~ On August 22, 2022, Broad Atlantic ~~Associate~~ **Associates** LLC, a wholly- owned subsidiary of the Company **(“ Broad Atlantic ”)** , completed the sale of the 520 Property for a purchase price of $ 49. 4 million. The 520 Property ~~serves~~ **served** as the Company’ s headquarters and ~~has~~ **had** several other tenants, and a related 800- car public parking garage. The **Company determined that the** 520 Property **met the** ~~is classified as~~ held- for- sale and ~~is presented as~~ discontinued operations ~~in the accompanying consolidated financial statements~~ **criteria as of July 1, 2022. The 520 Property was disposed of on August 22, 2022** . The Company owns a portion of the 6th floor of a building located at 5 Shlomo Halevi Street, in Jerusalem, Israel. **F- 12 Impairment of Long- Lived Assets The Company assesses the recoverability of long- lived assets, which include property and equipment and in- process research and development and patents whenever significant events or changes in circumstances indicate that its carrying amount may not be recoverable. If indicators of impairment exist, projected future undiscounted cash flows associated with the asset are compared to its carrying amount to determine whether the asset’ s carrying value is recoverable. Any resulting impairment is recorded as a reduction in the carrying value of the related asset in excess of fair value and a change to operating results. For the years ended July 31, 2023 and 2022, the Company determined that there was no impairment of its long- lived assets.** Assets Held- for- Sale and Discontinued Operations The Company classifies assets **as** held- for- sale if all held- for- sale criteria ~~is~~ **are** met pursuant to

ASC 360- 10, Property, Plant and Equipment. Criteria include management commitment to sell the disposal group in its present condition and the sale being deemed probable of being completed within one year. Assets classified as held- for- sale are not depreciated and are measured at the lower of their carrying amount or fair value less cost to sell. The Company assesses the fair value of a disposal group, less any costs to sell, each reporting period it remains classified as held- for- sale and reports any subsequent changes as an adjustment to the carrying value of the disposal group, as long as the new carrying value does not exceed the initial carrying value of the disposal group. Strategic changes in the Company' s operations can be considered a discontinued operation if both the operations and cash flows of the discontinued component have been (or will be) eliminated from the ongoing operations of the Company and the Company will not have any significant continuing involvement in the operations of the discontinued component after the disposal transaction. The results of the discontinued operations shall be reflected as a discontinued operation on the consolidated statements of operations and comprehensive loss and prior periods shall be recast to reflect the earnings from discontinued operations. As a result of the agreement to sell the 520 Property, the accompanying consolidated financial statements reflect the activity related to the sale of the 520 Property as discontinued operations. The Company determined that the 520 Property met the held- for- sale and discontinued operations criteria as of July 1, 2022. **The 520 Property was disposed of on August 22, 2022.** See Note **3** ~~2 to the consolidated financial statements~~ for additional information regarding the results, major classes of assets and liabilities, significant ~~noncash~~ **non- cash** operating items, and capital expenditures of discontinued operations. Debt Issuance Costs Debt issuance costs are recorded net against the related debt and amortized to interest expense over the life of the related debt. During the years ended July 31, **2023 and** 2022 ~~and 2021~~, amortized debt issuance costs of $ **0 and $** 472 ~~thousand and $ 28~~ thousand, respectively, were recorded as a component of interest expense which is included in Discontinued Operations. ~~F- 12~~ Revenue Recognition The Company applies the five- step approach as described in ASC 606, Revenue from Contracts with Customers, which consists of the following: (i) identifying the contract with a customer, (ii) identifying the performance obligations in the contract, (iii) determining the transaction price, (iv) allocating the transaction price to the performance obligations in the contract and (v) recognizing revenue when (or as) the entity satisfies a performance obligation. The Company disaggregates its revenue by source within its consolidated statements of operations and comprehensive loss. As an owner and operator of real estate, the Company derives the majority of its revenue from leasing office and parking space to tenants at its properties. In addition, the Company earns revenue from recoveries from tenants, consisting of amounts due from tenants for common area maintenance, real estate taxes and other recoverable costs. Revenue from recoveries from tenants is recorded together with rental income on the consolidated statements of operations and comprehensive loss which is also consistent with the guidance under ASC 842, Leases ~~(" ASC 842 ")~~ **. The revenue derived from the 520 Property, which included leasing office and parking space to the tenants, is presented within discontinued operations in the consolidated statements of operations and comprehensive loss** . Contractual rental revenue is reported on a straight- line basis over the terms of the respective leases. Accrued rental income, included within other assets on the consolidated balance sheets, represents cumulative rental income earned in excess of rent payments received pursuant to the terms of the individual lease agreements. The Company also ~~earns~~ **earned** revenue from parking which ~~is~~ **was** derived primarily from monthly and transient daily parking. The monthly and transient daily parking revenue falls within the scope of ASC 606 and ~~is~~ **was** accounted for at the point in time when control of the goods or services transfers to the customer and the Company' s performance obligation is satisfied, consistent with the Company' s previous accounting. The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of tenants to make required rent payments or parking customers to pay amounts due. **F- 13** Research and Development Costs Research and development costs and expenses incurred by consolidated entities consist primarily of salaries and related personnel expenses, stock- based compensation, fees paid to external service providers, laboratory supplies, costs for facilities and equipment, license costs, and other costs for research and development activities. Research and development expenses are recorded in operating expenses in the period in which they are incurred. Estimates have been used in determining the liability for certain costs where services have been performed but not yet invoiced. The Company monitors levels of performance under each significant contract for external service providers, including the extent of patient enrollment and other activities through communications with the service providers to reflect the actual amount expended. Contingent milestone payments associated with acquiring rights to intellectual property are recognized when probable and estimable. These amounts are expensed to research and development when there is no alternative future use associated with the intellectual property. Repairs and Maintenance The Company charges the cost of repairs and maintenance, including the cost of replacing minor items not constituting substantial betterment, to selling, general and administrative expenses as these costs are incurred. Stock- Based Compensation The Company accounts for stock- based compensation using the provisions of ASC 718, Stock **-** Based Compensation, which requires the recognition of the fair value of stock- based compensation. Stock- based compensation is estimated at the grant date based on the fair value of the awards. The Company accounts for forfeitures **of grants** as they occur. Compensation cost for awards is recognized using the straight- line method over the vesting period. Stock- based compensation is included in ~~selling,~~ general and administrative expense and research and development expense in the consolidated statements of operations and comprehensive loss. ~~F- 13~~ Income Taxes The Company recognizes deferred tax assets and liabilities for the future tax consequences attributable to temporary differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. The ultimate realization of deferred tax assets depends on the generation of future taxable income during the period in which related temporary differences become deductible. The Company considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in its assessment of a valuation allowance. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date of such change. The Company uses a two- step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. The Company determines whether it is more- likely- than- not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluating whether a tax position has met the more- likely- than- not recognition threshold, the Company presumes that the position will be examined by the appropriate taxing authority that has full knowledge of all relevant information. Tax positions that meet the more- likely- than- not recognition threshold are measured to determine the amount of tax benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 % likely of being realized upon ultimate settlement. Differences between tax positions taken in a tax return and amounts recognized in the financial statements will generally result in one or more of the following: an increase in a liability for income taxes payable, a reduction of an income tax refund receivable, a reduction in a deferred tax asset, or an increase in a deferred tax liability. The Company classifies interest and penalties on income taxes as a component of income tax expense, if any. Contingencies The Company accrues for loss contingencies when both (a) information available prior to issuance of the financial statements indicates that it is probable that a liability had been incurred at the date of the financial statements and (b) the amount of loss can reasonably be estimated. When the Company accrues for loss contingencies and the reasonable estimate of the loss is within a range, the Company records its best estimate within the range. When no amount within the range is a better estimate than any other amount, the Company accrues the minimum amount in the range. The Company discloses an estimated possible loss or a range of loss when it is at least reasonably possible that a loss may have been incurred. **F- 14** The Company categorizes leases at their inception as either operating or finance leases. On certain lease agreements, the Company may receive rent holidays and other incentives. The Company recognizes lease costs on a straight-line basis without regard to deferred payment terms, such as rent holidays, that defer the commencement date of required payments. As of July 31, **2023 and** 2022 ~~and 2021~~, the Company was not a lessee under any leasing arrangements. ~~As a lessor, the Company presents all rental revenue and reimbursements from tenants as a single line item rental income within the consolidated statements of operations and comprehensive loss. F- 14~~ Fair Value Measurements Fair value of financial and non-financial assets and liabilities is defined as an exit price, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The three- tier hierarchy for inputs used to measure fair value, which prioritizes the inputs to valuation techniques used to measure fair value, is as follows: ● Level 1- quoted prices in active markets for identical assets or liabilities; ● Level 2- quoted prices in active markets for similar assets and liabilities and inputs that are observable for the asset or liability; or ● Level 3- unobservable inputs for the asset or liability, such as discounted cash flow models or valuations. A financial asset' s or liability' s classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of the assets and liabilities being measured and their placement within the fair value hierarchy. Functional Currency The U. S. Dollar is the functional currency of our entities operating in the United States. The functional currency for our subsidiaries operating outside of the United States is the New Israeli Shekel, the currency of the primary economic environment in which such subsidiaries primarily expend cash. The Company translates those subsidiaries' financial statements into U. S. Dollars. The Company translates assets and liabilities at the exchange rate in effect as of the consolidated financial statement date, and translates accounts from the consolidated statements of operations and comprehensive loss using the weighted average exchange rate for the period. The Company reports gains and losses from currency exchange rate changes related to intercompany receivables and payables, currently in non- operating expenses. Loss Per Share Basic loss per share is computed by dividing net loss attributable to all classes of common stockholders of the Company by the weighted average number of shares of all classes of common stock outstanding during the applicable period. Diluted loss per share is determined in the same manner as basic loss per share, except that the number of shares is increased to include restricted stock still subject to risk of forfeiture and to assume exercise of potentially dilutive stock options using the treasury stock method, unless the effect of such increase would be anti- dilutive. **The Company uses income from continuing operations as the " control number " or benchmark to determine whether potential common shares are dilutive or anti- dilutive for purposes of reporting earnings (loss) per share for discontinued operations.** Recently Issued Accounting Standards Not Yet Adopted **From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (" FASB ") or other standard setting bodies and are adopted by the Company as of the specified effective date. The Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations upon adoption. F- 15** In June 2016, the FASB issued Accounting Standards Update (" ASU ") 2016- 13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, ~~that~~ **which** changes the impairment model for most financial assets and certain other instruments. For receivables, loans and other instruments, entities will be required to use a new forward- looking " expected loss " model that generally will result in the earlier recognition of allowance for losses. For available- for- sale debt securities with unrealized losses, entities will measure credit losses in a manner similar to current practice, except the losses will be recognized as allowances instead of reductions in the amortized cost of the securities. In addition, an entity will have to disclose significantly more information about allowances, credit quality indicators and past due securities. The new standard is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and will be applied as a cumulative- effect adjustment to retained earnings. The Company ~~is currently evaluating~~ **intends to adopt** the **standard on August 1, 2023 and does not believe the adoption will have a material** impact ~~of the pending adoption of the new standard~~ on its consolidated financial statements ~~and intends to adopt the standard on August 1, 2023~~. ~~F- 15~~ In August 2020, the FASB issued ASU No. 2020- 06, Accounting for Convertible Instruments and Contracts in an Entity' s Own Equity (" ASU 2020- 06 "), which simplifies an issuer' s accounting for convertible instruments by reducing the number of accounting models that require separate accounting for embedded conversion features. ASU 2020- 06 also simplifies the settlement assessment that entities are required to perform to determine whether a contract qualifies for equity classification and makes targeted improvements to the disclosures for convertible instruments and earnings- per- share (" EPS ") guidance. This update will be effective for the Company' s fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Entities can elect to adopt the new guidance through either a modified retrospective method of transition or a fully retrospective method of transition. The Company is currently evaluating the impact of the pending adoption of the new standard on its **consolidated** financial statements and intends to adopt the standard as of August 1, 2024. NOTE ~~2~~ **3** – DISCONTINUED OPERATIONS On July 1, 2022, the Company determined that the ~~building located at 520 Broad Street in Newark, New Jersey, and an associated 800- car public garage (the "~~ 520 Property ~~")~~ met the held- for- sale criteria and the Company ~~has~~ therefore classified the 520 Property as held- for- sale in the consolidated balance sheets at July 31, 2022 ~~and 2021~~. The sale of the 520 Property also ~~represents~~ **represented** a significant strategic shift that will have a major effect on the Company' s operations and financial results. Therefore, the Company has classified the results of operations related to the 520 Property as discontinued operations in the consolidated statements of operations and comprehensive loss. Depreciation on the 520 Property ~~has~~ ceased on July 1, 2022, as a result of the **520** Property being classified as held- for- sale. ~~During the third and fourth quarters of 2022, the buyer deposited a total of $ 3. 25 million in non- refundable deposits in escrow as part of the full purchase price of the 520 Property. The Company has included these non- refundable deposits as a contract deposit in the prepaid expenses and other current assets section of the balance sheet, and a corresponding deferred liability presented in other current liabilities on the consolidated balance sheet.~~ On August 22, 2022, Broad Atlantic ~~Associates, LLC, a wholly- owned subsidiary of the Company,~~ completed the sale of the 520 Property for ~~a~~ **an aggregate gross** purchase price of $ 49. 4 million. The 520 Property was encumbered by a mortgage securing a $ 15 million note payable which was paid off in this transaction. Refer to Note ~~12~~ **15** for further information on the note payable. After repaying the note payable, commissions, taxes, and other related costs, the Company received a net cash amount of approximately $ 33 million at closing. ~~F- 16~~ The carrying value of major classes of assets and liabilities related to discontinued operations at July 31, 2022 **was** ~~and 2021 were~~ as follows **: As of July 31, 2022** (~~$~~ in thousands) ~~: Year Ended July 31, 2022~~ Current assets held- for- sale Building and Improvements $ 45, 437 Land 10, 412 Furniture and Fixtures 1, 145 Other 205 Property and equipment 57, 199 Less Accumulated Depreciation (17, 005) Property and equipment, net ~~$~~ 40, 194 Total current assets held- for- sale ~~$~~ 40, 194 Total assets held- for- sale $ 40, 194 Current liabilities ~~Note payable, net of debt issuance costs,~~ held- for- sale **Total current liabilities** $ 15, 000 **F** ~~Year Ended July 31, 2021 Non~~ - **16** ~~current assets held- for- sale Building and Improvements $ 45, 336 Land 10, 412 Furniture and Fixtures 1, 145 Other Property and equipment 57, 098 Less Accumulated Depreciation (15, 700) Property and equipment, net $ 41, 398 Total non- current assets held- for- sale $ 41, 398 Total assets held- for- sale, non- current $ 41, 398 Current liabilities Note payable, net of debt issuance costs, held- for- sale $ 14, 528~~ The current portion of deferred rental income included in Prepaid Expenses and Other Current Assets was **$ 0 and** approximately $ 150 thousand ~~and $ 111 thousand~~ as of July 31, **2023 and** 2022 ~~and 2021~~, respectively. The noncurrent portion of deferred rental income included in Other Assets was **$ 0 and** approximately $ 1. 3 million ~~and $ 1. 5 million~~ as of July 31, **2023 and** 2022 ~~and 2021~~, respectively. The deferred rental income pertains to the 520 Property and **was** ~~shall be~~ settled at the date of the sale of the 520 Property with the other working capital accounts of **the** 520 **Property** ~~Broad Street~~. Discontinued operations ~~includes~~ - **include** (i) rental and parking revenues, (ii) payroll, benefits, facility costs, real estate taxes, consulting and professional fees dedicated to the 520 Property, (iii) depreciation and amortization expenses and (iv) interest (including amortization of debt issuance costs) on the note payable on the 520 Property. The operating results of these items are presented in our consolidated statements of operations and comprehensive loss as discontinued operations for all periods presented. ~~F- 17~~ The following table details the components comprising net loss from our discontinued operations ~~($ in thousands)~~ : Year Ended July 31, **2023** 2022 ~~2021~~ **(in thousands)** Revenue from discontinued operations: Rental – Third Party $ **68 $** 644 ~~$ 676~~ Rental – Related Party **115** 2, 161 ~~1, 991~~ Parking **66** 694 ~~502~~ Total revenue from discontinued operations **249** 3, 499 ~~3, 169~~ Costs and expenses from discontinued operations: ~~Selling, general~~ **General** and administrative **468** 2, 683 ~~3, 392~~ Depreciation and amortization **—** 1, 317 ~~1, 390~~ Loss from discontinued operations (**219) (** 501 ~~) (1, 613~~) Other income **—** 157 ~~—~~ Interest expense (**87) (** 1, 486 ~~) (92~~) Loss from discontinued operations ~~before income taxes~~ **(306)** (1, 830) ~~(1~~ **Gain on disposal of discontinued operations 6** , **784** ~~705) Income tax benefit / expense~~ — ~~— Net~~ **Gain (** loss **)** from discontinued operations $ **6, 478 $** (1, 830) **The gain on disposal of discontinued operations of approximately** $ ~~(~~ **6. 8 million was derived from the gross proceeds of approximately $ 49. 4 million from the sale of the 520 Property, less the carrying value of the 520 Property of approximately $ 40. 2 million, net of approximately $** 1 ~~, 705)~~ **. 2 million in transaction costs and the write off of approximately $ 1. 2 million of deferred rental income.** NOTE ~~3~~ **4** – INVESTMENT IN CORNERSTONE PHARMACEUTICALS Equity Investment in Cornerstone Pharmaceuticals and Impairment of Cost Method Investment Cornerstone Pharmaceuticals is a clinical stage, cancer metabolism- based therapeutics company focused on the development and commercialization of therapies that exploit the metabolic differences between normal cells and cancer cells. The Company owns debt and equity interests and ~~other~~ rights in Cornerstone Pharmaceuticals through a 90 %- owned non- operating subsidiary, Pharma Holdings, LLC, or Pharma Holdings. Pharma Holdings owns 50 % of CS Pharma Holdings, LLC, or CS Pharma, a non- operating entity that owns equity interests in Cornerstone Pharmaceuticals. Accordingly, the Company holds an effective 45 % indirect interest in the assets held by CS Pharma. A trust for the benefit of the children of Howard Jonas (Chairman of the Board and **Executive Chairman and** former Chief Executive Officer of the Company and ~~Chairman~~ **Member** of the Board of Cornerstone Pharmaceuticals) holds a financial instrument (the " Instrument ") that owns 10 % of Pharma Holdings. **F- 17** Pharma Holdings holds 44. 0 million shares of Cornerstone ~~Pharmaceutical~~ **Pharmaceuticals** ' ~~s~~ Series D Convertible Preferred Stock and a warrant to increase the combined ownership of Pharma Holdings and CS Pharma to up to 56 % of the fully diluted equity interests in Cornerstone Pharmaceuticals (the " Warrant "). The exercise price of the Warrant is the lower of 70 % of the price sold in an equity financing, or $ 1. 25 per share, subject to certain adjustments. On March 25, 2020, the Board of Directors of Cornerstone

Pharmaceuticals extended the expiration date of the Warrant held by Pharma Holdings to purchase shares of the Warrant from December 31, 2020 to June 30, 2021, and on August 31, 2020 the Board of Directors of Cornerstone Pharmaceuticals further extended the expiration date of the Warrant held by Pharma Holdings, LLC to purchase shares of the Warrant to August 15, 2021. In connection with the Merger Agreement, the Warrant expiration was extended to April 1, 2022. The Company has asserted that it may be entitled to a further extension of the Warrant. At this time, the Company does not intend to exercise the Warrant. ~~F- 18~~ Pharma Holdings also holds certain governance rights in Cornerstone Pharmaceuticals including appointment of directors. Pharma Holdings is not the primary beneficiary of Cornerstone Pharmaceuticals as it does not control or direct the activities of Cornerstone Pharmaceuticals that most significantly impact Cornerstone Pharmaceuticals’ economic performance. CS Pharma holds 16. 7 million shares of Cornerstone Pharmaceuticals ~~’~~ Series D Convertible Preferred Stock. CS Pharma owned a $ 10 million Series D Convertible Note, with 3. 5 % interest, in Cornerstone Pharmaceuticals which was converted to shares of Series D Preferred Stock in January 2019. The Company and its subsidiaries collectively own securities representing 51 % of the outstanding capital stock of Cornerstone Pharmaceuticals and ~~41~~ **42** % of the capital stock on a fully diluted basis (excluding the remainder of the Warrant). The Series D Convertible Preferred Stock has a stated value of $ 1. 25 per share (subject to appropriate adjustment to reflect any stock split, combination, reclassification or reorganization of the Series D Preferred Stock or any dilutive issuances, as described below). Holders of Series D Stock are entitled to receive non- cumulative dividends when, as and if declared by the Board of Cornerstone Pharmaceuticals, prior to any dividends to any other class of capital stock of Cornerstone Pharmaceuticals. In the event of any liquidation, dissolution or winding up **of** Cornerstone Pharmaceuticals, or in the event of any deemed liquidation, proceeds from such liquidation, dissolution or winding up shall be distributed first to the holders of Series D Stock. Except with respect to certain major decisions, or as required by law, holders of Series D Stock vote together with the holders of the other preferred stock and common stock and not as a separate class. The Company serves as the managing member of Pharma Holdings, and Pharma Holdings serves as the managing member of CS Pharma, with broad authority to make all key decisions regarding their respective holdings. Any distributions that are made to CS Pharma from Cornerstone Pharmaceuticals that are in turn distributed by CS Pharma, will need to be made pro rata to all members, which would entitle Pharma Holdings to 50 % (based on current ownership) of such distributions. Similarly, if Pharma Holdings were to distribute proceeds it receives from CS Pharma, it would do so on a pro rata basis, entitling the Company to 90 % (based on current ownership) of such distributions. The Company evaluated its investments in Cornerstone Pharmaceuticals in accordance with ASC 323, Investments- Equity Method and Joint Ventures, to establish the appropriate accounting treatment for its investment and has concluded that its investment did not meet the criteria for the equity method of accounting or consolidation and is carried at cost. The Company has determined that Cornerstone Pharmaceuticals is a VIE; however, the Company has determined that it is not the primary beneficiary as it does not have the power to direct the activities of Cornerstone Pharmaceuticals that most significantly impact Cornerstone Pharmaceuticals’ economic performance. In addition, the interests held in Cornerstone Pharmaceuticals are Series D Convertible Preferred Stock and do not represent in- substance common stock. The Instrument holds a contractual right to receive additional shares of Cornerstone Pharmaceuticals capital stock equal to 10 % of the fully diluted capital stock of Cornerstone Pharmaceuticals (the “ Bonus Shares ”) upon the achievement of certain milestones. The additional 10 % is based on the fully diluted capital stock of Cornerstone Pharmaceuticals, excluding the remainder for the Warrant, at the time of issuance. If any of the milestones are met, the Bonus Shares are to be issued without any additional payment. **F- 18** Pharma Holdings holds the Warrant ~~to purchase a significant stake in Cornerstone Pharmaceuticals,~~ as well as other equity and governance rights in Cornerstone Pharmaceuticals. The Company currently owns 51 % of the issued and outstanding equity in Cornerstone Pharmaceuticals. Approximately 8 % of the issued and outstanding equity is owned by the Company’ s subsidiary CS Pharma and 43 % is held by the Company’ s subsidiary Pharma Holdings. The Company’ s subsidiary Pharma Holdings holds the Warrant ~~, which is non- dilutable and provides for the Company to increase its (via Pharma Holdings and CS Pharma and inclusive of the interests held by the other owners of those entities) total ownership to 56 %. Based on the current shares issued and outstanding of Cornerstone Pharmaceuticals as of July 31, 2022, the Company, and the Company’ s affiliates, would need to pay approximately $ 13. 5 million to exercise the Warrant in full to 56 %. On an as- converted fully diluted basis (for all convertible securities of Cornerstone Pharmaceuticals outstanding), the Company and the Company’ s affiliates would need to pay approximately $ 118 million to exercise the Warrant in full (including to offset the impact of additional issuances of Cornerstone Pharmaceuticals equity under the Line of Credit, as defined below)~~ . The Instrument holds 10 % of the interest in Pharma Holdings and would need to contribute 10 % of any cash necessary to exercise any portion of the Warrant. Following any exercise, a portion of the Company’ s interest in Cornerstone Pharmaceuticals would continue to be held for the benefit of the other equity holders in Pharma Holdings and CS Pharma. ~~Given the Company’ s anticipated available cash, the Company would not be able to exercise the Warrant in its entirety and the Company may never be able to exercise the Warrant in full.~~ Cornerstone Pharmaceuticals may also issue additional equity interests, such as employee stock options, which will require the Company to pay additional cash to maintain the Company’ s ownership percentage or exercise the Warrant in full. The terms of the Warrant provide that it expired on April 1, 2022 ~~,~~ **;** however **,** the Company has asserted that it may be entitled to a further extension of the Warrant. At this time, the Company does not intend to exercise the Warrant. ~~F- 19 On January 28, 2021, Pharma Holdings partially exercised the Warrant to maintain the 51 % ownership percentage and purchased 7. 3 million shares of Cornerstone Pharmaceuticals’ Series D Preferred Stock for $ 9. 1 million, of which $ 0. 9 million was contributed by the holder of a minority interest in Pharma Holdings.~~ Due to the Data Events, on October 28, 2021, the Company recorded an impairment charge of approximately $ 79. 1 million related to the cost method investment in Cornerstone Pharmaceuticals representing the total amount of the Company’ s cost method investment. The impairment loss was included in “ Impairment of cost method investment – Cornerstone Pharmaceuticals ” in the ~~accompanying~~ consolidated statements of operations and comprehensive loss for the year ended July 31, 2022. Approximately $ 17. 3 million of the total impairment loss of $ 79. 1 million was applicable to noncontrolling interests in certain of the Company' s subsidiaries and was allocated to the holders of interests in CS Pharma and Pharma Holdings in the approximate amounts of $ 10. 4 million and $ 6. 9 million, respectively. Line of Credit to Cornerstone Pharmaceuticals and Impairment of Related Receivable On September 24, 2021, the Company entered into a Line of Credit Loan Agreement (the " Line of Credit Agreement ") with Cornerstone Pharmaceuticals under which Cornerstone Pharmaceuticals borrowed $ 25 million from the Company. The first advance was in the amount of $ 1. 9 million on September 24, 2021. On October 1, 2021, a second advance was made in the amount of $ 23. 1 million. The Line of Credit Agreement accrues interest at 9 % per annum. The maturity date of the Line of Credit Agreement was June 17, 2022, and the amounts due on that date were not paid. The Company is in discussions with Cornerstone Pharmaceuticals and is evaluating its rights and plan of action with respect to the Line of Credit Agreement (in the contexts of all of its interests in Cornerstone Pharmaceuticals). Due to the Data Events, the Company recorded a full reserve on the amounts due the Company from Cornerstone Pharmaceuticals related to the Line of Credit Agreement for $ 25 million **during the year ended July 31, 2022** . The Company also recorded a loss on related party receivables of approximately $ 2. 6 million related to other amounts owed by Cornerstone Pharmaceuticals during the year ended July 31, 2022. The Company recorded a reserve on related party interest receivable of $ 1. 9 million in Interest income, net, on the consolidated statements of operations and comprehensive loss during the year ended July 31, 2022. ~~NOTE 4 – INVESTMENT IN ALTIRA The Company entered into a Membership Interest Purchase Agreement (the " Purchase Agreement ") on May 13, 2020 with a member (the " First Seller ") of Altira Capital & Consulting, LLC (" Altira "). Pursuant to the Purchase Agreement, on May 13, 2020, the First Seller sold the economic rights related to a 33. 333 % membership interest in Altira to the Company and in effect the Company purchased the potential right to receive a 1 % royalty on Net Sales (as defined in the Royalty Agreement between Altira and Cornerstone Pharmaceuticals) on sales of certain Cornerstone Pharmaceuticals products. The purchase consideration for the purchase of the membership interest consisted of 1) $ 1, 000, 000 that was payable monthly in four equal monthly installments of $ 250, 000 each; 2) $ 3, 000, 000 payable on January 3, 2021; 3) $ 3, 000, 000 due within fifteen (15) days of interim data analysis in Cornerstone Pharmaceuticals' Phase 3 pivotal trial (AVENGER 500 ®) of CPI- 613 ® (devimistat); and 4) $ 3, 000, 000 which is due within one- hundred and twenty (120) days from the date that Cornerstone Pharmaceuticals files a new drug application with the U. S. Food and Drug Administration for approval of devimistat (CPI- 613) as a first in- line therapy for pancreatic cancer, as defined in the Purchase Agreement. The post- closing payments are to be made to the First Seller, at the Company' s discretion, in cash or shares of the Company' s Class B common stock based on the ten- day average share price of the Company' s Class B common stock prior to the date of payment or any combination thereof. F- 20 The Company has accounted for the purchase of the initial 33. 333 % membership interest in Altira as an equity method investment in accordance with the guidance in ASC 323, Investments – Equity Method and Joint Ventures. The Company determined that a 33. 333 % membership interest in Altira indicates that the Company is able to exercise significant influence over Altira, and the Company' s membership interest is considered to be " more than minor " in accordance with the guidance. The cost of the investment was determined to be $ 4, 000, 000 pursuant to the terms of the Purchase Agreement. The contingent consideration, as described within the Purchase Agreement, in the amount of $ 6, 000, 000, will be recognized when the payments are considered probable. For the fiscal 2020, the Company determined that the investment in Altira was fully impaired as of the acquisition date as there~~ **There** were no **amounts** ~~probable cash flows, and accordingly, the investment had no value. The Company~~ recorded **during** ~~an impairment charge of $ 4, 000, 000, which was the total amount of the Company' s investment recognized for the Purchase Agreement as of July 31, 2020. On December 7, 2020, the Company purchased an additional 33. 333 % of membership interests in Altira, pursuant to a Membership Interest Purchase Agreement (the " Second Altira Agreement ") between the Company and another Altira member, (the " Second Seller "). With this transaction, the Company now owns a right to an aggregate 66. 666 % of the membership interests in Altira. Pursuant to the Second Altira Agreement, on December 7, 2020, the Second Seller sold his economic rights related to a 33. 333 % membership interest in Altira to the Company and in effect the Company purchased the potential right to receive an additional 1 % royalty on Net Sales (as defined in the Royalty Agreement between Altira and Cornerstone Pharmaceuticals) on sales of certain Cornerstone Pharmaceuticals products. The consideration for the purchase of the Membership Interest consists of 1) $ 1, 000, 000 that was payable monthly in four equal monthly installments of $ 250, 000 each, commencing on January 4, 2021; 2) $ 3, 000, 000 payable on January 4, 2021; 3) $ 3, 000, 000 due within fifteen (15) days of the earlier to occur of either the completion of Cornerstone Pharmaceuticals' Phase III pivotal trial (AVENGER 500 ®) of CPI- 613 ® (devimistat) or May 31, 2021 and not before January 4, 2021; and 4) $ 3, 000, 000 which is due within one- hundred and twenty (120) days from the date that Cornerstone Pharmaceuticals files a new drug application with the U. S. Food and Drug Administration for approval of devimistat (CPI- 613) as a first in- line therapy for pancreatic cancer, as defined in the Purchase Agreement. Certain of the post- closing payments may be made, at the Company' s discretion, in cash or shares of the Company' s Class B common stock based on the ten- day average share price of the Company' s Class B common stock prior to the date of payment or any combination thereof. The purchase of the additional membership interests was accounted for as an asset acquisition, as Altira is not considered a business in accordance with the guidance in ASC 805, Business Combinations. The membership interests acquired do not consist of inputs, processes, and are not generating outputs, as required in ASC 805 to qualify as a business, and are therefore accounted for as an asset acquisition. Although this transaction is considered an asset acquisition, there are no assets or liabilities to be recorded as of the acquisition date as Altira does not have any business operations. The cost of the investment was determined to be $ 7, 000, 000 pursuant to the terms of the Second Altira Agreement. For~~ the year ended July 31, ~~2021~~ **2023 . Planned Restructuring NOTE 5 – CONVERTIBLE NOTE RECEIVABLE, RELATED PARTY On March 21, 2023** , the Company **loaned $ 2. 0 million to Cornerstone which is represented by a Promissory Note (the " Promissory Note " or " Note ") made by Cornerstone. The Note, which bears interest at a rate of seven and one- half percent (7. 5 %) per annum, was originally due and payable on May 22, 2023. On May 22, 2023, the Promissory Note was amended to extend the maturity date to November 30, 2023 and to waive any increase in the interest rate provided for in the Note,**

provided that the entire principal amount and all accrued interest thereon is repaid in cash or converted into equity securities of Cornerstone no later than November 30, 2023. The Promissory Note is secured by a first priority security interest in all of Cornerstone' s right, title and interest in and to all of the tangible and intangible assets purchased by Cornerstone pursuant to the Purchase Agreement between Cornerstone and Calithera Biosciences, Inc. (" Calithera "), a clinical- stage, precision oncology biopharmaceutical company developing targeted therapies to redefine treatment for biomarker- specific patient populations, and all proceeds therefrom and all rights to the data related to CB- 839 (the " Collateral "). F- 19 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS The interest on the Promissory Note accrues from the issuance date until the Note is paid in full or converted, which shall accrue on a quarterly basis. Subject to the amendment described above, in the event the total outstanding amount under the Promissory Note is not repaid by the amended maturity date, the rate of interest shall be eleven percent (11 %), retroactive from and after the maturity date. Subject to the amendment described above, following the occurrence of and during the continuation of an uncured Event of Default (as defined below), the outstanding principal amount shall bear interest at the rate of fourteen percent (14 %) per annum (the " Default Interest Rate ") until the earliest of (i) cure of such Event of Default, (ii) repayment of all outstanding amounts due under the Note, (iii) conversion of all then outstanding obligations under the Note, or (iv) transfer of all its rights related to the Collateral. The entire (and not less than the entire) outstanding principal amount due under the Promissory Note together with all accrued unpaid interest thereon and other amounts owing thereunder (together, the " Owed Amount "), may, at Cornerstone' s election at any time prior to the maturity date, be converted into a number of shares (the " Conversion Shares ") calculated by dividing the entire Owed Amount by the conversion price used by Cornerstone in a Qualified Offering / Conversion (as defined in the Note), and if no such Qualified Offering / Conversion has been consummated, the fair market value for the Conversion as determined **by an independent third party valuation firm (the " Conversion Price "). The Promissory Note contains certain trigger events (as defined in the Note)** that ~~the investment~~ **generally, if uncured within five (5) trading days, may result** in ~~Altira was fully impaired as of the acquisition date as there were no probable cash flows, and~~ - **an** ~~accordingly~~ **event of default in accordance with the terms of the Notes (such event** , ~~had no value~~ **an " Event of Default "). Upon an Event of a Default, the Company may consider the Promissory Note immediately due and payable. Upon an Event of Default, the interest rate may also be increased to the lesser of 18 % per annum or the maximum rate permitted under applicable law** . The Company recorded **the Promissory Note at fair value as the security is classified as available- for- sale. Subsequent changes in fair value are recorded in unrealized gain or loss on available- for- sale securities as a component of other comprehensive income (loss) in the consolidated statements of operations** ~~an~~ **and** ~~impairment~~ **comprehensive loss. For the year ended July 31, 2023, the Company recorded a** ~~charge~~ **change in fair value** of **approximately** $ ~~7, 000, 000,~~ **79 thousand related to the decrease in fair value of the Promissory Note** which was ~~the total amount of the Company' s investment~~ recognized **in other comprehensive income (loss) on the consolidated statements of operations and comprehensive loss. Interest income on the Promissory Note totaled approximately $ 54 thousand** for the **year ended July 31,** ~~Second Altira Agreement. During fiscal 2021~~ **2023** ~~, the Company issued 129, 620 shares of Class B Common Stock with a value of $ 3. 5 million to the First Seller under the Purchase Agreement. F- 21 Additionally, the Company issued 150, 703 shares of Class B Common Stock with a value of $ 5 million to the Altira Second Seller,~~ and **is recorded in** ~~cash payments totaling $ 2 million to satisfy the remaining non- contingent obligation due to the Altira Second Seller during fiscal 2021. Upon the December 2020 acquisition of the additional 33 % membership~~ interest ~~,~~ **receivable on** the ~~Company had a majority interest in Altira, which would require consolidation~~ **consolidated balance sheets** ~~. However, the assets and operations of Altira are not significant to the Company as a whole. The Company has identified the investment in Altira as a related party transaction (see Note 13)~~ . NOTE ~~5~~ **6** – INVESTMENT IN RP FINANCE, LLC On February 3, 2020, Cornerstone Pharmaceuticals entered into a Line of Credit ~~Loan Agreement~~ **with RP Finance** (" RPF Line of Credit ") ~~with RP Finance~~ which provides a revolving commitment of up to $ 50, 000, 000 to fund clinical trials and other capital needs. The Company owns 37. 5 % of the equity interests in RP Finance and is required to fund 37. 5 % of funding requests from Cornerstone Pharmaceuticals under the RPF Line of Credit. ~~Howard Jonas~~ **The Instrument** owns 37. 5 % of the equity interests in RP Finance, and is required to fund 37. 5 % of funding requests from Cornerstone Pharmaceuticals under the RPF Line of Credit. The remaining 25 % equity interests in RP Finance are owned by other ~~shareholders~~ **stockholders** of Cornerstone Pharmaceuticals. Under the RPF Line of Credit, all funds borrowed will bear interest at the mid- term Applicable Federal Rate published by the U. S. Internal Revenue Service. The maturity date is the ~~earlier~~ **earliest** of February 3, 2025, upon a change of control of Cornerstone Pharmaceuticals or a sale of Cornerstone Pharmaceuticals or its assets. Cornerstone Pharmaceuticals can draw on the facility on 60 days' notice. The funds borrowed under the RPF Line of Credit must be repaid out of certain proceeds from equity sales by Cornerstone Pharmaceuticals. In connection with entering into the **RPF** Line of Credit ~~Agreement~~ , Cornerstone Pharmaceuticals agreed to issue to RP Finance shares of its common stock representing 12 % of the issued and outstanding shares of Cornerstone Pharmaceuticals common stock, with such interest subject to anti- dilution protection as set forth in the RPF Line of Credit. The Company has determined that RP Finance is a VIE; however, the Company has determined that it is not the primary beneficiary as the Company does not have the power to direct the activities of RP Finance that most significantly impact RP Finance' s economic performance and, therefore, is not required to consolidate RP Finance. Therefore, the Company will use the equity method of accounting to record its investment in RP Finance. The Company has recognized ~~a loss of approximately~~ $ **0 in** ~~575 thousand and~~ earnings ~~of $ 383 thousand~~ from its ownership interests of 37. 5 % in RP Finance for the years ended July 31, **2023 and** 2022 **, respectively,** and **a loss of $ 0 and $ 575 thousand from its ownership interests of 37. 5 % in RP Finance for the years ended July 31,** ~~2021~~ **2023 and 2022** , respectively. The assets and operations of RP Finance are not significant and the Company has identified the equity investment in RP Finance as a related party transaction (see Note ~~13~~ **16**). **F- 20** In August 2020, Cornerstone Pharmaceuticals called for a $ 5 million draw on the RPF Line of Credit and the facility was funded by RP Finance in the amount of $ 5 million. In November 2020, Cornerstone Pharmaceuticals called for a second $ 5 million draw on the RPF Line of Credit and the facility was funded by RP Finance in the amount of $ 5 million. In June 2021 and July 2021, Cornerstone Pharmaceuticals called for a total aggregate of $ 10 million in draws on the line of RPF Line of Credit and the facility was funded by RP Finance in the amount of $ 10 million. In September 2021, Cornerstone Pharmaceuticals called for a $ 5 million draw on the RPF Line of Credit and the facility was funded by RP Finance LLC in the amount of $ 5 million. As of July 31, **2023 and** 2022, the Company has funded a cumulative total of $ 9. 375 million in accordance with its 37. 5 % ownership interests in RP Finance. The Company recorded a reserve on related party interest receivable of $ 1. 9 million in Interest income, net, on the consolidated statements of operations and comprehensive loss during the year ended July 31, 2022. ~~F- 22~~ Impairment of Equity Method Investment Due to the Data Events, during the three months ended October 31, 2021, the Company recorded equity in the loss of RP Finance of $ 575 thousand. As of July 31, **2023 and** 2022, the equity method investment on the Company' s balance sheet was $ 0, and no additional equity loss of RP Finance was recorded during the year ended July 31, ~~2022~~ **2023** . The Company was not obligated to guarantee obligations of RP Finance and is not committed to ~~provide~~ **provided** further financial support for RP Finance. Additionally, during the year ended July 31, 2022, the Company recorded a loss on related party receivables of $ 9. 375 million related to amounts owed by RP Finance. ~~The loss on related party receivables was recorded in the consolidated statements of operations and comprehensive loss during the year ended July 31, 2022.~~ NOTE ~~6~~ **7** – INVESTMENT IN LIPOMEDIX PHARMACEUTICALS LTD. LipoMedix is a development- stage, privately held Israeli company focused on the development of an innovative, safe and effective cancer therapy based on liposome delivery. As of July 31, ~~2022~~ **2023** , the Company held ~~84~~ **95** % of the issued and outstanding ordinary shares of LipoMedix and has consolidated this investment from the second quarter of fiscal 2018. In March 2021, the Company provided bridge financing in the principal amount of up to $ 400, 000 to LipoMedix with a maturity date of September 1, 2021, and an interest rate of 8 % per annum. As of September 1, 2021, LipoMedix was in default on the terms of the loan and as such, the interest rate has increased to 15 % per annum. On November 15, 2021, the Company entered into a share purchase agreement with LipoMedix to purchase up to 15, 975, 000 ordinary shares at $ 0. 1878 per share for an aggregate purchase price of $ 3. 0 million (the " **LipoMedix SPA** ~~Share Purchase Agreement~~ "). Additionally, LipoMedix issued the Company a warrant to purchase up to 15, 975, 000 ordinary shares at an exercise price of $ 0. 1878 per share which ~~expires~~ **expired** on November 11, 2022. As of the date of the **LipoMedix SPA** ~~November 2021 Share Purchase Agreement~~ , there was an outstanding loan balance including principal of $ 400 thousand and accrued interest of $ 21. 8 thousand owed by LipoMedix to the Company on ~~the~~ **a** note ~~from~~ **made by LipoMedix in favor of the Company issued in** March 2021. The amount due on the loan was netted against the approximately $ 3. 0 million aggregate purchase price due to LipoMedix, resulting in a cash payment by the Company of approximately $ 2. 6 million in exchange for the 15, 975, 000 shares purchased. As a result of the share purchase, the Company' s ownership of LipoMedix increased to approximately 84 % with a noncontrolling interest of approximately 16 %. The Company recorded approximately $ 8 thousand to adjust the carrying amount of the noncontrolling interest to reflect the Company' s increased ownership interest in LipoMedix' s net assets. **On February 9, 2023, the Company entered into a Share Purchase Agreement with LipoMedix to purchase 70, 000, 000 ordinary shares at $ 0. 03 per share for an aggregate purchase price of $ 2. 1 million (the " 2023 LipoMedix SPA "). As a result of the share purchase, the Company' s ownership of LipoMedix increased to approximately 95 % with a noncontrolling interest of approximately 5 %. The Company recorded approximately $ 16 thousand to adjust the carrying amount of the noncontrolling interest to reflect the Company' s increased ownership interest in LipoMedix' s net assets. F- 21** NOTE **8 – INVESTMENT IN DAY THREE LABS INC. On April** 7 **, 2023, the Company entered into a Common Stock Purchase Agreement (the " Day Three Purchase Agreement ") with Day Three. Day Three is a cannabinoid ingredient manufacturer specializing in the development and commercialization of novel cannabis product solutions. Pursuant to the Day Three Purchase Agreement, the Company purchased 4, 302, 224 shares of common stock representing 38 % of the outstanding shares of common stock of Day Three (33. 333 % on a fully diluted basis), for a purchase price of $ 3. 0 million. The Company also received a warrant exercisable for 7, 528, 893 shares of common stock at an aggregate purchase price of $ 3. 0 million, which expires five years from the date of issuance or earlier based on the occurrence of certain events as defined in the Day Three Purchase Agreement. As of the date of this report, the Company had not exercised the warrant. The Company has accounted for this investment as an equity method investment in accordance with the guidance in ASC 323, Investments – Equity Method and Joint Ventures. The Company determined that a 38 % ownership interest in Day Three and its right to designate two members of the Board of Directors of Day Three (out of a current total of seven members) indicates that the Company is able to exercise significant influence. Upon exercise of the warrant, the Company will have the right to appoint a third member of the Day Three Board of Directors. The Company has determined that Day Three is a VIE; however, the Company is not the primary beneficiary as it does not have the power to direct the activities that most significantly impact Day Three' s economic performance. The Company has therefore concluded it is not required to consolidate Day Three. The Company uses the equity method of accounting to record its investment in Day Three. Day Three' s fiscal year ends on December 31, and as a result, the Company will recognize its share of Day Three' s earnings / loss on a one- month lag. For the year ended July 31, 2023, the Company recognized approximately $ 203 thousand of equity in loss of Day Three, based on its proportionate share of Day Three' s results through June 30, 2023. The assets and operations of Day Three are not significant. NOTE 9 – INVESTMENT IN CYCLO THERAPEUTICS, INC. On May 2, 2023, the Company entered into a Securities Purchase Agreement (the " Cyclo SPA ") with Cyclo. Cyclo is a clinical stage biotechnology company, whose common stock is listed on the Nasdaq Capital Market under the symbol CYTH, that develops cyclodextrin- based products for the treatment of neurodegenerative diseases. The Company purchased from Cyclo (i) 2, 514, 970 common shares (the " Purchased Shares ") and (ii) a warrant to purchase 2, 514, 970 common shares with an exercise price of $ 0. 71 per share (the " Cyclo**

Warrant "), at a combined purchase price equal to $ 0. 835 per Purchased Share and Cyclo Warrant to purchase one share, for an aggregate purchase price of $ 2. 1 million. The Cyclo Warrant may be exercised for the seven- year period following the date Cyclo obtains the approval of the stockholders of Cyclo to the exercise of the Cyclo Warrant. On July 31, 2023, the Cyclo stockholders approved the exercise in full of the warrant. On June 1, 2023, the Company entered into another Securities Purchase Agreement (the " Cyclo II SPA ") with Cyclo. Pursuant to the Cyclo II SPA, the Company agreed to purchase an additional 4, 000, 000 shares of common stock (the " Cyclo II Shares "), and a warrant to purchase an additional 4, 000, 000 Shares (the " Cyclo II Warrant "), for an aggregate purchase price of $ 5, 000, 000. The Cyclo II Warrant has an exercise price of $ 1. 25 per share and is exercisable for a period of seven years following the date of issuance. On July 31, 2023, Cyclo obtained the approval of its stockholders for the transactions contemplated by the Cyclo II SPA. Subsequent to year end, on August 1, 2023, the Company completed the Cyclo II SPA with Cyclo, whereby the Company purchased 4, 000, 000 shares of common stock (the " Cyclo II Shares "), and a warrant to purchase an additional 4, 000, 000 Shares (the " Cyclo II Warrant "), for an aggregate purchase price of $ 5, 000, 000. The August 1, 2023 investment increased the Company' s percentage ownership of Cyclo common stock to 34 %. As of the date of this report, the Company had not exercised the Cyclo II Warrant. Pursuant to the Cyclo II SPA, the Registration Rights Agreement between the Company and Cyclo, dated May 2, 2023, has been amended to require Cyclo to file a registration statement with the Securities and Exchange Commission to register the resale of the Cyclo II Shares and shares of common stock underlying the Cyclo II Warrants, upon the request of the Company, and (ii) Cyclo agreed to appoint a designee of the Company (in addition to William Conkling, the Company' s Chief Executive Officer) to Cyclo' s Board of Directors, and to nominate such designee to serve as a director of Cyclo in connection with Cyclo' s solicitation of proxies for Cyclo' s next Annual Meeting of Stockholders. The Cyclo II SPA purchase price was paid on August 1, 2023, which is the effective date of the second Cyclo investment. Subsequent to year end, on October 20, 2023, the Company exercised the Cyclo Warrant to purchase 2, 514, 970 common shares at an exercise price of $ 0. 71 per share, pursuant to a Securities Purchase Agreement dated October 20, 2023, and in consideration received a new warrant to purchase an additional 2, 766, 467 common shares at an exercise price of $ 0. 95 per share which are exercisable for a period of four years following the issuance date (the " Cyclo III Warrant "), for an aggregate purchase price of $ 1, 785, 629. F- 22 The Company has elected to account for its investment in Cyclo under the fair value option. The investment was measured at fair value and the Company has recorded the subsequent changes in fair value as unrealized gain (loss) in the consolidated statements of operations and comprehensive loss. The investment in the Cyclo SPA resulted in an unrealized gain of approximately $ 2. 1 million as the purchase price was lower than the fair value of the investment. The Company recognized total unrealized gains on its investment of $ 2. 7 million in the accompanying consolidated statements of operations and comprehensive loss for the year ended July 31, 2023. Summarized Fair Value (Level 1) Method Investment Details Ownership % Aggregate Fair Value July 31, 2023 July 31, 2023 Cyclo 16 % $ 4, 763, 102 The 16 % ownership percentage as of July 31, 2023 is comprised of the shares of common stock owned by the Company and does not include the Cyclo Warrant. The total aggregate fair value of the Cyclo investment of $ 4, 763, 102 as of July 31, 2023 is comprised of common shares with an aggregate fair value of $ 3, 898, 204 and warrants with an aggregate fair value of $ 864, 898. Summarized consolidated financial information of Cyclo, reported on a one month lag, is as follows: Three Months Ended June 30, Six Months Ended June 30, 2023 2022 2023 2022 Revenue $ 117, 118 $ 541, 886 $ 269, 529 $ 736, 790 Loss from operations $ (4, 632, 942) $ (3, 456, 024) $ (9, 640, 074) $ (6, 390, 481) Net loss $ (4, 636, 455) $ (3, 451, 990) $ (9, 643, 540) $ (6, 223, 581) NOTE 10 – INVESTMENTS ~~IN MARKETABLE SECURITIES~~ The Company has classified its investments in corporate bonds **, U. S. treasury bills, and convertible note receivable** as available- for- sale securities. These securities are carried at estimated fair value with unrealized holding gains and losses included in accumulated other comprehensive loss in stockholders' equity until realized. Investment transactions are recorded on their trade date. Gains and losses on marketable security transactions are reported on the specific- identification method. Interest income is accrued daily and adjusted for amortization of premiums and accretion of discounts on the corporate bonds **and U** . ~~F- 23~~ **S. treasury bills.** The amortized cost, gross unrealized holding gains, gross unrealized holding losses, and fair value for available- for- sale securities as of July 31, **2023 and** 2022 are as follows: July **31, 2023 Amortized cost Gross unrealized gains Gross unrealized (losses) Fair value (in thousands) Available- for- sale securities: U. S. Treasury Bills $ 11, 222 $ 53 $ — $ 11, 275 Corporate bonds 46, 766 4, 333 (4, 660) 46, 439 Convertible note receivable, related party 2, 000 — (79) 1, 921 Total available- for- sale securities $ 59, 988 $ 4, 386 $ (4, 739) $ 59, 635 F- 23July** 31, 2022 Amortized cost Gross unrealized gains Gross unrealized (losses) Fair value (in thousands) Available- for- sale securities: Corporate bonds $ 36, 761 $ 81 $ (144) $ 36, 698 Total available- for- sale securities $ 36, 761 $ 81 $ (144) $ 36, 698 ~~The Company did not hold any investments in corporate bonds as of July 31, 2021.~~ During the year ended July 31, ~~2022~~ **2023** , the Company reclassified approximately $ ~~45~~ **154** thousand of unrealized ~~losses~~ **gains** out of accumulated other comprehensive loss related to ~~maturities~~ **the sale** of available- for- sale securities into consolidated net loss in the consolidated statements of operations and comprehensive loss in ~~Realized~~ **realized** ~~loss~~ **gain** on available- for- sale securities. Maturities of corporate bonds **and U. S. Treasury Bills** held as of July 31, ~~2022~~ **2023** were all due within one year. Marketable securities in an unrealized loss position as of July 31, ~~2022~~ **2023** were not deemed impaired at acquisition and subsequent declines in fair value are not deemed attributed to declines in credit quality. The Company believes that it is more likely than not that it will receive a full recovery of par value on the securities, although there can be no assurance that such recovery will occur. NOTE ~~8~~ **11** – FAIR VALUE MEASUREMENTS Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs to valuation methodologies used to measure fair value: ● Level ~~1- quoted prices in active markets for identical assets or liabilities; ● Level~~ 2- quoted prices in active markets for similar assets and liabilities and inputs that are observable for the asset or liability;

or ● Level 3- unobservable inputs for the asset or liability, such as discounted cash flow models or valuations. The determination of where assets and liabilities fall within this hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The following is a listing of the Company' s assets required to be measured at fair value on a recurring basis and where they are classified within the fair value hierarchy as of July 31, **2023 and** 2022 ~~and~~ **: July 31,** ~~2021~~ **2023 Level 1 Level 2 Level 3 Total (in thousands) Assets** : **Available- for- sale securities- Corporate Bonds $ — $ 46, 439 $ — $ 46, 439 Available- for- sale securities- U. S. Treasury Bills 11, 275 — — 11, 275 Investment in equity securities 294 — — 294 Investment in Cyclo Therapeutics Inc.- Common stock 3, 898 — — 3, 898 Investment in Cyclo Therapeutics Inc.- Warrants 865 — — 865 Hedge funds — — 4, 984 4, 984 Convertible note receivable, related party — — 1, 921 1, 921 Total $ 16, 332 $ 46, 439 $ 6, 905 $ 69, 676 F- 24** July 31, 2022 Level 1 Level 2 Level 3 Total ~~Assets:~~ (in thousands) **Assets:** Available- for- sale securities **- Corporate Bonds** $ — $ 36, 698 $ — $ 36, 698 Hedge funds — — 4, 764 4, 764 Total $ — $ 36, 698 $ 4, 764 $ 41, 462 **As of** ~~F- 24~~ July 31, ~~2021~~ **2023 and** ~~Level 1 Level 2 Level 3 Total Assets: (in thousands) Hedge funds $ — $ — $ 5, 268 $ 5, 268 Total $ — $ — $ 5, 268 $ 5, 268 As of July 31,~~ 2022 ~~and 2021~~ , the Company did not have any liabilities measured at fair value on a recurring basis. The following table summarizes the changes in the fair value of the assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3): Year Ended July 31, **2023** 2022 ~~2021~~ (in thousands) Balance, beginning of period $ **4, 764 $** 5, 268 ~~$ 7, 510 Liquidation of Hedge Fund Investments — (7, 000)~~ Total **gain** (loss) ~~gain~~ included in earnings **220** (504) ~~4~~ **Convertible note receivable** , ~~758~~ **related party 2, 000 — Total loss included in other comprehensive loss (79) —** Balance, end of period $ **6, 905 $** 4, 764 ~~$ 5, 268~~ Hedge funds classified as Level 3 include investments and securities which may not be based on readily observable data inputs. The availability of observable inputs can vary from security to security and is affected by a wide variety of factors, including, for example, the type of security, whether the security is new and not yet established in the marketplace, the liquidity of markets, and other characteristics particular to the security. The fair value of these assets is estimated based on information provided by the fund managers or the general partners. Therefore, these assets are classified as Level 3. **Available- for- sale securities classified as Level 3 include a convertible note receivable, related party (see Note 5) which may not be based on readily observable data inputs.** The ~~Company received~~ **availability of observable inputs can vary and is affected by** a **wide variety** ~~$ 2 million and $ 5 million distribution~~ of **factors, including, for example, the type of security, whether the security is new and not yet established in the marketplace, the liquidity of markets, and** ~~the~~ **other** ~~Company' s~~ **characteristics particular to the security. The fair value of this asset is estimated using a scenario- based analysis based on the probability- weighted present value of future** investments **returns, considering each of the possible outcomes available to us, including cash repayment, equity conversion, and collateral transfer scenarios. Estimating the fair value of the convertible note requires the development of significant and subjective estimates that may, and are likely to, change over the duration of the instrument with related changes** in **internal** ~~Hedge Funds in October 2020~~ and ~~May 2021~~ **external market factors. Therefore** , ~~respectively~~ **this asset is classified as Level 3** . The Company holds $ 0. **1 and $ 0.** 5 million **as of July 31, 2023 and 2022, respectively,** in investments in securities in another entity that are not liquid, which were included in Investments- Other Pharmaceuticals in the accompanying consolidated balance sheets. The investment is accounted for under ASC 321, Investments- Equity Securities, using the measurement alternative as defined within the guidance, and the Company recorded an impairment loss of $ ~~0~~ **334 thousand** and $ 0 ~~. 7 million~~ for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively. Fair Value of Other Financial Instruments The estimated fair value of the Company' s other financial instruments was determined using available market information or other appropriate valuation methodologies. However, considerable judgment is required in interpreting these data to develop estimates of fair value. Consequently, the estimates are not necessarily indicative of the amounts that could be realized or would be paid in a current market exchange. ~~Marketable securities. The Company' s available- for- sale securities are comprised of investments in fixed income corporate bonds and are recorded in available- for- sale securities on the consolidated balance sheets. These securities are recorded at fair value using market prices at July 31, 2022. The fair value estimates for marketable securities were classified as Level 2. Other assets and other liabilities. At July 31, 2022 and 2021, the carrying amount of these assets and liabilities approximated fair value. The fair values were estimated based on the Company' s assumptions, which were classified as Level 3 of the fair value hierarchy.~~ The Company' s financial instruments include trade accounts receivable, trade accounts payable, and due from related parties. The recorded carrying amounts of ~~trade~~ accounts receivable, ~~trade~~ accounts payable and due ~~from~~ **to** related parties approximate their fair value due to their short- term nature. F- 25 NOTE ~~9~~ **12** – ~~TRADE~~ ACCOUNTS RECEIVABLE ~~Trade~~ **Accounts receivable consisted of the following: July 31, 2023 July 31, 2022 (in thousands)** Accounts Receivable **- Third Party $ 247 $ 196** ~~consisted of the following: July 31, 2022 July 31, 2021 (in thousands) (in thousands) Trade~~ Accounts Receivable ~~$ 196 $ 315 Accounts Receivable~~ - Related Party **211** 158 ~~113~~ Less Allowance for Doubtful Accounts (**245) (** 197) ~~(193) Trade~~ Accounts Receivable, net $ **213 $** 157 ~~$ 235~~ NOTE ~~10~~ **13** – PROPERTY AND EQUIPMENT Property and equipment consisted of the following: July 31, **July 31, 2023** 2022 ~~2021~~ (in thousands) Building and Improvements $ 2, 505 $ 2, 505 Other 68 ~~66~~ **68** 2, 573 2, ~~571~~ **573** Less Accumulated Depreciation (**878) (** 803 ~~) (731~~) Total $ 1, ~~770~~ **695** $ 1, ~~840~~ **770** Other property and equipment consist of other equipment and miscellaneous computer hardware. Depreciation expense pertaining to property and equipment was approximately $ **78 thousand** ~~0. 1 million~~ and $ **72 thousand** ~~0. 1 million~~ for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively. The Company' s headquarters are located at 520 Broad Street in Newark, New Jersey, where it occupies office space ~~in a building~~ **and which was previously** owned by ~~its subsidiary~~ **the Company** . The table above excludes the **assets of the** 520 Property which ~~was~~ **were** classified as held- for- sale as of July 31, 2022 and **subsequently sold on August 22,** ~~2021~~ **2022** . Refer to Note **3** ~~2 and Note 19~~ for further information on the 520 Property. NOTE ~~11~~ **14** – LOSS PER SHARE Basic ~~net~~ loss per share is computed by dividing net loss attributable to all classes of common stockholders of the Company by the weighted average number of shares of all classes of common stock outstanding during the applicable period. Diluted loss per share includes potentially dilutive securities such as stock options, unvested restricted stock, warrants to purchase common stock, and other convertible instruments unless the result of inclusion would be anti- dilutive. The securities set forth **in the table** below have been excluded from the calculation of diluted net loss per share for the years ended July 31, **2023 and** 2022 ~~and 2021~~ because inclusion of all such securities would have been anti- dilutive for all periods presented. ~~F- 26~~ The following table summarizes the Company' s potentially dilutive securities ~~, in common share equivalents,~~ which have been excluded from the calculation of dilutive loss per share as their effect would be anti- dilutive: **Year Ended** July 31, **2023** 2022 ~~2021~~ Shares issuable upon exercise of stock options **388, 409** 1, 021, 277 ~~683, 414~~ Shares issuable upon vesting of restricted stock **684, 766** 1, 507, 373 1, ~~007~~ **073** , **175 2, 528, 650 F-** ~~975 Shares issuable upon exercise of warrants to purchase Class B common stock —~~ 26 ~~, 189 2, 528, 650 1, 717, 578~~ The diluted loss per share computation equals basic loss per share for the years ended July 31, **2023 and** 2022 ~~and 2021~~ because the Company had a net loss **from continuing operations** in all such periods and the impact of the assumed ~~exercise~~ **vesting** of ~~non- vested~~ restricted shares, **and exercise of** stock options, and warrants would have been anti- dilutive. **The following table summarizes the basic and diluted loss per share calculations (in thousands, except for share and per share amounts): Year Ended July 31, 2023 2022 Numerator: Net loss from continuing operations $ (8, 693) $ (140, 547) Net loss attributable to noncontrolling interests (339) (17, 719) Numerator for net loss from continuing operations (8, 354) (122, 828) Numerator for discontinued operations 6, 478 (1, 830) Net loss attributable to Rafael Holdings, Inc. $ (1, 876) $ (124, 658) Denominator: Weighted average basic and diluted shares outstanding 23, 263, 211 19, 767, 342 Loss per share attributable to common stockholders Basic and diluted: Continuing operations $ (0. 36) $ (6. 22) Discontinued operations 0. 28 (0. 09) Total basic and diluted loss per share $ (0. 08) $ (6. 31)** NOTE ~~12~~ **15** – NOTE PAYABLE, HELD- FOR- SALE On July 9, 2021, the Company, as guarantor, Rafael Holdings Realty, Inc., a wholly- owned subsidiary of the Company (" Realty "), as pledgor, and Broad- Atlantic ~~Associates, LLC~~ , a wholly- owned subsidiary of Realty (the " Borrower, " and together with the Company and Realty, the " Borrower Parties "), as borrower, entered into a loan agreement (the " Loan Agreement ") with 520 Broad Street LLC, a third- party lender (the " Lender "). The Loan Agreement ~~provides~~ **provided** for a loan in the amount of $ 15 million (the " Note Payable ") from Lender to Borrower secured by (i) a first mortgage on 520 Broad Street, Newark, New Jersey 07102; and (ii) a first priority security interest in the equity of the Borrower as set forth in the Pledge and Security Agreement between Realty and Lender. The Note Payable ~~bears~~ **bore** interest at a rate per annum equal to seven and one- quarter percent (7. 25 %) from July 9, 2021 ~~,~~ through July 31, 2021 and thereafter at an interest rate per annum equal to the 30- day LIBOR Rate, as published in The Wall Street Journal, plus 6. 90 % per annum, but in no event less than seven and one- quarter percent (7. 25 %) per annum. The Note Payable ~~is~~ **was** due on August 1, 2022, subject to the Company' s option to extend the maturity date until August 1, 2023 for a fee equal to three- quarters of one percent (0. 75 %) of the Note Payable. The Loan Agreement ~~contains~~ **contained** customary affirmative covenants, negative covenants and events of default, as defined in the Loan Agreement, including covenants and restrictions that, among other things, ~~restrict~~ **restricted** the Borrower' s ability to incur liens, or transfer, lease or sell the collateral as defined in the Loan Agreement. A failure to comply with these covenants ~~could~~ **would have** ~~permit~~ **permitted** the Lender to declare the Borrower' s obligations under the Loan Agreement, together with accrued interest and fees, to be immediately due and payable. The Company ~~is~~ **was** in compliance with the covenants in the Loan Agreement as of July 31, 2022. The Company extended the maturity date to November 1, 2022 and paid an extension fee of $ 37, 500 on July 29, 2022 **. F- 27 In connection with the sale of the 520 Property, on August 22, 2022, the Company paid off the outstanding principal balance of $ 15 million and accrued interest of approximately $ 87, 000 on the Note Payable. Refer to Note 3 for further details on the subsequent sale of the 520 Property** . Interest expense under the Note Payable, which is recognized in loss on discontinued operations, amounted to $ **87** ~~1. 2 million and $ 64~~ thousand for the ~~years~~ - **year** ended July 31, **2023, and $ 1. 2 million for the year ended July 31,** 2022 ~~and 2021, respectively~~ . Unamortized debt issuance costs on the Note Payable totaled **approximately** $ 0 as of July 31, **2023 and** 2022. Amortization of the debt discount on the Note Payable totaled approximately $ **0 and $** 472 ~~thousand and $ 28~~ thousand for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively. ~~Refer to Note 19 for further details on the subsequent sale of the 520 Property.~~ NOTE ~~13~~ **16** – RELATED PARTY TRANSACTIONS The Company has historically maintained an intercompany balance due to / from related parties that relates to cash advances for investments, loan repayments, charges for services provided to the Company by IDT ~~Corporation, or IDT,~~ and payroll costs for the Company' s personnel that were paid by IDT. ~~The~~ **IDT billed the** Company ~~also receives rental income from IDT and various companies under common control with IDT. The Company recorded expense of~~ approximately **$ 313 thousand and** $ 343 thousand **for** ~~and $ 322 thousand in related party~~ services **during** ~~to IDT for~~ the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively, of which ~~approximately~~ **$ 70 thousand and** $ 69 ~~thousand and $ 136~~ thousand is included in ~~Due~~ **due** to ~~Related~~ **related** ~~Parties~~ **parties** at July 31, **2023 and** 2022 ~~and 2021~~ , respectively. ~~F- 27~~ IDT ~~leases~~ **leased , prior to the Company' s sale of the property,** approximately 80, 000 square feet of office space plus parking at **the** 520 **Property** ~~Broad Street, Newark, New Jersey~~ and **leases** approximately 3, 600 square feet of office space in Jerusalem, Israel **. The Company invoiced IDT approximately $ 211 thousand, of which approximately $ 102 thousand is included in discontinued operations during the year ended July 31, 2023** . The Company invoiced IDT approximately $ 2. 1 million, of which approximately $ 2. 0 ~~million is included in discontinued operations and $ 1. 8 million, of which approximately $ 1. 7~~ million is included in discontinued operations for office rent and parking during the ~~years ended July 31, 2022 and 2021, respectively. As of July 31, 2022 and 2021, IDT owed the Company approximately $ 157 thousand and $ 168 thousand, respectively, for office rent and parking presented in trade accounts receivable within the consolidated balance sheet. During the~~ year ended July 31, **2022. As of July 31, 2023 and 2022, IDT owed the Company approximately $ 210 thousand and $ 157 thousand, respectively, for office rent and parking. Until October 31,** 2021, **the** ~~IDT exercised 43, 649 warrants to purchase shares of Class B Common Stock. The~~ Company had provided Cornerstone Pharmaceuticals with administrative, finance, accounting, tax and legal services. Howard S. Jonas **and William Conkling** currently ~~serves~~ - **serve** on the Board of Directors of ~~Cornerstone Pharmaceuticals and owns an equity interest in~~ Cornerstone Pharmaceuticals. The Company billed Cornerstone Pharmaceuticals $ 120 thousand ~~and $ 480 thousand~~

for the ~~years~~ - **year** ended July 31, 2022 ~~and 2021, respectively~~ . As of July 31, **2023 and July 31,** 2022 ~~and 2021~~ , Cornerstone Pharmaceuticals owed the Company $ 720 thousand, for which a full allowance for uncollectibility has been recorded ~~, and $ 600 thousand, respectively, included in Due from Cornerstone Pharmaceuticals~~ . Due to the Data Events, in the year ended July 31, 2022, the balance owed to the Company by Cornerstone Pharmaceuticals ~~as of July 31, 2022,~~ was fully reserved, resulting in a loss on related party receivable of $ 720 thousand (~~See~~ **see** Note ~~3~~ **4**). On ~~January 28~~ **March 21** , ~~2021~~ **2023** , ~~Pharma Holdings partially exercised~~ the **Company entered into a Promissory Note with** ~~Warrant and purchased 7. 3 million shares of~~ Cornerstone Pharmaceuticals ~~' Series D Preferred Stock~~ **, wherein, Cornerstone Pharmaceuticals promises to pay the Company $ 2 million together with all interest accrued on May 22, 2023, or such earlier date as the Promissory Note is required or permitted to be repaid (see Note 5). On May 22, 2023, the Promissory Note was amended to extend the maturity date to November 30, 2023 and to waive the interest increase (see Note 5). Genie Energy, Ltd. The Company leased office space at 520 Broad Street to Genie. The Company invoiced Genie approximately $ 19 thousand which is included in discontinued operations during the year ended July 31, 2023. Genie pays the Company** for **payroll costs for certain personnel which totaled approximately** $ **10 thousand during** ~~9. 1 million, of which $ 0. 9 million was contributed by~~ the **year ended July 31, 2023** ~~holder of a minority interest in Pharma Holdings~~ . Related Party Rental Income The Company ~~leases~~ **leased** space to related parties (including IDT Corporation- see above) which represented approximately **42 % and** 58 % ~~and 65 %~~ **of the Company' s total revenue** for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively ~~, which includes discontinued operations related party rental income pertaining to the 520 Property~~ . The portion of related party rental income pertaining to the 520 Property has been classified in discontinued operations on the consolidated statements of operations and comprehensive loss for the years ended July 31, **2023 and** 2022 ~~and 2021~~ . **F- 28** ~~See Note 18 for future minimum rent payments from related parties and other tenants. In May 2020, the Company acquired a membership interest of 33. 333 % in Altira, a related party. In December 2020, the Company acquired an additional 33. 333 % membership interest in Altira, for an aggregate of a 66. 666 % membership interest (see Note 4).~~ For the ~~years~~ - **year** ended July 31, **2023, the Company recognized $ 0 from its ownership interests of 37. 5 % in RP Finance. For the year ended July 31,** 2022 ~~and 2021, respectively~~ , the Company recognized a loss of $ 575 ~~thousand and earnings of $ 383~~ thousand in income from its ownership interests of 37. 5 % in RP Finance ~~, respectively~~ . ~~F- 28~~ Howard Jonas, Chairman of the Board and Former Chief Executive Officer In December 2020, ~~two entities~~ **IDT Corporation and Genie Energy Ltd** , on whose Boards of Directors Howard Jonas, the Company' s Chairman of the Board **and Executive Chairman** and former Chief Executive Officer serves, each purchased 218, 245 shares of Class B common stock for consideration of $ 5 million each. In connection with the purchases, each purchaser was granted warrants (the " Issued Warrants ") to purchase twenty percent (20 %) of the shares of Class B common stock purchased by such purchaser. The Issued Warrants have an exercise price of $ 22. 91 per share and expired on June 6, 2022. The Issued Warrants were not exercised. The shares and Issued Warrants were issued in reliance on the exemption from registration provided for under Section 4 (a) (2) of the Securities Act of 1933, as amended. On June 22, 2022, the Company entered into a Stock Purchase Agreement (the " I9 SPA ") with I9 Plus, LLC **, an entity affiliated with members of the family of Howard Jonas** . On July 6, 2022, pursuant to the I9 SPA, the Company sold 3, 225, 806 shares of the Company' s Class B common stock to I9 Plus, LLC at a price per share of $ 1. 86 and an aggregate sale price of $ 6 million. **On July 31, 2023, eight trusts, each for the benefit of a child of Howard S. Jonas, the Company' s Executive Chairman and Chairman of the Board, with independent trustees, transferred an aggregate of 787, 163 shares of Class A common stock of the Company (representing all of the issued and outstanding shares of the Class A common stock of the Company, and 51. 3 % of the aggregate voting power of all issued and outstanding shares of capital stock of the Company) to a limited partnership. Howard Jonas is the sole manager of the sole general partner of the limited partnership, and, therefore, has sole voting and dispositive power over the shares of Class A common stock held by the limited partnership. Following the transfer, Mr. Jonas will be the controlling stockholder of the Company and the Company is a controlled company as defined in Section 303A of the New York Stock Exchange Listed Company Manual.** LipoMedix Pharmaceuticals, Ltd. As of the date of the **LipoMedix SPA** ~~Share Purchase Agreement~~ , on November 15, 2021, there was an outstanding loan balance including principal of $ 400 thousand and accrued interest of $ 21. 8 thousand owed by LipoMedix to the Company on the note from March 2021. The amount due on the loan was netted against the $ 3. 0 million aggregate purchase price due LipoMedix, resulting in a cash payment by the Company of approximately $ 2. 6 million in exchange for the 15, 975, 000 shares purchased. As a result of the share purchase, the Company' s ownership of LipoMedix increased to approximately 84 % with a noncontrolling interest of approximately 16 %. **On February 9, 2023, the Company entered into a share purchase agreement with LipoMedix to purchase 70, 000, 000 ordinary shares at $ 0. 03 per share for an aggregate purchase price of $ 2. 1 million. As a result of the share purchase, the Company' s ownership of LipoMedix increased to approximately 95 % with a noncontrolling interest of approximately 5 %. The Company recorded approximately $ 16 thousand to adjust the carrying amount of the noncontrolling interest to reflect the Company' s increased ownership interest in LipoMedix' s net assets. Investment in Equity Securities The Company entered into a Cooperation Agreement with Genie, IDT and trusts for the benefit of certain family members of Howard Jonas related to an investment in a third- party publicly traded company. Subsequently, the Company and Genie agreed to share the expenses related to the investment equally and each would retain any return from its own investments. The Company invested $ 1. 6 million in the third- party company and after selling a portion of its interest made a profit of $ 309 thousand. F- 29** NOTE ~~14~~ **17** – INCOME TAXES At July 31, ~~2022~~ **2023** , the Company ~~has~~ **had** federal net operating loss (" NOL ") carryforwards from domestic operations of approximately $ ~~54~~ **63** . ~~9~~ **2** million, to offset future taxable income **,** ~~. The Company has~~ state NOLs of $ ~~35~~ **40** . ~~7~~ **4** million **, and** ~~. The Company has~~ NOLs from foreign operations of $ ~~4~~ **7** . ~~9~~ **6** million. As part of the Tax Act, federal NOLs generated in 2018 and later are not subject to an expiration period and are available to offset 80 % of taxable income in the year in which they are utilized. The federal NOL carryforwards generated prior to 2018 will begin to expire in 2026. The state NOLs will begin to expire in 2038 and foreign NOLs do not expire. The components of loss from continuing operations before income taxes are as follows: For the Years Ended July 31, **2023** 2022 ~~2021~~ (in thousands) Domestic $ (**6, 056) $ (** 137, 978) ~~$ (22, 546)~~ Foreign (**2, 689) (** 1, 994 ~~) (880~~) Loss before income taxes $ (**8, 745) $ (** 139, 972) ~~$ (23, 426) F- 29 (Provision for) benefit~~ **Benefit** from income taxes as presented in the consolidated statements of operations and comprehensive loss consisted of the following: For the Year Ended July 31, **2023** 2022 ~~2021~~ (in thousands) Current: Foreign $ **19 $** — ~~$ (19)~~ Federal — — State **(274)** — ~~1~~ Total current expense **(benefit) (255)** — ~~(18)~~ Deferred: Foreign — — Federal — — State — — Total deferred expense — — ~~Provision for~~ **Benefit from** income taxes $ **(255) $** — ~~$ (18)~~ The differences between income taxes expected at the U. S. federal statutory income tax rate **attributable to pretax loss from continuing operations** and income taxes **attributable to pretax loss from continuing operations** are reported as follows: At July 31, **2023** 2022 ~~2021~~ (in thousands) U. S. federal income tax at statutory rate $ **(1, 877) $ (** 29, 514 **)** ~~$ 4, 952~~ State income tax **(479) (** 8, 752 **)** ~~1, 571~~ Valuation allowance ~~(~~ **2, 958** 35, 001 ~~) (6, 560)~~ Foreign tax rate differential **(583) (** 459 ~~203~~ **)** Tax law change — — Permanent differences ~~(~~ **—** 3, 632 ~~) —~~ Rate change — — **Sale of state NOLs (274)-** Other ~~(~~ **-** 92 **Benefit from** ~~) (184) Provision for~~ income taxes $ **(255) $** — **During the year ended July 31, 2023, the Company received proceeds of approximately** $ ~~(18)~~ **274 thousand for the sale of the Company' s 2018 and 2019 New Jersey tax credits through the New Jersey Technology Business Tax Certificate Transfer Program.** The Company has not recorded U. S. income tax expense for foreign earnings because it has not generated any foreign earnings. F- 30 Significant components of the Company' s deferred tax assets and deferred tax liabilities are as follows: At July 31, **2023** 2022 ~~2021~~ (in thousands) Deferred tax assets: Net operating loss carryforwards $ **17, 852 $** 15, 170 ~~$ 12, 495~~ Unrealized gain / loss **30, 236** 31, 850 ~~968~~ Depreciation **(** 1 ~~—~~ **) 1 R & D amortization 689-** Reserves and accruals **237** 236 ~~—~~ Stock- based compensation 1, **858 1,** 839 ~~2, 096~~ Gross deferred tax assets **50, 871** 49, 096 ~~15, 559~~ Less valuation allowance (**50, 871) (** 49, 096 ~~) (15, 559~~) Total deferred tax assets — — Total deferred tax liabilities — — Deferred tax assets, net $ — $ — NOTE ~~15~~ **18** – BUSINESS SEGMENT INFORMATION The Company conducts business as two operating segments, Healthcare and Real Estate. The Company' s reportable segments are distinguished by types of service, customers and methods used to provide their services. The operating results of these business segments are regularly reviewed by the Company' s ~~CEO and~~ **Chief Executive Officer who is** the chief operating decision- maker. The accounting policies of the segments are the same as the accounting policies of the Company as a whole. The Company evaluates the performance of its Healthcare segment based primarily on research and development efforts and results of clinical trials and the Real Estate segment based primarily on results of operations. ~~All investments in Cornerstone Pharmaceuticals and assets and expenses associated with LipoMedix, Barer, Farber, and Rafael Medical Devices are tracked separately in the Healthcare segment.~~ The Healthcare segment is comprised of preferred and common equity interests and the Warrant to purchase equity interests in Cornerstone Pharmaceuticals, a majority equity interest in LipoMedix, Barer, Farber, and Rafael Medical Devices. To date, the Healthcare segment has not generated any revenues. The Real Estate segment consists of the Company' s real estate holdings, **which is currently** comprised of a portion of a commercial building in Israel. ~~F~~ **The revenue, (loss) income from operations, and (loss) income before taxes of the 520 Property have been excluded from the Real Estate segment in the figures below due to its classification of held** - ~~31~~ **for- sale and discontinued operations, and the sale of the 520 Property on August 22, 2022.** Operating results for the business segments of the Company are as follows: (in thousands) Healthcare Real Estate Total Year Ended July 31, **2023 Revenues $ — $ 279 $ 279 (Loss) income from operations (15, 121) 78 (15, 043) Year Ended July 31,** 2022 Revenues $ — $ 410 $ 410 (Loss) income from operations (60, 658) 181 (60, 477) **F-** ~~(Loss) income from continuing operations before income taxes (140, 153) 181 (139, 972) Year Ended July~~ 31 ~~, 2021 Revenues $ — $ 802 $ 802 (Loss) income from operations (28, 811) 612 (28, 199) (Loss) income from continuing operations before income taxes (24, 787) 1, 361 (23, 426)~~ Geographic Information Revenues from tenants located outside of the United States were generated entirely from related parties located in Israel. Revenues from these non- ~~United States~~ **U. S.** customers as a percentage of total revenues **, which are inclusive of revenue from discontinued operations,** were as follows (revenues by country are determined based on the location of the related facility): Year Ended July 31, **2023** 2022 ~~2021~~ Revenue from tenants located in Israel ~~7~~ **53** % 7 % Net ~~long- lived assets~~ **property, plant, and equipment** and total assets held outside of the United States, which are located in Israel, were as follows: (in thousands) United States Israel Total July 31, **2023 Property, plant, and equipment, net $ 293 $ 1, 402 $ 1, 695 Total assets 95, 244 3, 585 98, 829 July 31,** 2022 ~~Long- lived assets~~ **Property, plant, and equipment** , net $ 305 $ 1, 465 $ 1, 770 Total assets 114, 053 4, 267 118, 320 ~~July 31, 2021 Long- lived assets, net $ 306 $ 1, 534 $ 1, 840 Total assets 150, 847 3, 208 154, 055~~ NOTE ~~16~~ **19** – COMMITMENTS AND CONTINGENCIES ~~On July 12, 2019, the Company received a Citation and Notification of Penalty from the Occupational Safety and Health Administration of the U. S. Department of Labor, or OSHA, related to an OSHA inspection of 520 Broad Street, Newark, New Jersey. The citation seeks to impose penalties related to alleged violations of the Occupation Safety and Health Act of 1970 at 520 Broad Street. On July 31, 2019, the Company filed a Notice of Contest with OSHA contesting the citation in its entirety. On February 14, 2020, the Company entered into a Settlement Agreement with OSHA, as related to the citation received on July 12, 2019. As part of the Settlement Agreement, the Company agreed to pay a penalty of $ 127, 294 in eight quarterly installment payments through November 2021, which the Company has fully paid.~~ The Company may from time to time be subject to legal proceedings that may arise in the ordinary course of business. Although there can be no assurance in this regard, ~~other than noted above,~~ the Company does not expect any of those legal proceedings to have a material adverse effect on the Company' s results of operations, cash flows or financial condition. ~~F- 32~~ **In December 2022, Broad Atlantic entered into a settlement agreement with a vendor providing for the payment by the Company of $ 113 thousand representing payment in full for repair work done on the premises prior to our sale of the 520 Property. This amount is included in discontinued operations on the consolidated statements of operations and comprehensive loss.** NOTE ~~17~~ **20** – EQUITY **Share Repurchase Program In April 2023, the Company' s Board of Directors approved a share repurchase program (the " 2023 Share Repurchase Program ") authorizing the repurchase of up to $ 5 million of the Company' s**

Class B common stock. Under the 2023 Share Repurchase Program, which took effect on April 14, 2023, the Company may purchase its shares from time to time until the earlier of June 16, 2023 (the " Plan Termination Date ") or when $ 5 million worth of shares at $ 1. 75 per share or below have been purchased. In July 2023, the 2023 Share Repurchase Program was amended to extend the Plan Termination Date to the earlier of July 1, 2024, or when $ 5 million worth of shares at $ 1. 75 per share or below have been purchased. The timing and amount of any share repurchases under the 2023 Share Repurchase Program will be determined at the Company' s discretion and based on market conditions and other considerations. Share repurchases under the authorizations may be made through open market purchases or pursuant to pre- set trading plans meeting the requirements of Rule 10b5- 1 under the Securities Exchange Act of 1934. The program does not obligate the Company to acquire any particular amount of its Class B common stock, and the repurchase program may be suspended or discontinued at any time at the Company' s discretion. During the year ended July 31, 2023, the Company did not repurchase any of its Class B common stock. Class A Common Stock and Class B Common Stock The rights of holders of Class A common stock and Class B common stock are identical except for certain voting and conversion rights and restrictions on transferability. The holders of Class A common stock and Class B common stock receive identical dividends per share when and if declared by the Company' s Board of Directors. In addition, the holders of Class A common stock and Class B common stock have identical and equal priority rights per share in liquidation. The Class A common stock and Class B common stock do not have any other contractual participation rights. The holders of Class A common stock are entitled to three votes per share and the holders of Class B common stock are entitled to one- tenth of a vote per share. Each share of Class A common stock may be converted into one share of Class B common stock, at any time, at the option of the holder. Shares of Class A common stock are subject to certain limitations on transferability that do not apply to shares of Class B common stock. **F- 32** On May 27, 2021, the Company filed a Registration Statement on Form S- 3, whereby the Company may sell up to $ 250 million of Class B common stock. This Registration Statement was declared effective on June 7, 2021. On June 1, 2021, the Company filed a Registration Statement on Form S- 3 ~~and~~ **to** ~~issued -~~ **issue** 48, 859 shares of Class B common stock ~~to~~ **for payment due on** the **purchase of** Altira **, an investment which has been subsequently fully impaired** ~~Second Seller totaling $ 2. 25 million to satisfy a portion of the remaining non- contingent obligation due to the Altira Second Seller~~. On August 19, 2021, the Company entered into a Securities Purchase Agreement (the " Institutional Purchase Agreement ") with Institutional Investors and a Securities Purchase Agreement with I9Plus, LLC, (the " Jonas Purchase Agreement "), an entity affiliated with Howard S. Jonas, the Chairman of the Board of Directors of the Company. On August 24, 2021, the Company issued 2, 833, 425 shares of Class B common stock (the " Institutional Shares "), par value $ 0. 01 per share, to the Institutional Investors, at a purchase price equal to $ 35. 00 per share, for aggregate gross proceeds of approximately $ 99. 2 million, before deducting placement agent fees and other offering expenses. Additionally, pursuant to the Jonas Purchase Agreement, the Company issued 112, 501 shares of Class B common stock to I9Plus, LLC, at a purchase price equal to $ 44. 42 per share, which was equal to the closing price of a share of the Class B common stock on the New York Stock Exchange on August 19, 2021 (the " Jonas Offering "). The Jonas Offering resulted in additional aggregate gross proceeds of approximately $ 5. 0 million. The total net proceeds from the issuance of shares was $ 98. 0 million after deducting transaction costs of $ 6. 2 million. On August 19, 2021, in connection with the Institutional Purchase Agreement, the Company entered into a Registration Rights Agreement with the Institutional Investors whereby the Company agreed to prepare and file a registration statement with the SEC within 30 days after the earlier of (i) the date of the closing of the Merger Agreement, and (ii) the date the Merger Agreement is terminated in accordance with its terms, for purposes of registering the resale of the Institutional Shares and any shares of Class B common stock issued as a dividend or other distribution with respect to the Institutional Shares. **The 2018 Equity Incentive Plan was created and adopted by the Company in March 2018.** On January 19, 2022, the Company **' s stockholders** approved the 2021 Equity Incentive Plan (the " 2021 Plan "). The 2018 Equity Incentive Plan was suspended and replaced by the 2021 Plan, and **, following January 19, 2022,** no new grants ~~were~~ **are to be** awarded under the 2018 Equity Incentive Plan ~~as of January 19, 2022~~. Existing grants under the 2018 Equity Incentive Plan will not be impacted by the adoption of the 2021 Plan. Any of the Company' s employees, directors, consultants, and other service providers, and those of the Company' s affiliates, are eligible to participate in the 2021 Plan. In accordance with applicable tax rules, only employees (and the employees of parent or subsidiary corporations) are eligible to be granted incentive stock options. The 2021 Plan authorizes stock options (both incentive stock options or non- qualified stock options), stock appreciation rights, restricted stock, restricted stock units, and cash or other stock- based awards. **On January 19, 2022, the Company filed a Registration Statement on Form S- 8 registering 1, 919, 025 shares Class B Common Stock reserved for issuance under the 2021 Plan. On November 28, 2022, the Company' s Board of Directors approved an amendment to the 2021 Plan that, among other things, increases the number of shares of the Company' s Class B Common Stock available for the grant of awards thereunder by an additional 696, 770, which the stockholders approved on January 23, 2023.** The maximum number of shares of Class B common stock that may be issued under the 2021 Plan is ~~1~~ **2**, ~~919~~ **615**, ~~025~~ **795** shares. **As of** ~~During the year ended~~ July 31, ~~2022~~ **2023** ~~, 1, 533, 311 restricted shares and 237, 761 options were issued pursuant to the 2021 Plan, respectively. As of July 31, 2022~~, there were ~~229~~ **953**, ~~697~~ **516** shares still available for issuance under the 2021 Plan. On February 15, 2022, the Company filed a Registration Statement on Form S- 3 (as amended on March 2, 2022) registering the resale by institutional investors (the " Institutional Investors ") of the shares purchased by them. The Registration Statement was declared effective on March 7, 2022. ~~F- 33~~ On June 22, 2022, the Company entered into a Stock Purchase Agreement (the " I9 SPA ") with I9 Plus. On July 6, 2022, pursuant to the I9 SPA, the Company sold 3, 225, 806 shares of the Company' s Class B common stock to I9 Plus at a price per share of $ 1. 86 and an aggregate sale price of $ 6 million, presented in common stock sold to related party within the statement of stockholders' equity. The price per share was calculated to be the greater of (1) the volume weighted average price for the Class B common stock on the New York Stock Exchange for the five trading days ending on June 21, 2022 (which were the five trading days beginning with the first full trading day following the date that the transaction was approved by the Board of Directors of the Company, and its Corporate Governance Committee which consists solely of independent members of the Board) and (2) the closing price of the Class B common stock on June 21, 2022 (the trading day immediately preceding the date of the I9 SPA to ensure that the sale price was not below the Minimum Price under NYSE Rule 312. 03 (b)). The shares were issued in reliance on the exemption from registration provided for under Section 4 (a) (2) of the Securities Act of 1933, as amended. ~~New~~ **F- 33** Employment Agreement On June 13, 2022, the Company entered into an employment agreement with Howard S. Jonas (who serves as the Chairman of the Board and Executive Chairman of the Company) (the " Employment Agreement "), which provides, among other things: (i) a term of five years (subject to extension unless either party elects not to renew); (ii) an annual base salary of $ 260, 000, of which $ 250, 000 is payable through the issuance of restricted shares of the Company' s Class B common stock (" Class B Stock ") with the value of the shares based upon the volume weighted closing price of the Class B Stock on the NYSE on the thirty days ending with the NYSE trading day immediately preceding the issuance to be issued within thirty days of the date of the Employment Agreement (the " Start Date ") and each annual anniversary, and such shares vesting, contingent on Mr. Jonas' remaining in continuous service to the Company, in substantially equal amounts on the three, six, nine and twelve month anniversaries of the Start Date or annual anniversary; and (iii) a grant of restricted shares of Class B stock with a value of $ 600, 000, issuable within 30 days with the value of the shares based upon the volume weighted closing price of the Class B Stock on the NYSE on the thirty days ending with the NYSE trading day immediately preceding the issuance and such shares, and vesting, contingent on Mr. Jonas' remaining in continuous service to the Company, in substantially equal amounts on the first and second annual anniversaries of the Start Date. Stock Options A summary of stock option activity for the Company is as follows: Number of Options Weighted Average Exercise Price Weighted Average Remaining Contractual Term (in years) Aggregate Intrinsic Value (in thousands) Outstanding at July 31, ~~2020 580, 874 $ 4. 90 2. 65 $ 2, 846 Granted 118, 409 40. 85 — — Exercised (14, 546) 4. 90 — — Cancelled / Forfeited (1, 323) 4. 90 — — Outstanding at July 31,~~ 2021 683, 414 $ 11. 13 3. 05 $ 26, 982 Granted 518, 304 20. 54 9. 25 — Cancelled / Forfeited (180, 441) — — — Outstanding at July 31, 2022 1, 021, 277 ~~$~~ 12. 11 4. 47 **— Granted 175, 000 2. 08 9. 51 — Expired (589, 205) — — — Cancelled / Forfeited (218, 663) — — — Outstanding at July 31, 2023 388, 409 $ 14. 51 8. 71** $ — Exercisable at July 31, ~~2022~~ **2023** ~~594~~ **65** , ~~607~~ **456** $ ~~6~~ **20** . ~~69 1~~ **98 8** . ~~06~~ **13** $ — At July 31, ~~2022~~ **2023** , there ~~are~~ **is** unrecognized compensation costs related to non- vested stock options of $ ~~4.~~ 1 **. 3** million, which are expected to be recognized over the next ~~4~~ **3** . 2 years ~~. F- 34 Vesting terms of options granted to two executive team members during the year ended July 31, 2022 were modified to extend the vesting period by one year. This was accounted for as a modification, and no incremental compensation cost was recorded as the amount is nominal~~ . The value of option grants is calculated using the Black- Scholes option pricing model with the following assumptions for options granted during the years ended July 31, **2023 and** 2022 ~~and 2021~~ : **For the Year Ended** July 31, **2023** 2022 ~~July 31, 2021~~ Risk- free interest rate **3. 60 %- 3. 66 %** 0. 67 %- 1. 7 ~~% 1~~ % Expected term (in years) 6. ~~04- 6.~~ 11 6. 04 **- 6. 11** Expected volatility **95. 00 %** 75 %- 93 ~~% 75~~ % Expected dividend yield — % — % The **options granted had a $ 1. 58 and $ 3. 29** weighted ~~-~~ average grant date fair value ~~of stock options granted~~ during the years ended July 31, **2023 and** 2022 ~~and 2021 was $ 3. 29 and $ 23. 49~~ , respectively. **F- 34** Rafael Medical Devices, Inc. Stock Options The Rafael Medical Devices, Inc. 2022 Equity Incentive Plan (the " RMD 2022 Plan ") was created and adopted by the Company in May 2022. The RMD 2022 Plan allows for the issuance of up to 10, 000 shares of Class B common stock ~~of Rafael Medical Devices~~ which may be awarded in the form of incentive stock options or restricted shares. There are 4, 734 shares available for issuance under the RMD 2022 Plan as of July 31, ~~2022~~ **2023** . The fair value of Rafael Medical Devices, **LLC** ~~Inc.~~ common stock was estimated for financial reporting purposes based on a valuation of $ 4. 02 per share as of January 31, 2022. To determine the fair value of the common stock, the Company first determined an enterprise value using accepted valuation approaches; adjusted these valuation approaches with relevant discounts and then allocated the equity value to the common stock and common stock equivalents on a fully diluted basis. The enterprise value was estimated using the generally accepted income approach. The income approach estimates enterprise value based on the estimated present value of future cash flows the business is expected to generate over its remaining life. The estimated present value is calculated using a discount rate reflective of the risks associated with an investment in a similar company in a similar industry or having a similar history of revenue growth. The Company then subtracted the net non- operating assets and applied a discount for lack of marketability to determine equity fair value. A summary of stock option activity for Rafael Medical Devices, Inc. is as follows: Number of Options Weighted Average Exercise Price Weighted Average Remaining Contractual Term (in years) Aggregate Intrinsic Value (in thousands) Outstanding at July 31, 2021 — $ — — $ — Granted 5, 266 3. 82 9. 76 — Outstanding at July 31, 2022 5, 266 $ 3. 82 9. 76 **$ — Granted — — — — Outstanding at July 31, 2023 5, 266 $ 3. 82 8. 76** — Exercisable at July 31, ~~2022~~ **2023** ~~1~~ **2** , ~~316~~ **633** $ 3. 82 ~~9~~ **8** . 76 $ — At July 31, ~~2022~~ **2023** , there are unrecognized compensation costs related to non- vested stock options of $ ~~11~~ **5** thousand, which are expected to be recognized over the next ~~2~~ **1** . 44 years ~~. F- 35 The value of option grants is calculated using the Black- Scholes option pricing model with the following assumptions for options granted during the year ended July 31, 2022: Risk- free interest rate 3. 0 % Expected term (in years) 5. 63 Expected volatility 97. 0 % Expected dividend yield — % The weighted- average grant date fair value of stock options granted during the year ended July 31, 2022, was $ 3. 12~~ . Restricted Stock The fair value of restricted shares of the Company' s Class B common stock is determined based on the closing price of the Company' s Class B common stock on the grant date. Share awards generally vest on a graded basis over three years of service. In January ~~2021~~ **2022** , the Company granted **33** ~~a total of 12~~ , ~~609~~ **360** restricted shares of Class B common stock to non- employee directors, ~~all~~ **18, 336** of which were granted ~~from~~ **under** the 2018 Equity Incentive Plan ~~. The restricted shares vested immediately on the grant date. The share based compensation cost was approximately $ 286 thousand~~ , ~~which was included in selling, general~~ and **15** ~~administrative expense in the consolidated statement of operations and comprehensive loss. In January 2022~~ , **024** ~~the Company granted 33, 360 restricted shares of Class B common stock to non- employee directors, 18, 336~~ of which were granted **under** ~~from the 2018 Equity Incentive Plan, and 15, 024 of which were granted from~~ the 2021 Plan. The restricted shares vested immediately on the grant date. The share based compensation cost was approximately $ 151 thousand, which was included in ~~selling,~~ general and administrative expense in the consolidated statement of operations and comprehensive loss. On February 1, 2022, the Company issued 986, 835 shares of Class B restricted stock to two members of the executive team. Approximately 24 % of the restricted shares vest in December 2022, with the remaining shares vesting ratably each quarter through December 2025. On June 14, 2022, the Company issued 452, 130 shares of Class B restricted stock to Howard S. Jonas **. In January 2023, the Company issued 120, 019 shares of Class B restricted stock to certain members of its Board of Directors, and 100, 000 shares of Class B restricted stock to its new Chief Financial Officer. During January 2023, 296, 759 shares of Class B restricted stock were cancelled or forfeited due to (i) the cancellation of 285, 036 shares of restricted stock in connection with the departure of the Company' s former Chief Financial Officer and (ii) the remaining shares forfeited upon the termination of certain employees of the Company. F- 35 In connection with Patrick Fabbio' s January 27, 2023 departure as the Company' s Chief Financial Officer, the Company and Mr. Fabbio entered into a Separation and General Release Agreement (the " Separation Agreement "), which provides, among other things, that the Company shall pay Mr. Fabbio severance in the amount of $ 307, 913, which is included in selling, general and administrative expense on the consolidated statement of operations and comprehensive loss for the year ended July 31, 2023. In connection with the termination of Mr. Fabbio' s position as Chief Financial Officer of the Company, there was a material forfeiture of his Class B restricted shares and stock options resulting in a reversal of approximately $ 915 thousand in stock- based compensation expense for the year ended July 31, 2023 that was previously recorded to selling, general and administrative expense** . A summary of the status of the Company' s grants of restricted shares of Class B common stock is presented below: Number of Non- vested Shares Weighted Average Grant Date Fair Value Outstanding at July 31, ~~2020~~ **2021** ~~123~~ **1** , ~~104~~ **007, 975** $ ~~10~~ **46** . ~~80~~ **77** Granted ~~956~~ **1** , ~~317~~ **533, 311 4. 24 Vested (90, 608) 16. 86 Cancelled / Forfeited (943, 305) (** 48. **50** ~~34 Vested (69, 347) (10. 76) Cancelled / Forfeited (2, 099) (13. 54~~) Outstanding at July 31, ~~2021~~ **2022** 1, ~~007~~ **507** , ~~975~~ **373** $ ~~46~~ **4** . ~~77~~ **22** Granted **220, 019** 1 ~~, 533, 311 4~~ . ~~24~~ **99** Vested (~~90~~ **745** , ~~608) 16. 86~~ **867) 3. 37** Cancelled / Forfeited (~~943~~ **296** , ~~305~~ **759**) (~~48~~ **5** . ~~50~~ **10**) Non- vested shares at July 31, ~~2022~~ **2023** ~~1~~ **684** , **766** ~~507, 373~~ $ 4. ~~22~~ **04** At July 31, ~~2022~~ **2023** , there was $ ~~4~~ **1** . ~~9~~ **8** million of total unrecognized compensation cost related to non- vested stock- based compensation arrangements, which is expected to be recognized over the next **four** ~~3. 25~~ years. ~~F- 36~~ On November 21, 2021, Ameet Mallik resigned as Chief Executive Officer of the Company, effective January 31, 2022. In connection with his resignation, there was a material forfeiture of the former CEO' s Class B restricted shares, resulting in a reversal of approximately $ 19. 0 million in stock- based compensation expense that was previously recorded to selling, general and administrative expense. Additionally, pursuant to the terms of his employment agreement, the Company paid $ 5. 0 million relating to his severance payout, which is included in selling, general and administrative expense on the consolidated statement of operations and comprehensive loss for the year ended July 31, 2022. A summary of the stock- based compensation expense for the Company' s equity incentive plans is presented below **(in thousands)** : **For the** Year Ended July 31, **2023** 2022 ~~2021 (in thousands) Selling, general~~ **General** and administrative $ **3, 044 $** 17, 270 ~~$ 6, 110~~ Research and development **194** 791 ~~523~~ Forfeiture of RSUs within ~~selling,~~ general and administrative (**931) (** 18, 978 **) Forfeiture of RSUs within research and development (119**) — Net stock- based compensation ~~(credit)~~ expense $ **2, 188 $** (917) ~~$ 6, 633~~ On December 7, 2020, Rafael Holdings entered into a Securities Purchase Agreement (the " SPA ") for the sale of 567, 437 shares of the Company' s Class B common stock at a price per share of $ 22. 91 (which was the closing price for the Class B common stock on the New York Stock Exchange on December 4, 2020, the trading day immediately preceding the date of the SPA) for an aggregate purchase price of $ 13 million. **F- 36** Approximately $ 8. 2 million of the proceeds received pursuant to the SPA were used by the Company to exercise an additional portion of the Warrant in order to maintain the Company' s relative position in Cornerstone Pharmaceuticals in light of issuances of Cornerstone Pharmaceuticals equity securities to third- party shareholders of Cornerstone Pharmaceuticals, due to warrant exercises by these shareholders. The Company is using the remaining proceeds to fund the operations of its drug development programs including its Barer Institute subsidiary, and for general corporate purposes. Under the SPA, two entities, on whose Boards of Directors Howard Jonas, the Registrant' s Chairman of the Board and former Chief Executive Officer serves, each purchased 218, 245 shares of Class B common stock for consideration of $ 5 million each. The shares and warrants were issued in reliance on the exemption from registration provided for under Section 4 (a) (2) of the Securities Act of 1933, as amended. Equity- classified Warrants In connection with the SPA entered into on December 7, 2020, each purchaser was granted warrants to purchase twenty percent (20 %) of the shares of Class B common stock purchased by such purchaser. The Company issued warrants to purchase 113, 487 shares of Class B common stock to the purchasers. The warrants are exercisable at a per share exercise price of $ 22. 91, and are exercisable at any time on or after December 7, 2020 through June 6, 2022. The Company determined that these warrants are equity- classified. During fiscal 2021, IDT and Genie each exercised 43, 649 warrants, resulting in a total of 87, 298 shares of Class B common stock issued for proceeds of approximately $ 2 million. On June 6, 2022, the Company' s outstanding warrants to purchase 26, 189 shares of common stock at an exercise price of $ 22. 91 per share expired. There were no exercises of warrants during the year ended July 31, 2022. At July 31, 2022, the Company had no outstanding warrants. ~~F- 37~~ NOTE ~~18~~ **21** – LEASES The Company is the lessor of ~~certain~~ **the Israeli** ~~properties~~ **property** which ~~are~~ **is** leased to tenants under net operating leases with ~~initial~~ **a** term expiration ~~dates~~ - **date within** ~~ranging from 2021~~ **2025** ~~to 2029~~ . Lease income included on the consolidated statements of operations and comprehensive loss was $ 0. 3 million and $ 0. 3 million for the years ended July 31, **2023 and** 2022 ~~and 2021~~ , respectively. During the years ended July 31, **2023 and** 2022 ~~and 2021~~ , **no** ~~approximately $ 212 thousand and $ 37 thousand, respectively, of~~ real estate property taxes ~~are~~ **were** included in rental income. The future contractual minimum lease payments to be received (excluding operating expense reimbursements) by the Company as of July 31, ~~2022~~ **2023** , under non- cancellable operating leases which expire on various dates through 2025 are as follows: Year ending July 31, Related Parties Other Total (in thousands) ~~2023~~ **2024** $ ~~75~~ **77** $ — $ ~~75 2024 77 —~~ 77 2025 78 — 78 ~~Thereafter — — —~~ Total Minimum Future Rental Income $ ~~230~~ **155** $ — $ **155** ~~230 The Company has related party leases that~~

~~expire in April 2025 for (i) an aggregate of 88, 631 square feet, which includes two parking spots per thousand square feet of space leased at 520 Broad Street, Newark, New Jersey, and (ii) 3, 595 square feet in Israel. The annual rent is approximately $ 2. 0 million in the aggregate. The related parties have the right to terminate the domestic leases upon four months' notice, and upon early termination will pay a termination penalty equal to 25 % of the portion of the rent due over the course of the remaining term.~~ A related party has the right to terminate the Israeli lease upon four months' notice. ~~IDT has the right to lease an additional 50~~ **NOTE 22 – SUBSEQUENT EVENTS Issuance of Class B Common Stock On August 28** , **2023** ~~000 square feet~~ , ~~in 25, 000- foot increments, in~~ the ~~building located at 520~~ **Company granted 111, 408 restricted shares of Class B common stock of the Company to Howard Jonas, the Chairman of the** ~~Broad~~ - **Board and Executive Chairman and former Chief Executive Officer of** ~~Street, Newark, New Jersey on the same terms as their~~ -- **the Company** ~~base lease,~~ and **Member of** ~~other~~ -- **the** ~~rights should 25~~ **Board of Cornerstone Pharmaceuticals** , ~~000~~ **pursuant to his employment agreement. Rafael Medical Devices, LLC outside party investment During the fourth** ~~square~~ - **quarter** ~~feet or less remain available to lessees in the building. Upon expiration~~ of the ~~lease, related parties have the right to renew the leases for another five years~~ - **year** ~~. The minimum future rental income pertaining to the 520 Property has been excluded from the table above as they have been classified as held- for- sale for the years~~ ended July 31, ~~2022~~ **2023 ,** ~~and 2021. NOTE 19 – SUBSEQUENT EVENTS Sale of~~ the ~~520 Property~~ **Company received $ 825 thousand as a deposit from outside third party investors for the purchase of membership units of Rafael Medical Devices, LLC.** On August ~~22~~ **1** , ~~2022~~ **2023** ~~, Broad Atlantic Associate LLC, a wholly- owned subsidiary of the Company, completed the sale of the 520 Property for a purchase price of $ 49. 4 million. The 520 Property served as the Company' s headquarters and has several other tenants. The 520 Property was encumbered by a mortgage securing a $ 15 million loan which was paid off in this transaction. After repaying the loan, and paying commissions, taxes, and other related costs~~ , the Company received **an additional $ 100 thousand and closed on the sale of units in exchange of $ 925 thousand, whereby the Company will now hold 53. 4 % (on** a ~~net amount~~ **fully diluted basis) ownership interests in Rafael Medical Devices, LLC. As** of ~~approximately $ 33 million at closing~~ **July 31, 2023, the Company recorded the funds received within prepaid expenses and other current assets and other current liabilities within the consolidated balance sheets** . F- ~~381~~ **370** . ~~38~~ **36** 6. 22 0. 09 0. ~~11 1~~ **28 0** . ~~49~~ **08** 6. ~~3119767342During Fiscal~~ **3123263211In November** 2022, ~~we discontinued further material investment in Levco~~ **the Company resolved to curtail its early- stage development efforts, including pre- clinical research at Barer. The decision was taken to reduce spending as the Company focuses on exploring strategic opportunities** . 50 % of CS Pharma Holdings, LLC is owned by Pharma Holdings, LLC. We have a 90 % ownership in Pharma Holdings, LLC and, therefore, an effective 45 % interest in CS Pharma Holdings, LLC. The Company, along with CS Pharma and Pharma Holdings, collectively own securities representing 51 % of the outstanding capital stock of Cornerstone Pharmaceuticals and ~~41~~ **42** % of the capital stock on a fully diluted basis (excluding the remainder of the Warrant). Refer to Note ~~3~~ **4** for further details. **During Fiscal 2022, the Company discontinued further material investment in Levco. On February 9, 2023, the Company increased its ownership interest in LipoMedix Pharmaceuticals Ltd. an additional 11 % from 84 % to 95 %. 23263211 0. 36 6. 22 0. 09 0. 28 0. 08 6.** ~~false~~ **31false FY2022** - **08- 01 2023** - 07- ~~31 FY2021~~ **312023- 01- 31us- gaap:CommonClassAMember2023- 10- 27us- gaap:CommonClassBMember2023- 10- 272023- 07- 312022** - 07- 31rfl: **OtherPharmaceuticalsMember2023** ~~TotalAvailableforsaleSecuritiesMember2021- 08- 01 2022~~ - 07- **31rfl** ~~312020- 10- 312021- 05- 31us- gaap~~ : ~~FairValueInputsLevel1Member2022~~ **OtherPharmaceuticalsMember2022** - 07- 31us- gaap: ~~FairValueInputsLevel2Member2022~~ **HedgeFundsMember2023** - 07- 31us- gaap: ~~FairValueInputsLevel3Member2022~~ **HedgeFundsMember2022- 07- 31rfl:INVESTMENTINDAYTHREELABSINCMember2023- 07- 31rfl:INVESTMENTINDAYTHREELABSINCMember2022- 07- 31rfl:InvestmentInCycloTherapeuticsIncMember2023- 07- 31rfl:InvestmentInCycloTherapeuticsIncMember2022** - 07- 31us- gaap: ~~FairValueInputsLevel1Member2021~~ **RelatedPartyMember2023** - 07- 31us- gaap: ~~FairValueInputsLevel2Member2021~~ **RelatedPartyMember2022** - 07- 31us- gaap: ~~FairValueInputsLevel3Member2021~~ **CommonClassAMember2023** - 07- 31us- gaap: **CommonClassAMember2022** ~~PropertyPlantAndEquipmentMember2021- 08- 01 2022~~ - 07- 31us- gaap: **CommonClassBMember2023** ~~PropertyPlantAndEquipmentMember2020- 08- 01 2021~~ - 07- 31us- gaap: **CommonClassBMember2022** ~~PropertyPlantAndEquipmentMember2022- 07- 31us- gaap:PropertyPlantAndEquipmentMember2021- 07- 312021- 07- 092022- 07- 29 2022- 07- 29country:IL2022~~ - 07- 31rfl: ~~IdtRafaelHoldingsLlcMember2021~~ **RentalThirdPartyMember2022** - 08- 01 ~~2022~~ **2023** - 07- **31rfl:RentalThirdPartyMember2021** - 08- 01 2022- 07- **31rfl: RentalRelatedPartyMember2022- 08- 01 2023- 07- 31rfl: RentalRelatedPartyMember2021- 08- 01 2022- 07- 31rfl: OtherRelatedPartyMember2022- 08- 01 2023- 07- 31rfl: OtherRelatedPartyMember2021- 08- 01 2022- 07- 312021- 08- 01 2022- 07- 31rfl: InvestmentInCycloTherapeuticsIncMember2022- 08- 01 2023- 07- 31rfl: InvestmentInCycloTherapeuticsIncMember2021- 08- 01 2022- 07- 31us- gaap: HedgeFundsMember2022- 08- 01 2023- 07- 31us- gaap: HedgeFundsMember2021- 08- 01 2022- 07- 31rfl: DayThreeLabsIncMember2022- 08- 01 2023- 07- 31rfl: DayThreeLabsIncMember2021- 08- 01 2022- 07- 31rfl: RPFinanceLLCMember2022- 08- 01 2023- 07- 31rfl: RPFinanceLLCMember2021- 08- 01 2022- 07- 31us- gaap: CommonClassAMember us- gaap: CommonStockMember2022- 07- 31us- gaap: CommonClassBMember us- gaap: CommonStockMember2022- 07- 31us- gaap: AdditionalPaidInCapitalMember2022- 07- 31us- gaap: RetainedEarningsUnappropriatedMember2022- 07- 31us- gaap: AccumulatedOtherComprehensiveIncomeMember2022- 07- 31us- gaap: NoncontrollingInterestMember2022- 07- 31us- gaap: CommonClassAMember us- gaap: CommonStockMember2022- 08- 01 2023- 07- 31us- gaap: CommonClassBMember us- gaap: CommonStockMember2022- 08- 01 2023- 07- 31us- gaap: AdditionalPaidInCapitalMember2022- 08- 01 2023- 07- 31us- gaap: RetainedEarningsUnappropriatedMember2022- 08- 01 2023- 07- 31us- gaap: AccumulatedOtherComprehensiveIncomeMember2022- 08- 01 2023- 07- 31us- gaap:**

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07- 31us- gaap:StockOptionMember2021- 08- 01 2022- 07- ~~31us- gaap:StockOptionMember2020- 08- 01 2021- 07- 31rfl:RMD2022PlanMember2021- 08- 01 2022- 07-~~ 31rfl:RMD2022PlanMember2022- 08- 01 2023- 07- 31rfl:RMD2022PlanMember2023- 07- 31rfl:RMD2022PlanMember2022- 01- ~~31rfl:EquityIncentivePlanMember2021- 01- 01 2021- 01-~~ 312022- 01- ~~01~~ 31 2022- 01- 31srt:BoardOfDirectorsChairmanMember2022- 01- ~~01~~ 31 2022- 01- 31srt:BoardOfDirectorsChairmanMember rfl:EquityIncentivePlanMember2022- 01- 31 2022- 01 - 31rfl:EquityIncentivePlanMember2022- 01- 31 2022- 01- 312022- 02- 01 2022- 02- 012022- 06- 14 2022- 06- 14srt:BoardOfDirectorsChairmanMember2023- 01- 31 2023- 01- 31srt:ChiefFinancialOfficerMember2023- 01- 31 2023- 01- 31srt:ChiefFinancialOfficerMember rfl:EquityIncentivePlanMember2023- 01- 31 2023- 01- ~~14us -~~ 31us - gaap:RestrictedStockMember2023- 07- 31us - gaap:RestrictedStockMember2022- ~~07- 31us- gaap:RestrictedStockMember2021-~~ 08- 01 ~~2022~~ 2023 - 07- 31srt:ChiefExecutiveOfficerMember2021- 11- 21 2021- 11- 21srt:ChiefExecutiveOfficerMember2021- 08- 01 2022- 07- ~~21rfl~~ 31rfl :SecuritiesPurchaseAgreementMember ~~us- gaap:CommonClassBMember2020- 12- 01 2020- 12- 07rfl:SecuritiesPurchaseAgreementMember us- gaap:CommonClassBMember2020- 12- 07rfl:SecuritiesPurchaseAgreementMember2021- 08- 01 2022- 07- 31rfl:SecuritiesPurchaseAgreementMember~~ us- gaap: ~~CommonStockMember2020~~ CommonClassBMember2020- 12- 07 2020- 12- 07rfl: SecuritiesPurchaseAgreementMember us- gaap: CommonClassBMember2020- 12- 07rfl: SecuritiesPurchaseAgreementMember us- gaap: CommonClassBMember2020- 12- 04 2020- 12- 04rfl: SecuritiesPurchaseAgreementMember2022- 08- 01 2023- 07- 31rfl: SecuritiesPurchaseAgreementMember us- gaap: CommonClassBMember2022- 08- 01 2023- 07- 31us- gaap: WarrantMember2020- 12- 07 2020- 12- 07us- gaap: WarrantMember us- gaap: CommonClassBMember2020- 12- 07us- gaap: WarrantMember rfl: IDTCorporationMember2020 - 08- 01 2021- 07- 31us- gaap: ~~AdditionalPaidInCapitalMember2020~~ WarrantMember us- gaap: CommonClassBMember2020 - 08- 01 2021- 07- 31us- gaap: ~~RetainedEarningsUnappropriatedMember2020~~ CommonClassBMember2020 - 08- 01 2021- 07- 31us- gaap: ~~AccumulatedOtherComprehensiveIncomeMember2020~~ WarrantMember2022 - ~~08~~ 06 - ~~01 2021~~ 06rfl: RafaelMedicalDevicesLLCMember2021 - 07- ~~31us- gaap: NoncontrollingInterestMember2020- 08- 01 2021- 07-~~ 31rfl: ~~CSPharmaHoldingsLLCMember2021~~ RafaelMedicalDevicesLLCMember2021 - 08- 01 2022- 07- 31rfl: ~~PharmaHoldingsLLCMember2021~~ RafaelMedicalDevicesLLCMember2022- 07- 31rfl: RafaelMedicalDevicesLLCMember2022- 08- 01 2023- 07- 31rfl: RafaelMedicalDevicesLLCMember2023- 07- 31srt: MinimumMember2022- 08- 01 2023- 07- 31srt: MaximumMember2022- 08- 01 2023- 07- 31srt: MinimumMember2021 - 08- 01 2022- 07- ~~31rfl~~ 31srt : MaximumMember2021 ~~CSPharmaHoldingsLLCMember2022- 07- 31us- gaap: SubsequentEventMember2022 -~~ 08- 01 2022-

07- 31rfl: RelatedPartiesMember2023- 07- 31rfl: OtherMember2023- 07- 31us- gaap: CommonClassBMember2023- 08- **282023** ~~22rfl: RelatedPartiesMember2021-~~ - 08- **01rfl: RafaelMedicalDevicesLLCMember us** ~~01 2022- 07- 31us-~~ - gaap: **SubsequentEventMember2023** ~~AccountsReceivableMember rfl: OneCustomersMember2021-~~ - 08- 01 2022- 07- 31us-...... 31rfl: OtherMember2022- 07- 31iso4217 **01iso4217** : USD xbrli: sharesiso4217: USDxbrli: sharesxbrli: pure utr: sqftExhibit 4. 2 DESCRIPTION OF THE REGISTRANT' S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934 Our authorized capital stock consists of (i) 35 million shares of Class A common stock, (ii) 200 million shares of Class B common stock, and (iii) 10 million shares of Preferred Stock. The following description of our classes of authorized stock does not purport to be complete and is subject to and qualified in its entirety by reference to our charter and bylaws, copies of which are filed as exhibits to the Annual Report on Form 10- K to which this Exhibit 4. 2 is a part. Holders of shares of our Class A common stock are entitled to three votes for each share on all matters to be voted on by the stockholders. Holders of our Class A common stock are entitled to share ratably in dividends, if any, as may be declared from time to time by the Board of Directors in its discretion from funds legally available therefor. Each share of our Class A common stock may be converted, at any time and at the option of the holder, and automatically converts upon transfers to unaffiliated parties, into one fully paid and non- assessable share of our Class B common stock. As of October ~~25~~ **27** , ~~2022~~ **2023** , there were 787, 163 of our shares of Class A common stock outstanding. Holders of shares of our Class B common stock are entitled to one tenth of one vote for each share on all matters to be voted on by the stockholders. Holders of our Class B common stock are entitled to share ratably in dividends, if any, as may be declared from time to time by the Board of Directors in its discretion from funds legally available therefor. As of October ~~25~~ **27** , ~~2022~~ **2023** , there were 23, ~~685~~ **719** , ~~649~~ **472** shares of Class B common stock outstanding. The Board of Directors has the authority to fix the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the stockholders. As of October ~~25~~ **27** , ~~2022~~ **2023** , there were no shares of our preferred stock were outstanding. Anti- Takeover Effects of Our Charter and By- Laws Some provisions of Delaware law and our Certificate of Incorporation and By- Laws could make the following more difficult: ● acquisition of us by means of a tender offer; ● acquisition of us by means of a proxy contest or otherwise; or ● removal of our incumbent officers and directors. These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions also are designed to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of increased protection give us the potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us and outweigh the disadvantages of discouraging those proposals because negotiation of them could result in an improvement of their terms. Certificate of Incorporation; By- Laws Our Certificate of Incorporation and By- Laws contain provisions that could make more difficult the acquisition of us by means of a tender offer, a proxy contest or otherwise. These provisions are summarized below. Undesignated Preferred Stock. The authorization of our undesignated preferred stock makes it possible for our Board of Directors to issue our preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes of control of our management. Size of Board and Vacancies. Our Certificate of Incorporation provides that the number of directors on our Board of Directors will be between three and seventeen. Newly created directorships resulting from any increase in our authorized number of directors or any vacancies in our Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause will be filled solely by the vote of our remaining directors in office. Stockholder Meetings. Under our By- Laws, only our (i) Chairman of the Board, (ii) Executive Chairman, (iii) Chief Executive Officer, (iv) President, (v) Corporate Secretary, or (vi) any Assistant Secretary may call special meetings of our stockholders and shall be called by any such officer at the request in writing of a majority of our Board of Directors or at the request in writing of stockholders owning our issued and outstanding capital stock representing not less than a majority of the voting power of all our issued and outstanding capital stock. Exhibit 21. 01 DOMESTIC SUBSIDIARIES Altira Capital & Consulting, LLC (DE) Barer Institute, Inc. (DE) Broad- Atlantic Associates, LLC (DE) CS Pharma Holdings, LLC (f / k / a Mort2Chai Partners, LLC) (DE) Farber Partners, LLC (DE) Pharma Holdings, LLC (f / k / a IDT- Rafael Holdings, LLC (DE) Rafael Holdings Realty, Inc. (f / k / a IDT Capital, Inc.) (DE) Rafael Medical Devices **LLC** ~~, Inc.~~ (DE) RP Finance LLC (DE) The Barer Institute, LLC (f / k / a Rafael Realty, LLC) (NJ) FOREIGN SUBSIDIARIES IDT R. E. Holdings Ltd. (Israel) LipoMedix Pharmaceuticals Ltd. (Israel) Exhibit 23. 1 CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM We consent to the incorporation by reference in registration statement No. 333- ~~225115~~ **274254** on Form S- 8, registration statement No. 333- ~~252754~~ **262754** on Form S- 3 / A, registration statement No. 333- 256865 on Form S- 3, registration statement No. 333- 256565 on Form S- 3 and registration statement No. 333- 253455 on Form S- 3 of Rafael Holdings, Inc. of our report dated October ~~31~~ **30** , ~~2022~~ **2023** related to our audits of the consolidated financial statements of Rafael Holdings, Inc. as of July 31, **2023 and** 2022 ~~and 2021~~ and for the years then ended, included in the Annual Report on Form 10- K of Rafael Holdings, Inc. for the year ended July 31, ~~2022~~ **2023** . **/ s / CohnReznick LLP New York, New York** Exhibit 31. 01 ~~pursuant to Section~~ **CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO EXCHANGE ACT RULE 13a- 14 (a) / 15d- 14 (a) AS ADOPTED PURSUANT TO SECTION** 302 ~~of the Sarbanes~~ **OF THE SARBANES** - ~~Oxley Act of~~ **OXLEY ACT OF** 2002 I, William Conkling, certify that: 1. I have reviewed this Annual Report on Form 10- K of Rafael Holdings, Inc.; 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; 3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant' s other certifying officer (s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a- 15 (e) and 15d- 15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a- 15 (f) and 15d-

15 (f)) for the registrant and have: (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; (c) Evaluated the effectiveness of the registrant' s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and (d) Disclosed in this report any change in the registrant' s internal control over financial reporting that occurred during the registrant' s most recent fiscal quarter (the registrant' s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant' s internal control over financial reporting; and5. The registrant' s other certifying officer (s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant' s auditors and the audit committee of the registrant' s board of directors (or persons performing the equivalent functions): (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant' s ability to record, process, summarize and report financial information; and (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant' s internal control over financial reporting. Date: October **30, 2023 / s / William ConklingExhibit** 31 ~~, 2022 / s / William Conkling William Conkling Chief Executive Officer Exhibit 31~~ . 02 ~~Certification of Principal Financial Officer~~ **CERTIFICATION OF CHIEF FINANCIAL OFFICER** I, ~~Patrick Fabbio~~ **David Polinsky** , certify that: **/** ~~1. I have reviewed this Annual Report on Form 10- K of Rafael Holdings, Inc.; 3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; 4. The registrant'~~ s ~~other certifying officer (s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a- 15 (e) and 15d- 15 (e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a- 15 (f) and 15d- 15 (f)) for the registrant and have: (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; 5. The registrant' s other certifying officer (s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant' s auditors and the audit committee of the registrant' s board of directors (or persons performing the equivalent functions):~~ / **David PolinskyExhibit** ~~s / Patrick Fabbio Patrick Fabbio Chief Financial Officer Exhibit~~ 32. 01 ~~Certification Pursuant to~~ **CERTIFICATION PURSUANT TO** 18 U. S. C. ~~Section~~ **SECTION** 1350 (~~as Adopted Pursuant to Section~~ **AS ADOPTED PURSUANT TO SECTION** 906 ~~of the Sarbanes~~ **OF THE SARBANES** - ~~Oxley Act Of~~ **OXLEY ACT OF** 2002) In connection with the Annual Report of Rafael Holdings, Inc. (the " Company ") on Form 10- K for the annual period ended July 31, ~~2022~~ **2023** as filed with the Securities and Exchange Commission (the " Report "), I, William Conkling, Chief Executive Officer of the Company, certify, pursuant to 18 U. S. C. § 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that to my knowledge: 1. The Report fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Rafael Holdings, Inc. and will be retained by Rafael Holdings, Inc. and furnished to the Securities and Exchange Commission or its staff upon request. Exhibit 32. 02 In connection with the Annual Report of Rafael Holdings, Inc. (the " Company ") on Form 10- K for the annual period ended July 31, ~~2022~~ **2023** as filed with the Securities and Exchange Commission (the " Report "), I, ~~Patrick Fabbio~~ **David Polinsky** , Chief Financial Officer of the Company, certify, pursuant to 18 U. S. C. § 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002, that to my knowledge: ~~/ s / Patrick Fabbio Patrick Fabbio Chief Financial Officer~~ **A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Rafael Holdings, Inc. and will be retained by Rafael Holdings, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.** v3. ~~22~~ **23** . ~~2. 2Document~~ **3Document** And Entity Information- USD ($) $ in Millions 12 Months EndedJul. 31, ~~2022~~ **2023** Oct. ~~25~~ **27** , ~~2022~~ **2023** Jan. 31, ~~2022Document~~ **2023Document** Information Line Items Entity Registrant Name RAFAEL HOLDINGS, INC. Trading Symbol RFL Document Type 10- K Current Fiscal Year End Date-- 07- 31 Entity Public Float $ 70. 2Amendment Flag false Entity Central Index Key Entity Current Reporting Status Yes Entity Voluntary Filers No Entity Filer Category Non- accelerated Filer Entity Well- known Seasoned Issuer No Document Period End Date Jul. 31, ~~2022~~ **2023** Document Fiscal Year Focus Document Fiscal Period Focus FY Entity Small Business true Entity Emerging Growth Company true Entity Shell Company false Entity Ex Transition Period false ICFR Auditor Attestation Flag false Document Annual Report true Document Transition Report false Entity File Number 000- 55863 Entity Incorporation, State or Country Code DE Entity Tax Identification Number 82- 2296593 Entity Address, Address Line One 520 Broad Street Entity Address, City or Town Newark Entity Address, State or Province NJ Entity Address, Postal Zip Code City Area Code (212) Local Phone Number 658- 1450 Title of 12 (b) Security Class B common stock, par value $ 0. 01 per share Security Exchange Name NYSE Entity Interactive Data Current Yes **Document Financial Statement Error Correction [Flag] false** Auditor Firm ID Auditor Name CohnReznick LLP Auditor Location New York, New York Class A Common Stock Document Information Line Items Entity Common Stock, Shares Outstanding 787, 163 Class B Common Stock Document

Information Line Items Entity Common Stock, Shares Outstanding 23, ~~685~~ **719** , ~~649~~ **472** X- DefinitionBoolean flag that is true when the XBRL content amends previously- filed or accepted submission. ReferencesNo definition available. Details Name: dei_AmendmentFlag Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionPCAOB issued Audit Firm Identifier ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_AuditorFirmId Namespace Prefix: dei_ Data Type: dei: nonemptySequenceNumberItemType Balance Type: na Period Type: durationX- ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_AuditorLocation Namespace Prefix: dei_ Data Type: dei: internationalNameItemType Balance Type: na Period Type: durationX- ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_AuditorName Namespace Prefix: dei_ Data Type: dei: internationalNameItemType Balance Type: na Period Type: durationX- DefinitionArea code of city ReferencesNo definition available. Details Name: dei_CityAreaCode Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionEnd date of current fiscal year in the format-- MM- DD. ReferencesNo definition available. Details Name: dei_CurrentFiscalYearEndDate Namespace Prefix: dei_ Data Type: xbrli: gMonthDayItemType Balance Type: na Period Type: durationX- DefinitionBoolean flag that is true only for a form used as an annual report. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_DocumentAnnualReport Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- **DefinitionIndicates whether any of the financial statement period in the filing include a restatement due to error correction. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Regulation S- K- Number 229- Section 402- Subsection wReference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 4: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_DocumentFinStmtErrorCorrectionFlag Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX-** DefinitionFiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10- Q or 10- QT statements have value Q1, Q2, and Q3 respectively, with 10- K, 10- KT or other fiscal year statements having FY. ReferencesNo definition available. Details Name: dei_DocumentFiscalPeriodFocus Namespace Prefix: dei_ Data Type: dei: fiscalPeriodItemType Balance Type: na Period Type: durationX- DefinitionThis is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006. ReferencesNo definition available. Details Name: dei_DocumentFiscalYearFocus Namespace Prefix: dei_ Data Type: xbrli: gYearItemType Balance Type: na Period Type: durationX- DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. ReferencesNo definition available. Details Name: dei_DocumentInformationLineItems Namespace Prefix: dei_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionFor the EDGAR submission types of Form 8- K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N- 1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY- MM- DD. ReferencesNo definition available. Details Name: dei_DocumentPeriodEndDate Namespace Prefix: dei_ Data Type: xbrli: dateItemType Balance Type: na Period Type: durationX- DefinitionBoolean flag that is true only for a form used as a transition report. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Forms 10- K, 10- Q, 20- F- Number 240- Section 13- Subsection a- 1 Details Name: dei_DocumentTransitionReport Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionThe type of document being provided (such as 10- K, 10- Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word' Other'. ReferencesNo definition available. Details Name: dei_DocumentType Namespace Prefix: dei_ Data Type: dei: submissionTypeItemType Balance Type: na Period Type: durationX- DefinitionAddress Line 1 such as Attn, Building Name, Street Name ReferencesNo definition available. Details Name: dei_EntityAddressAddressLine1 Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionName of the City or Town ReferencesNo definition available. Details Name: dei_EntityAddressCityOrTown Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionCode for the postal or zip code ReferencesNo definition available. Details Name: dei_EntityAddressPostalZipCode Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionName of the state or province. ReferencesNo definition available. Details Name: dei_EntityAddressStateOrProvince Namespace Prefix: dei_ Data Type: dei: stateOrProvinceItemType Balance Type: na Period Type: durationX- DefinitionA unique 10- digit SEC- issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK. ReferencesReference 1: http: / / www. xbrl.

org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityCentralIndexKey Namespace Prefix: dei_ Data Type: dei: centralIndexKeyItemType Balance Type: na Period Type: durationX- DefinitionIndicate number of shares or other units outstanding of each of registrant' s classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class / interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument. ReferencesNo definition available. Details Name: dei_EntityCommonStockSharesOutstanding Namespace Prefix: dei_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: instantX- DefinitionIndicate' Yes' or' No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant' s current or most recent filing containing the related disclosure. ReferencesNo definition available. Details Name: dei_EntityCurrentReportingStatus Namespace Prefix: dei_ Data Type: dei: yesNoItemType Balance Type: na Period Type: durationX- DefinitionIndicate if registrant meets the emerging growth company criteria. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityEmergingGrowthCompany Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionIndicate if an emerging growth company has elected not to use the extended transition period for complying with any new or revised financial accounting standards. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Securities Act- Number 7A- Section B- Subsection 2 Details Name: dei_EntityExTransitionPeriod Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionCommission file number. The field allows up to 17 characters. The prefix may contain 1- 3 digits, the sequence number may contain 1- 8 digits, the optional suffix may contain 1- 4 characters, and the fields are separated with a hyphen. ReferencesNo definition available. Details Name: dei_EntityFileNumber Namespace Prefix: dei_ Data Type: dei: fileNumberItemType Balance Type: na Period Type: durationX- DefinitionIndicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non- accelerated Filer. Definitions of these categories are stated in Rule 12b- 2 of the Exchange Act. This information should be based on the registrant' s current or most recent filing containing the related disclosure. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityFilerCategory Namespace Prefix: dei_ Data Type: dei: filerCategoryItemType Balance Type: na Period Type: durationX- DefinitionTwo- character EDGAR code representing the state or country of incorporation. ReferencesNo definition available. Details Name: dei_EntityIncorporationStateCountryCode Namespace Prefix: dei_ Data Type: dei: edgarStateCountryItemType Balance Type: na Period Type: durationX- DefinitionBoolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S- T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Regulation S- T- Number 232- Section 405 Details Name: dei_EntityInteractiveDataCurrent Namespace Prefix: dei_ Data Type: dei: yesNoItemType Balance Type: na Period Type: durationX- DefinitionThe aggregate market value of the voting and non- voting common equity held by non- affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant' s most recently completed second fiscal quarter. ReferencesNo definition available. Details Name: dei_EntityPublicFloat Namespace Prefix: dei_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionThe exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityRegistrantName Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionBoolean flag that is true when the registrant is a shell company as defined in Rule 12b- 2 of the Exchange Act. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityShellCompany Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionIndicates that the company is a Smaller Reporting Company (SRC). ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntitySmallBusiness Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionThe Tax Identification Number (TIN), also known as an Employer Identification Number (EIN), is a unique 9- digit value assigned by the IRS. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b- 2 Details Name: dei_EntityTaxIdentificationNumber Namespace Prefix: dei_ Data Type: dei: employerIdItemType Balance Type: na Period Type: durationX- DefinitionIndicate' Yes' or' No' if the registrant is not required to file reports pursuant to Section 13 or Section 15 (d) of the Act. ReferencesNo definition available. Details Name: dei_EntityVoluntaryFilers Namespace Prefix: dei_ Data Type: dei: yesNoItemType Balance Type: na Period Type: durationX- DefinitionIndicate' Yes' or' No' if the registrant is a well- known seasoned issuer, as defined in Rule 405 of the Securities Act. Is used on Form Type: 10- K, 10- Q, 8- K, 20- F, 6- K, 10- K / A, 10- Q / A, 20- F / A, 6- K / A, N- CSR, N- Q, N- 1A. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Securities Act- Number 230- Section 405 Details Name: dei_EntityWellKnownSeasonedIssuer Namespace Prefix: dei_ Data Type: dei: yesNoItemType Balance Type: na Period Type: durationX- ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 10- K- Number 249- Section 310Reference 2: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Form 20- F- Number 249- Section 220- Subsection fReference 3: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC-

Name Form 40- F- Number 249- Section 240- Subsection f Details Name: dei_IcfrAuditorAttestationFlag Namespace Prefix: dei_ Data Type: xbrli: booleanItemType Balance Type: na Period Type: durationX- DefinitionLocal phone number for entity. ReferencesNo definition available. Details Name: dei_LocalPhoneNumber Namespace Prefix: dei_ Data Type: xbrli: normalizedStringItemType Balance Type: na Period Type: durationX- DefinitionTitle of a 12 (b) registered security. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection b Details Name: dei_Security12bTitle Namespace Prefix: dei_ Data Type: dei: securityTitleItemType Balance Type: na Period Type: durationX- DefinitionName of the Exchange on which a security is registered. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / presentationRef- Publisher SEC- Name Exchange Act- Number 240- Section 12- Subsection d1- 1 Details Name: dei_SecurityExchangeName Namespace Prefix: dei_ Data Type: dei: edgarExchangeCodeItemType Balance Type: na Period Type: durationX- DefinitionTrading symbol of an instrument as listed on an exchange. ReferencesNo definition available. Details Name: dei_TradingSymbol Namespace Prefix: dei_ Data Type: dei: tradingSymbolItemType Balance Type: na Period Type: durationX- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassAMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassBMember Namespace Prefix: Data Type: na Balance Type: Period Type: Consolidated Balance Sheets- USD ($) $ in Thousands Jul. 31, ~~2022~~ **2023** Jul. 31, ~~2021CURRENT~~ **2022CURRENT** ASSETS Cash and cash equivalents $ **21, 498 $** 26, ~~537 $ 7, 854Restricted cash 5, 000Available~~ **537Available** - for- sale securities **57, 714** 36, ~~698 Interest~~ **698Interest receivableConvertible note** receivable ~~Trade~~ **, related party 1, 921** ~~accounts~~ **Accounts** receivable, net of allowance for doubtful accounts of $ **245 and $** 197 ~~and $ 193~~ at July 31, ~~2022~~ **2023** and July 31, ~~2021, respectivelyDue from Cornerstone Pharmaceuticals, net of allowance for losses on related party receivables of $ 720 and $ 0 at July 31,~~ 2022 ~~and July 31~~ , ~~2021, respectively~~ **respectivelyPrepaid** ~~Prepaid~~ expenses and other current assets 4, **621Assets** ~~621 1, 075Assets~~ held- for- sale 40, ~~194~~ **194Investment in equity securities** Total current assets **82, 941** 108, ~~347 14, 764Property~~ -- **347Property** and equipment, net 1, ~~770~~ **695** 1, **770In** ~~840Equity investment – RP Finance LLC Due from RP Finance LLC, net of allowance for losses on related party receivables of $ 9, 375 and $ 0 at July 31, 2022 and July 31, 2021, respectively 7, 500Investments – Cornerstone Pharmaceuticals 79, 141Investments – Other PharmaceuticalsInvestments – Hedge Funds 4, 764 5, 268In~~ - process research and development and patents 1, 575 1, 575Other assets 1, ~~387 1, 517Non- current assets held- for- sale 41, 398TOTAL~~ - **387TOTAL** ASSETS **98, 829** 118, ~~320 154, 055CURRENT~~ -- **320CURRENT** LIABILITIES ~~Trade accounts~~ **Accounts payableAccrued** ~~payable 1, 160Accrued~~ expenses 1, ~~875 1, 227Other~~ **875Other** current liabilities **1, 023** 3, **518Note** ~~518Due to related partiesNote~~ payable, net of debt issuance costs, held- for- sale 15, **000Total** ~~000 14, 528Total~~ current liabilities **2, 145** 21, ~~026 17, 303Other~~ - **026Other** liabilitiesTOTAL LIABILITIES **2, 200** 21, ~~114 17, 351COMMITMENTS~~ -- **114COMMITMENTS** AND CONTINGENCIES EQUITY ~~Class A common stock, $ 0. 01 par value; 35, 000, 000 shares authorized, 787, 163 shares issued and outstanding as of July 31, 2022 and July 31, 2021, respectivelyClass B common stock, $ 0. 01 par value; 200, 000, 000 shares authorized, 23, 712, 449 issued and 23, 687, 964 outstanding as of July 31, 2022, and 16, 947, 066 issued and 16, 936, 864 outstanding as of July 31, 2021Additional~~ ---- **Additional** paid- in capital **264, 010** 262, ~~023 159, 136Accumulated~~ - **023Accumulated** deficit (**167, 333) (** 165, 457 ~~) (40, 799~~) Accumulated other comprehensive loss related to unrealized loss on available- for- sale securities (**353) (** 63) Accumulated other comprehensive income related to foreign currency translation adjustment 3, ~~767~~ **725** 3, ~~772Total~~ - **767Total** equity attributable to Rafael Holdings, Inc. 100, ~~515 122~~ **293 100** , ~~286Noncontrolling~~ **515Noncontrolling** interests (3, **664) (3,** 309) ~~14, 418TOTAL~~ --- **TOTAL** EQUITY **96, 629** 97, ~~206 136, 704TOTAL~~ **206TOTAL** LIABILITIES AND EQUITY **98, 829 118, 320Class A Common Stock EQUITY Common stock valueClass B Common Stock EQUITY Common stock valueOther Pharmaceuticals CURRENT ASSETS InvestmentsHedge Funds CURRENT ASSETS Investments 4, 984 4, 764Day Three Labs Inc CURRENT ASSETS Investments 2, 797 Cyclo Therapeutics Inc CURRENT ASSETS Investments 4, 763 Related Party CURRENT LIABILITIES Other current liabilities** $ **26** ~~118, 320~~ $ **69X** ~~154, 055X~~ - **DefinitionAmount** ~~DefinitionAggregate par or stated value~~ of **convertible** ~~issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note~~ **note receivable** ~~: elements for number of nonredeemable common shares~~ , **related** ~~par~~ **party** ~~value and other disclosure concepts are in another section within stockholders' equity~~ . ReferencesNo definition available. Details Name: ~~rfl_CommonStockValue1~~ **rfl_ConvertibleNoteReceivableRelatedParty** Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: ~~credit~~ **debit** Period Type: instantX- ~~DefinitionThe~~ **DefinitionIn process research and development** ~~amount due from rafael pharmaceuticals~~ . ReferencesNo definition available. Details Name: ~~rfl_DueFromRafaelPharmaceuticals Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionEquity investment – RP Finance. ReferencesNo definition available. Details Name: rfl_EquityInvestmentRPFinance Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionIn process research and development. ReferencesNo definition available. Details Name:~~ rfl_InProcessResearchAndDevelopment ~~Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of investments hedge funds. ReferencesNo definition available. Details Name: rfl_InvestmentsHedgeFunds Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of investments- other pharmaceuticals. ReferencesNo definition available. Details Name: rfl_InvestmentsOtherPharmaceuticals Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionThe amount of non- current assets held- for- sale. ReferencesNo definition available. Details Name: rfl_NoncurrentAssetsHeldforsale~~ Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount, after allowance, receivable from customers, clients, or other third- parties, and receivables classified as other due within one year or the normal operating cycle, if longer. ReferencesNo definition available. Details Name: us- gaap_AccountsAndOtherReceivablesNetCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionCarrying value as of the balance sheet date of liabilities incurred (and for which invoices have typically been received) and payable to vendors for goods and services received that are used in an entity' s business. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **exampleRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 852- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210~~ **Section 55** - ~~SubTopic~~ **Paragraph** 10- **Publisher FASB** ~~Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 19 (a))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481372 / 852** ~~extlink & oid = 120391452 & loc = d3e13212~~ - **10- 55-** ~~122682Reference~~ **10Reference** 2: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- Topic ~~852~~ **210** - SubTopic 10- Section ~~55~~ **S99** - Paragraph **1- Subparagraph (SX** ~~10~~ **210 . 5- 02. 19 (a))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 84165509 & loc = d3e56426~~ - ~~112766~~ **10- S99- 1** Details Name: us- gaap_AccountsPayableCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionCarrying value as of the balance sheet date of obligations incurred and payable, pertaining to costs that are statutory in nature, are incurred on contractual obligations, or accumulate over time and for which invoices have not yet been received or will not be rendered. Examples include taxes, interest, rent and utilities. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- Topic 210- SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 20)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_AccruedLiabilitiesCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount, after tax, of accumulated unrealized gain (loss) on investment in debt security measured at fair value with change in fair value recognized in other comprehensive income (available- for- sale). ReferencesReference 1: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section 45- Paragraph 14- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 126968391 & loc = d3e681~~ - ~~108580~~ **10- 45- 14** Details Name: us- gaap_AccumulatedOtherComprehensiveIncomeLossAvailableForSaleSecuritiesAdjustmentNetOfTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAccumulated adjustment, net of tax, that results from the process of translating subsidiary financial statements and foreign equity investments into the reporting currency from the functional currency of the reporting entity, net of reclassification of realized foreign currency translation gains or losses. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 11- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 11Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section 45- Paragraph 11- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = d3e637- 108580Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 14A- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 14AReference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **825** - SubTopic 10 ~~- Section 45- Paragraph 14- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = d3e681- 108580Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 5A- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482736 / 825- 10- 45- 5AReference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **220** - SubTopic 10 ~~- Section 45- Paragraph 5A- URI https: / / asc. fasb. org / extlink & oid = 123594809 & loc = SL116692626- 108610Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 10A- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 10AReference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section 45- Paragraph 10A- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669646- 108580Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section 45- Paragraph ~~14A~~ - **14- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 126968391 & loc = SL7669686~~ - ~~108580~~ **10- 45- 14** Details Name: us- gaap_AccumulatedOtherComprehensiveIncomeLossForeignCurrencyTranslationAdjustmentNetOfTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- ~~DefinitionAmount of~~ **DefinitionValue received from shareholders in common stock- related transactions that are in** excess of ~~issue price over~~ par **value** or stated value ~~of stock~~ and **amounts received** from other ~~transaction involving~~ stock **- related transactions. Includes only common stock transactions (excludes preferred stock transactions). May be called contributed capital, capital in excess of par, capital surplus,** or ~~stockholder. Includes, but is not limited to, additional~~ paid- in capital ~~(APIC) for common and preferred stock~~ . ReferencesReference 1: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~exampleRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~ Section ~~55~~ **S99** - Paragraph **1- Subparagraph (SX** ~~10~~ **210 . 5- 02 (30) (a) (1))- Publisher FASB** - URI https: / / asc. fasb. org / ~~extlink & oid = 84165509 & loc = d3e56426- 112766Reference 2: http:~~ / **1943274** / **2147480566** ~~fasb. org~~ / ~~us- gaap / role / ref / legacyRef- Publisher FASB- Name Accounting Standards Codification- Topic~~ 210- ~~SubTopic~~ 10- ~~Section~~ S99- ~~Paragraph~~ 1 ~~- Subparagraph (SX 210. 5- 02 (30) (a) (1))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682~~ Details Name: us- ~~gaap_AdditionalPaidInCapital~~ **gaap_AdditionalPaidInCapitalCommonStock** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionSum of the carrying amounts as of the balance sheet date of all assets that are recognized. Assets are probable future economic benefits obtained or controlled by an entity as a result of past transactions or events. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 810- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 942- SubTopic 210-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **3** - Subparagraph (**bb** ~~SX 210. 9- 03 (11~~) ~~)~~ **-**

Publisher FASB - URI https: / / asc. fasb. org / **/ 1943274 / 2147481203 / 810** ~~extlink & oid = 126897435 & loc = d3e534808- 122878Reference~~ **10- 50- 3Reference** 2: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 810- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 25- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 25Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~852~~ **235** - SubTopic 10 ~~- Section 55- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 84165509 & loc = d3e56426- 112766Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **323** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **825** - SubTopic 10 ~~- Section 50- Paragraph 22- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 6: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~470~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 210-~~ Section ~~S99~~ **55** - Paragraph ~~1- Subparagraph (SX 210~~ - **10** ~~. 7~~ - **Publisher FASB** ~~03 (a) (12))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481372 / 852** ~~extlink & oid = 126734703 & loc = d3e572229~~ - **10- 55-** ~~122910Reference~~ ---- **10Reference** 7: http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~ Section ~~50~~ **55** - Paragraph ~~7~~ **12** - **Publisher FASB** ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 124433192 & loc = SL2890621~~ - **830- 55-** ~~112765Reference~~ ---- **12Reference** 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 03 (a) (12))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479440 / 944- 210- S99- 1Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 9: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1A~~ **22** - **Publisher FASB** ~~Subparagraph (SX 210. 13- 01 (a) (4) (ii))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 126975872 & loc = SL124442526~~ - ~~122756Reference~~ 10 **- 50- 22Reference 10** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (8))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946- 210- S99- 1Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **210** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (18))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - 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Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552-~~

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Assets are probable future economic benefits obtained or controlled by an entity as a result of past transactions or events. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 810- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (bb)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~210~~ **810** - SubTopic 10 ~~- Section 45- Paragraph 1- URI https: / / asc. fasb. org / extlink & oid = 124098289 & loc = d3e6676- 107765Reference 2: http: / / www. xbrl. org / 2003 / role / exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 25- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 25Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~852~~ **235** - SubTopic 10 ~~- Section 55- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 84165509 & loc = d3e56426- 112766Reference 3: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~852~~ **323** - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124433192 & loc = SL2890621- 112765Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **825** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 6: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~470~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / /**

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SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 10: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 11: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **470** - SubTopic 10 ~~- Section 45- Paragraph 25- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 116870748 & loc = SL6758485- 165988Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - 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Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 20: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~235~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1B~~ **7** - Subparagraph (~~SX 210. 13- 02 (~~ a) **- Publisher FASB** ~~(4) (i)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481404 / 852** ~~extlink & oid = 126975872 & loc = SL124442552- 122756~~ **10- 50- 7** Details Name: us- gaap_AssetsCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type:

instantX- ReferencesNo definition available. Details Name: us- gaap_AssetsCurrentAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionAmount of assets held- for- sale that are not part of a disposal group, expected to be sold within a year or the normal operating cycle, if longer. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / exampleRef- ~~Publisher FASB~~ **Topic 852- SubTopic 10** - Name Accounting Standards Codification- **Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481372 / 852- 10- 55- 10Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~852~~ **360** - SubTopic 10 ~~- Section 55- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 84165509 & loc = d3e56426- 112766Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB -~~ Name Accounting Standards Codification- ~~Topic 360- SubTopic 10-~~ Section 15- Paragraph 4- Subparagraph (b) (2)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482309 / 360** ~~extlink & oid = 126982154 & loc = d3e400~~ - ~~110220~~ **10- 15- 4** Details Name: us- gaap_AssetsHeldForSaleNotPartOfDisposalGroupCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of investment in debt security measured at fair value with change in fair value recognized in other comprehensive income (available- for- sale), classified as current. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 320- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 2- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481830 / 320- 10- 45- 2Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 326- SubTopic 30 ~~- Section 45- Paragraph 1- URI https: / / asc. fasb. org / extlink & oid = 124258926 & loc = SL82898722- 210454Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB -~~ Name Accounting Standards Codification- ~~Topic 320- SubTopic 10-~~ Section 45- Paragraph ~~2-~~ **1- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479130 / 326** ~~extlink & oid = 124260329 & loc = d3e26626~~ - ~~111562~~ **30- 45- 1** Details Name: us- gaap_AvailableForSaleSecuritiesDebtSecuritiesCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of **currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes** short- term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. ReferencesReference 1: http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (1))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic 210- SubTopic 10- **Name Accounting Standards Codification-** Section ~~S99~~ **45** - Paragraph 1- Subparagraph (**a** ~~SX 210. 5- 02 (1~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483467 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- 45- 1Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Name Accounting Standards Codification- Topic 230- SubTopic 10- Section 45- Paragraph 4- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482740 / 230- 10- 45- 4** Details Name: us- ~~gaap_CashEquivalentsAtCarryingValue~~ **gaap_CashAndCashEquivalentsAtCarryingValue** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionRepresents the caption on the face of the balance sheet to indicate that the entity has entered into (1) purchase or supply arrangements that will require expending a portion of its resources to meet the terms thereof, and (2) is exposed to potential losses or, less frequently, gains, arising from (a) possible claims against a company' s resources due to future performance under contract terms, and (b) possible losses or likely gains from uncertainties that will ultimately be resolved when one or more future events that are deemed likely to occur do occur or fail to occur. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 944- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~5~~ **7** - ~~02. 25~~ **03 (a**) **(19))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479440 / 944** ~~extlink & oid = 120391452 & loc = d3e13212~~ - **210- S99-** ~~122682Reference~~ ----- **1Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 210-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~7~~ **6** - **04** ~~03.~~ (~~a~~ **15**) ~~, 19~~) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479617 / 946** ~~extlink & oid = 126734703 & loc = d3e572229~~ - **210- S99-** ~~122910Reference~~ ----- **1Reference** 3: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic 942- SubTopic 210- Section S99- Paragraph 1- Subparagraph (SX 210. 9- 03. 17)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147479853 / 942** ~~extlink & oid = 126897435 & loc = d3e534808~~ - ~~122878 Details Name~~ **210- S99- 1Reference 4** : **http: / / fasb. org /** us- ~~gaap_CommitmentsAndContingencies Namespace Prefix: us- gaap_~~ - **gaap** ~~Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAggregate par or stated value of issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note: elements for number of nonredeemable common shares, par value and other disclosure concepts are in another section within stockholders' equity. ReferencesReference 1: http: / / www. xbrl. org / 2003~~ / role / **ref / legacyRef** ~~exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- Topic ~~852~~ **210** - SubTopic 10- Section ~~55~~ **S99** - Paragraph **1- Subparagraph (SX** ~~10~~ **210 . 5- 02. 25)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 84165509 & loc = d3e56426~~ - ~~112766Reference 2~~ **10- S99- 1 Details Name: us- gaap_CommitmentsAndContingencies Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionValue of all classes of common stock held by shareholders. May be all or portion of the number of common shares authorized. These shares exclude common shares repurchased by the entity and held as treasury shares. ReferencesReference 1** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (16) (a))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946-**

210- S99- 1Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 210- SubTopic 10 - Section S99- Paragraph 1-...... / role / disclosureRef- Publisher FASB - Name Accounting Standards Codification- **-** Section S99- Paragraph 1- Subparagraph (SX 210.5- 02 (~~29~~ **12**)) ~~- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147480566 / 210~~ **extlink & oid = 120391452 & loc = d3e13212** - **122682** ~~10- S99- 1~~ Details Name:us- ~~gaap_CommonStockValueOutstanding~~ **gaap_LongTermInvestments** Namespace Prefix:us- gaap_ Data Type:xbrli:monetaryItemType Balance Type: ~~credit~~ **debit** Period Type:instantX- ~~ReferencesNo definition available. Details Name:us- gaap_EquityAbstract Namespace Prefix:us- gaap_ Data Type:xbrli:stringItemType Balance Type:na Period Type:durationX- DefinitionAmount~~ -- **DefinitionTotal** of ~~investment~~ **all stockholders' equity (deficit) items,net of receivables from officers,directors,owners,and affiliates of the entity which is directly or indirectly attributable to that ownership interest** in **subsidiary** equity **which is not attributable to the parent** ~~security measured at fair value with change in fair value recognized in net income~~ (~~FV- NI~~ **that is,noncontrolling interest,previously referred to as minority interest**) ~~,classified as current~~ . ReferencesReference 1:http:/ / www.xbrl.org / 2003 / role / disclosureRef **- Publisher FASB** Topic ~~740~~ **210** - SubTopic 10 ~~- Section 45- Paragraph 6- URI https: / / asc. fasb. org / extlink & oid = 123427490 & loc = d3e31931- 109318Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (2))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~740~~ **210** - SubTopic 10 ~~- Section 45- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 123427490 & loc = d3e31917- 109318 Details Name: us- gaap_DeferredIncomeTaxAssetsNet Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionCarrying amount as of the balance sheet date of obligations due all related parties. For classified balance sheets, represents the current portion of such liabilities (due within one year or within the normal operating cycle if longer). ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483467 / 210- 10- 45- 1Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **825** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (C))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~1B~~ **1A** - **Publisher FASB** ~~Subparagraph (SX 210. 13- 02 (a) (5))~~ - URI https: / / asc. fasb. org / ~~extlink & oid = 126975872 & loc = SL124442552- 122756Reference 3: http: /~~ **1943274** / **2147482736** ~~www. xbrl. org~~ / **825** ~~2003 / role / disclosureRef~~ - ~~Publisher FASB- Name Accounting Standards Codification- Topic 850- SubTopic~~ 10- **45** ~~Section 50~~ - ~~Paragraph 1- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 6457730 & loc = d3e39549- 107864Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB- Name Accounting Standards Codification- Topic 470- SubTopic 10- Section S99- Paragraph~~ 1A - Subparagraph (SX 210. 13...... 126975872 & loc = SL124442552- 122756 Details Name: us- ~~gaap_DueToRelatedPartiesCurrent~~ **gaap_EquitySecuritiesFvNi** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: ~~credit~~ **debit** Period Type: instantX- **DefinitionAmount of investments, and noncurrent assets classified as other.** ReferencesNo definition available. Details Name: us- ~~gaap_EquityAbstract~~ **gaap_InvestmentsAndOtherNoncurrentAssets** Namespace Prefix: us- gaap_ Data Type: xbrli: ~~stringItemType~~ **monetaryItemType** Balance Type: ~~na~~ **debit** Period Type: ~~durationX~~ **instantX** - DefinitionSum of the carrying amounts as of the balance sheet date of all liabilities that are recognized. Liabilities are probable future sacrifices of economic benefits arising from present obligations of an entity to transfer assets or provide services to other entities in the future. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 810- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~210~~ **810** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 19- 26)- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 2: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 25- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 25Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~852~~ **810** - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124433192 & loc = SL2890621- 112765Reference 3: http: / / www. xbrl. org / 2003 / role / exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (bb)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 3Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **235** - SubTopic 10 ~~- Section 50- Paragraph 30- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8906- 108599Reference 4: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~852~~ **323** - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124433192 & loc = SL2890621- 112765Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **825** - SubTopic 10 ~~- Section 45- Paragraph 25- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 116870748 & loc = SL6758485- 165988Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1B~~ **28** - Subparagraph (**f** ~~SX 210. 13- 02 (a~~) **- Publisher FASB** ~~(5))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482907 / 825** ~~extlink & oid = 126975872 & loc = SL124442552~~ - **10- 50-** ~~122756Reference~~ - **28Reference** 7: http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name

Accounting Standards Codification- ~~Topic 825- SubTopic 10-~~Section ~~50~~ **55** - Paragraph ~~28~~ **12** - **Publisher FASB** ~~Subparagraph (f)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 123596393 & loc = d3e14064~~ - **830- 55-** ~~108612Reference~~ ---- **12Reference** 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (14))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946- 210- S99- 1Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 10: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~810~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (bb)- URI https: / / asc. fasb. org / extlink & oid = 123419778 & loc = d3e5710- 111685Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 123419778 & loc = d3e5710- 111685Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 14: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~323~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 19: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~235~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 7- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481404 / 852- 10- 50- 7Reference 20: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~470~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 20: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - 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~~extlink & oid = 84165509 & loc = d3e56426- 112766Reference 3~~ 10- S99- 1 Details Name: us- gaap_Liabilities Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any. ReferencesReference 1 : http: / / ~~fasb~~ www . xbrl. org / 2003 ~~us- gaap~~ / role / exampleRef ~~ref / legacyRef- Publisher FASB~~ Topic 852- SubTopic 10 - Name Accounting Standards Codification- Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481372 / 852- 10- 55- 10Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~942~~ 944 - SubTopic 210 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 9- 03 (23))- URI https: / / asc. fasb. org / extlink & oid = 126897435 & loc = d3e534808- 122878Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 210-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 7- 03 (a) (25))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479440 / 944 ~~extlink & oid = 126734703 & loc = d3e572229~~ - 210- S99- ~~122910Reference~~ ----- 1Reference ~~5~~ 3 : http: / / www. xbrl. org / 2009 / role / commonPracticeRef- ~~Publisher FASB~~ Topic 235- SubTopic 10 - Name Accounting Standards Codification- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 4: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Topic ~~235~~ 323 - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 5: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Topic ~~210~~ 825 - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (32))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 7: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic ~~825~~ 942- SubTopic 210- Name Accounting Standards Codification- Section S99- Paragraph 1- Subparagraph (SX 210. 9- 03 (23))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479853 / 942- 210- S99- 1Reference 7: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 210 - SubTopic 10- Name Accounting Standards Codification- Section ~~50~~ S99 - Paragraph ~~28~~ 1 - Subparagraph (~~f~~ SX 210. 5- 02 (32))- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210 ~~extlink & oid = 123596393 & loc = d3e14064~~ - ~~108612~~ 10- S99- 1 Details Name: us- gaap_LiabilitiesAndStockholdersEquity Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionTotal obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ disclosureRef - ~~Publisher FASB~~ Topic 810- SubTopic 10 - Name Accounting Standards Codification- Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~852~~ 810 - SubTopic 10 ~~- Section 55- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 84165509 & loc = d3e56426- 112766Reference 2: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 45- Paragraph 25- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 25Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~852~~ 810 - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124433192 & loc = SL2890621- 112765Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 3- Subparagraph (bb)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 3Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~470~~ 235 - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 4: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~852~~ 323 - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124433192 & loc = SL2890621- 112765Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~810~~ 825 - SubTopic 10 ~~- Section 45- Paragraph 25- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 116870748 & loc = SL6758485- 165988Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 7: http: / / www. xbrl. org / 2003 / role / exampleRef- Topic ~~235~~ 852 - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 7: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481372 / 852- 10- 55- 10Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~470~~ 210 - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 45- Paragraph 5- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483467 / 210- 10- 45- 5Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 9: http: / / www. xbrl. org / 2003 /~~

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Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 19: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~470~~ **852** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 7- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481404 / 852- 10- 50- 7Reference 20: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~825~~ **852** - SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section ~~45~~ **50** - Paragraph ~~5~~ **7- Subparagraph (b)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147481404 / 852** ~~extlink & oid = 124098289 & loc = d3e6904~~ - **10- 50-** ~~107765Reference~~ ----- **7Reference** 21: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic 210- SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 21)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_LiabilitiesCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- ReferencesNo definition available. Details Name: us- gaap_LiabilitiesCurrentAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- **DefinitionAmount** ~~DefinitionThe total amount~~ of **equity** ~~investments that are intended to be held for an extended period of time~~ (**deficit** ~~longer than one operating cycle~~) **attributable to noncontrolling interest. Excludes temporary equity** . ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 235- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~210~~ **323** - SubTopic 10 - Section S99- Paragraph 1-...... / role / disclosureRef- Publisher FASB - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb.**

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Subparagraph (~~f~~ SX 210. 7- 03 (a) (24))- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147479440 / 944 ~~extlink & oid = 123596393 & loc = d3e14064~~ - 210- S99- ~~108612Reference~~ ----- 1Reference ~~4~~ 5 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 946- SubTopic 210 - Name Accounting Standards Codification- Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (19))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946- 210- S99- 1Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - 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Name Accounting Standards Codification- Topic ~~470~~ 210 - SubTopic 10- Section S99- Paragraph ~~1B~~ 1 - Subparagraph (SX 210. ~~13~~ 5 - 02 ~~(a~~ . 31) - Publisher FASB ~~(4) (iv))~~ - URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210 ~~extlink & oid = 126975872 & loc = SL124442552~~ - ~~122756~~ 10- S99- 1 Details Name: us- gaap_MinorityInterest Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionSum of the carrying values as of the balance sheet date of the portions of long- term notes payable due within one year or the operating cycle if longer. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- Topic 210- SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 19, 20)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210 ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ 10- S99- 1 Details Name: us- gaap_NotesPayableCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of noncurrent assets classified as other. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 210- SubTopic 10 - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (17))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210 ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ 10- S99- 1 Details Name: us- gaap_OtherAssetsNoncurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of liabilities classified as other, due within one year or the normal operating cycle, if longer. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / exampleRef- ~~Publisher FASB~~ Topic 852- SubTopic 10 - Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~ Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481372 / 852 ~~extlink & oid = 84165509 & loc = d3e56426~~ - 10- 55- ~~112766Reference~~ 10Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~-~~

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ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB -~~Name Accounting Standards Codification- Topic 210- SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 24)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212 -~~ ~~122682~~ **10- S99- 1** Details Name: us- gaap_OtherLiabilitiesNoncurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of asset related to consideration paid in advance for costs that provide economic benefits in future periods, and amount of other assets that are expected to be realized or consumed within one year or the normal operating cycle, if longer. ReferencesReference 1: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (9))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212 -~~ ~~122682~~ **10- S99- 1** Details Name: us- gaap_PrepaidExpenseAndOtherAssetsCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB -~~Name Accounting Standards Codification- **Section 50- Paragraph 1- SubTopic 10-** Topic 360- **Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482099 / 360- 10- 50- 1Reference 2: http: / / www. xbrl. org / 2003 / role / exampleRef- Topic 852-** SubTopic 10 ~~- Section 50- Paragraph 1- URI https: / / asc. fasb. org / extlink & oid = 6391035 & loc = d3e2868- 110229Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB -~~ Name Accounting Standards Codification- **Section 55- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481372 / 852- 10- 55- 10Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 944- SubTopic 210 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 03 (a) (8))- URI https: / / asc. fasb. org / extlink & oid = 126734703 & loc = d3e572229- 122910Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB -~~ Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 03 (a) (8))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479440 / 944- 210- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 942- SubTopic 360 ~~- Section 50- Paragraph 1- URI https: / / asc. fasb. org / extlink & oid = 124429447 & loc = SL124453093- 239630Reference 4: http: / / www. xbrl. org / 2003 / role / exampleRef- Publisher FASB -~~ Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~ Section ~~55~~ **50** - Paragraph ~~10~~ **1- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480842 / 942** ~~extlink & oid = 84165509 & loc = d3e56426 -~~ ~~112766~~ **360- 50- 1** Details Name: us- gaap_PropertyPlantAndEquipmentNet Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionThe total amount due to the entity within one year of the balance sheet date (or one operating cycle, if longer) from outside sources, including trade accounts receivable, notes and loans receivable, as well as any other types of receivables, net of allowances established for the purpose of reducing such receivables to an amount that approximates their net realizable value. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **exampleRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 852- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 210-~~ Section ~~S99~~ **55** - Paragraph ~~1- Subparagraph (SX 210 -~~ **10** ~~. 7 -~~ **Publisher FASB** ~~03 (a) (5)) -~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147481372 / 852** ~~extlink & oid = 126734703 & loc = d3e572229 - 122910Reference 2~~ **10- 55- 10 Details Name: us- gaap_ReceivablesNetCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of accumulated undistributed earnings (deficit). ReferencesReference 1** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **exampleRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 852- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 946- SubTopic 210-~~ Section ~~S99~~ **55** - Paragraph ~~3- Subparagraph (SX 210 -~~ **10** ~~. 6 -~~ **Publisher FASB** ~~06 (3)) -~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147481372 / 852** ~~extlink & oid = 120401414 & loc = d3e604059 -~~ **10- 55-** ~~122996Reference~~ **10Reference** ~~3~~ **2** : http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~ Section ~~55~~ **65** - Paragraph ~~10~~ **2- Subparagraph (g) (2) (i)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480016 / 944** ~~extlink & oid = 84165509 & loc = d3e56426 -~~ **40** ~~112766 Details Name: us -~~ **65** ~~gaap_ReceivablesNetCurrent Namespace Prefix: us -~~ **2Reference 3** ~~gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionAmount of cash restricted as to withdrawal or usage, classified as current. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. ReferencesReference 1~~ : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 230- SubTopic 10-~~ Section ~~50~~ **65** - Paragraph ~~8~~ **2- Subparagraph (h) (2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480016 / 944** ~~extlink & oid = 126999549 & loc = SL98516268 - 108586Reference 2~~ **40- 65- 2Reference 4** : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **11** - **Publisher FASB** ~~Subparagraph (SX 210. 5- 02 (1)) -~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147480990 / 946** ~~extlink & oid = 120391452 & loc = d3e13212 -~~ **20** ~~122682 Details Name: us -~~ **50** ~~gaap_RestrictedCashCurrent Namespace Prefix: us -~~ **11Reference 5** ~~gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: instantX- DefinitionThe cumulative amount of the reporting entity' s undistributed earnings or deficit. ReferencesReference 1~~ : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 944- SubTopic 210** - Name Accounting Standards Codification- ~~Topic~~

~~210- SubTopic 10-~~Section S99- Paragraph 1- Subparagraph (SX 210. ~~5~~ **7** - **03** ~~02 (30)~~ (a) (~~3~~ **23**) **(a**) **(4))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479440 / 944** ~~extlink & oid = 120391452 & loc = d3e13212~~ - **210- S99-** ~~122682Reference~~ ----- **1Reference** ~~2~~ **6** : http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (17))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946- 210- S99- 1Reference 7: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~852~~ **505** - SubTopic 10 ~~- Section 55- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 84165509 & loc = d3e56426- 112766Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 210-~~Section S99- Paragraph 1- Subparagraph (SX 210. ~~7~~ **3** - **04** ~~03 (a~~) **- Publisher FASB** ~~(23) (a) (4))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 126734703 & loc = d3e572229~~ - **10- S99-** ~~122910Reference~~ ----- **1Reference** ~~4~~ **8** : http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~Section ~~65~~ **S99** - Paragraph ~~2~~ **1** - Subparagraph (~~h)~~ **SX 210. 5- 02** (~~2~~ **30**) **(a) (3))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 124501264 & loc = SL117420844~~ - ~~207641Reference 5~~ **10- S99- 1 Details Name: us- gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. ReferencesReference 1** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **exampleRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 852- SubTopic 10** - Name Accounting Standards Codification- ~~Topic~~ **Section** ~~505~~ - **55** - ~~SubTopic~~ **Paragraph** 10- **Publisher FASB** ~~Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481372 / 852** ~~extlink & oid = 120397183 & loc = d3e187085~~ - **10- 55-** ~~122770Reference~~ ---- **10Reference** ~~6~~ **2** : http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~Section ~~65~~ **55** - Paragraph ~~2~~ **12** - **Publisher FASB** ~~Subparagraph (g) (2) (i)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 124501264 & loc = SL117420844~~ - **830** ~~207641 Details Name: us~~ - **55** ~~gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us~~ - **12Reference 3** ~~gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionTotal of all stockholders' equity (deficit) items, net of receivables from officers, directors, owners, and affiliates of the entity which are attributable to the parent. The amount of the economic entity' s stockholders' equity attributable to the parent excludes the amount of stockholders' equity which is allocable to that ownership interest in subsidiary equity which is not attributable to the parent (noncontrolling interest, minority interest). This excludes temporary equity and is sometimes called permanent equity. ReferencesReference 1~~ : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 235- SubTopic 10-~~Section S99- Paragraph 1- Subparagraph (SX 210. ~~4~~ **6** - ~~08~~ **04** (~~g~~ **19**) ~~(1~~) **- Publisher FASB** ~~(ii))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147479617 / 946** ~~extlink & oid = 120395691 & loc = d3e23780~~ - **210- S99-** ~~122690Reference~~ ----- **1Reference** ~~2~~ **4** : http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 852- SubTopic 10-~~Section ~~55~~ **S99** - Paragraph **2- Subparagraph (SX** ~~10~~ **210 . 6- 05 (4))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479617 / 946** ~~extlink & oid = 84165509 & loc = d3e56426~~ - **210- S99-** ~~112766Reference~~ ----- **2Reference** ~~3~~ **5** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2009** ~~us- gaap~~ / role / **commonPracticeRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 310- SubTopic 10-~~Section S99- Paragraph ~~2~~ **3** - Subparagraph (~~SAB Topic~~ **SX 210. 6- 09 (** 4 ~~. E~~) **(b))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 122038336 & loc = d3e74512~~ - ~~122707Reference 4~~ **220- S99- 3Reference 6** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~Section S99- Paragraph ~~1~~ **3** - Subparagraph (SX 210. ~~5~~ **6** - ~~02~~ **09** (~~31~~ **6**)) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682Reference 5~~ **220- S99- 3Reference 7** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (7))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 3Reference 8: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~210~~ **235** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 9: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~210~~ **323** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (30))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 7: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 10: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 825- SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 8: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 11: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~323~~ **210** - SubTopic 10 - Section 50- Paragraph 3-...... / role / disclosureRef- Publisher FASB - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 12: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~250~~ **210** - SubTopic 10 ~~- Section 45- Paragraph 24- URI https: / / asc. fasb. org / extlink & oid = 124436220 & loc = d3e21930- 107793Reference 2: http: / / www.~~

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E)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480418 / 310- 10- S99- 2 Details Name: us- gaap_StockholdersEquity Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionAmount of equity (deficit) attributable to parent and noncontrolling interest. Excludes temporary equity. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22644- 107794Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 24- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 24Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **250** - SubTopic 10 ~~- Section 50- Paragraph 5- URI https: / / asc. fasb. org / extlink & oid = 124431353 & loc = SL124442411- 227067Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 23- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 23Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~326~~ **250** - SubTopic 10 ~~- Section 65- Paragraph 4- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 122640432 & loc = SL121648383- 210437Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 5- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 5Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~105~~ **326** - SubTopic 10 ~~- Section 65- Paragraph 6- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 126987489 & loc = SL124442142- 165695Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 105- SubTopic 10-~~ Section 65- Paragraph ~~6~~ **5** - Subparagraph (~~d~~ **c**) **(2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479654 / 326** ~~extlink & oid = 126987489 & loc = SL124442142~~ - **10- 65-** ~~165695Reference~~ ----- **5Reference** ~~9~~ **5** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~ Section ~~45~~ **65** - Paragraph ~~16~~ **6- Subparagraph (e)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 126929396 & loc = SL4568740~~ - **20- 65-** ~~111683Reference~~ ----- **6Reference** ~~10~~ **6** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- **Section 65- Paragraph 6- Subparagraph (h) (1)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480528 / 815- 20- 65- 6Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 815- SubTopic **20** ~~40- Section 65- Paragraph 1- Subparagraph (c) (3)- URI https: / / asc. fasb. org / extlink & oid = 126732423 & loc = SL123482106- 238011Reference 11: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 825- SubTopic 10-~~ Section ~~50~~ **65** - Paragraph ~~28~~ **6** - Subparagraph (~~f~~ **h**) **(1) (i)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 123596393 & loc = d3e14064~~ - **20- 65-** ~~108612Reference~~ ----- **6Reference** ~~12~~ **8** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~45~~ **65** - Paragraph ~~5~~ **6** - Subparagraph (~~b~~ **h**) **(1) (iii)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 124436220 & loc = d3e21711~~ - ~~107793Reference 13~~ **20- 65- 6Reference 9** : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 323- SubTopic 10-~~ Section ~~50~~ **65** - Paragraph ~~3~~ **6** - Subparagraph (~~e~~ **h**) **(1) (iv)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 114001798 & loc = d3e33918~~ - ~~111571Reference 14~~ **20- 65- 6Reference 10** : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- **Section 65- Paragraph 6- Subparagraph (i) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480528 / 815- 20- 65- 6Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **848** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~ Section ~~50~~ **65** - Paragraph ~~1~~ **2- Subparagraph (a) (3) (iii) (03)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483550 / 848** ~~extlink & oid = 6450520 & loc = d3e32583~~ - ~~110901Reference 16~~ **10- 65- 2Reference 12** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 105- SubTopic 10** - Name Accounting Standards Codification- **Section 65- Paragraph 6- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479343 / 105- 10- 65- 6Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~740~~ **105** - SubTopic 10 ~~- Section 65- Paragraph 8- Subparagraph (d) (2)- URI https: / / asc. fasb. org / extlink & oid = 126983759 & loc = SL121830611- 158277Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 848- SubTopic 10-~~ Section 65- Paragraph ~~2~~ **6** - Subparagraph (~~a~~ **d**) **- Publisher FASB** ~~(3) (iii) (03)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147479343 / 105** ~~extlink & oid = 125980421 & loc = SL125981372~~ - **10- 65-** ~~237846Reference~~ ----- **6Reference** ~~18~~ **14** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~

Section ~~45~~ **65** - Paragraph ~~17~~ **2- Subparagraph (f) (1)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480016 / 944** ~~extlink & oid = 118261656 & loc = d3e32136-~~ ~~110900Reference 19~~ **40- 65- 2Reference 15** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 2- Subparagraph (f) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480016 / 944- 40- 65- 2Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 740- SubTopic 10 ~~- Section 65- Paragraph 8- Subparagraph (d) (3)- URI https: / / asc. fasb. org / extlink & oid = 126983759 & loc = SL121830611- 158277Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~Section 65- Paragraph **8- Subparagraph (d) (** 2 ~~- Subparagraph (f~~) ~~(2)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482615 / 740** ~~extlink & oid = 124501264 & loc = SL117420844-~~ ~~207641Reference 21~~ **10- 65- 8Reference 17** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 740- SubTopic 10** - Name Accounting Standards Codification- **Section 65- Paragraph 8- Subparagraph (d) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482615 / 740- 10- 65- 8Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~718~~ **326** - SubTopic 10 ~~- Section 65- Paragraph 15- Subparagraph (f) (2)- URI https: / / asc. fasb. org / extlink & oid = 128097895 & loc = SL121327923- 165333Reference 22: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- **Section 65- Paragraph 4- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479654 / 326- 10- 65- 4Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **718** - SubTopic 10 ~~- Section 55- Paragraph 4I- URI https: / / asc. fasb. org / extlink & oid = 120409616 & loc = SL4590271- 111686Reference 23: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~Section 65- Paragraph ~~2~~ **15** - Subparagraph (~~f~~ **e**) ~~(1)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480336 / 718** ~~extlink & oid = 124501264 & loc = SL117420844-~~ **10- 65-** ~~207641Reference~~----- **15Reference** ~~24~~ **20** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 718- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~Section ~~45~~ **65** - Paragraph ~~20~~ **15** - Subparagraph (~~a~~ **f**) **(1)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480336 / 718** ~~extlink & oid = 118261656 & loc = d3e32211-~~ **10- 65-** ~~110900Reference~~ **15Reference** ~~25~~ **21** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef-~~ ~~Publisher FASB~~ **Topic 718- SubTopic 10** - Name Accounting Standards Codification- **Section 65- Paragraph 15- Subparagraph (f) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480336 / 718- 10- 65- 15Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 15- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4568447- 111683Reference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 718- SubTopic 10-~~Section ~~65~~ **50** - Paragraph ~~15~~ **1** - Subparagraph (~~f~~ **b**) (~~1~~ **3**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 128097895 & loc = SL121327923-~~ **10- 50-** ~~165333Reference~~----- **1Reference** ~~27~~ **23** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (e) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (3)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 28: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 7- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 7Reference 25: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~718~~ **220** - SubTopic 10- **Name Accounting Standards Codification-** Section ~~65~~ **Section** 50- Paragraph **22** ~~5- Publisher FASB-~~ URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147482765 / 220~~ **extlink & oid = 126901519 & loc = d3e8736** - ~~10- 50- 5Reference~~ **108599Reference** ~~26~~ **7** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 830- SubTopic 30-~~ Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section 50- Paragraph ~~1~~ **11** - ~~Publisher FASB~~ **Subparagraph (b)** - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481674 / 830~~ **extlink & oid = 124431687 & loc = d3e22694** - ~~30- 50- 1Reference~~ **107794Reference** ~~27~~ **8** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 830- SubTopic 30-~~ Name Accounting Standards Codification- **Topic 260- SubTopic 10-** Section ~~45- Paragraph 17-~~ Paragraph 15- **Publisher FASB** ~~Subparagraph (c)-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147481231 / 810** ~~extlink & oid = 128097895 & loc = SL121327923-~~ ~~165333~~ **10** = ~~126975872 & loc = SL124442552-~~ **45-** ~~122756Reference~~---- **15Reference** ~~2~~ **42** :http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~Name Accounting Standards Codification- Topic ~~946~~ **810** - SubTopic ~~220~~ **10** - Section ~~S99~~ **45** - Paragraph ~~1~~ **16** - **Publisher FASB** ~~Subparagraph (SX 210.6- 07.1 (c))-~~ URI https:/ / asc.fasb.org / **/ 1943274 / 2147481231 / 810** ~~extlink & oid = 120401555 & loc = SL114874292-~~ ~~224272Reference 3~~ **10- 45- 16Reference 43** :http:/ / **fasb** ~~www.xbrl~~ .org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~disclosureRef- Publisher FASB-~~ Name Accounting Standards Codification- Topic ~~470~~ **810** - SubTopic 10- Section ~~S99~~ **55** - Paragraph ~~1A~~ **4I** - ~~Subparagraph (SX 210~~ **Publisher FASB- URI https:/ / asc** . ~~13~~ **fasb.org / / 1943274 / 2147481175 / 810** - ~~01~~ **10- 55- 4I** Details Name: us- gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: **instantX- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassAMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassBMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_InvestmentTypeAxis = rfl_OtherPharmaceuticalsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_InvestmentTypeAxis = us- gaap_HedgeFundsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_InvestmentTypeAxis = rfl_INVESTMENTINDAYTHREELABSINCMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_InvestmentTypeAxis = rfl_InvestmentInCycloTherapeuticsIncMember Namespace Prefix: Data Type: na Balance Type: Period Type: X-**

Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = us- gaap_RelatedPartyMember Namespace Prefix: Data Type: na Balance Type: Period Type: ~~instantConsolidated~~ ------- **Consolidated** Balance Sheets (Parentheticals)- USD ($) $ in Thousands Jul. 31, ~~2022~~ **2023** Jul. 31, ~~2021Allowance~~ **2022Allowance** for doubtful accounts (in Dollars) $ ~~197~~ **245** $ **197Class** ~~193Allowance for losses on related party receivables (in Dollars) Net of allowance for losses on related party receivables (in Dollars) $ 9, 375 $ 0Class~~ A Common Stock Common stock, par value (in Dollars per share) $ 0. 01 $ 0. 01Common stock, shares authorized 35, 000, 000 35, 000, 000Common stock, shares issued 787, 163 787, 163Common stock, shares outstanding 787, 163 787, 163Class B Common Stock Common stock, par value (in Dollars per share) $ 0. 01 $ 0. 01Common stock, shares authorized 200, 000, 000 200, 000, 000Common stock, shares issued 23, **635, 709 23,** 712, **449Common** ~~449 16, 947, 066Common~~ stock, shares outstanding 23, **490, 527 23,** 687, ~~964~~ **964X** 16, 936, 864X- DefinitionThe...... Type: debit Period Type: instantX - DefinitionAmount of allowance for credit loss on accounts receivable, classified as current. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 310- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph **1- Subparagraph (SX 210. 5- 02 (** 4 **))- Publisher FASB** - URI https: / / asc. fasb. org **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 123577603 & loc = d3e5074~~ - **10- S99-** ~~111524Reference~~ ----- **1Reference** 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 326- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 326- SubTopic 20-~~ Section 45- Paragraph 1- **Publisher FASB-** URI https: / / asc. fasb. org **/ 1943274 / 2147479344 / 326** ~~extlink & oid = 124255206 & loc = SL82895884~~ - **20- 45-** ~~210446Reference~~ ----- **1Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 310- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1- Subparagraph (SX 210. 5- 02 (~~ 4 ~~))~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147481962 / 310** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- 50- 4** Details Name: us- gaap_AllowanceForDoubtfulAccountsReceivableCurrent Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantX- DefinitionFace amount or stated value per share of common stock. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_CommonStockParOrStatedValuePerShare Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na Period Type: instantX- DefinitionThe maximum number of common shares permitted to be issued by an entity' s charter and bylaws. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 04 (16) (a))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946- 210- S99- 1Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10- **Name Accounting Standards Codification-** Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_CommonStockSharesAuthorized Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: instantX- DefinitionTotal number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm' s shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_CommonStockSharesIssued Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: instantX- DefinitionNumber of shares of common stock outstanding. Common stock represent the ownership interest in a corporation. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10-** Topic 505- **Publisher FASB** ~~SubTopic 10- Section 50- Paragraph 2~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481112 / 505** ~~extlink & oid = 126973232 & loc = d3e21463~~ - **10- 50-** ~~112644Reference~~ ----- **2Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- **Section 50- Paragraph 22** - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147483575 / 946~~ **extlink & oid = 126901519 & loc = d3e8736** - **108599Reference 7** ~~220- S99- 3Reference 4~~ :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 946- SubTopic 210~~ - Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section ~~S99~~ **50** - Paragraph ~~1~~ **11** - Subparagraph (**b** ~~SX 210.6- 04 (16~~) ~~(a))- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147479617 / 946~~ **extlink & oid = 124431687 & loc = d3e22694** - ~~210- S99- 1Reference~~ **107794Reference** ~~5~~ **8** :http:/ / www.xbrl.org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef- Publisher FASB- Name Accounting Standards Codification** - Topic ~~946~~ **260** - SubTopic ~~220~~ **10** - ~~Name~~ **Section** Topic 210- SubTopic 10- **Name Accounting Standards Codification-** Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_CommonStockSharesOutstanding Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: instantX- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassAMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_StatementClassOfStockAxis = us- gaap_CommonClassBMember Namespace Prefix: Data Type: na Balance Type: Period Type: Consolidated Statements of Operations and Comprehensive Loss- USD ($) $ in Thousands 12 Months EndedJul. 31, ~~2022~~ **2023** Jul. 31, ~~2021REVENUE~~ **2022REVENUE Total revenue** ~~Rental – Third Party~~ $ ~~179~~ **279** $ **410COSTS** ~~214Rental – Related PartyOther – Related PartyTotal revenueCOSTS~~ AND EXPENSES ~~Selling, general~~ **General** and administrative **8, 932**

16, **978Research** ~~978 17, 024Research~~ and development **6, 312** 8, ~~742 4, 907Depreciation~~ -- **742Depreciation** and amortizationProvision for loss on receivable from Cornerstone Pharmaceuticals pursuant to line of credit 25, ~~000 Provision~~ **000Provision** for losses on related party receivables 10, **095Loss** ~~095 Impairment – Altira 7, 000Loss~~ from operations (**15, 043) (** 60, 477 ~~) (28, 199~~) Interest expense (6) ~~(12)~~ Interest ~~incomeGain~~ ---- **income 3,** ~~on sale of building Impairment~~ **253Impairment** of investments- Other Pharmaceuticals (~~724~~ **334**) Impairment of cost method investment- Cornerstone Pharmaceuticals (79, 141) Realized **gain (** loss **)** on available- for- sale securities (45) ~~Unrealized~~ **Realized** ~~(loss)~~ gain on **investment in equity securities Unrealized gain on investment in equity securities Unrealized gain (loss) on** investments **Loss** ~~- Hedge Funds (504) 4, 758Loss~~ from continuing operations before income taxes (**8, 745) (** 139, 972) **Benefit from** ~~(23, 426) Provision for~~ income taxes ~~(18) Equity in (loss) earnings of RP Finance (575)~~ Consolidated **net** loss from continuing operations (**8, 693) (** 140, 547 ~~) (23, 061~~) Discontinued Operations (Note ~~2~~ **3**) Loss from discontinued operations related to 520 Property (**306) (** 1, 830) **Gain** ~~(1, 705) Loss~~ on **disposal of 520 Property 6, 784 Income (loss) from** discontinued operations **6, 478** (1, 830 ~~) (1, 705~~) Consolidated net loss (**2, 215) (** 142, 377 ~~) (24, 766~~) Net loss attributable to noncontrolling interests (**339) (** 17, 719 ~~) (222~~) Net loss attributable to Rafael Holdings, Inc. (**1, 876) (** 124, 658 ~~) (24, 544~~) OTHER COMPREHENSIVE LOSS Consolidated net loss (**2, 215) (** 142, 377 ~~) (24, 766~~) Unrealized loss on available- for- sale securities (**290) (** 63) Foreign currency translation adjustment (**42) (** 5) Total comprehensive loss (**2, 547) (** 142, 445 ~~) (24, 756~~) Comprehensive loss attributable to noncontrolling interests (**336) (** 17, 746 ~~) (37~~) Total comprehensive loss attributable to Rafael Holdings, Inc. **$ (2, 211) $** (124, 699) **Basic and diluted:** ~~(24, 793)~~ Continuing operations ~~loss per share Loss from continuing operations (140, 547) (23, 061) Loss attributable to noncontrolling interests (17, 719) (222) Numerator for loss per share from continuing operations (122, 828) (22, 839) Discontinued operations loss per share Loss from discontinued operations $ (1, 830) $ (1, 705) Loss per share Continuing operations- basic and diluted~~ (in Dollars per share) $ (**0. 36) $ (** 6. 22 ~~) $ (1. 38~~) Discontinued operations ~~- basic and diluted~~ (in Dollars per share) ~~(~~ 0. **28 (0.** 09) **Total basic and diluted** ~~(0. 11) Loss~~ **loss** per ~~common~~ share ~~- basic and diluted~~ (in Dollars per share) $ (**0. 08) $ (** 6. 31 ~~) $ (1. 49~~) Weighted average number of shares used in calculation of loss per share Basic and diluted (in Shares) **23, 263, 211** 19, 767, ~~342 16, 522, 686X- DefinitionThe amount of comprehensive~~ **342Rental – Third Party REVENUE Total revenue $ 171 $ 179Rental – Related Party REVENUE Total revenueOther – Related Party REVENUE Total revenue Cyclo Therapeutics Inc COSTS AND EXPENSES Unrealized gain (** loss ~~attributable to noncontrolling interests~~ **) on investments 2, 663 Hedge Funds COSTS AND EXPENSES Unrealized gain (loss) on investments (504) Day Three Labs Inc COSTS AND EXPENSES Equity in loss (203) RP Finance COSTS AND EXPENSES Equity in loss $ (575) X-** ReferencesNo definition available. Details Name: ~~rfl_ComprehensiveLossAttributableToNoncontrollingInterests~~ **rfl_BasicAndDilutedAbstract** Namespace Prefix: rfl_ Data Type: xbrli: ~~monetaryItemType~~ **stringItemType** Balance Type: ~~debit~~ **na** Period Type: durationX- ReferencesNo definition available. Details Name: ~~rfl_ContinuingOperationsLossPerShareAbstract Namespace Prefix: rfl_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- ReferencesNo definition available. Details Name: rfl_DiscontinuedOperationsLossPerShareAbstract Namespace Prefix: rfl_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- ReferencesNo definition available. Details Name: rfl_DiscontinuedOperationsNote2Abstract~~ **rfl_DiscontinuedOperationsNote3Abstract** Namespace Prefix: rfl_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionAmount impairment of cost method investment rafael pharmaceuticals. ReferencesNo definition available. Details Name: rfl_ImpairmentOfCostMethodInvestmentRafaelPharmaceuticals Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionProvision for loss on receivable pursuant to line of credit. ReferencesNo definition available. Details Name: rfl_ProvisionForLossOnReceivablePursuantToLineOfCredit Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionProvision for losses on related party receivables. ReferencesNo definition available. Details Name: ~~rfl_ProvisionForLossesOnRelatedPartyReceivables~~ **rfl_Provisionforlossesonrelatedpartyreceivables** ~~Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount of revenue recognized from other related party. ReferencesNo definition available. Details Name: rfl_RevenuesOtherRelatedParty Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe net change in the difference between the fair value and the carrying value, or in the comparative fair values, of investments, not including unrealized gains or losses on securities separately or otherwise categorized as trading, available- for- sale, or held- to- maturity, held at each balance sheet date and included in earnings for the period. ReferencesNo definition available. Details Name: rfl_UnrealizedGainOnInvestmentsHedgeFund~~ Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount after tax of increase (decrease) in equity from transactions and other events and circumstances from net income and other comprehensive income, attributable to parent entity. Excludes changes in equity resulting from investments by owners and distributions to owners. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (24))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 2Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~944~~ **942** - SubTopic 220 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (22))- URI https: / / asc. fasb. org / extlink & oid = 120400993 & loc = SL114874131- 224263Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section S99- Paragraph ~~2~~ **1** - Subparagraph (SX 210. ~~5~~ **9** - ~~03~~ **04** (~~24~~ **26**)) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 126953954 & loc = SL114868664 - 224227Reference~~ **220- S99- 1Reference** 3: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef - Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (22))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section 45-~~

~~Paragraph 5- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = d3e557- 108580Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **45** - Paragraph ~~1~~ **1A** - Subparagraph (**c** ~~SX 210. 9- 04 (26~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 120399700 & loc = SL114874048-~~ ~~224260Reference~~ **10- 45- 1AReference** 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~Section 45- Paragraph 1B- Subparagraph (b)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 126968391 & loc = SL7669625-~~ **10- 45-** ~~108580Reference~~ **1BReference** 6: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Topic 220- SubTopic 10- Section 45- Paragraph ~~1A~~ **5** - **Publisher FASB** ~~Subparagraph (c)-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 126968391 & loc = SL7669619-~~ ~~108580~~ **10- 45- 5** Details Name: us- gaap_ComprehensiveIncomeNetOfTax ~~Publisher FASB- URI https:/ / asc~~ **DefinitionThe total amount of revenue recognized for the period from operating leases,including minimum lease revenue,contingent revenue,percentage revenue and sublease revenue** . **ReferencesReference 1** ~~fasb.org / / 1943274 / 2147482790 / 220- 10- 45- 1BReference 8~~ :http:/ / fasb.org / us- gaap / role / ref / ~~legacyRef~~ **otherTransitionRef- Publisher FASB** - Name Accounting Standards Codification- Topic ~~810~~ **840** - SubTopic ~~10~~ **20** - Section ~~55~~ **25** - Paragraph **1** ~~4K- Publisher FASB-~~ URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481175 / 810~~ **extlink & oid = 123415192 & loc = d3e39896** - **112707** ~~10- 55- 4K~~ Details Name:us- ~~gaap_ComprehensiveIncomeNetOfTaxAttributableToNoncontrollingInterest~~ **gaap_OperatingLeasesIncomeStatementLeaseRevenue** Namespace Prefix:us- gaap_ Data Type:xbrli:monetaryItemType Balance Type: ~~debit~~ **credit** Period Type:durationX- ~~DefinitionAmount after~~ Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- ReferencesNo definition available. Details Name: us- gaap_CostsAndExpensesAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionThe current period expense charged against earnings on long- lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 360~~ **Section 45- Paragraph 28- Subparagraph (b)** - SubTopic 10- ~~Section 50~~ **Topic 230** - **Publisher FASB** ~~Paragraph 1- Subparagraph (a)-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147482740 / 230** ~~extlink & oid = 6391035 & loc = d3e2868-~~ **10- 45-** ~~110229Reference-~~ -- **28Reference** 2: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB-~~ Name Accounting Standards Codification- Topic ~~230~~ **360** - SubTopic 10- Section ~~45~~ **50** - Paragraph ~~28~~ **1** - Subparagraph (~~b~~ **a**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482099 / 360** ~~extlink & oid = 126954810 & loc = d3e3602-~~ ~~108585~~ **10- 50- 1** Details Name: us- gaap_DepreciationAndAmortization Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount after tax of gain (loss) not previously recognized resulting from the disposal of a discontinued operation. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 205- SubTopic 20** - Name Accounting Standards Codification- **Section 50- Paragraph 5C- Subparagraph (b) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 5CReference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = d3e957- 107759Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- **Section 45- Paragraph 3B- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483475 / 205- 20- 45- 3BReference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 1- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = d3e1361- 107760Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 1Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 3B- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = SL51721525- 107759Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 205- SubTopic 20-~~Section ~~50~~ **45** - Paragraph ~~5C~~ **3** - **Publisher FASB** ~~Subparagraph (b) (2)-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147483475 / 205** ~~extlink & oid = 109222650 & loc = SL51721675-~~ ~~107760~~ **20- 45- 3** Details Name: us- gaap_DiscontinuedOperationGainLossOnDisposalOfDiscontinuedOperationNetOfTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount ~~before~~ **after** tax of income (loss) from **operations classified as** a discontinued operation. ~~Includes~~ **Excludes** ~~, but is not limited to, the income (loss) from operations during the phase- out period,~~ gain (loss) on disposal ~~,~~ **and provision for** gain (loss) **until** ~~for reversal of write- down (write- down) to fair value, less cost to sell, and adjustments to a prior period gain (loss) on~~ disposal. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 205- SubTopic 20** - Name Accounting Standards Codification- **Section 45- Paragraph 3A- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483475 / 205- 20- 45- 3AReference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 5B- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = SL51721673- 107760Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 5C- Subparagraph (b) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 5CReference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 1- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = d3e1361- 107760Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 205- SubTopic 20-~~ Section 45- Paragraph ~~3A~~ **3- Publisher FASB** - URI https: / / asc. fasb. org / ~~extlink & oid = 109222160 & loc = SL51721523-~~

~~107759Reference 4: http:~~ / **1943274** / **2147483475** ~~fasb. org~~ / ~~us- gaap / role / ref / legacyRef- Publisher FASB- Name Accounting Standards Codification- Topic~~ 205- ~~SubTopic~~ 20- ~~Section~~ 45- Paragraph 4- URI https: /...... SubTopic 20- Section 45- Paragraph 3 ~~- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = d3e957- 107759Reference 8: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB- Name Accounting Standards Codification- Topic 220- SubTopic 10- Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (14))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868664- 224227~~ Details Name: us- ~~gaap_DiscontinuedOperationIncomeLossFromDiscontinuedOperationBeforeIncomeTax~~ --------- **gaap_DiscontinuedOperationIncomeLossFromDiscontinuedOperationDuringPhaseOutPeriodNetOfTax** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit ~~Period Type: durationX- ReferencesNo definition available. Details Name: us- gaap_EarningsPerShareAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na~~ Period Type: durationX- DefinitionThe amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **50** - Paragraph ~~1~~ **3** - **Publisher FASB** ~~Subparagraph (e) (4)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **10- 50-** ~~238011Reference~~ ----- **3Reference** 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **55** - Paragraph ~~3~~ **15- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482635 / 260** ~~extlink & oid = 124431687 & loc = d3e22583-~~ **10- 55-** ~~107794Reference~~ **15Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **65** - Paragraph ~~11~~ **1** - Subparagraph (~~b~~ **e**) **(4)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480175 / 815** ~~extlink & oid = 124431687 & loc = d3e22694-~~ **40- 65-** ~~107794Reference~~ ----- **1Reference** 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1448- 109256Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22595- 107794Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 7- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 7Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 7- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1337- 109256Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **45** - Paragraph ~~1~~ **2** - **Publisher FASB** ~~Subparagraph (f)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **10- 45-** ~~238011Reference~~ ----- **2Reference** 9: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 60B- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 60BReference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **250** - SubTopic 10 ~~- Section 55- Paragraph 52- URI https: / / asc. fasb. org / extlink & oid = 128363288 & loc = d3e4984- 109258Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **4** - **Publisher FASB** ~~Subparagraph (SX 210. 7- 04 (23))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120400993 & loc = SL114874131-~~ **10- 50-** ~~224263Reference~~ ----- **4Reference** 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482662 / 260- 10- 50- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 55- Paragraph 15- URI https: / / asc. fasb. org / extlink & oid = 128363288 & loc = d3e3842- 109258Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 10Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **220** - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22644- 107794Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~1~~ **2** - Subparagraph (~~a~~ **SX 210. 5- 03 (25**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 124432515 & loc = d3e3550-~~ **10- S99-** ~~109257Reference~~ ----- **2Reference** 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section S99- Paragraph ~~2~~ **1** - Subparagraph (SX 210. ~~5~~ **9** - ~~03~~ **04** (~~25~~ **27**)) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 126953954 & loc = SL114868664-~~ ~~224227Reference~~ **220- S99- 1Reference** 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- Publisher FASB- URI https: / / asc. fasb. org**

/ / 1943274 / 2147483586 / 944- 220- S99- 1Reference 16: http: / / www. xbrl. org / 2003 / role / exampleRef- Topic 260- SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1252- 109256Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 55- Paragraph 52- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482635 / 260- 10- 55- 52Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 60B- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = SL5780133- 109256Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **45** - Paragraph ~~1~~ **7** - **Publisher FASB** ~~Subparagraph (SX 210. 9- 04 (27))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 120399700 & loc = SL114874048 -~~ ~~224260~~ **10- 45- 7** Details Name: us- gaap_EarningsPerShareBasic Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na **Period Type: durationX- DefinitionThe aggregate total of expenses of managing and administering the affairs of an entity, including affiliates of the reporting entity, which are not directly or indirectly associated with the manufacture, sale or creation of a product or product line. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 946- SubTopic 220- Name Accounting Standards Codification- Section S99- Paragraph 1- Subparagraph (SX 210. 6- 07 (2) (a))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 1Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 220- SubTopic 10- Name Accounting Standards Codification- Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03. 4)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 2 Details Name: us- gaap_GeneralAndAdministrativeExpense Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit** Period Type: durationX- DefinitionThe amount by which the fair value of an investment is less than the amortized cost basis or carrying amount of that investment at the balance sheet date and the decline in fair value is deemed to be other than temporary, before considering whether or not such amount is recognized in earnings or other comprehensive income. ReferencesReference 1: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / otherTransitionRef** - ~~Publisher FASB~~ **Topic 320- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 320- SubTopic 10-~~ Section 45- Paragraph 8A- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147481830 / 320** ~~extlink & oid = 124260329 & loc = SL6284422 -~~ ~~111562~~ **10- 45- 8A** Details Name: us- gaap_ImpairmentOfInvestments Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount ~~after tax~~ of income (loss) from continuing operations **, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss)** attributable to ~~the~~ noncontrolling interest. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (11))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **280** - SubTopic 10 ~~- Section 45- Paragraph 15- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4568447- 111683Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 22- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 22Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **280** - SubTopic 10 ~~- Section 45- Paragraph 19- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4569616- 111683 Details Name: us- gaap_IncomeLossFromContinuingOperationsAttributableToNoncontrollingEntity Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionThe portion of earnings or loss from continuing operations before income taxes that is attributable to domestic operations. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 30- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 30Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (h) (1))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 5: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~740~~ **280** - SubTopic 10 - Section S99- Paragraph 1-...... / role / disclosureRef- Publisher FASB - Name Accounting Standards Codification- **Section 50- Paragraph 31- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 31Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (e)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section 50- Paragraph ~~30~~ **32** - Subparagraph (~~b~~ **c**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 126901519 & loc = d3e8906 -~~ ~~108599Reference 3~~ **10- 50- 32Reference 7** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 942- SubTopic 235** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~32~~ **1** - Subparagraph (~~f~~ **SX 210. 9- 05 (b**) **(2))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479557 / 942** ~~extlink & oid = 126901519 & loc = d3e8933 -~~ **235- S99-** ~~108599Reference~~ ----- **1Reference** ~~4~~ **8** : http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- **Section 25- Paragraph 1- SubTopic 20-** Topic 940- **Publisher FASB** ~~SubTopic 20- Section 25- Paragraph 1~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481913 / 940** ~~extlink & oid = 126941158 & loc = d3e41242 -~~ **20- 25-** ~~110953Reference~~ ----- **1Reference** ~~5~~ **9** : http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 280~~ **Section S99** - ~~SubTopic~~ **Paragraph 2- Subparagraph (SX 210. 5- 03 (** 10 **))** - **Publisher FASB** ~~Section 50- Paragraph 22~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126901519 & loc = d3e8736 -~~ ~~108599Reference 6~~ **10- S99- 2Reference 10** : http: / / fasb. org / us- gaap / role / ref / legacyRef-

~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~Section S99- Paragraph ~~2~~ **1** - Subparagraph (SX 210. ~~5~~ **9** - ~~03~~ **04** (~~10~~ **15**)) **- Publisher FASB** - URI https: / / asc. fasb. org / ~~extlink & oid = 126953954 & loc = SL114868664- 224227Reference 7: http:~~ / **1943274** / **2147483589** ~~fasb. org~~ / ~~us~~ **942** - ~~gaap / role / ref / legacyRef- Publisher FASB- Name Accounting Standards Codification- Topic 944- SubTopic~~ 220- ~~Section~~ S99- ~~Paragraph~~ 1 - Subparagraph (SX 210. 7...... 120399700 & loc = SL114874048- 224260 Details Name: us- gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount after tax of income (loss) from continuing operations including portion attributable to the noncontrolling interest. ReferencesReference 1: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 810- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 19- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 19Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~323~~ **235** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **323** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **825** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **250** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 235- SubTopic 10-~~Section ~~S99~~ **50** - Paragraph 1- Subparagraph (**b** ~~SX 210. 4- 08 (g~~) (~~1~~ **2**) **- Publisher FASB** ~~(ii))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120395691 & loc = d3e23780~~ - **10- 50-** ~~122690Reference~~ ----- **1Reference** 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~Section ~~50~~ **65** - Paragraph ~~22~~ **1- Subparagraph (f)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480175 / 815** ~~extlink & oid = 126901519 & loc = d3e8736~~ - **40- 65-** ~~108599Reference~~ ----- **1Reference** 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (11))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 22- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 22Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 10: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 13: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 14: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **470** - SubTopic 10 ~~- Section 45- Paragraph 19- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4569616- 111683Reference 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- Publisher FASB- URI**

https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **S99** - Paragraph ~~1~~ **1B** - Subparagraph (~~f~~ **SX 210. 13- 02 (a**) **(4) (iii) (A))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480097 / 470** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **10- S99-** ~~238011Reference---~~ **1BReference** 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 470- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 17: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 18: http: / / www. xbrl. org / 2003 / role / exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 31- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8924- 108599Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 30- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 30Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 30- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8906- 108599Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 21: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~250~~ **280** - SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 31- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 31Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **280** - SubTopic 10- **Name Accounting Standards Codification-** Section 50- Paragraph ~~28~~ **32** - Subparagraph (~~f~~ **c**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 123596393 & loc = d3e14064-~~ ~~108612~~ **10- 50- 32** Details Name: us-gaap_IncomeLossFromContinuingOperationsIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe amount of net income (loss) from continuing operations per each share of common stock or unit outstanding during the reporting period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22583- 107794Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **50** - Paragraph 1- Subparagraph (**b** ~~SX 210. 7- 04 (19~~) **(2**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120399700 & loc = SL114874048-~~ ~~224260Reference~~ **10- 50- 1Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **50** - Paragraph ~~1~~ **11** - Subparagraph (~~f~~ **a**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **10- 50-** ~~238011Reference---~~ **11Reference** 5: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **11** - Subparagraph (**b** ~~SX 210. 7- 04 (11~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120400993 & loc = SL114874131-~~ ~~224263Reference~~ **10- 50- 11Reference** 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 2- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 2Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **260** - SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 60B- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 60BReference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1252- 109256Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~45~~ **50** - Paragraph ~~7~~ **4- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126958026 & loc = d3e1337-~~ ~~109256Reference~~ **10- 50-**

4Reference 9: http: / / www. xbrl. org / ~~2003~~ **2009** / role / ~~disclosureRef~~ **commonPracticeRef** - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **220** - SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~45~~ **S99** - Paragraph ~~60B~~ **2** - Subparagraph (~~d~~ **SX 210. 5- 03 (25**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126958026 & loc = SL5780133-~~ **10- S99-** ~~109256Reference~~ ----- **2Reference** 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 9- 04 (27))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483589 / 942- 220- S99- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **260** - SubTopic 10 ~~- Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (25))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868664- 224227Reference 12: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **45** - Paragraph ~~1~~ **7** - **Publisher FASB** ~~Subparagraph (SX 210. 9- 04 (20))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 120399700 & loc = SL114874048-~~ ~~224260Reference~~ **10- 45- 7Reference** 13: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 03 (13))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 1Reference 14: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 942- SubTopic 220 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 9- 04 (27))- URI https: / / asc. fasb. org / extlink & oid = 120399700 & loc = SL114874048- 224260Reference 14: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~5~~ **9** - ~~03~~ **04** (~~13~~ **20**)) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 126953954 & loc = SL114868656-~~ ~~224227Reference~~ **220- S99- 1Reference** 15: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~4~~ **1- Subparagraph (SX 210. 7- 04 (19))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 124431687 & loc = d3e22595-~~ ~~107794~~ **220- S99- 1** Details Name: us- gaap_IncomeLossFromContinuingOperationsPerBasicShare Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na Period Type: durationX- DefinitionAmount after tax of income (loss) from a discontinued operation including the portion attributable to the noncontrolling interest. Includes, but is not limited to, the income (loss) from operations during the phase- out period, gain (loss) on disposal, gain (loss) for reversal of write- down (write- down) to fair value, less cost to sell, and adjustments to a prior period gain (loss) on disposal. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (12))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483586 / 944** ~~extlink & oid = 120400993 & loc = SL114874131-~~ ~~224263Reference~~ **220- S99- 1Reference** 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 740- SubTopic 270** - Name Accounting Standards Codification- **Section 45- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482551 / 740- 270- 45- 3Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 7- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = SL51721683- 107760Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 7- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 7Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 3B- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = SL51721525- 107759Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 3A- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483475 / 205- 20- 45- 3AReference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 5C- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = SL51721675- 107760Reference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 5C- Subparagraph (b) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 5CReference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = d3e957- 107759Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 3B- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483475 / 205- 20- 45- 3BReference 7: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 50- Paragraph 1- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 109222650 & loc = d3e1361- 107760Reference 7: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 4- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483475 / 205- 20- 45- 4Reference 8: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 3A- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = SL51721523- 107759Reference 8: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 1Reference 9: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 205- SubTopic 20 ~~- Section 45- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 109222160 & loc = d3e1012- 107759Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 740- SubTopic 270-~~ Section 45- Paragraph 3- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 /**

2147483475 / 205 ~~extlink & oid = 109227538 & loc = d3e44648 - 109337~~ **20- 45- 3** Details Name: us- gaap_IncomeLossFromDiscontinuedOperationsNetOfTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionPer basic share amount, after tax, of income (loss) from the day- to- day business activities of the discontinued operation and gain (loss) from the disposal of the discontinued operation. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1278- 109256Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~2~~ **60B** - Subparagraph (**d** ~~SX 210. 5- 03 (25~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126953954 & loc = SL114868664 - 224227Reference~~ **10- 45- 60BReference** 3: http: / / www. xbrl. org / ~~2003~~ **2009** / role / ~~disclosureRef~~ **commonPracticeRef** - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **220** - SubTopic 10 ~~- Section 45- Paragraph 60B- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = SL5780133- 109256Reference 4: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (25))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 2Reference 5: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~944~~ **942** - SubTopic 220 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- URI https: / / asc. fasb. org / extlink & oid = 120400993 & loc = SL114874131- 224263Reference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~7~~ **9** - 04 (~~19~~ **27**)) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 120400993 & loc = SL114874131 - 224263Reference~~ **220- S99- 1Reference** 6: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section ~~S99~~ **45** - Paragraph ~~1- Subparagraph (SX 210.~~ 7- **Publisher FASB** ~~04 (12))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 120400993 & loc = SL114874131 - 224263Reference~~ **10- 45- 7Reference** 7: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~45~~ **S99** - Paragraph ~~7~~ **2- Subparagraph (SX 210. 5- 03 (14))- Publisher FASB** - URI https: / / asc. fasb. org / ~~extlink & oid = 126958026 & loc = d3e1337- 109256Reference 8: http:~~ / **1943274** / **2147483621** ~~www. xbrl. org~~ / ~~2009 / role / commonPracticeRef- Publisher FASB- Name Accounting Standards Codification- Topic 942- SubTopic~~ 220- ~~Section~~ **10-** S99- ~~Paragraph 1- Subparagraph (SX 210. 9- 04 (27))- URI https: / / asc. fasb. org / extlink & oid = 120399700 & loc = SL114874048- 224260Reference 9: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB- Name Accounting Standards Codification- Topic 220- SubTopic 10- Section S99- Paragraph~~ 2 ~~- Subparagraph (SX 210. 5- 03 (14))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868664- 224227~~ Details Name: us- gaap_IncomeLossFromDiscontinuedOperationsNetOfTaxPerBasicShare Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na Period Type: durationX- DefinitionAmount of income (loss) for proportionate share of equity method investee' s income (loss). ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 220~~ **Section 45- Paragraph 28- Subparagraph (b)** - SubTopic 10- ~~Section S99~~ **Topic 230** - **Publisher FASB** ~~Paragraph 2- Subparagraph (SX 210. 5- 03 (12))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482740 / 230** ~~extlink & oid = 126953954 & loc = SL114868664 -~~ **10- 45-** ~~224227Reference~~ **28Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (10))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483586 / 944** ~~extlink & oid = 120400993 & loc = SL114874131 - 224263Reference~~ **220- S99- 1Reference** 3: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 323- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 1- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481664 / 323- 10- 45- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~230~~ **280** - SubTopic 10 ~~- Section 45- Paragraph 28- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 126954810 & loc = d3e3602- 108585Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **22** - Subparagraph (**g** ~~SX 210. 9- 04 (13~~) **- Publisher FASB** ~~(f))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 120399700 & loc = SL114874048 -~~ **10- 50-** ~~224260Reference~~ ---- **22Reference** 5: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~22~~ **2** - Subparagraph (~~g~~ **SX 210. 5- 03 (12**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126901519 & loc = d3e8736- 108599Reference~~ **10- S99- 2Reference** 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 323- SubTopic 10-~~ Section ~~45~~ **S99** - Paragraph 1- **Subparagraph (SX 210. 9- 04 (13) (f))- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 109237563 & loc = d3e33749 - 111570~~ **220- S99- 1** Details Name: us- gaap_IncomeLossFromEquityMethodInvestments Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph**

8- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 8Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~740~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SAB TOPIC 6. I. 7)- URI https: / / asc. fasb. org / extlink & oid = 122134291 & loc = d3e330036- 122817Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 9- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 9Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 740- SubTopic 10 ~~- Section 50- Paragraph 10- URI https: / / asc. fasb. org / extlink & oid = 121826272 & loc = d3e32672- 109319Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 10- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482685 / 740- 10- 50- 10Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **740** - SubTopic 10 ~~- Section 50- Paragraph 22- Subparagraph (h)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SAB TOPIC 6. I. 7)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479360 / 740- 10- S99- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (h))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section 50- Paragraph ~~9~~ **22- Subparagraph (h)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 124431687 & loc = d3e22663- 107794Reference~~ **10- 50- 22Reference** 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 740- SubTopic 20-~~ Section ~~45~~ **S99** - Paragraph ~~2~~ **1** - Subparagraph (~~a~~ **SX 210. 7- 04 (9**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483586 / 944** ~~extlink & oid = 123586238 & loc = d3e38679-~~ **220- S99-** ~~109324Reference~~ ----- **1Reference** 7: http: / / www. xbrl. org / 2003 / role / disclosureRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 2- Subparagraph (a)- SubTopic 20-** Topic ~~944~~ **740** - **Publisher FASB** ~~SubTopic 220- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (9))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482659 / 740** ~~extlink & oid = 120400993 & loc = SL114874131-~~ **20- 45-** ~~224263Reference~~ ----- **2Reference** 8: http: / / www. xbrl. org / 2003 / role / disclosureRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250~~ **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (h))** - SubTopic 10- ~~Section 50~~ **Topic 235** - ~~Paragraph 8~~ **Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480678 / 235** ~~extlink & oid = 124431687 & loc = d3e22658-~~ ~~107794~~ **10- S99- 1** Details Name: us- gaap_IncomeTaxExpenseBenefit Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount of the cost of borrowed funds accounted for as interest expense. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 835- SubTopic 20-~~ Section ~~50~~ **55** - Paragraph ~~1~~ **10** - **Publisher FASB** ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 6450988 & loc = d3e26243-~~ **830- 55-** ~~108391Reference~~ ---- **10Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2009** ~~us- gaap~~ / role / **commonPracticeRef** ~~ref / legacyRef-~~ ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 835- SubTopic 30-~~ Section 45- Paragraph 3- **Subparagraph (i)- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483581 / 946** ~~extlink & oid = 124435984 & loc = d3e28555-~~ **220- 45-** ~~108399Reference~~ ----- **3Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 07 (3))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 22- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~2~~ **22** - Subparagraph (**d** ~~210. 5- 03 (11-~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 126953954 & loc = SL114868664-~~ **10- 50-** ~~224227Reference~~ ---- **22Reference** 5: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic **835- SubTopic 30- Section 45- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482925 / 835- 30- 45- 3Reference 6: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic** 942- SubTopic 220- **Name Accounting Standards Codification-** Section S99- Paragraph 1- Subparagraph (SX 210. 9- 04. 9)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 120399700 & loc = SL114874048-~~ ~~224260 SL124442552~~ **220** - **S99-** ~~122756Reference~~ ----- **1Reference** ~~5~~ **7** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section S99- Paragraph ~~1A~~ **2** - Subparagraph (~~SX~~ 210. ~~13~~ **5** - ~~01~~ **03** (**11** ~~a) (5~~)) **- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126975872 & loc = SL124442526-~~ **10- S99-** ~~122756Reference~~ ----- **2Reference** ~~6~~ **8** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 835- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1B~~ **1** - Subparagraph (~~SX 210.13- 02 (~~ a) **- Publisher FASB** ~~(5))~~ - URI https:/ / asc.fasb.org / **/ 1943274 / 2147483013 / 835- 20- 50- 1** Details Name: us- gaap_InterestExpense Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount of interest income earned from interest bearing assets classified as other. ReferencesNo definition available. Details Name: us- gaap_InterestIncomeOther Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of ~~unrealized and~~ realized gain (loss) on investment in marketable security ~~, including other- than- temporary impairment (OTTI)~~ . ReferencesNo definition available. Details Name: us- ~~gaap_MarketableSecuritiesGainLoss~~ **gaap_MarketableSecuritiesRealizedGainLossExcludingOtherThanTemporaryImpairments** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of unrealized gain (loss) on investment in marketable security. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (7) (c))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126953954 & loc = SL114868664-~~ - ~~224227~~**10- S99- 2** Details Name: us- gaap_MarketableSecuritiesUnrealizedGainLoss ~~Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of unrealized gain (loss) on investment in marketable security, excluding other- than- temporary impairment (OTTI). ReferencesNo definition available. Details Name: us- gaap_MarketableSecuritiesUnrealizedGainLossExcludingOtherThanTemporaryImpairments~~ Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 235- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~Section S99- Paragraph 1- Subparagraph (SX 210. ~~9~~**4** - ~~04~~**08** (~~22~~**g**) **(1**) **(ii))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480678 / 235** ~~extlink & oid = 120399700 & loc = SL114874048~~ - ~~224260Reference~~**10- S99- 1Reference** 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 323- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~**825** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~**220** - SubTopic 10 ~~- Section 50- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22595- 107794Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~Section ~~S99~~**50** - Paragraph ~~1~~**6** - **Publisher FASB** ~~Subparagraph (SX 210. 7- 04 (18))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482765 / 220** ~~extlink & oid = 120400993 & loc = SL114874131~~ - **10- 50-** ~~224263Reference~~ ----- **6Reference** 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~Section ~~65~~**50** - Paragraph ~~1~~**3** - **Publisher FASB** ~~Subparagraph (f)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126732423 & loc = SL123482106~~ - **10- 50-** ~~238011Reference~~ ----- **3Reference** 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~Section 50- Paragraph ~~6~~ **1- Subparagraph (b) (2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 124431353 & loc = SL124452729~~ - ~~227067Reference~~ **10- 50- 1Reference** 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~**250** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 8: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 8- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 8Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~**250** - SubTopic 10 ~~- Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (20))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868664- 224227Reference 9: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 9- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 9Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~230~~**250** - SubTopic 10 ~~- Section 45- Paragraph 28- URI https: / / asc. fasb. org / extlink & oid = 126954810 & loc = d3e3602- 108585Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~**250** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~Section ~~S99~~**50** - Paragraph ~~1A- Subparagraph (SX 210. 13- 01 (a) (~~4 **- Publisher FASB** ~~) (iii) (A))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126975872 & loc = SL124442526~~ - ~~122756Reference~~ **10- 50- 4Reference** 13: http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 470~~ **Section 55** - ~~SubTopic~~ **Paragraph** 10- **Publisher FASB** ~~Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 126975872 & loc = SL124442552~~ - **830- 55-** ~~122756Reference~~ **10Reference** 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~Section ~~S99~~**45** - Paragraph ~~1A~~**7** - **Publisher FASB** ~~Subparagraph (SX 210. 13- 01 (a) (4) (i))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483581 / 946** ~~extlink & oid = 126975872 & loc = SL124442526~~ - **220- 45-** ~~122756Reference~~ ----- **7Reference** 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (18))-**

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SubTopic 10 ~~- Section 50- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22583- 107794Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~235~~ 470 - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~260~~ 470 - SubTopic 10 ~~- Section 45- Paragraph 60B- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = SL5780133- 109256Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 23: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~323~~ 470 - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 23: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~250~~ 470 - SubTopic 10 ~~- Section 50- Paragraph 8- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22658- 107794Reference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 25: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~220~~ 470 - SubTopic 10 ~~- Section 45- Paragraph 1A- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669619- 108580Reference 25: http: / / www. xbrl. org / 2003 / role / exampleRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~280~~ 470 - SubTopic 10 ~~- Section 50- Paragraph 31- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8924- 108599Reference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 27: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~250~~ 470 - SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 27: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 28: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~250~~ 470 - SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 28: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 205- SubTopic 20-~~ Section ~~50~~ S99 - Paragraph ~~7~~ 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470 ~~extlink & oid = 109222650 & loc = SL51721683~~ - 10- S99- ~~107760Reference~~ 1BReference 29: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 280- SubTopic 10 - Name Accounting Standards Codification- Section 50- Paragraph 30- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 30Reference 30: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~220~~ 280 - SubTopic 10 ~~- Section 45- Paragraph 1B- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669625- 108580Reference 30: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 32- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 31: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~280~~ 260 - SubTopic 10 ~~- Section 50- Paragraph 22- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 31: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher~~

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ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 1A- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 1AReference 37: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section 45- Paragraph 1B- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669625- 108580Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 1B- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 1BReference 38: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~810~~ **220** - SubTopic 10 ~~- Section 50- Paragraph 1A- Subparagraph (a) (2)- URI https: / / asc. fasb. org / extlink & oid = 109239629 & loc = SL4573702- 111684Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~8~~ **2- Subparagraph (SX 210. 5- 03 (20))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 124431687 & loc = d3e22658~~ - ~~107794Reference 4~~ **10- S99- 2Reference 39** : http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 9- 04 (22))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483589 / 942- 220- S99- 1 Details Name: us- gaap_NetIncomeLoss Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of Net Income (Loss) attributable to noncontrolling interest. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 1A- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669619- 108580Reference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 8- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 8Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **250** - SubTopic 10 ~~- Section 55- Paragraph 4J- URI https: / / asc. fasb. org / extlink & oid = 120409616 & loc = SL4591551- 111686Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section 50- Paragraph 9- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 124431687 & loc = d3e22663~~ - **10- 50-** ~~107794Reference~~ ----- **9Reference** ~~7~~ **3** : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (17))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 4: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 220- SubTopic 10 ~~- Section 50- Paragraph 6- URI https: / / asc. fasb. org / extlink & oid = 124431353 & loc = SL124452729- 227067 Details Name: us- gaap_NetIncomeLossAttributableToNoncontrollingInterest Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount, after deduction of tax, noncontrolling interests, dividends on preferred stock and participating securities; of income (loss) available to common shareholders. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 6- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482765 / 220- 10- 50- 6Reference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~250~~ **810** - SubTopic 10 ~~- Section 50- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22595- 107794Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~45~~ **50** - Paragraph ~~10~~ **1A- Subparagraph (a) (2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147481203 / 810** ~~extlink & oid = 126958026 & loc = d3e1448~~ - **10- 50-** ~~109256Reference~~ **1AReference** ~~3~~ **6** : http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Topic ~~250~~ **810** - SubTopic 10- Section ~~50~~ **55** - Paragraph ~~11~~ **4J** - **Publisher FASB** ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481175 / 810** ~~extlink & oid = 124431687 & loc = d3e22694~~ - **10- 55-** ~~107794Reference~~ ----- **4JReference** ~~4~~ **7** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards

Codification- **Section 45- Paragraph 1A- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 1AReference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **220** - SubTopic 10 ~~- Section 45- Paragraph 11- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1377- 109256Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~50~~ **45** - Paragraph ~~1~~ **1B** - Subparagraph (a) **- Publisher FASB** - URI https: / / asc. fasb. org / ~~extlink & oid = 124432515 & loc = d3e3550- 109257Reference 6: http:~~ / **1943274** / **2147482790** ~~www. xbrl. org~~ / **220** ~~2003 / role / disclosureRef - Publisher FASB- Name Accounting Standards Codification- Topic 280- SubTopic~~ 10- Section 50- Paragraph 22- URI...... Topic 260- SubTopic 10- Section 45- **1B** Paragraph 60B- Subparagraph (c)...... 126901519 & loc = d3e8933- 108599 Details Name: us- ~~gaap_NetIncomeLossAvailableToCommonStockholdersBasic~~ **gaap_NetIncomeLossAttributableToNoncontrollingInterest** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: ~~credit~~ **debit** Period Type: durationX- DefinitionThe net result for the period of deducting operating expenses from operating revenues. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 280- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 22- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 22Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 31- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8924- 108599Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 30- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 30Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 30- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8906- 108599Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 4: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 31- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 31Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section 50- Paragraph ~~22~~ **32- Subparagraph (c)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 126901519 & loc = d3e8736 - 108599~~ **10- 50- 32** Details Name: us- gaap_OperatingIncomeLoss Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe total amount of revenue recognized for......: credit Period Type: durationX- DefinitionAmount after tax, before reclassification adjustments of other comprehensive income (...... tax expense (benefit), after reclassification adjustments of gain (loss) on foreign currency translation adjustments, foreign currency transactions designated and effective as economic hedges of a net investment in a foreign entity and intra- entity foreign currency transactions that are of a long- term- investment nature. ReferencesReference 1: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~ Section 45- Paragraph ~~21~~ **10A- Subparagraph (a- c)- SubTopic 10- Topic 220- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 118261656 & loc = d3e32262 -~~ **10- 45-** ~~110900Reference -~~ **10AReference** 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 11- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 11Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **830** - SubTopic 10 ~~- Section 45- Paragraph 12- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = d3e640- 108580Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 9- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481839 / 830- 10- 45- 9Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 830- SubTopic 20 ~~- Section 45- Paragraph 5- URI https: / / asc. fasb. org / extlink & oid = 125521441 & loc = d3e30755- 110894Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 35- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482014 / 830- 20- 35- 3Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **830** - SubTopic ~~10~~ **30- Name Accounting Standards Codification** - Section 45- Paragraph ~~10A~~ **12** - **Publisher FASB** ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481694 / 830** ~~extlink & oid = 126968391 & loc = SL7669646 - 108580~~ **30- 45- 12** Details Name: us- ~~gaap_OtherComprehensiveIncomeLossForeignCurrencyTranslationAdjustmentTax~~ **gaap_OtherComprehensiveIncomeForeignCurrencyTransactionAndTranslationGainLossArisingDuringPeriodNetOfTax** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: ~~debit~~ **credit** Period Type: durationX- ReferencesNo definition available. Details Name: us- gaap_OtherComprehensiveIncomeLossNetOfTaxPortionAttributableToParentAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na ~~)~~ **Section 50** - ~~Publisher FASB~~ **Paragraph 22** - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481800 / 320~~ **extlink & oid = 126901519 & loc = d3e8736** - ~~10- 50- 9Reference~~ **108599Reference** ~~2~~ **7** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section ~~45~~ **50** - Paragraph ~~10A~~ **11** - Subparagraph (~~c~~ **b**) ~~- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147482790 / 220~~ **extlink & oid = 124431687 & loc = d3e22694** - ~~10- 45- 10AReference~~ **107794Reference** ~~3~~ **8** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification- **Topic 260- SubTopic 10-** Section ~~45-~~ Period Type: durationX- DefinitionThe consolidated profit or loss for the period, net of income taxes, including the portion attributable to the noncontrolling interest. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 235- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **323** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **825** - SubTopic 10 ~~- Section 45- Paragraph 1A- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669619- 108580Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **250** - SubTopic 10 ~~- Section 50- Paragraph 1A- Subparagraph (a) (1)- URI https: / / asc. fasb. org / extlink & oid = 109239629 & loc = SL4573702- 111684Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section 50- Paragraph ~~9~~ **1- Subparagraph (b) (2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 124431687 & loc = d3e22663-~~ **10- 50-** ~~107794Reference~~ ----- **1Reference** 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 8- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 8Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section 50- Paragraph ~~22~~ **9- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126901519 & loc = d3e8736-~~ **10- 50-** ~~108599Reference~~ ----- **9Reference** 8: http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **55** - Paragraph ~~32~~ **11** - **Publisher FASB** ~~Subparagraph (c)-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 126901519 & loc = d3e8933-~~ **830- 55-** ~~108599Reference~~ **11Reference** 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 205** - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **45** - Paragraph ~~1~~ **3** - Subparagraph (~~f~~ **a**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480767 / 946** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **205- 45-** ~~238011Reference~~ ----- **3Reference** 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~1A~~ **7** - **Publisher FASB** ~~Subparagraph (SX 210. 13- 01 (a) (5))-~~ URI https: / / asc. fasb. org / **/ 1943274 / 2147483581 / 946** ~~extlink & oid = 126975872 & loc = SL124442526-~~ **220- 45-** ~~122756Reference~~ ----- **7Reference** 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (16))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 12: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section 50- Paragraph ~~6~~ **22- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 124431353 & loc = SL124452729-~~ **10- 50-** ~~227067Reference~~ ---- **22Reference** 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~30~~ **1** - Subparagraph (~~b~~ **SX 210. 6- 07 (9**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 126901519 & loc = d3e8906-~~ **220- S99-** ~~108599Reference~~ ----- **1Reference** 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (1) (d))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 3Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~230~~ **810** - SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126954810 & loc = d3e3000- 108585Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 19- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 19Reference 16: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~810~~ **220** - SubTopic 10 ~~- Section 45- Paragraph 19- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4569616- 111683Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 6- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482765 / 220- 10- 50- 6Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~323~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 18: http: / / www. xbrl. org / 2009 / role /**

commonPracticeRef- Topic ~~280~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 205- SubTopic 20-~~ Section ~~50~~ **S99** - Paragraph ~~7~~ **1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480097 / 470** ~~extlink & oid = 109222650 & loc = SL51721683~~ - **10- S99-** ~~107760Reference~~ **1AReference** 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 470- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 235-~~ Section S99- Paragraph ~~1~~ **1B** - Subparagraph (SX 210. ~~9~~ **13** - ~~05~~ **02** (~~b~~ **a**) (~~2~~ **4**) **(i**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480097 / 470** ~~extlink & oid = 120399901 & loc = d3e537907~~ - **10- S99-** ~~122884Reference~~ **1BReference** 23: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 470- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **470** - 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55- 4JReference 34: http: / / www. xbrl. org / 2003 / role / exampleRef- Topic ~~250~~ **810** - SubTopic 10- Section ~~55~~ **50** - Paragraph **22** ~~4K- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481175 / 810~~ **extlink & oid = 126901519 & loc = d3e8736** - **108599Reference 7** ~~10- 55- 4KReference 35~~ :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section ~~45~~ **50** - Paragraph ~~1A~~ **11** - Subparagraph (~~a~~ **b**) ~~- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147482790 / 220~~ **extlink & oid = 124431687 & loc = d3e22694** - ~~10- 45- 1AReference~~ **107794Reference** ~~36~~ **8** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification **- Topic 260- SubTopic 10- Section** Section 50- Paragraph ~~8~~ **1A- Subparagraph (a) (1)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147481203 / 810** ~~extlink & oid = 124431687 & loc = d3e22658~~ - ~~107794~~ **10- 50- 1AReference 39: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 810- SubTopic 10- Name Accounting Standards Codification- Section 50- Paragraph 1A- Subparagraph (c) (1)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 1A** Details Name: us- gaap_ProfitLoss ~~entity and its principal,owners,management,or members~~ **Namespace Prefix:us- gaap_ Data Type:xbrli:monetaryItemType Balance Type:credit Period Type:durationX- DefinitionAmount** of **realized gain** ~~their immediate families;and~~ (~~e~~ **loss**) ~~affiliates~~ **on investment** . ReferencesReference 1:http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section S99- Paragraph ~~1B~~ **1** - Subparagraph (SX 210. ~~13~~ **7** - ~~02~~ **04 (3)** (a) ~~(4~~) **- Publisher FASB** ~~(iv))~~ - URI https:/ / asc.fasb.org / **/ 1943274 / 2147483586 / 944** ~~extlink & oid = 126975872 & loc = SL124442552~~ - ~~122756Reference 2~~ **220- S99- 1 Details Name** : ~~http:/ / fasb.org /~~ us- **gaap_RealizedInvestmentGainsLosses** ~~gaap /~~ Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe aggregate costs incurred (1) in a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service, a new process or technique, or in bringing about a significant improvement to an existing product or process; or (2) to translate research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or the entity' s use, during the reporting period charged to research and development projects, including the costs of developing computer software up to the point in time of achieving technological feasibility, and costs allocated in accounting for a business combination to in- process projects deemed to have no alternative future use. ReferencesReference 1: http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 730- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 1- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482916 / 730- 10- 50- 1Reference 2: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 912- SubTopic 730 ~~- Section 25- Paragraph 1- URI https: / / asc. fasb. org / extlink & oid = 6472174 & loc = d3e58812- 109433Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 985- SubTopic 20-~~ Section ~~50~~ **25** - Paragraph 1- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482517 / 912** ~~extlink & oid = 6501960 & loc = d3e128462~~ - **730- 25-** ~~111756Reference~~ ----- **1Reference** 3: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic ~~730~~ **985** - SubTopic ~~10~~ **20** - Section 50- Paragraph 1- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147481283 / 985** ~~extlink & oid = 6420194 & loc = d3e21568~~ - ~~108373~~ **20- 50- 1** Details Name: us- gaap_ResearchAndDevelopmentExpense Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionAmount of...... xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount of revenue recognized from goods sold, services rendered, insurance premiums, or other activities that constitute an earning process. Includes, but is not limited to, investment and interest income before deduction of interest expense when recognized as a component of revenue, and sales and trading gain (loss). ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 235- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **323** - SubTopic 10 ~~- Section 50- Paragraph 22- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~323~~ **825** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **220** - SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (1))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 2Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 6: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~280~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 32- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8933- 108599Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 7: http: / / www. xbrl.**

org / 2003 / role / disclosureRef- Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 22- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8736- 108599Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - 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Name Accounting Standards Codification- **Section 50- Paragraph 22- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 22Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 280- SubTopic 10 ~~- Section 50- Paragraph 42- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e9054- 108599Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 40- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 40Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 942- SubTopic 235-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **22** - Subparagraph (**a** ~~SX 210. 9- 05 (b~~) **- Publisher FASB** ~~(2))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 120399901 & loc = d3e537907~~ - **10- 50-** ~~122884Reference~~ ---- **22Reference** 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 280- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a)~~

~~(4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 22: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **50** - Paragraph ~~1A~~ **41** - Subparagraph (~~SX 210. 13- 01 (~~ a) **- Publisher FASB** ~~(4) (ii))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 126975872 & loc = SL124442526~~ - **10- 50-** ~~122756Reference~~ ----- **41Reference** 23: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 942- SubTopic 235** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section S99- Paragraph ~~2~~ **1** - Subparagraph (SX 210. ~~5~~ **9** - ~~03~~ **05** (~~1~~ **b**) **(2**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479557 / 942** ~~extlink & oid = 126953954 & loc = SL114868664~~ - ~~224227~~ **235- S99- 1** Details Name: us- gaap_Revenues Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- ReferencesNo definition available. Details Name: us- gaap_RevenuesAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- **DefinitionAmount** ~~DefinitionThe aggregate total costs related to selling a firm' s product and services, as well as all other general and administrative expenses. Direct selling expenses (for example, credit, warranty, and advertising) are expenses that can be directly linked to the sale~~ of **unrealized gain (loss)** ~~specific products. Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for example telephone expenses, Internet, and postal charges. General and administrative expenses include salaries of non~~ - **on investment** ~~- sales personnel, rent, utilities, communication, etc~~ . ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220~~ **Section 45- Paragraph 28- Subparagraph (b)** - SubTopic 10- ~~Section S99~~ **Topic 230** - **Publisher FASB** ~~Paragraph 2- Subparagraph (SX 210. 5- 03. 4)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482740 / 230** ~~extlink & oid = 126953954 & loc = SL114868664~~ - ~~224227~~ **10- 45- 28** Details Name: us- ~~gaap_SellingGeneralAndAdministrativeExpense~~ **gaap_UnrealizedGainLossOnInvestments** Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: ~~debit~~ **credit** Period Type: durationX- ReferencesNo definition available. Details Name: us- gaap_WeightedAverageNumberOfSharesOutstandingAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionNumber of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482662 / 260- 10- 50- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124432515 & loc = d3e3550- 109257Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section 45- Paragraph 10- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126958026 & loc = d3e1448~~ - ~~109256~~ **10- 45- 10** Details Name: us- gaap_WeightedAverageNumberOfSharesOutstandingBasic Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: **durationX- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_RentalThirdPartyMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_RentalRelatedPartyMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_OtherRelatedPartyMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_InvestmentInCycloTherapeuticsIncMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = us- gaap_HedgeFundsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_DayThreeLabsIncMember Namespace Prefix: Data Type: na Balance Type: Period Type: X- Details Name: us- gaap_RelatedPartyTransactionsByRelatedPartyAxis = rfl_RPFinanceLLCMember Namespace Prefix: Data Type: na Balance Type: Period Type:** ~~durationConsolidated~~ -------- **Consolidated** Statements of Operations and Comprehensive Loss (Parentheticals)- $ / shares 12 Months EndedJul. 31, ~~2022~~ **2023** Jul. 31, ~~2021Income~~ **2022Income** Statement [Abstract] Continuing operations- basic and diluted (in Dollars per share) $ (**0. 36) $ (** 6. 22) **Loss per common share** ~~$ (1. 38) Discontinued operations~~ - basic and diluted (in Dollars per share) ~~(~~ 0. **28 (0.** 09) **Total diluted** ~~(0. 11) Loss~~ **loss** per ~~common~~ share ~~- basic and diluted~~ (in Dollars per share) $ (**0. 08) $ (** 6. 31 ~~) $ (1. 49~~) Basic and diluted (in Shares) (in Shares) **23, 263, 211** 19, 767, ~~342~~ **342X** ~~16, 522, 686X~~ - DefinitionThe amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 55- Paragraph 52- URI https: / / asc. fasb. org / extlink & oid = 128363288 & loc = d3e4984- 109258Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **55** - Paragraph ~~7~~ **15** - **Publisher FASB** ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482635 / 260** ~~extlink & oid = 124431687 & loc = d3e22644~~ - **10- 55-** ~~107794Reference~~ **15Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section ~~55~~ **65** - Paragraph ~~15~~ **1- Subparagraph (e) (4)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480175 / 815** ~~extlink & oid = 128363288 & loc = d3e3842~~ - **40- 65-** ~~109258Reference~~ ----- **1Reference** 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815-**

SubTopic 40 - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1252- 109256Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 11- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 11Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 4- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22595- 107794Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 7- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 7Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **260** - SubTopic 10 ~~- Section 50- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22583- 107794Reference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 2- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 2Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 60B- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = SL5780133- 109256Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **45** - Paragraph ~~1~~ **60B** - Subparagraph (~~f~~ **d**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126732423 & loc = SL123482106- 238011Reference~~ 10 **- 45- 60BReference 10** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~ Section ~~S99~~ **50** - Paragraph ~~1~~ **4** - **Publisher FASB** ~~Subparagraph (SX 210. 9- 04 (27))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120399700 & loc = SL114874048~~ - **10- 50-** ~~224260Reference~~ ----- **4Reference** 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482662 / 260- 10- 50- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **220** - SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124432515 & loc = d3e3550- 109257Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (25))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483621 / 220- 10- S99- 2Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~944~~ **942** - SubTopic 220 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- URI https: / / asc. fasb. org / extlink & oid = 120400993 & loc = SL114874131- 224263Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~11~~ **1** - Subparagraph (~~a~~ **SX 210. 9- 04 (27**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483589 / 942** ~~extlink & oid = 124431687 & loc = d3e22694~~ - **220- S99-** ~~107794Reference~~ ----- **1Reference** 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 15: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 7- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1337- 109256Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **55** - Paragraph ~~1~~ **52** - **Publisher FASB** ~~Subparagraph (e) (4)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482635 / 260** ~~extlink & oid = 126732423 & loc = SL123482106~~ - **10- 55-** ~~238011Reference~~ ----- **52Reference** 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~2~~ **7** - **Publisher FASB** ~~Subparagraph (SX 210. 5- 03 (25))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126953954 & loc = SL114868664~~ - ~~224227~~ **10- 45- 7** Details Name: us- gaap_EarningsPerShareDiluted Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na Period Type: durationX- DefinitionThe amount of net income (loss) derived from continuing operations during the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section 50- Paragraph 1- Subparagraph (~~a~~ **b**) **(2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 124432515 & loc = d3e3550~~ - **10- 50-** ~~109257Reference~~ ----- **1Reference** 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~260~~ **250** - SubTopic 10 ~~- Section 45- Paragraph 7- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1337- 109256Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards

Codification- ~~Topic 815- SubTopic 40-~~Section ~~65~~ **50** - Paragraph ~~1~~ **11** - Subparagraph (~~f~~ **a**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126732423 & loc = SL123482106~~ - **10- 50-** ~~238011Reference~~ ---- **11Reference** 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~Section ~~S99~~ **50** - Paragraph ~~1~~ **11** - Subparagraph (**b** ~~SX 210. 7- 04 (23~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 120400993 & loc = SL114874131~~ - ~~224263Reference~~ **10- 50- 11Reference** 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 942- SubTopic 220-~~Section ~~S99~~ **45** - Paragraph ~~1~~ **2** - **Publisher FASB** ~~Subparagraph (SX 210. 9- 04 (27))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 120399700 & loc = SL114874048~~ - **10- 45-** ~~224260Reference~~ ----- **2Reference** 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 60B- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 60BReference 8: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 250- SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 8: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 4- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 4Reference 9: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic 944- SubTopic 220 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (11))- URI https: / / asc. fasb. org / extlink & oid = 120400993 & loc = SL114874131- 224263Reference 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (23))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **260** - SubTopic 10 ~~- Section S99- Paragraph 2- Subparagraph (SX 210. 5- 03 (25))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868664- 224227Reference 10: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482662 / 260- 10- 50- 1Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 03 (13))- URI https: / / asc. fasb. org / extlink & oid = 126953954 & loc = SL114868656- 224227Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~Section ~~45~~ **S99** - Paragraph ~~60B~~ **2** - Subparagraph (~~d~~ **SX 210. 5- 03 (25**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483621 / 220** ~~extlink & oid = 126958026 & loc = SL5780133~~ - **10- S99-** ~~109256Reference~~ ----- **2Reference** 12: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 942- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 9- 04 (27))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483589 / 942- 220- S99- 1Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1252- 109256Reference 13: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 944- SubTopic 220-~~Section ~~S99~~ **45** - Paragraph ~~1- Subparagraph (SX 210.~~ 7- **Publisher FASB** ~~04 (19))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 120400993 & loc = SL114874131~~ - ~~224263Reference~~ **10- 45- 7Reference** 14: http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 220- SubTopic 10** - Name Accounting Standards Codification- ~~.5~~ - **Section 50** ~~03 (13))~~ - ~~Publisher FASB~~ **Paragraph 4** - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147483621 / 220~~ **extlink & oid = 124431687 & loc = d3e22595** - **107794** ~~10- S99- 1~~ Details Name:us- gaap_IncomeLossFromContinuingOperationsPerDilutedShare Namespace Prefix:us- gaap_ Data Type:dtr- types:perShareItemType Balance Type:na Period Type:durationX- DefinitionPer diluted share amount,after tax,of income (loss) from the day- to- day business activities of the discontinued operation and gain (loss) from the disposal of the discontinued operation. ReferencesReference 1:http:/ / www.xbrl.org / 2003 / **role / disclosureRef- Publisher FASB** Topic ~~250~~ **260** - SubTopic 10 ~~- Section 50- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22583- 107794Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 3- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 3Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **260** - SubTopic 10 ~~- Section 50- Paragraph 11- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22694- 107794Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 60B- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 60BReference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **260** - SubTopic 10 - Section 50- Paragraph 4-...... / role / disclosureRef- Publisher FASB - Name Accounting Standards Codification- **Section 45- Paragraph 7- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482689 / 260- 10- 45- 7Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~260~~ **810** - SubTopic 10 ~~- Section 45- Paragraph 7- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1337- 109256Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~Section S99- Paragraph 5- Subparagraph (SAB Topic 5. E)- **Publisher FASB-** URI https: / / asc. fasb. org / ~~extlink & oid = 120398118 & loc = d3e355146- 122828Reference 3: http:~~ / **1943274** / **2147479836** ~~www. xbrl. org~~ / **810** ~~2003 / role / disclosureRef~~ - ~~Publisher FASB- Name Accounting Standards Codification- Topic 260- SubTopic~~ 10- **S99** ~~Section 45~~ - **5** ~~Paragraph 60B- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = SL5780133- 109256Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB- Name Accounting Standards Codification- Topic 260- SubTopic 10- Section 45- Paragraph 3- URI https: / / asc. fasb. org / extlink & oid = 126958026 & loc = d3e1278- 109256~~ Details Name: us- gaap_IncomeLossFromDiscontinuedOperationsNetOfTaxPerDilutedShare Namespace Prefix: us- gaap_ Data Type: dtr- types: perShareItemType Balance Type: na Period Type: durationX- ReferencesNo definition available. Details Name: us-gaap_IncomeStatementAbstract Namespace Prefix: us- gaap_ Data Type: xbrli: stringItemType Balance Type: na Period Type: durationX- DefinitionThe average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 260- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 1- Subparagraph (a)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482662 / 260- 10- 50- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 260- SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 124432515 & loc = d3e3550- 109257Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 260- SubTopic 10-~~ Section 45- Paragraph 16- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482689 / 260** ~~extlink & oid = 126958026 & loc = d3e1505 -~~ ~~109256~~ **10- 45- 16** Details Name: us- gaap_WeightedAverageNumberOfDilutedSharesOutstanding Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationConsolidated Statements of **Shareholders** Equity **(Deficit)** - USD ($) $ in Thousands ~~Total~~ **Series A Common Stock Series A Series B Common Stock Series B** Additional Paid- in Capital Accumulated Deficit Accumulated other comprehensive income Noncontrolling interests **TotalBalance** ~~Series A Common StockSeries B Common StockBalance~~ at Jul. 31, ~~2020~~ **2021** ~~$ 130, 528 $ 129, 136 $ (16, 255) $ 3, 762 $ 13, 728~~ $ 8 $ **169 $ 159, 136 $ (40, 799) $ 3, 772 $ 14, 418 $ 136,** ~~149Balance~~ **704Balance** (in Shares) at Jul. 31, ~~2020~~ **2021** 787, 163 ~~15~~ **16** , ~~028~~ **936** , ~~536Net~~ **864 Net** loss (~~24~~ **124** , ~~766~~ **658**) (~~24~~ **17** , ~~544~~ **719**) (~~222~~ **142, 377**) Stock- based compensation ~~6, 633 6, 623~~ $ **16 18, 045 18,** ~~10Stock~~ - **061Stock** - based compensation (in Shares) ~~965, 938Shares issued- Investment in Altira 8, 501 8, 498 $ 3Shares issued- Investment in Altira (in Shares) 280, 323Shares issued- Securities Purchase Agreement 13, 000 12, 994 $ 6Shares issued- Securities Purchase Agreement (in Shares) 567, 437Shares withheld for payroll taxes (185) (185) Shares withheld for payroll taxes (in Shares) (7, 214) Warrants exercised 2, 000~~ 1, ~~999 $ 1Warrants exercised (in Shares) 87, 298Stock options exercised Stock options exercised (in Shares) 14, 546Capital contribution for noncontrolling interest Foreign currency translation adjustment Balance at Jul. 31, 2021 136, 704 159, 136 (40, 799) 3, 772 14, 418 $ 8 $ 169Balance (in Shares) at Jul. 31, 2021 787, 163 16, 936, 864Net loss (142, 377) (124, 658) (17, 719) Stock- based compensation 18, 061 18, 045 $ 16Stock- based compensation (in Shares) 1,~~ 533, **311** ~~311Forfeiture~~ --- **Forfeiture** of restricted stock **$ (9)** (18, **969) (18,** 978 ~~) (18, 969) $ (9~~) Forfeiture of restricted stock (in Shares) (943, 305) Common stock sold to investors **$ 28** 99, ~~170~~ **142** 99, **170Common** ~~142 $ 28Common~~ stock sold to investors (in Shares) 2, 833, **425** ~~425Transaction~~ --- **Transaction** costs incurred in connection with sale of common stock (6, 228) (6, 228) **Common stock sold to related party $ 33 10, 964 10, 997Common stock sold to related party (in Shares) 3, 338, 307 Shares withheld for payroll taxes (75) (75) Shares withheld for payroll taxes (in Shares) (10, 638) Unrealized loss on available- for- sale securities (63) (63)** Acquisition of additional ownership interest in LipoMedix (8) ~~Common stock sold to related party 10~~ **Foreign currency translation adjustment (5) (5) Balance at Jul. 31** , **2022** ~~997 10, 964~~ $ ~~33Common stock sold to related party~~ **8 $ 237 262, 023 (165, 457) 3, 704 (3, 309) 97, 206Balance** (in Shares) **at Jul. 31, 2022 787, 163 787, 163 23, 687, 964 23, 687, 964 Net loss (1, 876) (339) (2, 215) Stock- based compensation $ 2** 3, ~~338~~ **089 3** , **091Stock- based compensation (in** ~~307Shares~~ --- **Shares** ~~withheld for payroll taxes~~ **) 220, 019 Forfeiture of restricted stock $** (**2) (901) (903) Forfeiture of restricted stock (in Shares) (296,** ~~75~~ **759** ~~) (75~~) Shares withheld for payroll taxes **$ (1) (217) (218) Shares withheld for payroll taxes** (in Shares) (~~10~~ **120** , ~~638~~ **697**) Unrealized loss on available- for- sale securities (~~63~~ **290**) (~~63~~ **290) Acquisition of additional ownership interest in LipoMedix (16**) Foreign currency translation adjustment (~~5~~ **42**) (~~5~~ **42**) Balance at Jul. 31, ~~2022 $ 97, 206 $ 262, 023~~ **2023** ~~$ (165, 457) $ 3, 704 $ (3, 309)~~ $ 8 $ **236 $ 264, 010 $ (167, 333) $ 3, 372 $ (3, 664) $ 96,** ~~237Balance~~ **629Balance** (in Shares) at Jul. 31, ~~2022~~ **2023 787, 163** 787, 163 23, ~~687~~ **490** , ~~964X~~ **527 23, 490, 527 X** - ~~DefinitionCapital contribution for noncontrolling~~ **DefinitionNumber of shares of common stock outstanding. Common stock represent the ownership** interest ~~. ReferencesNo definition available. Details Name: rfl_CapitalContributionForNoncontrollingInterest Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionShares withheld for payroll taxes. ReferencesNo definition available. Details Name: rfl_SharesWithheldForPayrollTaxesinShares Namespace Prefix: rfl_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionShares issued- Investment~~ in **a corporation** ~~Altira. ReferencesNo definition available. Details Name: rfl_StockIssuedDuringPeriodSharesIssuedInvestment Namespace Prefix: rfl_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionShares issued- Investment in Altira. ReferencesNo definition available. Details Name: rfl_StockIssuedDuringPeriodSharesIssuedInvestmentShares Namespace Prefix: rfl_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionAmount of increase in additional paid in capital (APIC) resulting from the issuance of warrants. Includes allocation of proceeds of debt securities issued with detachable stock purchase warrants~~ . ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 470- SubTopic 20-~~ Section ~~25~~ **50** - Paragraph 2- **SubTopic 10- Topic 505- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147481112 / 505** ~~extlink & oid = 123466302 & loc = d3e4724~~ - **10- 50-** ~~112606Reference~~ ----- **2Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef - Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph 2- **Subparagraph (SX 210. 6- 05 (4))- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147479617 / 946** ~~extlink & oid = 126973232 & loc = d3e21463~~ - **210- S99-** ~~112644Reference~~ ----- **2Reference** 3: http: / / ~~fasb~~ **www** . **xbrl.** org / **2009** ~~us- gaap~~ / role / **commonPracticeRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~ Section S99- Paragraph ~~1~~ **3** - Subparagraph (SX 210. ~~3~~ **6** - ~~04~~ **09** **(4**) **(b))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 120397183 & loc = d3e187085~~ - **220** ~~122770 Details Name: us~~ - **S99** ~~gaap_AdjustmentsToAdditionalPaidInCapitalWarrantIssued Namespace Prefix: us~~ - **3Reference 4** ~~gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount before tax of foreign currency transaction realized and unrealized gain (loss) recognized in the income~~

~~statement. ReferencesReference 1~~ : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 210** - Name Accounting Standards Codification- ~~Topic 830- SubTopic 20-~~ Section ~~45~~ **S99** - Paragraph 1- **Subparagraph (SX 210. 6- 04 (16) (a))- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147479617 / 946** ~~extlink & oid = 125521441 & loc = d3e30690-~~ **210- S99-** ~~110894Reference~~ ----- **1Reference** ~~2~~ **5** : http: / / www. xbrl. org / ~~2003~~ **2009** / role / ~~disclosureRef~~ **commonPracticeRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 830- SubTopic 20-~~ Section ~~35~~ **S99** - Paragraph ~~1~~ **3- Subparagraph (SX 210. 6- 09 (7))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 123602790 & loc = d3e30226-~~ ~~110892Reference 3~~ **220- S99- 3Reference 6** : http: / / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 830- SubTopic 10-~~ Section ~~45~~ **S99** - Paragraph ~~17~~ **1- Subparagraph (SX 210. 5- 02 (29))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 126980362 & loc = d3e28228-~~ ~~110885Reference 4~~ **10- S99- 1 Details Name: us- gaap_CommonStockSharesOutstanding Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: instantX- DefinitionAmount, before tax, of realized and unrealized gain (loss) from foreign currency transaction. ReferencesReference 1** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 6- 07 (7))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 830- SubTopic 20- ~~))~~ **Name Accounting Standards Codification- Section 35- Paragraph 1- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147482014 / 830** ~~extlink & oid = 126975872 & loc = SL124442552-~~ **20- 35-** ~~122756Reference~~ ----- **1Reference** ~~5~~ **3** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 830- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~1A~~ **1** - **Publisher FASB** ~~Subparagraph (SX 210.13- 01 (a) (5))-~~ URI https:/ / asc.fasb.org / **/ 1943274 / 2147481956 / 830** ~~extlink & oid = 126975872 & loc = SL124442526-~~ **20- 45-** ~~122756Reference~~ ----- **1Reference** ~~6~~ **4** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 830- SubTopic 20** - Name Accounting Standards Codification- Section 50- Paragraph 1- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147481926 / 830** ~~extlink & oid = 124440516 & loc = d3e30840-~~ ~~110895~~ **20- 50- 1Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 830- SubTopic 10- Name Accounting Standards Codification- Section 45- Paragraph 17- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481839 / 830- 10- 45- 17** Details Name: us- gaap_ForeignCurrencyTransactionGainLossBeforeTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAmount, after tax and before adjustment, of unrealized holding gain (loss) on investment in debt security measured at fair value with change in fair value recognized in other comprehensive income (available- for- sale). Excludes unrealized gain (loss) on investment in debt security measured at amortized cost (held- to- maturity) from transfer to available- for- sale. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 320- SubTopic 10** - Name Accounting Standards Codification- **Section 50- Paragraph 9- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481800 / 320- 10- 50- 9Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10 ~~- Section 45- Paragraph 10A- Subparagraph (e)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669646- 108580Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 10A- Subparagraph (e)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482790 / 220- 10- 45- 10AReference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 220- SubTopic 10- **Name Accounting Standards Codification-** Section 45- Paragraph 11- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147482790 / 220** ~~extlink & oid = 126968391 & loc = d3e637-~~ ~~108580~~ **10- 45- 11** Details Name: us- gaap_OtherComprehensiveIncomeUnrealizedHoldingGainLossOnSecuritiesArisingDuringPeriodNetOfTax Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionThe consolidated profit or loss for the period, net of income taxes, including the portion attributable to the noncontrolling interest. ReferencesReference 1: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 235- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480678 / 235- 10- S99- 1Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~235~~ **323** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 3- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481687 / 323- 10- 50- 3Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **825** - SubTopic 10 ~~- Section 45- Paragraph 1A- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669619- 108580Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 28- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482907 / 825- 10- 50- 28Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **250** - SubTopic 10 ~~- Section 50- Paragraph 1A- Subparagraph (a) (1)- URI https: / / asc. fasb. org / extlink & oid = 109239629 & loc = SL4573702- 111684Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section 50- Paragraph ~~9~~ **1- Subparagraph (b) (2)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 124431687 & loc = d3e22663-~~ **10- 50-** ~~107794Reference~~ ----- **1Reference** 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 1- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526-~~

~~122756Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 8- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 8Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (i))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 7: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section 50- Paragraph ~~22~~ **9- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483443 / 250** ~~extlink & oid = 126901519 & loc = d3e8736~~ - **10- 50-** ~~108599Reference~~ ----- **9Reference** 8: http: / / www. xbrl. org / 2003 / role / ~~disclosureRef~~ **exampleRef** - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **55** - Paragraph ~~32~~ **11** - **Publisher FASB** ~~Subparagraph (e)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 126901519 & loc = d3e8933~~ - **830- 55-** ~~108599Reference~~ **11Reference** 9: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 205** - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~ Section ~~65~~ **45** - Paragraph ~~1~~ **3** - Subparagraph (~~f~~ **a**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480767 / 946** ~~extlink & oid = 126732423 & loc = SL123482106~~ - **205- 45-** ~~238011Reference~~ ----- **3Reference** 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section ~~S99~~ **45** - Paragraph ~~1A~~ **7** - **Publisher FASB** ~~Subparagraph (SX 210. 13- 01 (a) (5))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147483581 / 946** ~~extlink & oid = 126975872 & loc = SL124442526~~ - **220- 45-** ~~122756Reference~~ ----- **7Reference** 11: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 7- 04 (16))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483586 / 944- 220- S99- 1Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 12: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section 50- Paragraph ~~6~~ **22- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 124431353 & loc = SL124452729~~ - **10- 50-** ~~227067Reference~~ ---- **22Reference** 13: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 280- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph ~~30~~ **1** - Subparagraph (~~b~~ **SX 210. 6- 07 (9**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 126901519 & loc = d3e8906~~ - **220- S99-** ~~108599Reference~~ ----- **1Reference** 14: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (1) (d))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 3Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~230~~ **810** - SubTopic 10 ~~- Section 45- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126954810 & loc = d3e3000- 108585Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 19- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481231 / 810- 10- 45- 19Reference 16: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~810~~ **220** - SubTopic 10 ~~- Section 45- Paragraph 19- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4569616- 111683Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 6- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482765 / 220- 10- 50- 6Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~323~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (c)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (i))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 18: http: / / www. xbrl. org / 2009 / role / commonPracticeRef-** Topic ~~280~~ **470** - 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**10- S99-** ~~107760Reference~~ **1AReference** 20: http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 470- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 1- Subparagraph (b) (2)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22499- 107794Reference 21: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1AReference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~825~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 28- Subparagraph (f)- URI https: / / asc. fasb. org / extlink & oid = 123596393 & loc = d3e14064- 108612Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - 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/ / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 470- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (A))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~280~~ **470** - SubTopic 10 ~~- Section 50- Paragraph 31- URI https: / / asc. fasb. org / extlink & oid = 126901519 & loc = d3e8924- 108599Reference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 25: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **470** - SubTopic 10 ~~- Section 45- Paragraph 1B- Subparagraph (a)- URI https: / / asc. fasb. org / extlink & oid = 126968391 & loc = SL7669625- 108580Reference 25: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iv))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic 470- SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iv))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480097 / 470- 10- S99- 1BReference 27: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (iii) (A))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 27: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 30- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 30Reference 28: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (5))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 28: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 32- Subparagraph (f)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 32Reference 29: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1B- Subparagraph (SX 210. 13- 02 (a) (4) (iii) (B))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442552- 122756Reference 29: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 31- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482810 / 280- 10- 50- 31Reference 30: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~470~~ **280** - SubTopic 10 ~~- Section S99- Paragraph 1A- Subparagraph (SX 210. 13- 01 (a) (4) (ii))- URI https: / / asc. fasb. org / extlink & oid = 126975872 & loc = SL124442526- 122756Reference 30: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~ Section 50- Paragraph ~~1A~~ **32** - Subparagraph (c) ~~(1)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482810 / 280** ~~extlink & oid = 109239629 & loc = SL4573702~~ - ~~111684Reference~~ **10- 50- 32Reference** 31: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 942- SubTopic 235** - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~ Section ~~55~~ **S99** - Paragraph ~~4J~~ **1- Subparagraph (SX 210. 9- 05 (b) (2))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479557 / 942** ~~extlink & oid = 120409616 & loc = SL4591551~~ - **235- S99-** ~~111686Reference~~ ----- **1Reference** 32: http: / / www. xbrl. org / 2003 / role / ~~exampleRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 205- SubTopic 20** - Name Accounting Standards Codification- **Section 50- Paragraph 7- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483499 / 205- 20- 50- 7Reference 33: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic 810- SubTopic 10 ~~- Section 55- Paragraph 4K- URI https: / / asc. fasb. org / extlink & oid = 120409616 & loc = SL4591552- 111686Reference 33: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 55- Paragraph 4J- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481175 / 810- 10- 55- 4JReference 34: http: / / www. xbrl. org / 2003 / role / exampleRef-** Topic ~~250~~ **810** - SubTopic 10- Section ~~55~~ **50** - Paragraph **22** ~~4K- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481175 / 810~~ **extlink & oid = 126901519 & loc = d3e8736** - **108599Reference 7** ~~10- 55- 4KReference 35~~ :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section ~~45~~ **50** - Paragraph ~~1A~~ **11** - Subparagraph (~~a~~ **b**) ~~- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147482790 / 220~~ **extlink & oid = 124431687 & loc = d3e22694** - ~~10- 45- 1AReference~~ **107794Reference** ~~36~~ **8** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- **Publisher FASB** ~~Topic 220- SubTopic 10~~ - Name Accounting Standards Codification **- Topic 260- SubTopic 10- Section** Section 50- Paragraph ~~8~~ **1A- Subparagraph (a) (1)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147481203 / 810** ~~extlink & oid = 124431687 & loc = d3e22658~~ - ~~107794~~ **10- 50- 1AReference 39: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 810- SubTopic 10- Name Accounting Standards Codification- Section 50- Paragraph 1A- Subparagraph (c) (1)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481203 / 810- 10- 50- 1A** Details Name: us- gaap_ProfitLoss Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionNumber of shares issued **during** ~~which are neither cancelled nor held in~~ the ~~treasury~~ **period as a result of an employee stock purchase plan** . **ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- Name Accounting Standards Codification- Section 50- Paragraph 2- SubTopic 10- Topic 505- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50-** ~~ReferencesNo~~ --- **2Reference** ~~definition available~~ **2: http: / / fasb** . ~~URI https:/ / asc.fasb.org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 2:http:/ / fasb.~~ org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 850- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph 1- Subparagraph (~~d~~ **SX 210.5- 02 (28**) **)- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 6457730 & loc = d3e39549~~ - **10- S99-** ~~107864Reference~~ ----- **1Reference** 3:http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 505- SubTopic 10** - Name Accounting Standards

Codification- ~~Topic 850- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph **1- Subparagraph (SX 210.** 3 **- 04)- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 6457730 & loc = d3e39603-~~ **10- S99-** ~~107864Reference~~ ----- **1Reference** 4:http:/ / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210.5- 02 (~~3~~ **29**) ~~(b~~) ~~)~~ **- Publisher FASB** - URI https:/ / asc.fasb.org / ~~extlink~~ **/ 1943274 / 2147480566 / 210- 10- S99- 1** Details Name: us- ~~gaap_SharesOutstanding~~ **gaap_StockIssuedDuringPeriodSharesEmployeeStockPurchasePlans** Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: ~~instantX~~ **durationX** - DefinitionNumber of shares issued in lieu of cash for services contributed to the entity. Number of shares includes, but is not limited to, shares issued for services contributed by vendors and founders. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodSharesIssuedForServices Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionNumber of new stock issued during the period. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- ~~Topic 210~~ **Section 50- Paragraph 2** - SubTopic 10- ~~Section S99~~ **Topic 505** - **Publisher FASB** ~~Paragraph 1- Subparagraph (SX 210. 5- 02 (29))~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481112 / 505** ~~extlink & oid = 120391452 & loc = d3e13212-~~ **10- 50-** ~~122682Reference~~ ----- **2Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 505** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~ Section 50- Paragraph 2- **Subparagraph (a)- Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147481004 / 946** ~~extlink & oid = 126973232 & loc = d3e21463-~~ **505- 50-** ~~112644Reference~~ ----- **2Reference** 3: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- **Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (4) (b))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 3Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~505~~ **946** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- URI https: / / asc. fasb. org / extlink & oid = 120397183 & loc = d3e187085- 122770Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ - Name Accounting Standards Codification- **Section S99- Paragraph 3- Subparagraph (SX 210. 6- 03 (i) (1))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479886 / 946- 10- S99- 3Reference 5: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10- **Name Accounting Standards Codification-** Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212-~~ - ~~122682~~ **10** ~~loc = SL124442552-~~ - **S99-** ~~122756Reference~~ ----- **1Reference** ~~2~~ **6** :http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 505- SubTopic 10** - Name Accounting Standards Codification ~~- Topic 946- SubTopic 220-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~6~~ **3** - **04** ~~07.1 (e~~) ~~)~~ **- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 120401555 & loc = SL114874292-~~ ~~224272Reference 3~~ **10- S99- 1Reference 7** :http:/ / **fasb** ~~www.xbrl~~ .org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section S99- Paragraph ~~1A~~ **1** - Subparagraph (SX 210. ~~13~~ **5** - ~~01~~ **02** (**29** ~~a) (4) (iii) (B~~)) **- Publisher FASB** - URI https:/ / asc.fasb.org / ~~extlink~~ **/ 1943274 / 2147480566 / 210- 10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodSharesNewIssues Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionNumber of shares ~~of~~ **related to Restricted** ~~stock~~ **Stock Award forfeited during** ~~issued attributable to transactions classified as other~~ -- **the period** . **ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- Name Accounting Standards Codification- Section 50- Paragraph 2- SubTopic 10- Topic 505- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50-** ~~ReferencesNo~~ --- **2Reference** ~~definition available~~ **2: http: / / fasb** . ~~URI https:/ / asc.fasb.org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 2:http:/ / fasb.~~ org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 850- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph 1- Subparagraph (~~d~~ **SX 210.5- 02 (28**) **)- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 6457730 & loc = d3e39549-~~ **10- S99-** ~~107864Reference~~ ----- **1Reference** 3:http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 505- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 850- SubTopic 10-~~ Section ~~50~~ **S99** - Paragraph **1- Subparagraph (SX 210.** 3 **- 04)- Publisher FASB** - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 6457730 & loc = d3e39603-~~ **10- S99-** ~~107864Reference~~ ----- **1Reference** 4:http:/ / ~~www~~ **fasb** . ~~xbrl.~~ org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210.5- 02 (~~3~~ **29**) ~~(b~~) ~~)~~ **- Publisher FASB** - URI https:/ / asc.fasb.org / ~~extlink~~ **/ 1943274 / 2147480566 / 210- 10- S99- 1** Details Name: us- **gaap_StockIssuedDuringPeriodSharesRestrictedStockAwardForfeited** ~~gaap_StockIssuedDuringPeriodSharesOther Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionNumber of shares of stock issued during the period as part of a transaction to acquire assets that do not qualify as a business combination. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodSharesPurchaseOfAssets~~ Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionNumber, after forfeiture, of shares or units issued under share- based payment arrangement. Excludes shares or units issued under employee stock ownership plan (ESOP). ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10-** Topic 505- **Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50- 2Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 210-** SubTopic 10 ~~- Section 50- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126973232 & loc = d3e21463- 112644Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB-~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 505-

SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- URI https: / / asc. fasb. org / extlink & oid = 120397183 & loc = d3e187085- 122770Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480008 / 505- 10- S99- 1Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodSharesShareBasedCompensation Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- ~~DefinitionNumber of shares (or other type of equity) forfeited during the period. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodSharesShareBasedCompensationForfeited Namespace Prefix: us- gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX-~~DefinitionValue of stock issued pursuant to acquisitions during the period. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10-** Topic 505- **Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50- 2Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 505-** SubTopic 10 ~~- Section 50- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126973232 & loc = d3e21463- 112644Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 120397183 & loc = d3e187085~~ - **10- S99-** ~~122770Reference~~ ----- **1Reference** 3: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic 210- SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 29- 31)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682~~ **10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodValueAcquisitions Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionAggregate change in value for stock issued during the period as a result of employee stock purchase plan. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10-** Topic 505- **Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50- 2Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Topic 210-** SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- URI https: / / asc. fasb. org / extlink & oid = 120397183 & loc = d3e187085- 122770Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~210~~ **505** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480008 / 505- 10- S99- 1Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section ~~50~~ **S99** - Paragraph ~~2~~ **1- Subparagraph (SX 210. 5- 02 (29))- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 126973232 & loc = d3e21463~~ - ~~112644~~ **10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodValueEmployeeStockPurchasePlan Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionValue of stock issued in lieu of cash for services contributed to the entity. Value of the stock issued includes, but is not limited to, services contributed by vendors and founders. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodValueIssuedForServices Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionEquity impact of the value of new stock issued during the period. Includes shares issued in an initial public offering or a secondary public offering. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10-** Topic 505- **Publisher FASB** ~~SubTopic 10- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481112 / 505** ~~extlink & oid = 120397183 & loc = d3e187085~~ - **10- 50-** ~~122770Reference~~ ----- **2Reference** 2: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **exampleRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 830** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section ~~50~~ **55** - Paragraph ~~2~~ **11- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480167 / 946** ~~extlink & oid = 126973232 & loc = d3e21463~~ - **830- 55-** ~~112644Reference~~ ---- **11Reference** 3: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 205** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~Section ~~S99~~ **45** - Paragraph ~~1~~ **4** - Subparagraph (**a** ~~SX 210. 5- 02 (29~~) ~~)~~ **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480767 / 946** ~~extlink & oid = 120391452 & loc = d3e13212~~ - ~~122682Reference~~ **205- 45- 4Reference** 4: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef~~ - ~~Publisher FASB~~ **Topic 946- SubTopic 505** - Name Accounting Standards Codification- ~~.13~~ **Section 50** - ~~02~~ **Paragraph 2- Subparagraph** (a) **- Publisher FASB** ~~(5))~~ - URI https:/ / asc.fasb.org / **/ 1943274 / 2147481004 / 946** ~~extlink & oid = 126975872 & loc = SL124442552~~ - **505- 50-** ~~122756Reference~~ ----- **2Reference** ~~7~~ **5** :http:/ / www.xbrl.org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 946- SubTopic 220** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~Section S99- Paragraph ~~1A~~ **3** - Subparagraph (SX 210. ~~13~~ **6** - **09** ~~01 (a)~~ (4) (~~iv~~ **b**)) **- Publisher FASB** - URI https:/ /

asc.fasb.org / **/ 1943274 / 2147483575 / 946** ~~extlink & oid = 126975872 & loc = SL124442526 -~~ ~~122756Reference 8~~ **220- S99- 3Reference 6** :http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher~~ Topic 210- SubTopic 10- **Name Accounting Standards Codification-** Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212 -~~ ~~122682~~ **10** ~~loc = SL124442552 -~~ **S99-** ~~122756Reference~~ ----- **1Reference** 7:http:/ / **fasb** ~~www.xbrl~~ .org / ~~2003~~ **us- gaap** / role / ~~disclosureRef~~ **ref / legacyRef** - ~~Publisher FASB~~ **Topic 505- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 470- SubTopic 10-~~ Section S99- Paragraph ~~1A~~ **1** - Subparagraph (SX 210. ~~13~~ **3** - **04** ~~01 (a~~) **- Publisher FASB** ~~(4) (iv))~~ - URI https:/ / asc.fasb.org / **/ 1943274 / 2147480008 / 505** ~~extlink & oid = 126975872 & loc = SL124442526 -~~ **10- S99-** ~~122756Reference~~ ----- **1Reference** 8:http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- ~~Topic 220- SubTopic 10-~~ Section S99- Paragraph ~~2~~ **1** - Subparagraph (SX 210.5- **02** ~~03.1~~ (~~e~~ **29**)) **- Publisher FASB** - URI https:/ / asc.fasb.org / ~~extlink & oid =~~ **/ 1943274 / 2147480566 / 210- 10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodValueNewIssues Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionValue of shares of stock issued attributable to transactions classified as other. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodValueOther ~~Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionValue of shares of stock issued during the period as part of a transaction to acquire assets that do not qualify as a business combination. ReferencesNo definition available. Details Name: us- gaap_StockIssuedDuringPeriodValuePurchaseOfAssets~~ Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionValue of stock related to Restricted Stock Awards forfeited during the period. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- **Section 50- Paragraph 2- SubTopic 10- Topic 505- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147481112 / 505- 10- 50- 2Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~210~~ **505** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480008 / 505- 10- S99- 1Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic ~~505~~ **210** - SubTopic 10 ~~- Section 50- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126973232 & loc = d3e21463- 112644Reference 4: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. ~~3~~ **5** - ~~04~~ **02 (29**) **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120397183 & loc = d3e187085 -~~ ~~122770~~ **10- S99- 1** Details Name: us- gaap_StockIssuedDuringPeriodValueRestrictedStockAwardForfeitures Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: debit Period Type: durationX- DefinitionValue, after forfeiture, of shares issued under share- based payment arrangement. Excludes employee stock ownership plan (ESOP). ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- ~~Publisher FASB~~ **Topic 210- SubTopic 10** - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480566 / 210- 10- S99- 1Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 505- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- URI https: / / asc. fasb. org / extlink & oid = 120397183 & loc = d3e187085- 122770Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480008 / 505- 10- S99- 1Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef-** Topic 210- SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (28))- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~ Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02 (29))- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480566 / 210** ~~extlink & oid = 120391452 & loc = d3e13212 -~~ **10- S99-** ~~122682Reference~~ ----- **1Reference** 4: http: / / fasb. org / us- gaap / role / ref / legacyRef ~~- Publisher FASB~~ - Name Accounting Standards Codification- Topic 718- SubTopic 10- Section 50- Paragraph 2- Subparagraph (d) (1)- **Publisher FASB-** URI https: / / asc. fasb. org / **/ 1943274 / 2147480429 / 718** ~~extlink & oid = 128089324 & loc = d3e5070 -~~ ~~113901~~ **10- 50- 2** Details Name: us- gaap_StockIssuedDuringPeriodValueShareBasedCompensation Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- ~~DefinitionValue~~ **DefinitionAmount** of ~~stock issued as a result of the exercise of stock options~~ **equity (deficit) attributable to parent and noncontrolling interest. Excludes temporary equity** . ReferencesReference 1: http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef -~~ ~~Publisher FASB~~ **Topic 250- SubTopic 10** - Name Accounting Standards Codification- **Section 45- Paragraph 24- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 24Reference 2: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~505~~ **250** - SubTopic 10 ~~- Section 50- Paragraph 2- URI https: / / asc. fasb. org / extlink & oid = 126973232 & loc = d3e21463- 112644Reference 2: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 23- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 23Reference 3: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~505~~ **250** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 3- 04)- URI https: / / asc. fasb. org / extlink & oid = 120397183 & loc = d3e187085- 122770Reference 3: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 45- Paragraph 5-**

Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483421 / 250- 10- 45- 5Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~210~~ **326** - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 5- 02. 29- 31)- URI https: / / asc. fasb. org / extlink & oid = 120391452 & loc = d3e13212- 122682 Details Name: us- gaap_StockIssuedDuringPeriodValueStockOptionsExercised Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: durationX- DefinitionNumber of shares that have been repurchased during the period and have not been retired and are not held in treasury. Some state laws may govern the circumstances under which an entity may acquire its own stock and prescribe the accounting treatment therefore. This element is used when state law does not recognize treasury stock. ReferencesReference 1: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section ~~50~~ **65** - Paragraph **5- Subparagraph (c) (** 2 **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479654 / 326** ~~extlink & oid = 126973232 & loc = d3e21463-~~ ~~112644Reference 2~~ **10- 65- 5Reference 5** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef-~~ ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~Section ~~S99~~ **65** - Paragraph ~~1~~ **6** - Subparagraph (**e** ~~SX 210. 5- 02 (29-~~ ~~)~~ **)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 120391452 & loc = d3e13212-~~ **20- 65-** ~~122682Reference~~ ----- **6Reference** ~~3~~ **6** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef-~~ ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section ~~S99~~ **65** - Paragraph **6- Subparagraph (h) (** 1 ~~- Subparagraph (SX 210. 3- 04-~~) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 120397183 & loc = d3e187085-~~ ~~122770Reference 4~~ **20- 65- 6Reference 7** : http: / / ~~fasb~~ **www** . **xbrl.** org / **2003** ~~us- gaap~~ / role / **disclosureRef** ~~ref / legacyRef-~~ ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 210- SubTopic 10-~~Section ~~S99~~ **65** - Paragraph **6- Subparagraph (h) (** 1 ~~- Subparagraph (SX 210. 5- 02 (28-~~) **(i)**) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 120391452 & loc = d3e13212-~~ **20** ~~122682 Details Name: us-~~ **65** ~~gaap_StockRepurchasedDuringPeriodShares Namespace Prefix: us-~~ **6Reference 8** ~~gaap_ Data Type: xbrli: sharesItemType Balance Type: na Period Type: durationX- DefinitionAmount of stockholders' equity (deficit), net of receivables from officers, directors, owners, and affiliates of the entity, attributable to both the parent and noncontrolling interests. Amount excludes temporary equity. Alternate caption for the concept is permanent equity. ReferencesReference 1~~ : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~Section ~~45~~ **65** - Paragraph ~~24~~ **6- Subparagraph (h) (1) (iii)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 124436220 & loc = d3e21930-~~ ~~107793Reference 2~~ **20- 65- 6Reference 9** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- ~~Topic 505- SubTopic 10-~~Section ~~S99~~ **65** - Paragraph **6- Subparagraph (h) (** 1 ~~- Subparagraph (SX 210. 3- 04-~~) **(iv)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480528 / 815** ~~extlink & oid = 120397183 & loc = d3e187085-~~ ~~122770Reference 3~~ **20- 65- 6Reference 10** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 815- SubTopic 20** - Name Accounting Standards Codification- **Section 65- Paragraph 6- Subparagraph (i) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480528 / 815- 20- 65- 6Reference 11: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **848** - SubTopic 10 ~~- Section 45- Paragraph 23- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124436220 & loc = d3e21914- 107793Reference 4: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 65- Paragraph 2- Subparagraph (a) (3) (iii) (03)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483550 / 848- 10- 65- 2Reference 12: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~250~~ **105** - SubTopic 10 ~~- Section 50- Paragraph 7- Subparagraph (b)- URI https: / / asc. fasb. org / extlink & oid = 124431687 & loc = d3e22644- 107794Reference 5: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 65- Paragraph 6- Subparagraph (c)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479343 / 105- 10- 65- 6Reference 13: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~220~~ **105** - SubTopic 10 ~~- Section 50- Paragraph 5- URI https: / / asc. fasb. org / extlink & oid = 124431353 & loc = SL124442411- 227067Reference 6: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 326- SubTopic 10-~~Section 65- Paragraph ~~4~~ **6** - Subparagraph (d) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147479343 / 105** ~~extlink & oid = 122640432 & loc = SL121648383-~~ ~~210437Reference 7~~ **10- 65- 6Reference 14** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- ~~Topic 105- SubTopic 10-~~Section 65- Paragraph ~~6~~ **2** - Subparagraph (~~e~~ **f**) **(1)- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147480016 / 944** ~~extlink & oid = 126987489 & loc = SL124442142-~~ ~~165695Reference 8~~ **40- 65- 2Reference 15** : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ **Topic 944- SubTopic 40** - Name Accounting Standards Codification- **Section 65- Paragraph 2- Subparagraph (f) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480016 / 944- 40- 65- 2Reference 16: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~105~~ **740** - SubTopic 10 ~~- Section 65- Paragraph 6- Subparagraph (d)- URI https: / / asc. fasb. org / extlink & oid = 126987489 & loc = SL124442142- 165695Reference 9: http: / / fasb. org / us- gaap / role / ref / legacyRef- Publisher FASB~~ - Name Accounting Standards Codification- **Section 65- Paragraph 8- Subparagraph (d) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482615 / 740- 10- 65- 8Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef-** Topic ~~810~~ **740** - SubTopic 10 ~~- Section 45- Paragraph 16- URI https: / / asc. fasb. org / extlink & oid = 126929396 & loc = SL4568740- 111683Reference 10: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 815- SubTopic 40-~~Section 65- Paragraph ~~1~~ **8** - Subparagraph (~~e~~ **d**) (3) **- Publisher FASB** - URI https: / / asc. fasb. org / **/ 1943274 / 2147482615 / 740** ~~extlink & oid = 126732423 & loc = SL123482106-~~ **10- 65-** ~~238011Reference~~ ----- **8Reference** ~~11~~ **18** : http: / / www. xbrl. org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - ~~Publisher FASB~~ **Topic 326- SubTopic 10** - Name Accounting Standards Codification- **Section 65- Paragraph 4- Subparagraph (d)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147479654 / 326-**

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SubTopic 10 ~~- Section 50- Paragraph 3- Subparagraph (e)- URI https: / / asc. fasb. org / extlink & oid = 114001798 & loc = d3e33918- 111571Reference 14: http: / / www. xbrl. org / 2009 / role / commonPracticeRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 65- Paragraph 15- Subparagraph (f) (2)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480336 / 718- 10- 65- 15Reference 22: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~235~~ 250 - SubTopic 10 ~~- Section S99- Paragraph 1- Subparagraph (SX 210. 4- 08 (g) (1) (ii))- URI https: / / asc. fasb. org / extlink & oid = 120395691 & loc = d3e23780- 122690Reference 15: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~ Section 50- Paragraph 1- Subparagraph (b) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250 ~~extlink & oid = 6450520 & loc = d3e32583~~ - 10- 50- ~~110901Reference~~ ----- 1Reference ~~16~~ 23 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 815- SubTopic 40 - Name Accounting Standards Codification- Section 65- Paragraph 1- Subparagraph (e) (3)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147480175 / 815- 40- 65- 1Reference 24: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~740~~ 250 - SubTopic 10 ~~- Section 65- Paragraph 8- Subparagraph (d) (2)- URI https: / / asc. fasb. org / extlink & oid = 126983759 & loc = SL121830611- 158277Reference 17: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 7- Subparagraph (b)- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483443 / 250- 10- 50- 7Reference 25: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~848~~ 220 - SubTopic 10 ~~- Section 65- Paragraph 2- Subparagraph (a) (3) (iii) (03)- URI https: / / asc. fasb. org / extlink & oid = 125980421 & loc = SL125981372- 237846Reference 18: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Section 50- Paragraph 5- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147482765 / 220- 10- 50- 5Reference 26: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 830- SubTopic 30 ~~- Section 45- Paragraph 17- URI https: / / asc. fasb. org / extlink & oid = 118261656 & loc = d3e32136- 110900Reference 19: http: / / www. xbrl. org / 2003 / role / disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- ~~Topic 740- SubTopic 10-~~ Section ~~65~~ 50 - Paragraph ~~8~~ 1 - Publisher FASB ~~Subparagraph (d) (3)~~ - URI https: / / asc. fasb. org / / 1943274 / 2147481674 / 830 ~~extlink & oid = 126983759 & loc = SL121830611~~ - 30- 50- ~~158277Reference~~ ----- 1Reference ~~20~~ 27 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 830- SubTopic 30 - Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~ Section ~~65~~ 45 - Paragraph ~~2~~ 17 - Publisher FASB ~~Subparagraph (f) (2)~~ - URI https: / / asc. fasb. org / / 1943274 / 2147481694 / 830 ~~extlink & oid = 124501264 & loc = SL117420844~~ - 30- 45- ~~207641Reference~~ --- 17Reference ~~21~~ 28 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 830- SubTopic 30 - Name Accounting Standards Codification- ~~Topic 718- SubTopic 10-~~ Section ~~65~~ 45 - Paragraph ~~15~~ 20 - Subparagraph (~~f~~ a) ~~(2)~~ - Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147481694 / 830 ~~extlink & oid = 128097895 & loc = SL121327923~~ - ~~165333Reference 22~~ 30- 45- 20Reference 29 : http: / / ~~fasb~~ www . xbrl. org / 2003 ~~us- gaap~~ / role / exampleRef ~~ref / legacyRef~~ - ~~Publisher FASB~~ Topic 946- SubTopic 830 - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~ Section 55- Paragraph ~~4I~~ 11- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147480167 / 946 ~~extlink & oid = 120409616 & loc = SL4590271~~ - 830- 55- ~~111686Reference~~ ---- 11Reference ~~23~~ 30 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 946- SubTopic 205 - Name Accounting Standards Codification- ~~Topic 944- SubTopic 40-~~ Section ~~65~~ 45 - Paragraph ~~2~~ 3 - Publisher FASB ~~Subparagraph (f) (1)~~ - URI https: / / asc. fasb. org / / 1943274 / 2147480767 / 946 ~~extlink & oid = 124501264 & loc = SL117420844~~ - ~~207641Reference 24~~ 205- 45- 3Reference 31 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 946- SubTopic 505 - Name Accounting Standards Codification- ~~Topic 830- SubTopic 30-~~ Section ~~45~~ 50 - Paragraph ~~20~~ 3 - Publisher FASB ~~Subparagraph (a)~~ - URI https: / / asc. fasb. org / / 1943274 / 2147481004 / 946 ~~extlink & oid = 118261656 & loc = d3e32211~~ - ~~110900Reference 25~~ 505- 50- 3Reference 32 : http: / / ~~fasb~~ www . xbrl. org / 2003 ~~us- gaap~~ / role / disclosureRef ~~ref / legacyRef~~ - ~~Publisher FASB~~ Topic 946- SubTopic 210 - Name Accounting Standards Codification- ~~Topic 810- SubTopic 10-~~ Section ~~45~~ S99 - Paragraph ~~15~~ 1- Subparagraph (SX 210. 6- 04 (19))- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946 ~~extlink & oid = 126929396 & loc = SL4568447~~ - 210- S99- ~~111683Reference~~ ----- 1Reference ~~26~~ 33 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 946- SubTopic 210 - Name Accounting Standards Codification- ~~Topic 718- SubTopic 10-~~ Section ~~65~~ S99 - Paragraph ~~15~~ 2 - Subparagraph (~~f)~~ SX 210. 6- 05 (~~1~~ 4))- Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147479617 / 946 ~~extlink & oid = 128097895 & loc = SL121327923~~ - ~~165333Reference 27~~ 210- S99- 2Reference 34 : http: / / www. xbrl. org / ~~2003~~ 2009 / role / ~~disclosureRef~~ commonPracticeRef - ~~Publisher FASB~~ Topic 946- SubTopic 220 - Name Accounting Standards Codification- ~~Topic 250- SubTopic 10-~~ Section ~~50~~ S99 - Paragraph ~~1~~ 3 - Subparagraph (SX 210. 6- 09 (4) (b) ~~(3~~) - Publisher FASB - URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946 ~~extlink & oid = 124431687 & loc = d3e22499~~ - ~~107794Reference 28~~ 220- S99- 3Reference 35 : http: / / www. xbrl. org / 2003 / role / disclosureRef- ~~Publisher FASB~~ Topic 946- SubTopic 220 - Name Accounting Standards Codification- Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (6))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 / 2147483575 / 946- 220- S99- 3Reference 36: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic ~~718~~ 946- SubTopic 220- Name Accounting Standards Codification- Section S99- Paragraph 3- Subparagraph (SX 210. 6- 09 (7))- Publisher FASB- URI https: / / asc. fasb. org / / 1943274 /

2147483575 / 946- 220- S99- 3Reference 37: http: / / www. xbrl. org / 2003 / role / disclosureRef- Topic 505 - SubTopic 10- **Name Accounting Standards Codification-** Section ~~65)~~ **Section 50** - ~~Publisher FASB~~ **Paragraph 22** - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147481687 / 323~~ **extlink & oid = 126901519 & loc = d3e8736** - **108599Reference 7** ~~10- 50- 3Reference 40~~ :http:/ / www.xbrl.org / ~~2009~~ **2003** / role / ~~commonPracticeRef~~ **disclosureRef** - **Publisher FASB** ~~Topic 825- SubTopic 10~~ - Name Accounting Standards Codification- **Topic 250- SubTopic 10-** Section 50- Paragraph ~~28~~ **11** - Subparagraph (~~f~~ **b**) ~~- Publisher FASB~~ - URI https:/ / asc.fasb.org / ~~/ 1943274 / 2147482907 / 825~~ **extlink & oid = 124431687 & loc = d3e22694** - **107794Reference 8** ~~10- 50- 28Reference 41~~ :http:/ / ~~fasb~~ **www.xbrl** .org / **2003** ~~us- gaap~~ / role / ~~ref / legacyRef~~ **disclosureRef- Publisher FASB** - Name Accounting Standards Codification- Topic ~~810~~ **260** - SubTopic 10- Section - Paragraph 15- **Publisher FASB** ~~Subparagraph (e)~~ - URI https: / / asc. fasb. org / **/ 1943274 / 2147481231 / 810** ~~extlink & oid = 128097895 & loc = SL121327923~~ - ~~165333~~ **10** ~~= 126975872 & loc = SL124442552~~ - **45-** ~~122756Reference~~ ---- **15Reference** ~~2~~ **42** :http:/ / fasb.org / us- gaap / role / ref / legacyRef- ~~Publisher FASB-~~ Name Accounting Standards Codification- Topic ~~946~~ **810** - SubTopic ~~220~~ **10** - Section ~~S99~~ **45** - Paragraph ~~1~~ **16** - **Publisher FASB** ~~Subparagraph (SX 210.6- 07.1 (c))~~ - URI https:/ / asc.fasb.org / **/ 1943274 / 2147481231 / 810** ~~extlink & oid = 120401555 & loc = SL114874292~~ - ~~224272Reference 3~~ **10- 45- 16Reference 43** :http:/ / **fasb** ~~www.xbrl~~ .org / ~~2003~~ **us- gaap** / role / **ref / legacyRef** ~~disclosureRef- Publisher FASB~~ - Name Accounting Standards Codification- Topic ~~470~~ **810** - SubTopic 10- Section ~~S99~~ **55** - Paragraph ~~1A~~ **4I** - ~~Subparagraph (SX 210~~ **Publisher FASB- URI https:/ / asc** . ~~13~~ **fasb.org / / 1943274 / 2147481175 / 810** - ~~01~~ **10- 55- 4I** Details Name: us- gaap_StockholdersEquityIncludingPortionAttributableToNoncontrollingInterest Namespace Prefix: us- gaap_ Data Type: xbrli: monetaryItemType Balance Type: credit Period Type: instantConsolidated Statements of Cash Flows- USD ($) $ in Thousands 12 Months EndedJul. 31, ~~2022~~ **2023** Jul. 31, ~~2021Operating~~ **2022Operating** activities Consolidated net loss $ (**2, 215) $ (** 142, 377) ~~$ (24, 766)~~ Less: **Income (** ~~Loss~~ **loss)** from discontinued operations **6** , **478** ~~net of tax~~ (1, 830 ~~) (1, 705~~) Loss from continuing operations (**8, 693) (** 140, 547 ~~) (23, 061~~) Adjustments to reconcile consolidated net loss to net cash used in operating activities Depreciation and **amortizationNet** ~~amortizationDeferred income taxes Net~~ unrealized **(gain)** loss ~~(gain)~~ on investments- Hedge Funds (~~4~~ **220) Unrealized gain on equity securities (33) Unrealized gain in equity investments- Cyclo Therapeutics Inc. (2** , ~~758~~ **663**) Realized **(gain)** loss on available- for- sale securities **(154) Amortization of discount on available- for- sale securities (1, 195)** Impairment of investments- Other Pharmaceuticals Impairment of cost method investment- Cornerstone Pharmaceuticals 79, ~~141 Impairment – Altira 7, 000Provision~~ **141Provision** for loss on receivable from Cornerstone Pharmaceuticals pursuant to line of credit 25, ~~000~~ **000Equity in loss of RP Finance** Equity in loss ~~(earnings)~~ of ~~RP Finance (383)~~ **Day Three Labs Inc.** Provision for losses on related party receivables 10, ~~095 Provision~~ **095Provision** for doubtful ~~accountsStock~~ ----- **accounts Stock** - based compensation ~~(credit) expense~~ **, net 2, 188** (917 ~~) 6, 633Gain on sale of building (749~~) Change in assets and liabilities, net of effects from discontinued operations: ~~Interest receivable (140)~~ Trade accounts receivable (~~161~~ **117) Interest receivable (247) (140**) Prepaid expenses and other current assets (3, 545) ~~(802)~~ Other ~~assetsAccounts~~ **assets (27) Accounts** payable and accrued ~~expensesOther~~ ----- **expenses (827) Other** current liabilities 3, 566Due to related parties (**43) (** 67 ~~) Due from related parties (482~~) Due from Cornerstone Pharmaceuticals (120) Other ~~liabilities~~ **liabilitiesNet** ~~(44) Net~~ cash used in continuing operations (**10, 247) (** 26, 038 ~~) (15, 314~~) Net cash used in discontinued operations (**639) (** 41 ~~) (287~~) Net cash used in operating activities (**10, 886) (** 26, 079 ~~) (15, 601~~) Investing activities **Payment to Cornerstone Pharmaceuticals pursuant to Line of Credit** (**25, 000)** Purchases ~~) dispositions~~ of property and equipment (2) Payment to fund RP Finance Line of Credit (1, 875) ~~(7, 500) Payment to Cornerstone Pharmaceuticals pursuant to Line of Credit (25, 000)~~ Purchases of available- for- sale securities (**204, 798) (** 65, 306) Proceeds from **the sale and** maturities of available- for- sale securities **185, 121** 28, ~~500~~ **500Issuance of convertible note receivable, related party (2, 000)** Proceeds from ~~sale~~ **investments- Other Pharmaceuticals Purchases** of ~~building 3~~ **equity securities (1** , **586)** ~~658Proceeds~~ --- **Proceeds** from ~~sale~~ **sales** of ~~Hedge Funds 7~~ **equity securities 1** , **325** ~~000Purchase~~ --- **Purchase** of Investment in ~~Altira~~ **Day Three Labs Inc.** (~~2~~ **3** , 000) **Purchase of** Investment in ~~Rafael Pharmaceuticals~~ **Cyclo Therapeutics Inc.** (~~9~~ **2** , ~~123~~ **100**) Net cash used in investing activities of continuing operations (**26, 960) (** 63, 683 ~~) (7, 921~~) Net cash **provided by (** used in **)** investing activities of discontinued operations **48, 171** (113 ~~) (250~~) Net cash **provided by (** used in **)** investing activities **21, 211** (63, 796 ~~) (8, 171~~) Financing activities ~~Contribution from noncontrolling interest of consolidated entity~~ Proceeds ~~from exercise of options Proceeds from exercise of warrants 2, 000Proceeds~~ from issuance of common stock 99, ~~170 13, 000Proceeds~~ **170Proceeds** from issuance of common stock from related party 10, ~~997 Payment~~ **997Payment** of transaction costs incurred in connection with sale of common stock (6, 228) Payments for taxes related to shares withheld for employee taxes (**218) (** 75 ~~) (185~~) Net cash **(used in) provided by continuing operations (218) 103, 864Net cash used in financing activities of discontinued operations (15, 000) Net cash (used in)** provided by financing activities ~~of continuing operations~~ **(15, 218)** 103, ~~864 15, 798Net cash provided by financing activities of discontinued operations 14, 500Net cash provided by financing activities 103, 864 30, 298Effect~~ -- **864Effect** of exchange rate changes on cash and cash equivalents (**146) (** 306) Net **(decrease)** increase in cash and cash equivalents ~~and restricted cash~~ **(5, 039)** 13, ~~683 6, 648Cash~~ - **683Cash** and cash equivalents, ~~and restricted cash,~~ beginning of year **26, 537** 12, **854Cash** ~~854 6, 206Cash~~ and cash equivalents, ~~and restricted~~ **end of year 21, 498 26, 537Non-** cash ~~, end of year 26, 537 12, 854Supplemental~~ **supplemental disclosure** ~~schedule of noncash investing and financing activities Common shares issued for payment of purchase price for Altira equity 8, 501Acquisition~~ --- **Acquisition** of additional ownership interest in LipoMedix ~~Reconciliation of cash and restricted cash Cash and cash equivalents 26, 537 7, 854Restricted cash 5, 000Total cash and cash equivalents and restricted cash shown in statement of cash flows~~ $ **16** ~~26, 537~~ $ **8** ~~12, 854~~