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RISKS RELATING TO COMMERCIALIZATION OF OUR PRODUCTS We depend heavily on our lead product, JAKAFI (ruxolitinib), which is marketed as JAKAVI outside the United States. If we are unable to maintain revenues from JAKAFI or those revenues decrease, our business may be materially harmed. JAKAFI is our first product marketed by us that is approved for sale in the United States. JAKAFI was approved by the U. S. Food and Drug Administration, or FDA, in November 2011 for the treatment of patients with intermediate or high-risk myclofibrosis, in December 2014 for the treatment of patients with polycythemia vera who have had an inadequate response to or are intolerant of hydroxyurea, which we refer to as uncontrolled polycythemia vera, in May 2019 for the treatment of steroid- refractory acute graft- versus- host disease in adult and pediatrie patients 12 years and older and in September 2021 for the treatment of steroid- refractory chronic graft- versus- host disease in adult and pediatric patients 12 years and older. Although we have received regulatory approval for these indications, such approval does not guarantee future revenues. While we also sell our and our licensors' other approved products ICLUSIG in the European Union, or EU, and other countries for the treatment of certain types of leukemia., PEMAZYRE in the United States, Europe and Japan for the treatment of certain metastatic cholangiocarcinoma indications, as well as for certain blood cancer indications in the United States, MONJUVI in the United States and MINJUVI in the European Union for the treatment of certain lymphoma indications, and OPZELURA in the Unites States for the treatment of certain indications of atopic dermatitis and ZYNYZ vitiligo, and our exclusive licensees sell OLUMIANT (baricitinib) for the treatment of specified rheumatoid arthritis and atopic dermatitis indications and TABRECTA for the treatment of a certain type of non-small cell lung cancer, we anticipate that JAKAFI product sales will continue to contribute a significant percentage of our total revenues over the next several years. The commercial success of JAKAFI and our ability to maintain and continue to increase revenues from the sale of JAKAFI will depend on a number of factors, including: • the number of patients with intermediate or high-risk myelofibrosis, uncontrolled polycythemia vera or steroid- refractory graft- versus- host disease who are diagnosed with the diseases and the number of such patients that may be treated with JAKAFI; • the acceptance of JAKAFI by patients and the healthcare community; • whether physicians, patients and healthcare payors view JAKAFI as therapeutically effective and safe relative to cost and any alternative therapies, as well as whether patients will continue to use JAKAFI; • the ability to obtain and maintain sufficient coverage or reimbursement by third- party payors and pricing; • the ability of our third- party manufacturers to manufacture JAKAFI in sufficient quantities that meet all applicable quality standards; • the ability of our company and our third- party providers to provide marketing and distribution support for JAKAFI; • the effects of the COVID-19 pandemie, any associated quarantine, travel restriction, stay- at- home or shutdown orders, guidelines or practices, and any disruption in our supply chain for JAKAFI on our ability to provide marketing and distribution support for JAKAFI, our ability to produce sufficient quantities of JAKAFI that meet all applicable quality standards, patient demand (including new patient prescriptions and hesitancy of patients to make office visits) and other risks detailed further below under "- Other Risks Relating to our Business — Public health epidemics, such as the COVID-19 pandemic, could adversely affect our business, results of operations, and financial condition"; • the label and promotional claims allowed by the FDA; • the maintenance of regulatory approval for the approved indications in the United States; and • our ability to develop, obtain regulatory approval for and commercialize ruxolitinib in the United States for additional indications or in combination with other therapeutic modalities: and • the effects of a public health pandemic or epidemic such as the COVID- 19 pandemic or of adverse geopolitical <mark>events, regulatory, legislative or administrative developments</mark> . If we are not able to maintain revenues from JAKAFI in the United States, or our revenues from JAKAFI decrease, our business may be materially harmed and we may need to delay other drug discovery, development and commercialization initiatives or even significantly curtail operations, and our ability to license or acquire new products to diversify our revenue base could be limited. In addition, revenues from our other products and our receipt of royalties under our collaboration agreements, including our agreements with Novartis for sales of JAKAVI outside the United States and TABRECTA globally and with Eli Lilly and Company for worldwide sales of OLUMIANT, will depend on factors similar to those listed above, with similar regulatory, pricing and reimbursement issues driven by applicable regulatory authorities and governmental and third-party payors affecting jurisdictions outside the United States. If we are unable to obtain, or maintain at anticipated levels, coverage and reimbursement for our products from government health administration authorities, private health insurers and other organizations, our pricing may be affected and our product sales, results of operations and financial condition could be harmed. Our ability to commercialize our current and any future approved products successfully will depend in part on the prices we are able to charge for these products and the extent to which adequate coverage and reimbursement levels for the cost of our products and related treatment are obtained from third- party payors, such as private insurers, government insurance programs, including Medicare and Medicaid, health maintenance organizations (HMOs) and other health care related organizations in the United States and abroad. We may not be able to sell our products on a profitable basis or our profitability may be reduced if we are required to sell our products at lower than anticipated prices or reimbursement is unavailable or limited in scope or amount. The costs of JAKAFI, ICLUSIG, PEMAZYRE, MONJUVI / MINJUVI and, OPZELURA and ZYNYZ are not insignificant and almost all patients will require some form of third-party coverage to afford their cost. Our future revenues and profitability will be adversely affected if we cannot depend on government and other third- party payors to defray the cost of our products to the patient. Governments and other third- party payors continue to pursue initiatives to manage drug costs. Pricing and reimbursement for our products may be adversely affected by a number of factors, including; • actions of federal, state and foreign governments and other third- party payors to

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implement or modify laws, regulations or policies addressing payment and reimbursement for drugs; • pressure by employers on
private health insurance plans to reduce costs or moderate cost increases, as well as continued public scrutiny of the price of
drugs and other healthcare costs; and • consolidation of third- party payors and continued initiatives of government and other
third- party payors to reduce costs by seeking price discounts or rebates, reducing reimbursement rates or imposing restrictions
on access to or coverage of particular drugs based on perceived value; • pressure on healthcare budgets resulting from
macroeconomic factors such as inflation, rising interest rates and the economic effects of geopolitical conflicts; and • the
increasing number of hospitals and other covered entities that are eligible to participate in the U. S. 340B drug pricing
program, which requires drug manufacturers such as our company to sell drugs to those entities at discounted prices in
order for those drugs to be covered by Medicaid. In many markets outside of the United States, including countries of the
EU, drug pricing and reimbursement are subject to government control, and government authorities are making greater efforts to
limit or regulate the price of drug products. Reimbursement systems in international markets vary significantly by country and
by region, and reimbursement approvals must be obtained on a country-by-country basis. Reimbursement in the EU must be
negotiated on a country-by-country basis and in many countries a drug product cannot be commercially launched until
reimbursement is approved. The timing to complete the negotiation process in each country is highly uncertain, and in some
countries, we expect that it may exceed 12 months. Some countries set prices by reference to prices in other countries, and
countries may refuse to reimburse or may restrict the reimbursed population for a drug product based on their national health
technology assessments and cost effectiveness thresholds. In addition, governmental authorities in many countries may reduce
prices for approved drug products from previously established prices. Third- party payors are increasingly challenging the
prices charged for medical products and services, and payors and employers are adopting benefit plan changes that shift a
greater portion of prescription drug costs to patients. Third party pharmacy benefit managers, or PBMs, other similar
organizations and payors can limit coverage to specific products on an approved list, or formulary, which might not include all
of the approved products for a particular indication, and to exclude drugs from their formularies in favor of competitor drugs or
alternative treatments, or place drugs on formulary tiers with higher patient co- pay obligations, and / or to mandate stricter
utilization criteria. Formulary exclusion effectively encourages patients and providers to seek alternative treatments, make a
complex and time- intensive request for medical exemptions, or pay 100 % of the cost of a drug. In addition, in many instances,
certain PBMs, other similar organizations and third party payors may exert negotiating leverage by requiring incremental
rebates, discounts or other concessions from manufacturers in order to maintain formulary positions, which could continue to
result in higher gross to net deductions for affected products. There has been significant consolidation in the health insurance
industry, resulting in large insurers and PBMs exerting greater pressure and leverage in pricing and usage negotiations with drug
manufacturers. In this regard, while we have entered into agreements with a number of PBMs, we are in the process of
negotiating agreements with additional PBMs and payor accounts to provide rebates to those entities related to formulary
coverage for OPZELURA, and we cannot guarantee that we will be able to agree to or maintain acceptable coverage terms with
these PBMs and other third party payors. Payors could decide to exclude OPZELURA from formulary coverage lists, impose
step edits that require patients to try alternative, including generic, treatments before authorizing payment for OPZELURA, limit
the types of diagnoses for which coverage will be provided or impose a moratorium on coverage for products while the payor
makes a coverage decision. An inability to maintain adequate formulary positions could increase patient cost- sharing for
OPZELURA and cause some patients to determine not to use OPZELURA. Any delays or unforeseen difficulties in
reimbursement approvals could limit patient access, depress therapy adherence rates, and adversely impact our ability to
successfully commercialize OPZELURA. If we are unsuccessful in obtaining and maintaining broad coverage and
reimbursement for OPZELURA, our anticipated revenue from and growth prospects for OPZELURA could be negatively
affected. If third parties institute high co-payment amounts or other benefit limits for our products, the demand for our products
and, accordingly, our revenues and results of operations, could be adversely affected. Our patient assistance programs have
provided support for non-profit organizations that provide financial assistance to eligible patients or in some cases, we have
provided our products without charge to eligible patients who have no insurance coverage or are underinsured. Substantial
support in this manner could harm our profitability in the future. Further, non-profit organizations' ability to provide assistance
to patients is dependent on funding from external sources, and we cannot guarantee that such funding will be provided at
adequate levels, or at all. Risks related to proposed changes in government regulations and health care reform measures are
described below under " — Other Risks Relating to our Business — Health care reform measures could impact the pricing and
profitability of pharmaceuticals, and adversely affect the commercial viability of our or our collaborators' products and drug
candidates." If government and other third- party payors refuse to provide coverage and reimbursement with respect to our
products, determine to provide a lower level of coverage and reimbursement than anticipated, reduce previously approved levels
of coverage and reimbursement, or delay reimbursement payments due to budgetary constraints relating to the COVID-19
pandemie, then our pricing or reimbursement for our products may be affected and our product sales, results of operations or
financial condition could be harmed. Our collaborators Novartis and Eli Lilly are affected by similar considerations for the
drugs that they market and for which we may receive royalties. We depend upon a limited number of specialty pharmacies and
wholesalers for a significant portion of any revenues from JAKAFI and most of our other drug products, and the loss of, or
significant reduction in sales to, any one of these specialty pharmacies or wholesalers could adversely affect our operations and
financial condition. We sell JAKAFI and our other drug products other than OPZELURA primarily to specialty pharmacies and
wholesalers. Specialty pharmacies dispense JAKAFI and our other drug products to patients in fulfillment of prescriptions and
wholesalers sell JAKAFI and our other drug products to hospitals and physician offices. We do not promote JAKAFI or our
other drug products to specialty pharmacies or wholesalers, and they do not set or determine demand for JAKAFI or our other
drug products. Our ability to successfully commercialize JAKAFI and our other drug products will depend, in part, on the extent
to which we are able to provide adequate distribution of JAKAFI and our other drug products to patients. Although we have
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contracted with a number of specialty pharmacies and wholesalers, they are expected generally to carry a very limited inventory
and may be reluctant to be part of our distribution network in the future if demand for the product does not increase. Further, it
is possible that these specialty pharmacies and wholesalers could decide to change their policies or fees, or both, at some time in
the future. This could result in their refusal to carry smaller volume products such as JAKAFI and our other drug products, or
lower margins or the need to find alternative methods of distributing our product. Although we believe we can find alternative
channels to distribute JAKAFI or our other drug products on relatively short notice, our revenue during that period of time may
suffer and we may incur additional costs to replace any such specialty pharmacy or wholesaler. The loss of any large specialty
pharmacy or wholesaler as part of our distribution network, a significant reduction in sales we make to specialty pharmacies or
wholesalers, or any failure to pay for the products we have shipped to them could materially and adversely affect our results of
operations and financial condition. If we are unable to establish and maintain effective sales, marketing and distribution
capabilities, or to enter into agreements with third parties to do so, we will not be able to successfully commercialize our
products. We have established commercial capabilities in the United States and outside of the United States, but cannot
guarantee that we will be able to enter into and maintain any marketing, distribution or third- party logistics agreements with
third- party providers on acceptable terms, if at all. We may not be able to correctly judge the size and experience of the sales
and marketing force and the scale of distribution capabilities necessary to successfully market and sell any new products.
Establishing and maintaining sales, marketing and distribution capabilities are expensive and time- consuming. Competition for
personnel with experience in sales and marketing can be high. Our expenses associated with building and maintaining the sales
force and distribution capabilities may be disproportional compared to the revenues we may be able to generate on sales of our
products. We are working continuing to establish and maintain sales, marketing and distribution capabilities for OPZELURA
that will generally be separate from our existing capabilities for oncology indications, and we have no prior experience in
commercializing products for dermatology indications. Successful commercialization of our drug candidates for dermatology
indications requires us to establish new physician and payor relationships, PBM and pharmacy network relationships,
reimbursement strategies and governmental interactions, separate from our existing capabilities for oncology indications.
Our inability to commercialize successfully products in indications outside of oncology could harm our business and operating
results. If we fail to comply with applicable laws and regulations, we could lose our approval to market our products or be
subject to other governmental enforcement activity. We cannot guarantee that we will be able to maintain regulatory approval to
market our products in the jurisdictions in which they are currently marketed. If we do not maintain our regulatory approval to
market our products, in particular JAKAFI, our results of operations will be materially harmed. We and our collaborators, third-
party manufacturers and suppliers are subject to rigorous and extensive regulation by the FDA and other federal and state
agencies as well as foreign governmental agencies. These regulations continue to apply after product marketing approval, and
cover, among other things, testing, manufacturing, quality control and assurance, labeling, advertising, promotion, risk
mitigation, and adverse event reporting requirements. The commercialization of our products is subject to post-regulatory
approval product surveillance, and our products may have to be withdrawn from the market or subject to restrictions if
previously unknown problems occur. Regulatory agencies may also require additional clinical trials or testing for our products,
and our products may be recalled or may be subject to reformulation, additional studies, changes in labeling, warnings to the
public and negative publicity. For example, from late 2013 through 2014, ICLUSIG was subject to review by the European
Medicines Agency, or EMA, of the benefits and risks of ICLUSIG to better understand the nature, frequency and severity of
events obstructing the arteries or veins, the potential mechanism that leads to these side effects and whether there needed to be a
revision in the dosing recommendation, patient monitoring and a risk management plan for ICLUSIG. This review was
completed in January 2015, with additional warnings in the product information but without any change in the approved
indications. The EMA could take additional actions in the future that reduce the commercial potential of ICLUSIG. In addition,
in September 2021, the FDA updated approved a labeling update-for JAKAFI, adding and other JAK inhibitor drugs to
include warnings of increased risk of major adverse cardiovascular events, thrombosis, and secondary malignancies related to
another JAK- inhibitor treating rheumatoid arthritis, a condition for which JAKAFI is not indicated. As part of the FDA labeling
update for oral JAK inhibitors in treating inflammatory conditions, class "boxed" warnings were also included in the
OPZELURA label. We cannot predict the effects on sales of JAKAFI with the updated warnings or OPZELURA as a result of
the "boxed" warnings, but it is possible that future sales of JAKAFI and OPZELURA can be negatively affected, which could
have a material and adverse effect on our business, results of operations and prospects. Failure to comply with the laws and
regulations administered by the FDA or other agencies could result in: • administrative and judicial sanctions, including warning
letters; • fines and other civil penalties; • suspension or withdrawal of regulatory approval to market or manufacture our
products; • interruption of production; • operating restrictions; • product recall or seizure; • injunctions; and • criminal
prosecution. The occurrence of any such event may have a material adverse effect on our business. If the use of our products
harms patients, or is perceived to harm patients even when such harm is unrelated to our products, our regulatory approvals
could be revoked or otherwise negatively impacted or we could be subject to costly and damaging product liability claims. The
testing of JAKAFI, ICLUSIG, PEMAZYRE, MONJUVI / MINJUVI and, OPZELURA and ZYNYZ, the manufacturing,
marketing and sale of JAKAFI, PEMAZYRE and OPZELURA and the marketing and sale of ICLUSIG and, MONJUVI /
MINJUVI and ZYNYZ expose us to product liability and other risks. Side effects and other problems experienced by patients
from the use of our products could: • lessen the frequency with which physicians decide to prescribe our products; • encourage
physicians to stop prescribing our products to their patients who previously had been prescribed our products; • cause serious
harm to patients that may give rise to product liability claims against us; and • result in our need to withdraw or recall our
products from the marketplace. If our products are used by a wide patient population, new risks and side effects may be
discovered, the rate of known risks or side effects may increase, and risks previously viewed as less significant could be
determined to be significant. Previously unknown risks and adverse effects of our products may also be discovered in connection
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with unapproved, or off- label, uses of our products. We are prohibited by law from promoting or in any way supporting or
encouraging the promotion of our products for off-label uses, but physicians are permitted to use products for off-label
purposes. In addition, we are studying and expect to continue to study JAKAFI in diseases for potential additional indications in
controlled clinical settings, and independent investigators are doing so as well. In the event of any new risks or adverse effects
discovered as new patients are treated for intermediate or high- risk myelofibrosis, uncontrolled polycythemia vera or acute
graft- versus- host disease and as JAKAFI is studied in or used by patients for off- label indications, regulatory authorities may
delay or revoke their approvals, we may be required to conduct additional clinical trials, make changes in labeling of JAKAFI,
reformulate JAKAFI or make changes and obtain new approvals. We may also experience a significant drop in the sales of
JAKAFI, experience harm to our reputation and the reputation of JAKAFI in the marketplace or become subject to lawsuits,
including class actions. Any of these results could decrease or prevent sales of JAKAFI or substantially increase the costs and
expenses of commercializing JAKAFI. Similar results could occur with respect to our commercialization of ICLUSIG,
PEMAZYRE, MONJUVI / MINJUVI and, OPZELURA and ZYNYZ. Patients who have been enrolled in our clinical trials or
who may use our products in the future often have severe and advanced stages of disease and known as well as unknown
significant pre- existing and potentially life- threatening health risks. During the course of treatment, patients may suffer adverse
events, including death, for reasons that may or may not be related to our products. Such events could subject us to costly
litigation, require us to pay substantial amounts of money to injured patients, delay, negatively impact or end our opportunity to
receive or maintain regulatory approval to market our products, or require us to suspend or abandon our commercialization
efforts. Even in a circumstance in which we do not believe that an adverse event is related to our products, the investigation into
the circumstance may be time consuming or inconclusive. These investigations may interrupt our sales efforts, impact and limit
the type of regulatory approvals our products receive or maintain, or delay the regulatory approval process in other countries.
Factors similar to those listed above also apply to our <mark>license collaborator collaborators Novartis for in the</mark> jurisdictions in
which it has development and commercialization rights, to ICLUSIG for jurisdictions outside the they have United States, to
our collaborator Lilly for all jurisdictions and to our collaborator Innovent for PEMAZYRE in the jurisdictions in which it has
development and commercialization rights. If we market our products in a manner that violates various laws and regulations, we
may be subject to civil or criminal penalties. In addition to FDA and related regulatory requirements, we are subject to health
care "fraud and abuse" laws, such as the federal False Claims Act, the anti-kickback provisions of the federal Social Security
Act, and other state and federal laws and regulations. Federal and state anti-kickback laws prohibit, among other things,
knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for purchasing, leasing,
ordering or arranging for the purchase, lease or order of any health care item or service reimbursable under Medicare, Medicaid,
or other federally- or state- financed health care programs. Federal false claims laws prohibit any person from knowingly
presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to
be made, a false statement to get a false claim paid. Pharmaceutical companies have been prosecuted under these laws for a
variety of alleged promotional and marketing activities. Although physicians are permitted, based on their medical judgment, to
prescribe products for indications other than those approved by the FDA, manufacturers are prohibited from promoting their
products for such off- label uses. We market JAKAFI for intermediate or high- risk myelofibrosis, uncontrolled polyeythemia
vera and acute graft- versus- host disease and provide promotional materials to physicians regarding the use of JAKAFI for
these indications. Although we believe that our promotional materials for physicians do not constitute improper promotion of
JAKAFI, the FDA or other agencies may disagree. If the FDA or another agency determines that our promotional materials or
other activities constitute improper promotion of JAKAFI, it could request that we modify our promotional materials or other
activities or subject us to regulatory enforcement actions, including the issuance of a warning letter, injunction, seizure, civil fine
and criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action if they
believe that the alleged improper promotion led to the submission and payment of claims for an unapproved use, which could
result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement.
Even if it is later determined we are not in violation of these laws, we may be faced with negative publicity, incur significant
expenses defending our position and have to divert significant management resources from other matters. Similar risks exist for
our marketing of PEMAZYRE and OPZELURA and our collaborator MorphoSys's marketing of MONJUVI. The European
Union and member countries, as well as governmental authorities in other countries, impose similar strict restrictions on the
promotion and marketing of drug products. The off- label promotion of medicinal products is prohibited in the EU and in other
territories, and the EU also maintains strict controls on advertising and promotional materials. The promotion of medicinal
products that are not subject to a marketing authorization is also prohibited in the EU. Violations of the rules governing the
promotion of medicinal products in the EU and in other territories could be penalized by administrative measures, fines and
imprisonment. The majority of states also have statutes or regulations similar to the federal anti- kickback law and false claims
laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply
regardless of the payor. Numerous states and localities have enacted or are considering enacting legislation requiring
pharmaceutical companies to establish marketing compliance programs, file periodic reports or make periodic public disclosures
on sales, marketing, pricing, clinical trials, and other activities. Additionally, as part of the Patient Protection and Affordable
Care Act, the federal government has enacted the Physician Payment Sunshine provisions. The These Physician Payment
Sunshine provisions and similar laws and regulations in other jurisdictions where we do business require manufacturers to
publicly report certain payments or other transfers of value made to physicians and teaching hospitals. Many of these
requirements are new and uncertain, and the penalties for failure to comply with these requirements are unclear. Nonetheless, if
we are found not to be in full compliance with these laws, we could face enforcement action and fines and other penalties, which
could be significant in amount or result in exclusion from federal healthcare programs such as Medicare and Medicaid. Any
action initiated against us for violation of these laws, even if we successfully defend against it, could require the expenditure of
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significant resources and generate negative publicity, which could harm our business and operating results, and any settlement of such action initiated against us, regardless of the merits, could result in the payment of significant amounts, which could harm our financial condition and operating results. See also "— Other Risks Relating to our Business — If we fail to comply with the extensive legal and regulatory requirements affecting the health care industry, we could face increased costs, penalties and a loss of business" below. Competition for our products could harm our business and result in a decrease in our revenue. Our products compete, and our product candidates may in the future compete, with currently existing therapies, including generic drugs, product candidates currently under development by us and others, or future product candidates, including new chemical entities that may be safer or more effective or more convenient than our products. Any products that we develop may be commercialized in competitive markets, and our competitors, which include large global pharmaceutical and biopharmaceutical companies and smaller research- based biotechnology companies, may succeed in developing products that render our products obsolete or noncompetitive. Many of our competitors, particularly large pharmaceutical and biopharmaceutical companies, have substantially greater financial, operational and human resources than we do. Smaller or earlier stage companies may also prove to be significant competitors, particularly through focused development programs and collaborative arrangements with large, established companies. In addition, many of our competitors deploy more personnel to market and sell their products than we do, and we compete with other companies to recruit, hire, train and retain pharmaceutical sales and marketing personnel. If our sales force and sales support organization are not appropriately resourced and sized to adequately promote our products, the commercial potential of our current and any future products may be diminished. In any event, the commercial potential of our current products and any future products may be reduced or eliminated if our competitors develop or acquire and commercialize generic or branded products that are safer or more effective, are more convenient or are less expensive than our products. See " Item 1. Business — Competition" in this Annual Report on Form 10-K for additional information regarding the effects of competition. If we are unable to compete successfully, our commercial opportunities will be reduced and our business, results of operations and financial conditions may be materially harmed. Present and potential competitors for JAKAFI include major pharmaceutical and biotechnology companies, as well as specialty pharmaceutical firms. In addition, JAKAFI could face competition from generic products. As a result of the Drug Price Competition and Patent Term Restoration Act of 1984, commonly known as the Hatch-Waxman Act, in the United States, generic manufacturers may seek approval of a generic version of an innovative pharmaceutical by filing with the FDA an Abbreviated New Drug Application, or ANDA. The Hatch-Waxman Act provides significant incentives to generic manufacturers to challenge U. S. patents on successful innovative pharmaceutical products. In February 2016, we received a notice letter regarding an ANDA that requested approval to market a generic version of JAKAFI and purported to challenge patents covering ruxolitinib phosphate and its use that expire in 2028. The notice letter does not challenge the ruxolitinib composition of matter patent, which expires in December 2027. To date, to our knowledge, the FDA has taken no action with respect to this ANDA. Separately, in January 2018 the Patent Trial and Appeal Board (PTAB) of United States Patent and Trademark Office denied a petition challenging our patent covering deuterated ruxolitinib analogs and the PTAB subsequently denied the petitioner's request for rehearing in May 2018. Nevertheless, the petitioner still has the right separately to challenge the validity of our patent in federal court. There can be no assurance that our patents will be upheld or that any litigation in which we might engage with any such generic manufacturer would be successful in protecting JAKAFI's exclusivity. The entry of a competitive drug product from another company or a generic version of JAKAFI could result in a decrease in JAKAFI sales and materially harm our business, operating results and financial condition. ICLUSIG currently competes with existing therapies that are approved for the treatment of patients with chronic myeloid leukemia, or CML, who are resistant or intolerant to prior tyrosine kinase inhibitor, or TKI, therapies, on the basis of, among other things, efficacy, cost, breadth of approved use and the safety and side- effect profile. In addition, generic versions of imatinib are available and, while we currently believe that generic versions of imatinib will not materially impact our commercialization of ICLUSIG, given ICLUSIG's various indication statements globally that are currently focused on resistant or intolerant CML, we cannot be certain how physicians, payors, patients, regulatory authorities and other market participants will respond to the availability of generic versions of imatinib. MONJUVI / MINJUVI currently competes with existing therapies that are approved for the treatment of patients with diffuse large B- cell lymphoma on the basis of, among other things, efficacy, cost, breadth of approved use and the safety and side- effect profile. These existing therapies are offered by major pharmaceutical and biotechnology companies, as well as specialty pharmaceutical firms. Competitors and potential competitors for PEMAZYRE <mark>and ZYNYZ</mark> include major pharmaceutical and biotechnology companies, as well as specialty pharmaceutical firms. Competitors for OPZELURA include existing over- the- counter topical treatments, prescription topical treatments, including generic versions, such as tacrolimus, pimecrolimus, topical steroids, and EUCRISA (crisaborole) from Pfizer Inc., as well as oral and injectable therapies such as prednisone and other oral steroids, injectable DUPIXENT (dupilimab) from Sanofi and Regeneron Pharmaceuticals, Inc., and oral CIBINQO (abrocitinib) from Pfizer Inc. and RINVOQ (upadacitinib) from AbbVie Inc. In September 2023, we received a notice letter regarding an ANDA that requested approval to market a generic version of OPZELURA and purported to challenge patents covering ruxolitinib phosphate cream and its uses that expire in 2031 and 2040. The notice letter does not challenge ruxolitinib nor the ruxolitinib phosphate composition of matter patents, providing patent coverage (with pediatric extension) until December 2028. To date, to our knowledge, the FDA has taken no action with respect to this ANDA. Factors similar to those listed above also apply to our collaborator Novartis for JAKAVI and TABRECTA in jurisdictions in which it has commercialization rights and to our collaborator Lilly for OLUMIANT all jurisdictions. With respect to OLUMIANT, in August 2022 we and Lilly received notice letters with respect to ANDAs that requested approval to market generic versions of OLUMIANT prior to the expiration of the three U. S. Patents that expire in 2030. OTHER RISKS RELATING TO OUR BUSINESS Public health epidemics and pandemics, such as the COVID-19 pandemic, have adversely affected and could in the future adversely affect our business, results of operations, and financial condition. Our global operations expose us to risks associated with public health epidemics and pandemics, such as the COVID-

19 pandemic that has spread globally and continues with the proliferation of new variants. The extent to which the COVID-19 pandemic and the measures taken to limit COVID-19's spread impact our operations and those of our suppliers, collaborators, service providers and healthcare organizations serving patients, as well as demand for our drug products, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak and any future resurgence of the outbreak, additional or modified government actions, including any further restrictions or reopening of local, state or national social or economic activity, new information that may emerge concerning the severity of COVID-19 and the actions taken to contain COVID-19 or treat its impact, among others. As a result of the COVID-19 pandemic, we have experienced and may in the future experience disruptions that could severely impact our business, results of operations and financial condition, including the following: • When the COVID- 19 pandemic commenced, to protect the health of our employees and their families, and our communities, in accordance with and in some cases in advance of direction from state and local government authorities, we limited access to our facilities and a significant percentage of our personnel worked remotely. In the event that governmental authorities were to re-establish workplace restrictions, our employees conducting research and development activities may not be able to access our laboratory space or access may be limited, and our research and development activities may be significantly limited or curtailed, possibly for an extended period of time. These research and development activities could include completing Investigational New Drug (IND) / Clinical Trial Application (CTA) - enabling studies, our ability to select future development candidates, and initiation of additional clinical trials for our development programs. Having a significant portion of our employees work from home can strain our information technology infrastructure, which may affect our ability to operate effectively, may make us more susceptible to communications disruptions, and expose us to greater cybersecurity risks. • Our sales and marketing activities, including our interactions with healthcare professionals, have been limited and made more difficult by government or employer imposed work from home orders and travel and workplace visitor restrictions resulting from measures to address the COVID-19 pandemic, as well as employee- initiated remote work and travel limitations resulting from, among other things, the spread of the COVID-19 variants. In addition, demand for our products has been affected by decreases in new patients, which we believe resulted in large part from decreases in patient visits to healthcare professionals and prioritization of hospital resources for the COVID-19 pandemic, resulting in decreases in disease screening and diagnosis. We cannot predict the effects on patient demand or future sales if there are prolonged quarantines, work from home orders, travel restrictions or surges in COVID-19 cases. • Our clinical trials have been and will likely continue to be affected by delays in site initiation, patient screening, patient enrollment, and monitoring and data collection as a result of prioritization of hospital resources for the COVID-19 pandemic, difficulty in recruiting and retaining healthcare providers and staff due to their diversion toward treating COVID-19 patients, the potential unwillingness of patients to enroll or continue in clinical trials for fear of exposure to COVID-19 at sites, and the inability to access sites for initiation and monitoring. In addition, some patients may be unable to comply with clinical trial protocols if quarantines or travel restrictions impede patient movement or interrupt health services, we may be unable to obtain blood samples for testing, and we may not be able to provide the trial drug candidate to patients. Also, we rely on independent clinical investigators, contract research organizations and other third- party service providers to assist us in managing, monitoring and otherwise carrying out our preclinical studies and clinical trials, and the COVID-19 pandemic has affected and may continue to affect their ability to devote sufficient time and resources to our programs or to travel to sites to perform work for us. • Regulatory agencies globally have experienced disruptions in their operations as a result of the coronavirus pandemic. The FDA and comparable foreign regulatory agencies may have slower response times or be under-resourced to continue to monitor our clinical trials and, as a result, review, inspection, and other timelines may be materially delayed. If any of these disruptions occur or continue to occur, we cannot predict how long they may last. Our drug candidate application reviews and potential approvals could be impacted or delayed by these disruptions, if they occur or continue to occur. • The outbreak and measures taken to limit the spread of the outbreak, especially if prolonged. could also disrupt our supply chain or limit our ability to obtain sufficient materials for our drug products and product eandidates, which could adversely affect our revenues and clinical trial timelines. Currently, our supply chain for our drug products and product candidates depends on operations by us and by other companies in multiple countries around the world, and the effects of the COVID-19 pandemic on any or all of these countries is uncertain and unpredictable and potential disruption is possible. In addition, our third-party manufacturers might experience capacity constraints and delays in producing materials for our drug products and product candidates if they are required, under the U.S. Defense Production Act or similar governmental mandates, to prioritize production of raw materials, supplies, drugs or vaccines to address COVID-19. And, for JAKAFI, while our strategy is to maintain a 24 month stock of active pharmaceutical ingredient, or API, inclusive of finished product, ruxolitinib phosphate might be used by us either to make JAKAFI or for ruxolitinib drug candidates in clinical trials. • Any deterioration of worldwide credit and financial markets could result in losses on our holdings of cash and investments due to failures of financial institutions and other parties, and interruptions and delays in our ability to collect, or potential losses on, our accounts receivable. Our collaborators could be affected by similar factors as those that have or could affect our business. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential impacts or delays on our or our collaborators' businesses, our revenues, including milestone and royalty revenues from our collaborators, our and our collaborators' clinical trials, healthcare systems or the global economy as a whole. However, these effects could have a material adverse impact on our business, results of operations, and financial condition. We may be unsuccessful in our efforts to discover and develop drug candidates and commercialize drug products. Our long term success, revenue growth and diversification of revenues depends on our ability to obtain regulatory approval for new drug products and additional indications for our existing drug products. Our ability to discover and develop drug candidates and to commercialize additional drug products and indications will depend on our ability to: • hire and retain key employees; • identify high quality therapeutic targets; • identify potential drug candidates; • develop products internally or license or acquire drug candidates from others; • identify and enroll suitable human subjects, either in the United States or

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abroad, for our clinical trials; • complete laboratory testing; • commence, conduct and complete safe and effective clinical trials
on humans; • obtain and maintain necessary intellectual property rights to our products; • obtain and maintain necessary
regulatory approvals for our products, both in the United States and abroad; • enter into arrangements with third parties to
provide services or to manufacture our products on our behalf; • deploy sales, marketing, distribution and manufacturing
resources effectively or enter into arrangements with third parties to provide these functions in compliance with all applicable
laws; • obtain appropriate coverage and reimbursement levels for the cost of our products from governmental authorities, private
health insurers and other third-party payors; • lease facilities at reasonable rates to support our growth; and • enter into
arrangements with third parties to license and commercialize our products. We The biotechnology and pharmaceutical
industries are intensely competitive and subject to rapid and significant technological change. Despite investing
significant resources, we may not be successful in discovering, developing, or commercializing additional drug products or our
existing drug products in new indications. Discovery and development of drug candidates are expensive, uncertain and time-
consuming, and we do not know if our efforts will lead to discovery of any drug candidates that can be successfully developed
and marketed. Of the compounds or biologies that we identify as potential drug products or that we may in-license from other
companies, including potential products for which we are conducting clinical trials, only a few, if any, are likely to lead to
successful drug development programs and commercialized drug products. We depend heavily on the success of our most
advanced drug candidates. We and our collaborators might not be able to commercialize any of our or their drug candidates
successfully, and we may spend significant time and money attempting to do so. We have invested significant resources in the
development of our most advanced drug candidates. We have a number of drug candidates in Phase III clinical trials as
monotherapies or in combination with other drugs and drug candidates, including parsaelisib, pemigatinib, retifanlimab,
ruxolitinib, ruxolitinib cream and tafasitamab. Our ability to generate product revenues will depend on the successful
development and eventual commercialization of our most advanced drug candidates. We, or our collaborators or licensees, may
decide to discontinue development of any or all of our drug candidates at any time for commercial, scientific or other reasons.
Even if a drug candidate received marketing approval, it may not be able to achieve market acceptance For- or compete
successfully example, in April 2018, we along with competitors' Merck stopped the ECHO- 301 study with epacadostat, and
we also significantly downsized the epacadostat development program. If a product products and is developed but not
approved or marketed, or becomes approved for a narrower set of indications than those for which we initially conducted
elinical trials, we may have spent significant amounts of time and money on it without achieving potential returns initially
anticipated, which could adversely affect our operating results and financial condition as well as our business plans. Of the
compounds or biologics that we identify as potential drug products or that we may in-license from other companies,
including potential products for which we are conducting clinical trials, only a few, if any, are likely to lead to successful
drug development programs and commercialized drug products. If we or our collaborators are unable to obtain regulatory
approval for our drug candidates in the United States and foreign jurisdictions, we or our collaborators will not be permitted to
commercialize products resulting from our research. In order to commercialize drug products in the United States, drug
candidates will have to obtain regulatory approval from the FDA. Satisfaction of regulatory requirements typically takes many
years. To obtain regulatory approval, we or our collaborators, as the case may be, must first show that our or our collaborators'
drug candidates are safe and effective for target indications through preclinical testing (animal testing) and clinical trials (human
testing). Preclinical testing and clinical development are long, expensive and uncertain processes, and we do not know whether
the FDA will allow us or our collaborators to undertake clinical trials of any drug candidates in addition to our or our
collaborators' compounds currently in clinical trials. If regulatory approval of a product is granted, this approval will be limited
to those disease states and conditions for which the product is demonstrated through clinical trials to be safe and effective.
Completion of clinical trials may take several years and failure may occur at any stage of testing. The length of time required
varies substantially according to the type, complexity, novelty and intended use of the drug candidate. Interim results of a
preclinical test or clinical trial do not necessarily predict final results, and acceptable results in early clinical trials may not be
repeated in later clinical trials. For example, a drug candidate that is successful at the preclinical level may cause harmful or
dangerous side effects when tested at the clinical level. Our rate of commencement and completion of clinical trials may be
delayed, and existing clinical trials with our or our collaborators' drug candidates may be stopped, due to many potential factors,
including: • the high degree of risk and uncertainty associated with drug development; • our inability to formulate or
manufacture sufficient quantities of materials for use in clinical trials; • variability in the number and types of patients available
for each study; • difficulty in maintaining contact with patients after treatment, resulting in incomplete data; • unforeseen safety
issues or side effects; • poor or unanticipated effectiveness of drug candidates during the clinical trials; or • government or
regulatory delays. Data obtained from clinical trials are susceptible to varying interpretation, which may delay, limit or prevent
regulatory approval. Many companies in the pharmaceutical and biopharmaceutical industry, including our company, have
suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier clinical trials. In
addition, regulatory authorities may refuse or delay approval as a result of other factors, such as changes in regulatory policy
during the period of product development and regulatory agency review. For example, the FDA has in the past required, and
could in the future require, that we or our collaborators conduct additional trials of any of our drug candidates, which would
result in delays and could result in our termination of a drug development program. From time to time we and our
collaborators have experienced events that have resulted in delays, setbacks and terminations of drug development
programs. In April 2017, we and our collaborator Lilly announced that the FDA had issued a complete response letter for the
New Drug Application, or NDA, of OLUMIANT as a once-daily oral medication for the treatment of moderate- to- severe
rheumatoid arthritis. The letter indicated that additional clinical data were needed to determine the most appropriate doses and
to further characterize safety concerns across treatment arms. In June 2018, after a resubmission of the NDA, the FDA approved
the 2mg dose of OLUMIANT for the treatment of adults with moderately- to- severely active rheumatoid arthritis who have had
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an inadequate response to one or more tumor necrosis factor inhibitor therapies. The FDA did not at that time approve any
higher dose of OLUMIANT and required a warning label in connection with its approval. In addition, in January 2022, we
announced that we withdrew the NDA seeking approval of parsaclisib for the treatment of patients with relapsed or refractory
follicular lymphoma, marginal zone lymphoma and mantle cell lymphoma. The decision to withdraw the NDA followed
discussions with FDA regarding confirmatory clinical trials that we determined cannot be completed within the time period to
support the investment. Also, in March 2023, we received a complete response letter for ruxolitinib extended-release (XR)
tablets, which identified additional requirements for approval. Compounds or biologics developed by us or with or by our
collaborators and licensees may not prove to be safe and effective in clinical trials and may not meet all of the applicable
regulatory requirements needed to receive marketing approval. For example , in January 2016, a Phase II trial that was
evaluating ruxolitinib in combination with regorafenib in patients with relapsed or refractory metastatic colorectal cancer and
high C-reactive protein was stopped early after a planned analysis of interim efficacy data determined that the likelihood of the
trial meeting its efficacy endpoint was insufficient. In addition, in February 2016, we made a decision to discontinue our JANUS
1 study, our JANUS 2 study, our other studies of ruxolitinib in colorectal, breast and lung cancer, and our study of INCB39110
in pancreatic cancer after a planned analysis of interim efficacy data of JANUS 1 demonstrated that ruxolitinib plus capecitabine
did not show a sufficient level of efficacy to warrant continuation. Also, in April 2018, we along with Merck announced that the
ECHO- 301 study had been stopped and we also significantly downsized the epacadostat development program and in January
2020 we stopped our Phase <del>III-3</del> trial of itacitinib for the treatment of acute graft- versus- host- disease. If clinical trials of any of
our or our collaborators' compounds or biologics are stopped for safety, efficacy or other reasons or fail to meet their respective
endpoints, our overall development plans, business, prospects, expected operating results and financial condition could be
materially harmed and the value of our company could be negatively affected. Even if any of our applications receives an FDA
Fast Track or priority review designation (including based on a priority review voucher, one of which we recently acquired and
used in connection with our submission seeking FDA approval of ruxolitinib cream for atopic dermatitis), these designations
may not result in faster review or approval for our product candidate compared to product candidates considered for approval
under conventional FDA procedures and, in any event, do not assure ultimate approval of our product candidate by FDA. For
example, in June 2021 we were informed by the FDA that the FDA had extended by three months the review period for the
NDA for ruxolitinib cream for atopic dermatitis. Also, in July 2021, we announced that the FDA issued a complete response
letter for the BLA of retifanlimab for the treatment of squamous cell carcinoma of the anal canal, in which the FDA stated it
cannot approve the BLA and that additional data are needed. In addition, while the FDA had granted orphan drug designation
and Fast Track designation to parsaclisib as a treatment for patients with follicular lymphoma, marginal zone lymphoma and
mantle cell lymphoma, as discussed above we withdrew our NDA seeking approval for treatment of patients with those
lymphomas. The FDA has recently increased its attention on mandated confirmatory trials for oncology drug candidates with
accelerated approvals, and the logistics, cost and timing required for confirmatory trials may conflict with the investment thesis
for drug candidates, resulting in withdrawal of approval applications. Outside the United States, our and our collaborators'
ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities.
This foreign regulatory approval process typically includes all of the risks associated with the FDA approval process described
above and may also include additional risks. The requirements governing the conduct of clinical trials, product licensing, pricing
and reimbursement vary greatly from country to country and may require us to perform additional testing and expend additional
resources. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one
foreign regulatory authority does not ensure approval by regulatory authorities in other countries or by the FDA. In recent years,
through legislative and regulatory actions and executive orders, the U. S. federal government has made substantial changes to
various payment systems under the Medicare and other federal health care programs. Comprehensive reforms to the U.S.
healthcare system were enacted, including changes to the methods for, and amounts of, Medicare reimbursement, For example, a
provision in the American Rescue Plan Act of 2021 includes a provision that became effective in January 2024 that
<mark>eliminates the statutory cap on rebates that drug manufacturers pay to Medicaid. It</mark> is expected <del>to be</del> that this provision,
as implemented in 2024 by the Centers for Medicare and Medicaid Services, or CMS, will have the effect of increasing the
Medicaid rebate liability for some, particularly in the case of medicines that have experienced price increase increases
prices at a rate in excess of inflation. Further, in August 2022, the Inflation Reduction Act of 2022 was enacted, which includes
provisions allowing the federal government to negotiate prices for certain high- expenditure single source Medicare drugs, to
impose penalties and to implement a potential excise tax for manufacturers that fail to comply with the negotiation by offering a
price that is not equal to or less than the negotiated "maximum fair price" under the law, and to impose rebate liability on
manufacturers that take price increases that exceed inflation. The new law also reduced the out- of- pocket prescription drug
costs for Medicare Part D beneficiaries, and to help pay for this change in benefit design, the law imposes a new discount
program starting in 2025, in which manufacturers pay specified discounts on Medicare Part D utilization of their drugs as a
condition of selling such drugs in the Medicare Part D program. The Inflation Reduction Act includes certain exemptions for
small biotech drug manufacturers, including Incyte. These exemptions apply on a drug- specific basis, and qualifying drugs will
be exempt from possible negotiation through 2028 and subject to reduced discounts that will be phased- in over a number of
years under the new Part D benefit. While there is currently significant uncertainty regarding the implementation of some of
these reforms or the scope of amended or additional reforms, the implementation of reforms could significantly reduce net sales
resulting from the Medicare programs and limit our ability to increase the prices that we charge for our drugs. Reforms or other
changes to these payment systems may change the availability, methods and rates of reimbursements from Medicare, private
insurers and other third- party payors for our current and any future approved products. These reforms may affect future
investments in our drug development, should the reforms affect our risk-benefit analysis of investing in a drug candidate. Some
of these changes and proposed changes could result in reduced reimbursement rates or the elimination of dual sources of
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payment, which could reduce the price that we or any of our collaborators or licensees receive for any products in the future, and which would adversely affect our business strategy, operations and financial results. In addition, there has been an increasing legislative and enforcement interest in the United States with respect to drug pricing practices. This has resulted in significant legislative activity and proposals from the prior and current Administrations relating to prescription drug prices and reimbursement, any of which, if enacted, could impose downward pressure on the prices that we can charge for our products and may further limit the commercial viability of our products and drug candidates. Specifically, there have been ongoing federal congressional inquiries and proposed and enacted federal and state legislation, executive orders and administrative agency rules designed to, among other things, bring more transparency to drug pricing, reduce drug prices, reform government program reimbursement methodologies for prescription drugs, expand access to government- mandated discounted pricing (known as 340B pricing) through broader contract pharmacy arrangements, allow importation of drugs into the United States from other countries, and limit allowable prices for drugs through reference to an average price from foreign markets that may be substantially lower than what we currently or would otherwise charge. In certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. We expect that the health care reform measures that have been adopted in the United States and in foreign markets, and further reforms that may be adopted in the future, could result in more rigorous coverage criteria and additional downward pressure on the prices that we may receive for our approved products. If reimbursement for our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be materially harmed, including by our revenue potentially being materially adversely affected and our research and development efforts potentially being materially curtailed or, in some cases, ceasing. There may be future changes that result in reductions in current prices, coverage and reimbursement levels for our current or any future approved products, and we cannot predict the scope of any future changes or the impact that those changes would have on our operations. The eonsequences of the COVID-19 pandemie, including the economic effect on government budgets in the United States and elsewhere, may accelerate any of the healthcare reform efforts described above or result in future reform efforts, any of which could have adverse effects on our business, including higher costs for us, lower reimbursement rates for our products and lower demand for our products. Further, if we become the subject of any governmental or other regulatory hearing or investigation with respect to the pricing of our products or other business practices, we could incur significant expenses and could be distracted from the operation of our business and execution of our business strategy. Any such hearing or investigation could also result in significant negative publicity and harm to our reputation, reduced market acceptance and demand, which could adversely affect our financial results and growth prospects. In addition, the trend toward managed health care in the United States, the organizations for which could control or significantly influence the purchase of health care services and products, as well as legislative and regulatory proposals to reform health care or address the cost of government insurance programs, may all result in lower prices for or rejection of our products. Adoption of our products by the medical community and patients may be limited without adequate reimbursement for those products. Cost control initiatives may decrease coverage and payment levels for our products and, in turn, the price that we will be able to charge for any product. Our products may not be considered costeffective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a profitable basis. We are unable to predict all changes to the coverage or reimbursement methodologies that will be applied by private or government payors to our current and any future approved products. The continuing efforts of legislatures, health agencies and third- party payors to contain or reduce the costs of health care, any denial of private or government payor coverage or inadequate reimbursement for our drug candidates could materially and adversely affect our business strategy, operations, future revenues and profitability, and the future revenues and profitability of our potential customers, suppliers, collaborators and licensees and the availability of capital. The same risks apply to our compounds developed and marketed by our collaborators. and our future potential milestone and royalty revenues could be affected in a similar manner. We depend on our collaborators and licensees for the future development and commercialization of some of our drug candidates. Conflicts may arise between our collaborators and licensees and us, or our collaborators and licensees may choose to terminate their agreements with us, which may adversely affect our business. We have licensed to Novartis rights to ruxolitinib outside of the United States and worldwide rights to our MET inhibitor compounds, including TABRECTA, and licensed to Lilly worldwide rights to baricitinib. In addition, we have licensed to CMS, Innovent, InnoCare and Maruho-certain Asian rights to some of our drug products and clinical stage compounds to other collaborators. Under the terms of our agreements with these collaborators, we have no or limited control over the further clinical development of these drug candidates in the relevant territories and any revenues we may receive if these drug candidates receive regulatory approval and are commercialized in the relevant territories will depend primarily on the development and commercialization efforts of others. While OLUMIANT was approved by the European Commission in February 2017 for the treatment of moderate- to- severe rheumatoid arthritis in adult patients and by Japan's Ministry of Health, Labor and Welfare in July 2017 for the treatment of rheumatoid arthritis in patients with inadequate response to standard- of- care therapies, the NDA for OLUMIANT for the treatment of moderate- to- severe rheumatoid arthritis was approved in June 2018, and only in the lower dosage tablet and with a warning label. Delays in any marketing approval by the FDA, European or other regulatory authorities, or any label modifications or restrictions in connection with any such approval, or the existence of other risks relating to approved drug products, including those described under "Risks Relating to Commercialization of Our Products," could delay the receipt of and reduce resulting potential royalty and milestone revenue from baricitinib or any of our other out-licensed drug candidates. Conflicts may arise with our collaborators and licensees if they pursue alternative technologies or develop alternative products either on their own or in collaboration with others as a means for developing treatments for the diseases that we have targeted. Competing products and product opportunities may lead our collaborators and licensees to withdraw their support for our drug candidates. Any failure of our collaborators and licensees to perform their obligations under our agreements with them or otherwise to support our drug candidates could negatively impact the development of our drug candidates, lead to our loss of potential revenues from product sales and milestones and

delay our achievement, if any, of profitability. Additionally, conflicts have from time to time occurred, and may in the future arise, relating to, among other things, disputes about the achievement and payment of milestone amounts and royalties owed, the ownership of intellectual property that is developed during the course of a collaborative relationship or the operation or interpretation of other provisions in our collaboration agreements. These disputes have led and could in the future lead to litigation or arbitration, which could be costly and divert the efforts of our management and scientific staff, and could diminish the expected effectiveness of the collaboration. Our existing collaborative and license agreements can be terminated by our collaborators and licensees for convenience, among other circumstances. If any of our collaborators or licensees terminates its agreement with us, or terminates its rights with respect to certain indications or drug candidates, we may not be able to find a new collaborator for them, and our business could be adversely affected. Should an agreement be terminated before we have realized the benefits of the collaboration or license, our reputation could be harmed, we may not obtain revenues that we anticipated receiving, and our business could be adversely affected. The success of our drug discovery and development efforts may depend on our ability to find suitable collaborators to fully exploit our capabilities. If we are unable to establish collaborations or if these future collaborations are unsuccessful in the development and commercialization of our drug candidates, our research, development and commercialization efforts may be unsuccessful, which could adversely affect our results of operations, financial condition and future revenue prospects. An element of our business strategy is to enter into collaborative or license arrangements with other parties, under which we license our drug candidates to those parties for development and commercialization or under which we study our drug candidates in combination with other parties' compounds or biologics. For example, in addition to our Novartis, Lilly, Innovent, InnoCare, Maruho and CMS our other existing collaborations, we are evaluating strategic relationships with respect to several of our other programs. However, because collaboration and license arrangements are complex to negotiate, we may not be successful in our attempts to establish these arrangements. Also, we may not have drug candidates that are desirable to other parties, or we may be unwilling to license a drug candidate to a particular party because such party interested in it is a competitor or for other reasons. The terms of any such arrangements that we establish may not be favorable to us. Alternatively, potential collaborators may decide against entering into an agreement with us because of our financial, regulatory or intellectual property position or for scientific, commercial or other reasons. If we are not able to establish collaboration or license arrangements, we may not be able to develop and commercialize a drug product, which could adversely affect our business, our revenues and our future revenue prospects. We will likely not be able to control the amount and timing of resources that our collaborators or licensees devote to our programs or drug candidates. If our collaborators or licensees prove difficult to work with, are less skilled than we originally expected, do not devote adequate resources to the program, are unable to obtain regulatory approval of our drug candidates, pursue alternative technologies or develop alternative products, or do not agree with our approach to development or manufacturing of the drug candidate, the relationship could be unsuccessful. Our collaborations with respect to epacadostat involved the study of our collaborators' drugs used in combination with epacadostat on a number of indications or tumor types, many of which were the same across multiple collaborations. We cannot assure you that potential conflicts will not arise or be alleged among these or future collaborations. If a business combination involving a collaborator or licensee and a third- party were to occur, the effect could be to terminate or cause delays in development of a drug candidate. If we fail to enter into additional licensing agreements or if these arrangements are unsuccessful, our business and operations might be adversely affected. In addition to establishing collaborative or license arrangements under which other parties license our drug candidates for development and commercialization or under which we study our drug candidates in combination with such parties' compounds or biologics, we may explore opportunities to develop our clinical pipeline by in-licensing drug candidates or therapeutics targets that fit within our focus on oncology, such as our collaborations with Agenus Inc., MacroGenics, Inc., Merus N. V., MorphoSys, Syros Pharmaceuticals, Inc., and Syndax Pharmaceuticals, Inc., or explore additional opportunities to further develop and commercialize existing drug candidates in specific jurisdictions, such as our June 2016 acquisition of the development and commercialization rights to ICLUSIG in certain countries. We may be unable to enter into any additional in-licensing agreements because suitable drug candidates that are within our expertise may not be available to us on terms that are acceptable to us or because competitors with greater resources seek to in-license the same drug candidates. Drug candidates that we would like to develop or commercialize may not be available to us because they are controlled by competitors who are unwilling to license the rights to the drug candidate to us. In addition, we may enter into license agreements that are unsuccessful and our business and operations might be adversely affected if we are unable to realize the expected economic benefits of a collaboration or other licensing arrangement, by the termination of a drug candidate and termination and winding down of the related license agreement, or due to other business or regulatory issues, including financial difficulties, that may adversely affect a licensor's ability to continue to perform its obligations under an in-license agreement. For example, in January 2022, we decided to opt- out of the continued development with Merus of MCLA- 145, which was the most advanced compound under our collaboration with Merus, and in September 2022, we decided to terminate our collaboration with Calithera Biosciences, Inc. . If we make or incur contractual obligations to make significant upfront payments in connection with licenses for late- stage drug candidates, as we did in March 2020 in connection with the effectiveness of our collaboration agreement with MorphoSys, and if any of those drug candidates do not receive marketing approval or commercial sales as anticipated or we have to fund additional clinical trials before marketing approval can be obtained, we will have expended significant funds that might otherwise be applied for other uses or have to expend funds that were not otherwise budgeted or anticipated in connection with the collaboration, and such developments could have a material adverse effect on our stock price and our ability to pursue other transactions. As discussed above under "We depend on our collaborators and licensees for the future development and commercialization of some of our drug candidates. Conflicts may arise between our collaborators and licensees and us, or our collaborators and licensees may choose to terminate their agreements with us, which may adversely affect our business, conflicts or other issues may arise with our licensors. Those conflicts could result in delays in our plans to develop drug

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candidates or result in the expenditure of additional funds to resolve those conflicts that could have an adverse effect on our
results of operations. We may also need to license drug delivery or other technology in order to continue to develop our drug
candidates. If we are unable to enter into additional agreements to license drug candidates, drug delivery technology or other
technology or if these arrangements are unsuccessful, our research and development efforts could be adversely affected, and we
may be unable to increase our number of successfully marketed products and our revenues. Public health epidemics and
pandemics, such as the COVID- 19 pandemic, have adversely affected and could in the future adversely affect our
business, results of operations, and financial condition. Our global operations expose us to risks associated with public
health epidemics and pandemics, such as the COVID- 19 pandemic. The extent to which a public health pandemic and
the measures taken to limit the disease's spread can impact our operations and those of our suppliers, collaborators,
service providers and healthcare organizations serving patients, as well as demand for our drug products, will depend on
developments, that are highly uncertain, including the duration of the outbreak and any related government actions. As
a result of the COVID- 19 pandemic, we experienced, and as a result of future pandemics we may in the future
experience disruptions that could severely impact our business, results of operations and financial condition. These
disruptions can include the following: • the imposition of shelter- in- place orders and work- from- home policies that
could affect our research and development activities and access to our laboratory space; • disruptions in our sales and
marketing activities; • negative impacts on the demand for our products as a result of a decrease in patient visits to
healthcare professionals and the prioritization of hospital resources for a future pandemic; • negative impacts on our
clinical trials as a result of delays in site initiation, patient screening, patient enrollment, and monitoring and data
collection; • slower response times by the FDA and comparable foreign regulatory agencies for the review and potential
approvals of our drug candidate applications; and • negative impacts on the global supply chain which may affect our
ability to obtain sufficient materials for our drug products and product candidates. Our collaborators could be affected
by similar factors as those that have or could affect our business. The ultimate impact of a public health epidemic or
pandemic is highly uncertain, but the potential impacts or delays on our or our collaborators' businesses, our revenues,
including milestone and royalty revenues from our collaborators, our and our collaborators' clinical trials, healthcare
systems or the global economy as a whole could have a material adverse impact on our business, results of operations,
and financial condition. Even if a drug candidate that we develop receives regulatory approval, we may decide not to
commercialize it if we determine that commercialization of that product would require more money and time than we are
willing to invest. Even if any of our drug candidates receives regulatory approval, it could be subject to post-regulatory
surveillance, and may have to be withdrawn from the market or subject to restrictions if previously unknown problems occur.
Regulatory agencies <del>may</del> also may require additional clinical trials or testing, and the drug product may be recalled or may be
subject to reformulation, additional studies, changes in labeling, warnings to the public and negative publicity. As a result, we
may not continue to commercialize a product even though it has obtained regulatory approval. Further, we may decide not to
continue to commercialize a product if the market does not accept the product because it is too expensive or because third
parties, such as insurance companies or Medicare, will not cover it for substantial reimbursement. In addition, we may decide
not to continue to commercialize a product if competitors develop and commercialize similar or superior products or have
proprietary rights that preclude us from ultimately marketing our products. Any approved drug product that we bring to the
market may not gain market acceptance by physicians, patients, healthcare payors and others in the medical community. Even if
we or our collaborators are successful in gaining regulatory approval of any of our or our collaborators' drug candidates in
addition to JAKAFI, OLUMIANT, PEMAZYRE, MONJUVI / MINJUVI and OPZELURA or acquire rights to approved drug
products in addition to ICLUSIG, we may not generate significant product revenues if these drug products do not achieve an
adequate level of acceptance. Physicians may not recommend our or our collaborators' drug products until longer-term clinical
data or other factors demonstrate the safety and efficacy of our or our collaborators' drug products as compared to other
alternative treatments. Even if the clinical safety and efficacy of our or our collaborators' drug products is established,
physicians may elect not to prescribe these drug products for a variety of reasons, including the reimbursement policies of
government and other third-party payors and the effectiveness of our or our collaborators' competitors in marketing their
products. Market acceptance of our drug products, if approved for commercial sale, will depend on a number of factors,
including the following, and market acceptance of our collaborators' drug products will depend on similar factors: • the
willingness and ability of patients and the healthcare community to use our drug products; • the ability to manufacture our drug
products in sufficient quantities that meet all applicable quality standards and to offer our drug products for sale at competitive
prices; • the perception of patients and the healthcare community, including third- party payors, regarding the safety, efficacy
and benefits of our drug products compared to those of competing products or therapies; * the pricing and reimbursement of our
drug products relative to existing treatments; and • marketing and distribution support for our drug products. In September 2021,
the FDA updated labeling for JAKAFI and other JAK- inhibitor drugs to include warnings of increased risk of major adverse
eardiovascular events, thrombosis, and secondary malignancies related to another JAK- inhibitor treating rheumatoid arthritis, a
condition for which JAKAFI is not indicated. The label for OPZELURA contains similar warnings seen with JAK inhibitors for
inflammatory conditions. We cannot predict the effects on sales of JAKAFI as a result of the labeling change or OPZELURA as
a result of warning included in its label, but it is possible that future sales of JAKAFI and the commercial success of
OPZELURA can be negatively affected by the updated labeling, which could have a material and adverse effect on our
business, results of operations and prospects. We have limited capacity to conduct preclinical testing and clinical trials, and our
resulting dependence on other parties could result in delays in and additional costs for our drug development efforts. We have
limited internal resources and capacity to perform preclinical testing and clinical trials. As part of our development strategy, we
often hire contract research organizations, or CROs, to perform preclinical testing and clinical trials for drug candidates. If the
CROs that we hire to perform our preclinical testing and clinical trials do not meet deadlines, do not follow proper procedures,
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or a conflict arises between us and our CROs, our preclinical testing and clinical trials may take longer than expected, may cost
more, may be delayed or may be terminated. If we were forced to find a replacement entity to perform any of our preclinical
testing or clinical trials, we may not be able to find a suitable entity on favorable terms, or at all. Even if we were able to find
another company to perform a preclinical test or clinical trial, the delay in the test or trial may result in significant additional
expenditures. Events such as these may result in delays in our obtaining regulatory approval for our drug candidates or our
ability to commercialize our products and could result in increased expenditures that would adversely affect our operating results
. We face significant competition for our drug discovery and development efforts, and if we do not compete effectively, our
commercial opportunities will be reduced or climinated. The biotechnology and pharmaceutical industries are intensely
competitive and subject to rapid and significant technological change. Our drug discovery and development efforts may target
diseases and conditions that are already subject to existing therapies or that are being developed by our competitors, many of
which have substantially greater resources, larger research and development staffs and facilities, more experience in completing
preclinical testing and clinical trials, and formulation, marketing and manufacturing capabilities. As a result of these resources,
our competitors may develop drug products that render our products obsolete or noncompetitive by developing more effective
drugs, developing their products more efficiently or pricing their products more competitively. Our ability to develop
competitive products would be limited if our competitors succeeded in obtaining regulatory approvals for drug candidates more
rapidly than we were able to or in obtaining patent protection or other intellectual property rights that limited our drug
development efforts. Any drug products resulting from our research and development efforts, or from our joint efforts with
collaborators or licensees, might not be able to compete successfully with our competitors' existing and future products, or
obtain regulatory approval in the United States or elsewhere. The development of products or processes by our competitors with
significant advantages over those that we are developing could harm our future revenues and profitability. Our reliance on other
parties to manufacture our drug products and drug candidates could result in a short supply of the drugs, delays in clinical trials
or drug development, increased costs, and withdrawal or denial of a regulatory authority's approval. We do not currently
operate manufacturing facilities for most of our clinical or commercial production products of, including JAKAFI,
PEMAZYRE, <mark>ICLUSIG and</mark> OPZELURA <mark>,</mark> and <del>most of</del> our <del>other</del> drug candidates <del>or <mark>. Our current manufacturing strategy</del></del></mark>
for ICLUSIG. We currently hire these products and drug candidates is to contract with third parties to manufacture the
related raw materials, active pharmaceutical ingredient (API), and finished drug product of JAKAFI. We do have a
biologics production facility located in Yverdon, ICLUSIG-Switzerland, currently registered for MINJUVI
PEMAZYRE, OPZELURA and our other drug candidates for clinical trials and substance manufacturing, For ZYNYZ,
together with our collaborator MorphoSys is currently MacroGenics, we are responsible for the sourcing and manufacturing
of ZYNYZ MONJUVI / MINJUVI . In addition While working to increase our own manufacturing capacity through our
Swiss bioplant site, we expect to continue to rely on third parties for the manufacture of clinical and commercial supplies of
raw materials, API and finished drug product for any drugs that we successfully develop. We also hire contract with third
parties to package and label our the finished product products. The FDA requires that the raw materials, API and finished
product for drug products such as JAKAFI, PEMAZYRE and OPZELURA and our other drug candidates be manufactured
according to its current Good Manufacturing Practices regulations, and regulatory authorities in other countries have similar
requirements. Failure to There are only a limited number of manufacturers that comply with these requirements. Failure to
comply with current Good Manufacturing Practices and the applicable regulatory requirements of other countries in the
manufacture of our drug candidates and products could result in the FDA or a foreign regulatory authority halting our clinical
trials, withdrawing or denying regulatory approval of our drug product, enforcing initiating product recalls or taking other
enforcement actions, which could have a material adverse effect on our business. We may not be able to obtain sufficient
quantities of our drug candidates or any drug products we may develop if our designated manufacturers do not have the capacity
or capability to manufacture them according to our schedule and specifications. Manufacturers of pharmaceutical products often
encounter difficulties in production, especially in scaling up initial production to commercial quantities from clinical quantities.
These problems include difficulties with production costs and yields, quality control and assurance and shortages of qualified
personnel. To the extent problems such as these are experienced, we could encounter difficulties in supplying sufficient product
to meet demand or incur additional costs to remedy the problems or to recall defective products. Any such recall could also
harm our sales efforts and our reputation. Our suppliers To the extent our supply chain involves parties in China or materials
originating in areas of China that are or could be affected by disease outbreaks such as the COVID-19 pandemic or geopolitical
events such as the Russian invasion of Ukraine, which operate we could see disruptions to our supply chain. Currently, our
supply chain for our drug products and product candidates depends on operations by us and by other companies in multiple
countries around the world, <del>and <mark>could also experience disruptions in</mark> the their operations effects of the COVID-19 pandemic</del>
and measures to address the COVID-19 pandemic, as well as the effects resulting from the Russian invasion of Ukraine and
related various factors, including equipment malfunction or failure, regulatory requirements or sanctions— actions, raw
material shortages, labor disputes or shortages, including from the effects of public health pandemics, cyberattacks,
natural and other actions disasters, on any or all of these countries is uncertain and wars unpredictable and potential
disruption is possible. And, for or JAKAFI other geopolitical events. In addition, one or more of our third party contract
manufacturers could be acquired and its contract manufacturing operations could be ceased or curtailed. while
our strategy is to maintain at a minimum 24 months stock of ruxolitinib phosphate API, inclusive of finished product,
ruxolitinib phosphate might be used by us either to make JAKAFI or OPZELURA or for ruxolitinib drug candidates in clinical
trials. In addition, we may not be able to arrange for our drug candidates or any drug products that we may develop to be
manufactured by one of these parties on reasonable terms, if at all. We generally have a single source or a limited number of
suppliers that are qualified to supply each of the API and finished product of our drug products and our other drug candidates
and, in the case of JAKAFI, we only have a single source for its raw materials. If any of these suppliers were to become unable
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or unwilling to supply us with raw materials, API or finished product that complies with applicable regulatory requirements, we
could incur significant delays in our clinical trials or interruption of commercial supply that could have a material adverse effect
on our business. If we have promised delivery of a drug candidate or drug product and are unable to meet the delivery
requirement due to manufacturing difficulties, our development programs could be delayed, we may have to expend additional
sums in order to ensure that manufacturing capacity is available when we need it even if we do not use all of the manufacturing
capacity, and our business and operating results could be harmed. Any increases in the cost of our drug candidates or drug
products, whether through conditions affecting the cost and availability of raw materials, such as inflation, decreases in
available manufacturing capacity, or otherwise, would adversely affect our results of operations. We may not be able to
adequately manage and oversee the manufacturers we choose, they may not perform as agreed or they may terminate their
agreements with us. Foreign manufacturing approval processes typically include all of the risks associated with the FDA
approval process for manufacturing and may also include additional risks. A number of our collaborations involve the
manufacture of antibodies. Either we or our collaborators have primary responsibility for manufacturing activities, and we
intend to continue to use third- party contract manufacturing organizations for the manufacture of antibodies in conjunction with
our manufacturing facility in Switzerland, which became accredited by the Swiss Health Authority in June 2022.
Manufacturing antibodies and products containing antibodies is a more complex process than manufacturing small molecule
drugs and subject to additional risks. The process of manufacturing antibodies and products containing antibodies is highly
susceptible to product loss due to contamination, equipment failure or improper installation or operation of equipment, vendor or
operator error, inconsistency in yields, variability in product characteristics, and difficulties in scaling up the production process.
Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and
other supply disruptions. If microbial, viral or other contaminations are discovered in our product candidates or in the
manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an
extended period of time to investigate and remedy the contamination. We may encounter delays and difficulties in scaling up
production at our new facility or in obtaining necessary regulatory approvals and registrations to do so. If we fail to
comply with the extensive legal and regulatory requirements affecting the health care industry, we could face increased costs,
penalties and a loss of business. Our activities, and the activities of our collaborators, partners and third- party providers, are
subject to extensive government regulation and oversight both in the United States and in foreign jurisdictions. The FDA and
comparable agencies in other jurisdictions directly regulate many of our most critical business activities, including the conduct
of preclinical and clinical studies, product manufacturing, advertising and promotion, product distribution, adverse event
reporting and product risk management. States increasingly have been placing greater restrictions on the marketing practices of
healthcare companies and have instituted pricing disclosure and other requirements for companies selling pharmaceuticals. In
addition, pharmaceutical and biotechnology companies have been the target of lawsuits and investigations alleging violations of
government regulations, including claims asserting submission of incorrect pricing information, improper promotion of
pharmaceutical products, payments intended to influence the referral of federal or state healthcare business, submission of false
claims for government reimbursement, antitrust violations, violations of the U. S. Foreign Corrupt Practices Act, the U. K.
Bribery Act and similar anti- bribery or anti- corruption laws, or violations related to environmental matters. There is also
enhanced scrutiny of company- sponsored patient assistance programs, including insurance premium and co- pay assistance
programs and donations to third- party charities that provide such assistance. In December 2018, we received a civil
investigative demand from the U. S. Department of Justice, or DOJ, for documents and information relating to our speaker
programs and patient assistance programs, including our support of non-profit organizations that provide financial assistance to
eligible patients and in November 2019, the qui tam complaint underlying the DOJ inquiry was unsealed, at which time we
learned that a former employee whom we had terminated had made certain allegations relating to the programs described above.
While we deny that any improper claims were submitted to government payers, we agreed in May 2021 to settle the matter with
the DOJ Civil Division for $ 12. 6 million, plus certain statutory fees. Violations of governmental regulation by us, our vendors
or donation recipients may be punishable by criminal and civil sanctions, including damages, fines and penalties and exclusion
from participation in government programs, including Medicare and Medicaid. In addition to damages, fines and penalties for
violation of laws and regulations, we could be required to repay amounts we received from government payors, or pay
additional rebates and interest if we are found to have miscalculated the pricing information we have submitted to the
government. Actions taken by federal or local governments, legislative bodies and enforcement agencies with respect to these
legal and regulatory compliance matters could also result in reduced demand for our products, reduced coverage of our products
by health care payors, or both. We cannot ensure that our compliance controls, policies, and procedures will in every instance
protect us from acts committed by our employees, collaborators, partners or third- party providers that would violate the laws or
regulations of the jurisdictions in which we operate. Whether or not we have complied with the law, an investigation into
alleged unlawful conduct could increase our expenses, damage our reputation, divert management time and attention and
adversely affect our business, and any settlement of these proceedings could result in significant payments by us. Risks relating
to compliance with laws and regulations may be heightened as we continue to expand our global operations and enter new
therapeutic areas with different patient populations, which due to different product distribution methods, marketing programs or
patient assistance programs may result in additional regulatory burdens and obligations. The illegal distribution and sale by third
parties of counterfeit or unfit versions of our or our collaborators' products or stolen products could harm our business and
reputation. We are aware that counterfeit versions of our products have been distributed or sold by entities not authorized by us
using product packaging suggesting that the product was provided by us. If unauthorized third parties illegally distribute and sell
counterfeit versions of our or our collaborators' products, those products may not meet our or our collaborators' rigorous
manufacturing, distribution and handling standards. In addition, inventory that is stolen from warehouses, plants or while in-
transit, and that is subsequently improperly stored and sold through unauthorized channels, may not meet our or our
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collaborators' distribution and handling standards. A patient who receives a counterfeit or unfit drug may suffer dangerous
health consequences. Our reputation and business could suffer harm as a result of counterfeit or unfit drugs sold under our brand
name and could result in lost sales for us and decreased revenues. If counterfeit or unfit drugs are sold under our or our
collaborators' brand names, our reputation and business could suffer harm and we could experience decreased royalty revenues.
As most of our drug discovery and development operations are conducted at our headquarters in Wilmington, Delaware, the loss
of access to this facility would negatively impact our business. Our facility in Wilmington, Delaware is our headquarters and is
also where we conduct most of our drug discovery, research, development and marketing activities. In addition, natural
disasters, the effects of or measures taken to limit the effects of health epidemics such as the COVID-19 pandemic, or actions of
activists opposed to aspects of pharmaceutical research may disrupt our experiments or our ability to access or use our facility.
The loss of access to or use of our Wilmington, Delaware facility, either on a temporary or permanent basis, would result in an
interruption of our business and, consequently, would adversely affect our overall business. We depend on key employees in a
competitive market for skilled personnel, and the loss of the services of any of our key employees or our inability to attract and
retain additional personnel would affect our ability to expand our drug discovery and development programs and achieve our
objectives. We are highly dependent on the members of our executive management team and principal members of our
commercial, development, medical, operations and scientific staff. We experience intense competition for qualified personnel.
Our future success also depends in part on the continued service of our executive management team and key personnel and our
ability to recruit, train and retain essential personnel for our drug discovery and development programs, and for our medical
affairs and commercialization activities. If we lose the services of any of these people or if we are unable to recruit sufficient
qualified personnel, our research and product development goals, and our commercialization efforts could be delayed or
curtailed. We do not maintain "key person" insurance on any of our employees. If we fail to manage our growth effectively, our
ability to develop and commercialize products could suffer. We expect that if our drug discovery efforts continue to generate
drug candidates, our clinical drug candidates continue to progress in development, and we continue to build our development,
medical and commercial organizations, we will require significant additional investment in personnel, management and
resources. Our ability to achieve our research, development and commercialization objectives depends on our ability to respond
effectively to these demands and expand our internal organization, systems, controls and facilities to accommodate additional
anticipated growth. If we are unable to manage our growth effectively, our business could be harmed and our ability to execute
our business strategy could suffer. We may acquire businesses or assets, form joint ventures or make investments in other
companies that may be unsuccessful, divert our management's attention and harm our operating results and prospects. As part
of our business strategy, we may pursue additional acquisitions of what we believe to be complementary businesses or assets or
seek to enter into joint ventures. We also may pursue strategic alliances in an effort to leverage our existing infrastructure and
industry experience to expand our product offerings or distribution, or make investments in other companies. For example,
February 2024 in June 2016, we completed the acquisition of the European operations of ARIAD entered into a purchase
agreement with MorphoSys under which we acquired rights to tafasitamab (MONJUVI / MINJUVI) that resulted in our
holding exclusive global development and commercialization rights to tafasitamab. The success of our acquisitions, joint
ventures, strategic alliances and investments will depend on our ability to identify, negotiate, complete and, in the case of
acquisitions, integrate those transactions and, if necessary, obtain satisfactory debt or equity financing to fund those transactions.
These We may not realize the anticipated benefits of any acquisition, joint venture, strategic alliance transactions are complex,
time consuming and expensive and entail numerous risks, including: • unanticipated costs, delays or other operational or
financial problems related investment. We may not be able to integrate integrating acquisitions the products, product
candidates, technologies, business operations, systems, controls and personnel of an acquired company or asset with our
company; • failure to successfully develop and commercialize acquired products, product candidates or technologies or to
achieve other strategic objectives; • delays or inability to progress preclinical programs into clinical development or
unfavorable data from clinical trials evaluating acquired or licensed products or product candidates; • disruption of our
ongoing business and diversion of our management's and employees' attention from ongoing development of our existing
business <mark>- and other opportunities and challenges; • inability to</mark> achieve planned synergies or cost savings <mark>- ; • the potential</mark>
loss of key employees of an acquired company; • entry into markets in which we have no or limited direct prior
experience or where competitors in such markets have stronger market positions; • uncertainties in our ability to
maintain the key business relationships of businesses -- business we acquire ; • exposure to unknown or retain key personnel
contingent liabilities or the incurrence of unanticipated expenses, including those with respect to intellectual property,
pre- clinical or clinical data, safety, compliance or internal controls, and including as a result of the failure of the due
diligence processes to identify significant problems, liabilities or challenges of an acquired company or asset; • the risk
that acquired businesses may have differing or inadequate cybersecurity and data protection controls; and • exposure to
litigation or other claims in connection with, or inheritance of claims or litigation risk as a result of, the strategic
transaction, including claims from terminated employees, customers, former equity holders or other third parties.
Acquisition transactions may be subject to regulatory approvals or other requirements that are not within our control.
We may be unable to obtain these regulatory or other approvals, and closing conditions required in connection with our
acquisition transactions may be unable to be satisfied or waived, which could result in our inability to complete the
planned acquisition transactions. In addition, antitrust scrutiny by regulatory agencies and changes to regulatory
approval process in the U. S. and foreign jurisdictions may cause approvals to take longer than anticipated to obtain, not
be obtained at all, or contain burdensome conditions such as required divestitures, which may jeopardize, delay or
reduce the anticipated benefits of acquisitions to us and could impede the execution of our business -strategy. As a result
of these or other problems and risks, businesses, products or technologies we acquire or invest in or obtain licenses to
may not produce the revenues, earnings, business synergies or other benefits that we anticipated, within the expected
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timeframe or at all. As a result, we may incur higher costs and realize lower revenues than we had anticipated. We cannot assure you that any acquisitions or investments we may make in the future will be completed or that, if completed, the acquired business, licenses, investments, products, or technologies will generate sufficient revenue to offset the costs or other negative effects on our business. Other pharmaceutical companies, many of which may have substantially greater resources, compete with us for these opportunities., and we may be unable to effectively advance our business strategy through strategic transactions, which could impair assume unknown or our contingent liabilities ability to grow or obtain access to products incur unanticipated expenses. Integration of acquired companies or technology businesses also may require management resources that otherwise would could be available for ongoing important to the development of our existing business. Any acquisitions or investments made by us also could result in significant write- offs or the incurrence of debt and contingent liabilities, any of which could harm our operating results. For example, in each of the fiscal quarters in 2022 and in the third quarter of 2023 we recorded unrealized losses related to our investments in our collaboration partners, and we may in experience additional losses related to our investments in future period. In addition, if we choose to issue equity securities shares of our stock as consideration for any acquisition, dilution to our stockholders could result. Risks associated with our operations outside of the United States could adversely affect our business. Our acquisition of ARIAD's European operations significantly expanded our operations in Europe, and we plan to continue to expand our operations and conduct certain development activities outside of the United States. For example, as part of our plans to expand our activities outside of the United States, we now conduct some of our operations in Canada, commercial and clinical development activities in Japan and, have opened an office in China and are working with partners in additional markets. International operations and business expansion plans are subject to numerous additional risks, including: • multiple, conflicting and changing laws and regulations such as tax laws, privacy regulations, tariffs, export and import restrictions, employment, immigration and labor laws, regulatory requirements, and other governmental approvals, permits and licenses, compliance with which can increase in complexity as we enter into additional jurisdictions; • difficulties in staffing and managing operations in diverse countries and difficulties in connection with assimilating and integrating any operations and personnel we might acquire into our company; • risks associated with obtaining and maintaining, or the failure to obtain or maintain, regulatory approvals for the sale or use of our products in various countries; • complexities associated with managing government payor systems, multiple payor- reimbursement regimes or patient self- pay systems; • financial risks, such as longer payment cycles, difficulty obtaining financing in foreign markets, difficulty enforcing contracts and intellectual property rights, difficulty collecting accounts receivable and exposure to foreign currency exchange rate fluctuations; • general political and economic conditions in the countries in which we operate, including inflation, political or economic instability, terrorism and political unrest, -and geopolitical events such as the Russian invasion of Ukraine, curtailment of trade and other business restrictions, and uncertainties associated with the implementation of the relationship between the United Kingdom and the European Union; • public health risks, including epidemics and such as the effects of the COVID-19 pandemic pandemics, and related effects on new patient starts, clinical trial activity, regulatory agency response times, supply chain, travel and employee health and availability; and • regulatory and compliance risks that relate to maintaining accurate information and control over activities that may fall within the purview of the U. S. Foreign Corrupt Practices Act, its books and records provisions or its anti-bribery provisions, or similar anti- bribery or anti- corruption laws and regulations in other countries, such as the U. K. Anti- Bribery Act and the U. K. Criminal Finances Act, which may have similarly broad extraterritorial reach. In addition, our revenues are subject to foreign currency exchange rate fluctuations due to the global nature of our operations and unfavorable changes in foreign currency exchange rates may adversely affect our revenues and net income. To the extent that our non- U. S. source revenues represent a more significant portion of our total revenues, these fluctuations could materially affect our operating results. Any of the risks described above, if encountered, could significantly increase our costs of operating internationally, prevent us from operating in certain jurisdictions, or otherwise significantly harm our future international expansion and operations, which could have a material adverse effect on our business, financial condition and results of operations. If product liability lawsuits are brought against us, we could face substantial liabilities and may be required to limit commercialization of our products and our results of operations could be harmed. In addition to the risks described above under "— Risks Relating to Commercialization of Our Products — If the use of our products harms patients, or is perceived to harm patients even when such harm is unrelated to our products, our regulatory approvals could be revoked or otherwise negatively impacted or we could be subject to costly and damaging product liability claims," the conduct of clinical trials of medical products that are intended for human use entails an inherent risk of product liability. If any product that we or any of our collaborators or licensees develops causes or is alleged to cause injury during clinical trials or commercialization, we may be held liable. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities, including substantial damages to be paid to the plaintiffs and legal costs, or we may be required to limit further development and commercialization of our products. Additionally, any product liability lawsuit could cause injury to our reputation, participants and investigators to withdraw from clinical trials, and potential collaborators or licensees to seek other partners, any of which could impact our results of operations. Our product liability insurance policy may not fully cover our potential liabilities. In addition, we may determine that we should increase our coverage, and this insurance may be prohibitively expensive to us or our collaborators or licensees and may not fully cover our potential liabilities. We have Since December 30, 2017, we elected to self-insure a portion of our exposure to product liability risks through our wholly- owned captive insurance subsidiary, in tandem with thirdparty insurance policies. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the development or commercialization of our drug candidates and products, and if our liabilities from any such claims exceed our third-party insurance limits and self-insurance reserves, our results of operations, cash flows and financial condition could be adversely impacted. Because our activities involve the use of hazardous materials, we may be subject to claims relating to improper handling, storage or disposal of these materials that could

be time consuming and costly. We are subject to various environmental, health and safety laws and regulations governing, among other things, the use, handling, storage and disposal of regulated substances and the health and safety of our employees. Our research and development processes involve the controlled use of hazardous and radioactive materials and biological waste resulting in the production of hazardous waste products. We cannot completely eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. If any injury or contamination results from our use or the use by our collaborators or licensees of these materials, we may be sued and our liability may exceed our insurance coverage and our total assets. Further, we may be required to indemnify our collaborators or licensees against all damages and other liabilities arising out of our development activities or products produced in connection with these collaborations or licenses. Compliance with the applicable environmental and workplace laws and regulations is expensive. Future changes to environmental, health, workplace and safety laws could cause us to incur additional expense or may restrict our operations or impair our research, development and production efforts. Business disruptions could seriously harm our operations, future revenues and financial condition and increase our costs and expenses. Our operations, and those of our CROs, suppliers, and other contractors and consultants, could be subject to geopolitical events, natural disasters, power and other infrastructure failures or shortages, public health pandemics or epidemics, and other natural or man-made disasters or business interruptions. In addition, geopolitical and other events, such as the Russian invasion of Ukraine or the conflicts in the Middle East, could lead to sanctions, embargoes, supply shortages, regional instability, geopolitical shifts, cyberattacks, other retaliatory actions, and adverse effects on macroeconomic conditions, currency exchange rates, and financial markets, which could adversely impact our operations and financial results, as well as those of third parties with whom we conduct business. The occurrence of any of these business disruptions could seriously harm our operations, future revenues and financial condition and increase our costs and expenses. We have engaged CROs to conduct clinical trials outside the United States, including a limited number of trials in Ukraine and Russia. We may not be able to complete any additional dosing or follow- up visits of patients in Ukraine and Russia who are participating in these clinical trials. We may also be unable to ship additional clinical drug and other supplies necessary to complete the clinical trials in Ukraine and Russia. Although the impact of Russia's invasion is highly unpredictable, certain clinical trial activities have already been changed or suspended, and may continue to be changed, suspended or terminated, which could potentially increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. RISKS RELATING TO OUR FINANCIAL RESULTS We may incur losses in the future, and we expect to continue to incur significant expenses to discover and develop drugs, which may make it difficult for us to achieve sustained profitability on a quarterly or annual basis in the future. Due to historical net losses, we had an accumulated deficit of \$ 0.4 billion as of December 31, 2022. We intend to continue to spend significant amounts on our efforts to discover and develop drugs. As a result, we may incur losses in future periods as well-. Our revenues, expenses and net income (loss) may fluctuate, even significantly, due to the risks described in these "Risk Factors" and factors discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" as well as the timing of charges and expenses that we may take, including those relating to transactions such as acquisitions and the entry into collaborative agreements. We anticipate that our drug discovery and development efforts and related expenditures will increase as we focus on the studies, including preclinical tests and clinical trials prior to seeking regulatory approval, that are required before we can sell a drug product. The development of drug products will require us to spend significant funds on research, development, testing, obtaining regulatory approvals, manufacturing and marketing. To date, we do not have any drug products that have generated significant revenues other than from sales of JAKAFI and **OPZELURA and** we cannot assure you that we will generate substantial revenues from the drug candidates that we license or develop, including ICLUSIG, PEMAZYRE, MONJUVI / MINJUVI - and OPZELURA ZYNYZ, for several years, if ever, We cannot be certain whether or when we will achieve sustained or increased profitability on a quarterly or annual basis because of the factors discussed under "Risks Relating to Commercialization of our Products" and in the above paragraphs and the significant uncertainties relating to our ability to generate commercially successful drug products. Even if we are successful in obtaining regulatory approvals for manufacturing and commercializing drug products in addition to JAKAFI, ICLUSIG, PEMAZYRE, MONJUVI / MINJUVI, and OPZELURA and ZYNYZ, we may incur losses if our drug products do not generate significant revenues. We may need additional capital in the future. If we are unable to generate sufficient funds from operations, the capital markets may not permit us to raise additional capital at the time that we require it, which could result in limitations on our research and development or commercialization efforts or the loss of certain of our rights in our technologies or drug candidates. Our future funding requirements will depend on many factors and we anticipate that we may need to raise additional capital to fund our business plan and research and development efforts going- forward. Additional factors that may affect our future funding requirements include: • the acquisition of businesses, technologies, or drug candidates, or the licensing of technologies or drug candidates, if any; • the amount of revenues generated from our business activities; • any changes in the breadth of our research and development programs; • the results of research and development, preclinical testing and clinical trials conducted by us or our current or future collaborators or licensees, if any; • our exercise of any co-development options with collaborators that may require us to fund future development; • costs for future facility requirements; • our ability to maintain and establish new corporate relationships and research collaborations; • competing technological and market developments; • the time and costs involved in filing, prosecuting, defending and enforcing patent and intellectual property claims; • the receipt or payment of contingent licensing or milestone fees or royalties on product sales from our current or future collaborative and license arrangements, if established; and • the timing of regulatory approvals, if any. If we require additional capital at a time when investment in companies such as ours, or in the marketplace generally, is limited due to the then prevailing market or other conditions, we may have to scale back our operations, eliminate one or more of our research or development programs, or attempt to obtain funds by entering into an agreement with a collaborator or licensee that would result in terms that are not favorable to us or relinquishing our rights in certain of our proprietary technologies or drug candidates. If we are unable to raise

funds at the time that we desire or at any time thereafter on acceptable terms, we may not be able to continue to develop our drug candidates. The sale of equity or equity-linked securities in the future may be dilutive to our stockholders and may provide for rights, preferences or privileges senior to those of our holders of common stock, and debt financing arrangements could result in increased financing costs due to higher interest rates and may require us to pledge certain assets or enter into covenants that could restrict our operations or our ability to pay dividends or other distributions on our common stock or incur further indebtedness. Our marketable securities and long term investments are subject to risks that could adversely affect our overall financial position. We invest our cash in accordance with an established internal policy and customarily in short-term instruments, money market funds, U. S. government backed-funds and Treasury securities, which are investment grade and historically have been highly liquid and carried relatively low risk. Should a portion of our cash or marketable securities lose value or have their liquidity impaired, it could adversely affect our overall financial position by imperiling our ability to fund our operations and forcing us to seek additional financing sooner than we would otherwise. Such financing, if available, may not be available on commercially attractive terms. As discussed under "Other Risks Relating to Our Business — We may acquire businesses or assets, form joint ventures or make investments in other companies that may be unsuccessful, divert our management's attention and harm our operating results and prospects, "any investments that we may make in companies with which we have strategic alliances, such as Agenus, Merus and MorphoSys, could result in our recognition of losses on those investments. In addition, to the extent we may seek to sell or otherwise monetize those investments, we may not be able to do so at our desired price or valuation levels, or at all, due to the limited liquidity of some or all of those investments. Any loss in value of our long term investments could adversely affect our financial position on the consolidated balance sheets and consolidated statements of operations. Changes in tax laws or regulations could adversely affect our results of operations, business and financial condition. New tax laws or regulations could be enacted at any time, and existing tax laws or regulations could be interpreted, modified or applied in a manner that is adverse to us or our customers, which could adversely affect our results of operations, business and financial condition. For example, beginning in 2022, the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct research and development expenditures for tax purposes in the year incurred and instead requires taxpayers to capitalize and subsequently amortize such expenditures over five years for research activities conducted in the United States and over 15 years for research activities conducted outside the United States. If the requirement to amortize research and development expenditures is not repealed or otherwise modified, it will continue to have an adverse effect on our tax liability, and the amount of that effect could be material. As another example, in August 2022, the Inflation Reduction Act of 2022 was enacted, which, among other things, includes a new 15 % alternative minimum tax on the adjusted financial statement income of certain large corporations for tax years beginning after December 31, 2022. Furthermore, the enactment of some or all of the recommendations set forth or that may be forthcoming in the Organization for Economic Co-Operation and Development (OECD) project on "Base Erosion and Profit Shifting" (commonly known as BEPS 2. 0) by tax authorities and economic blocs in the countries in which we operate, could unfavorably impact our effective tax rate. Broadly speaking, BEPS 2. 0 would make fundamental changes to the international tax system, including with respect to the entitlement to tax global corporate profits and minimum global tax rates. For example, in December 2022, the EU-European Union member states agreed to implement in their domestic tax laws a 15 % global minimum tax on the profits of large multinational enterprises with a target effective date for fiscal years beginning on or after December 31, 2023. Although we continue to evaluate and assess the potential impact of the recent U. S. legislation and BEPS 2. 0 on us, the minimum tax rules could result in tax increases in both the United States and many foreign jurisdictions where we operate or have a presence. Any new tax legislation or initiatives could not only significantly increase our tax provision, cash tax liabilities, and effective tax rate, but could also significantly increase tax uncertainty due to differing interpretations and increased audit scrutiny. We derive a substantial portion of our revenues from royalties, milestone payments and other payments under our collaboration agreements. If we are unable to achieve milestones, develop product candidates to license or renew or enter into new collaborations, our revenues may decrease, and future milestone and royalty payments may not contribute significantly to revenues for several years, and may never result in revenues. We derived a substantial portion of our revenues for the year years ended December 31, 2023 and December 31, 2022 from JAKAVI and OLUMIANT product royalties and from milestone payments under our collaboration agreements. Future revenues from research and development collaborations depend upon continuation of the collaborations, the achievement of milestones and royalties we earn from any future products developed from our research. If we are unable to successfully achieve milestones or our collaborators fail to develop successful products, we will not earn the future revenues contemplated under our collaborative agreements. For example, delays in or other limitations with respect to the approval of baricitinib in the United States for the treatment of moderate- to- severe rheumatoid arthritis, or the failure to obtain such approval as a first line therapy, as discussed under "— We depend on our collaborators and licensees for the future development and commercialization of some of our drug candidates. Conflicts may arise between our collaborators and licensees and us, or our collaborators and licensees may choose to terminate their agreements with us, which may adversely affect our business." could affect potential future royalty and milestone and contract revenue. RISKS RELATING TO INTELLECTUAL PROPERTY AND LEGAL MATTERS If we are subject to arbitration, litigation and infringement claims, they could be costly and disrupt our drug discovery and development efforts. The technology that we use to make and develop our drug products, the technology that we incorporate in our products, and the products we are developing may be subject to claims that they infringe the patents or proprietary rights of others. The success of our drug discovery and development efforts will also depend on our ability to develop new compounds, drugs and technologies without infringing or misappropriating the proprietary rights of others. We are aware of patents and patent applications filed in certain countries claiming intellectual property relating to some of our drug discovery targets and drug candidates. While the validity of issued patents, patentability of pending patent applications and applicability of any of them to our programs are uncertain, if any of these patents are asserted against us or if we choose to license any of these patents, our ability to commercialize our products could be harmed or the potential return to us from any

product that may be successfully commercialized could be diminished. From time to time we have received, and we may in the future receive, notices from third parties offering licenses to technology or alleging patent, trademark, or copyright infringement, claims regarding trade secrets or other contract claims. Receipt of these notices could result in significant costs as a result of the diversion of the attention of management from our drug discovery and development efforts. Parties sending these notices may have brought and in the future may bring litigation against us or seek arbitration relating to contract claims. We may be involved in future lawsuits or other legal proceedings alleging patent infringement or other intellectual property rights or contract violations. In addition, litigation or other legal proceedings may be necessary to: • assert claims of infringement; • enforce our patents or trademarks; • protect our trade secrets or know- how; or • determine the enforceability, scope and validity of the proprietary rights of others. We may be unsuccessful in defending or pursuing these lawsuits, claims or other legal proceedings. Regardless of the outcome, litigation or other legal proceedings can be very costly and can divert management's efforts. An adverse determination may subject us to significant liabilities or require us or our collaborators or licensees to seek licenses to other parties' patents or proprietary rights. We or our collaborators or licensees may also be restricted or prevented from manufacturing or selling a drug or other product that we or they develop. Further, we or our future collaborators or licensees may not be able to obtain any necessary licenses on acceptable terms, if at all. If we are unable to develop noninfringing technology or license technology on a timely basis or on reasonable terms, our business could be harmed. We may be unable to adequately protect or enforce our proprietary information, which may result in its unauthorized use, a loss of revenue under a collaboration agreement or loss of sales to generic versions of our products or otherwise reduce our ability to compete in developing and commercializing products. Our business and competitive position depends in significant part upon our ability to protect our proprietary technology, including any drug products that we create. Despite our efforts to protect this information, unauthorized parties may attempt to obtain and use information that we regard as proprietary. For example, one of our collaborators may disclose proprietary information pertaining to our drug discovery efforts. In addition, while we have filed numerous patent applications with respect to ruxolitinib and our drug candidates in the United States and in foreign countries, our patent applications may fail to result in issued patents. In addition, because patent applications can take several years to issue as patents, there may be pending patent applications of others that may later issue as patents that cover some aspect of ruxolitinib and our drug candidates. Our existing patents and any future patents we may obtain may not be broad enough to protect our products or all of the potential uses of our products, or otherwise prevent others from developing competing products or technologies. In addition, our patents may be challenged and invalidated or may fail to provide us with any competitive advantages if, for example, others were first to invent or first to file a patent application for the technologies and products covered by our patents. As noted above under " — Risks Relating to Commercialization of Our Products — Competition for our products could potentially harm our business and result in a decrease in our revenue," a potential generic drug company competitor has challenged certain patents relating to JAKAFI. Additionally, when we do not control the prosecution, maintenance and enforcement of certain important intellectual property, such as a drug candidate in-licensed to us or subject to a collaboration with a third-party, the protection of the intellectual property rights may not be in our hands. If we do not control the intellectual property rights in-licensed to us with respect to a drug candidate and the entity that controls the intellectual property rights does not adequately protect those rights, our rights may be impaired, which may impact our ability to develop, market and commercialize the in-licensed drug candidate. Our means of protecting our proprietary rights may not be adequate, and our competitors may: • independently develop substantially equivalent proprietary information, products and techniques; • otherwise gain access to our proprietary information; or • design around patents issued to us or our other intellectual property. We pursue a policy of having our employees, consultants and advisors execute proprietary information and invention agreements when they begin working for us. However, these agreements may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. If we fail to maintain trade secret and patent protection, our potential future revenues may be decreased. If the effective term of our patents is decreased due to changes in the United States patent laws or if we need to refile some of our patent applications, the value of our patent portfolio and the revenues we derive from it may be decreased. The value of our patents depends, in part, on their duration. A shorter period of patent protection could lessen the value of our rights under any patents that we obtain and may decrease the revenues we derive from our patents. The United States patent laws provide a term of patent protection of 20 years from the earliest effective filing date of the patent application. Because the time from filing to issuance of biotechnology applications may be more than three years depending on the subject matter, a 20- year patent term from the filing date may result in substantially shorter patent protection. Additionally, United States patent laws were amended in 2011 with the enactment of the America Invents Act and third parties are now able to challenge the validity of issued U. S. patents through various review proceedings; thus rendering the validity of U. S. patents more uncertain. We may be obligated to participate in review proceedings to determine the validity of our U. S. patents. We cannot predict the ultimate outcome of these proceedings, the conduct of which could result in substantial costs and diversion of our efforts and resources. If we are unsuccessful in these proceedings some or all of our claims in the patents may be narrowed or invalidated and the patent protection for our products and drug candidates in the United States could be substantially shortened. Further, if all of the patents covering one of our products are invalidated, the FDA could approve requests to manufacture a generic version of that product prior to the expiration date of those patents. Other changes in the United States patent laws or changes in the interpretation of patent laws could diminish the value of our patents or narrow the scope of our patent protection. For example, the Supreme Court of the United States resolved a split among the circuit courts of appeals regarding antitrust challenges to settlements of patent infringement lawsuits under the Hatch-Waxman Act between brand- name drug companies and generic drug companies. The Court rejected the "scope of the patent" test and ruled that settlements involving "reverse payments" from brand- name drug companies to generic drug companies should be analyzed under the rule of reason. This ruling may create uncertainty and make it more difficult to settle patent litigation if a company seeking to manufacture a generic version of one of our products challenges the patents covering that product prior to

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the expiration date of those patents. International patent protection is particularly uncertain and costly, and our involvement in
opposition proceedings in foreign countries may result in the expenditure of substantial sums and management resources.
Biotechnology and pharmaceutical patent law outside the United States is even more uncertain and costly than in the United
States and is currently undergoing review and revision in many countries. Further, the laws of some foreign countries may not
protect our intellectual property rights to the same extent as United States laws. For example, certain countries do not grant
patent claims that are directed to the treatment of humans. We have participated, and may in the future participate, in opposition
proceedings to determine the validity of our foreign patents or our competitors' foreign patents, which could result in substantial
costs and diversion of our efforts. Successful challenges to our patent or other intellectual property rights through these
proceedings could result in a loss of rights in the relevant jurisdiction and allow third parties to use our proprietary technologies
without a license from us or our collaborators, which may also result in loss of future royalty payments. In addition, successful
challenges may jeopardize or delay our ability to enter into new collaborations or commercialize potential products, which could
harm our business and results of operations. RISKS RELATING TO INFORMATION TECHNOLOGY AND DATA
PRIVACY Significant disruptions of information technology systems, breaches of data security, or unauthorized disclosures of
personal information (including sensitive data or personally --- personal identifiable information) or individually identifiable
health information could adversely affect our business, and could subject us to liability or reputational damage. Our business is
increasingly dependent on critical, complex, and interdependent information technology (IT) systems, including Internet-based
systems, some of which are managed or hosted by third parties, to support business processes as well as internal and external
communications. The size and complexity of our IT systems make us our IT systems and data vulnerable to risks and
damages from a variety of sources, including malicious human acts, breaches of security, cyber- attacks, catastrophe or
natural disaster, telecommunications or network failures, loss of power or other natural or man- made events. In
addition, despite network security and back- up measures, we and our vendors frequently defend against and respond to
<mark>data security attacks and incidents, and our servers and our vendors' servers are</mark> potentially <del>vulnerable <mark>susceptible</mark> to IT</del>
system breakdowns physical or electronic break-ins, malicious intrusion, and computer viruses, software vulnerabilities,
ransomware attacks and similar disruptive problems. If our business continuity and disaster recovery plans and
procedures or those of our vendors, including our CROs and contract manufacturers, were disrupted, inadequate or
<mark>unsuccessful in the event of a problem, we could experience an interruption of all or a portion of our operations,</mark> which
may could result in significant harm the impairment of our ability to operate our business effectively, financial results and
reputation. In addition, having a <del>significant</del> portion of our employees work remotely <del>due to the COVID-19 pandemic or reputation. In addition, having a significant portion of our employees work remotely due to the COVID-19 pandemic or</del>
otherwise can strain our IT information technology infrastructure, which may affect our ability to operate effectively, may make
us more susceptible to communications disruptions, and expose us to greater cybersecurity risks. We are continuously evaluating
and, where appropriate, enhancing our IT systems to address our planned growth, including to support our planned
manufacturing operations. In particular, we are currently in the process of implementing a new enterprise resource planning
system. There are inherent costs and risks associated with implementing the enhancements to our IT systems, including potential
delays in access to, or errors in, critical business and financial information, substantial capital expenditures, additional
administrative time and operating expenses, retention of sufficiently skilled personnel to implement and operate the enhanced
systems, demands on management time, and costs of delays or difficulties in transitioning to the enhanced systems, any of which
could harm our business and results of operations. In addition, the implementation of enhancements to our IT systems may not
result in productivity improvements at a level that outweighs the costs of implementation, or at all. In addition, our systems and
the systems of our third- party providers and collaborators are potentially vulnerable to data security breaches which may expose
sensitive data to unauthorized persons or to the public. Such data security breaches could lead to the loss of confidential
information, trade secrets or other intellectual property, could lead to the public exposure of personal information (including
personally identifiable information or individually identifiable health information) of our employees, clinical trial patients,
customers, business partners, and others, could lead to potential identity theft, or could lead to reputational harm. Data security
breaches could also result in loss of clinical trial data or damage to the integrity of that data . Malicious attacks by third
parties are of ever- increasing sophistication and can be made by groups and individuals with a wide range of motives,
including nation states, organized criminal groups, "hacktivists" and others acting with malicious intent. In addition,
the increased use of social media by our employees and contractors could result in inadvertent disclosure of sensitive data or
personal information, including but not limited to, confidential information, trade secrets and other intellectual property. Any
such disruption or security breach, as well as any action by us or our employees or contractors that might be inconsistent with
the rapidly evolving data privacy and security laws and regulations applicable within the United States and elsewhere where we
conduct business, could result in enforcement actions by U. S. states, the U. S. Federal government or foreign governments,
liability or sanctions under data privacy laws, including healthcare laws such as HIPAA, that protect certain types of sensitive
information, regulatory penalties, other legal proceedings such as but not limited to private litigation, the incurrence of
significant remediation costs, disruptions to our development programs, business operations and collaborations, diversion of
management efforts and damage to our reputation, which could harm our business and operations. Because of the rapidly
moving nature of technology and the increasing sophistication of cybersecurity threats, our measures to prevent, respond to and
minimize such risks may be unsuccessful. In addition, many countries the European Parliament and the Council of the
European Union has adopted a comprehensive general jurisdictions in which we work globally have enacted and / or are
proposing privacy and data <del>privacy protection laws and regulation regulations , known as the GDPR,</del> which <del>governs</del>--
govern the collection and use of personal <del>data in the European Union. The GDPR, which is wide- ranging in scope, imposes</del>
several requirements relating to the consent of the individuals to whom the personal data relates, the information and provided
to the these may individuals, the security and confidentiality of the personal data, data breach notification and the use of third
party processors in connection with the processing of the personal data. The GDPR also imposes triet rules on the
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transfer of personal data out of the European Union to the United States, provides an enforcement authority and imposes large fines and penalties for noncompliance , including , For example in the European Union, under the General Data Protection Regulation, potential fines for fines of noncompliance are up to € 20 million or 4 % of the annual global revenues revenue of the infringer, whichever is greater. Further The United Kingdom has enacted legislation similar to the GDPR, some jurisdictions the UK GDPR, which provides - provide for potential fines private rights of up to action if data breaches result in the loss or the theft greater of £ 17 personal data. These laws and regulations may also require 5 million or 4 % of the annual global revenue. Moreover, as applicable, the European Court of Justice in July 2020 invalidated the Privacy Shield framework that • we ensure individuals to whom personal information relates are informed had been in place between the European Union and the United States, which invalidation has created uncertainty about how data can now be shared their personal information is collected and processed; • keep personal information confidential and secure; • transfer personal information in a compliant manner; • respond. Additionally, the California Consumer Privacy Act (CCPA) affords a private right of action to requests from individuals about such consumers if certain data breaches result in the loss or theft of their personal information; The GDPR, UK GDPR, CCPA and inform authorities and individuals as may other similar laws or regulations enacted or proposed to be applicable about any enacted in the United States or other jurisdictions associated with the enhanced protection of certain types of sensitive data breaches. These obligations, including healthcare data or other personal information, may increase our costs of doing business, and the differing varying requirements of these laws among all <mark>countries</mark> and <del>regulations-</del>jurisdictions in which we work can complicate our compliance efforts. Increasing use of social media and new technology, including artificial intelligence software, could give rise to liability, breaches of data security, or reputational damage. We and our employees increasingly are increasingly utilizing social media tools as a means of communication both internally and externally. We also are using new technology on a daily basis to enhance how we work. Despite our efforts to monitor evolving social media communication, our internal guidelines regarding the appropriate use of new technology and comply with applicable and emerging rules, there is risk that the use of social media these tools by us or our employees to communicate about our products or business may cause us to be found in violation of applicable requirements. In addition, our employees may knowingly or inadvertently make use of social media these tools in ways that may not comply with our policies social media policy or other legal or contractual requirements, which may give rise to liability, lead to the loss of trade secrets or other intellectual property, or result in public exposure of personal information of our employees, elinical trial-patients, customers, and others. Furthermore, negative posts or comments about us or our products in social media could seriously damage our reputation, brand image, and goodwill. Additionally, the use of artificial intelligence based software is increasing in the biopharmaceutical industry. As with many developing technologies, artificial intelligence based software presents risks and challenges that could affect its further development, adoption, and use, which could affect our business. If the analyses that artificial intelligence applications assist in producing are deficient or inaccurate, we could be subjected to competitive harm, potential legal liability, and brand or reputational harm. Use of artificial intelligence based software may also lead to the release of confidential proprietary information, which may impact our ability to realize the benefit of our intellectual property.