As of February 19, 2020, patent rights held by Galapagos NV relating to our product candidates include the following:

Filgotinib product candidate: We have six U.S. patents claiming filgotinib compositions of matter, salts of filgotinib and methods of treatment using filgotinib, and one pending U.S. patent application. We have two patents granted via the European Patent Office (EPO). Counterpart patent applications are also pending in Australia, Canada, and other foreign countries. The six issued U.S. patents, two European Patents, and any additional patents that may be granted based on our pending U.S. and foreign patent applications, are currently expected to expire in 2030, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions. In addition, we have one granted U.S. patent and two pending U.S. applications, with counterpart applications pending in other foreign countries, which are directed to certain physical forms, including polymorphic forms and compositions, of our filgotinib product candidate, and patents, if granted, based on these patent applications are estimated to expire in 2035, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have a U.S. patent, with counterpart applications pending in other foreign countries, related to the use of our filgotinib product candidate in cardiovascular disorders. Any patents, if granted, based on these patent applications are estimated to expire in 2036. We have a pending U.S. application, with counterpart applications pending in other foreign countries, which relates to methods of treatment using filgotinib in additional indications. Any patents, if granted, based on these patent applications are estimated to expire in 2037. We also have a pending PCT application related to the use of a combination of filgotinib with other Galapagos proprietary compounds. Any patents, if granted, based on this patent application are estimated to expire in 2038. We additionally have rights in a pending application under the Patent Cooperation Treaty, or PCT, which relates to specific methods of treatment using filgotinib. Any patents, if granted, based on this patent application are estimated to expire in 2039. We have additional patents and pending patent applications directed to the use of compounds related to our filgotinib product candidate and these patents, and patents that may be issued based on these pending patent applications, are currently expected to expire from 2029 to 2033, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions.

GLPG1690 product candidate: We have five issued U.S. patents relating to GLPG1690, one patent granted via the EPO, one pending U.S. patent application, and counterpart foreign patent applications that are pending in Australia, Canada, Europe and other foreign countries. These patents and patent applications claim GLPG1690 compositions of matter and methods of treatment using GLPG1690. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2034, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have a pending U.S. application, as well as foreign counterpart applications, relating to methods for treating lung disorders using GLPG1690, any patents, if granted, based on this patent application are estimated to expire in 2038. We also have a pending application under the PCT relating to methods for treating lung disorders using combinations of GLPG1690 with other compounds. Any patents, if granted, based on this patent application are estimated to expire in 2039.

GLPG1205 product candidate: We have three U.S. patents, one pending U.S. patent application, one patent granted via the European Patent Office (EPO) and one application pending at the EPO. Counterpart foreign patent are also granted in Australia, Japan, and other countries, as well as foreign counterpart patent applications pending in Canada, and other foreign countries. These patents and patent applications claim GLPG1205 compositions of matter and methods of treatment using GLPG1205. The three issued U.S. patents, one European Patent, and any additional patents that may be granted based on our pending U.S. and foreign patent applications, are currently expected to expire in 2032, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions. We also have a pending application under the PCT claiming methods of treatment using GLPG1205 in further indications. Patents, if any, that issue based on this pending patent application are estimated to expire in 2038.

GLPG1972 product candidate: We have rights, jointly with our alliance partner Servier, in two issued U.S. patents, one pending U.S. application, one patent granted via the EPO, and foreign granted patents in Australia, and China, and counterpart foreign patent applications that are pending in Canada, Japan and other foreign countries which claim GLPG1972 compositions of matter and methods of treatment using GLPG1972, in particular in OA. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2035, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have a pending U.K. application claiming methods of treatment using GLPG1972. Patents, if any, that issue based on this pending patent application are estimated to expire in 2041.

MOR106 product candidate: We have rights in a U.S. patent, and a pending U. S. application, a pending patent application at the EPO and counterpart foreign patent applications that are pending in Australia, Canada, and other foreign countries claiming MOR106 compositions of matter and methods of treatment using MOR106. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2037, not including any potential extension that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have rights in a pending application under the PCT relating to methods of treatment of AtD using MOR106. Patents, if any, that issue based on this pending patent application are estimated to expire in 2038. We also have rights in a pending application under the PCT relating to formulations of MOR106. Patents, if any, that issue based on this pending patent application are expected to expire in 2039. Finally, we also have rights in a pending patent application under the PCT which relates to methods of treatment using MOR106 in additional indications. Patents, if any, that issue based on this pending application are estimated to expire in 2039.

GLPG2534 product candidate: We have one U.S. patent and one pending U.S. application with counterpart foreign patent applications pending in Australia, Canada, Europe, Taiwan and other foreign countries claiming GLPG2534 compositions of matter and methods of treatment using GLPG2534. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2036, not including any potential extension that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have one pending U.S. application with counterpart foreign patent applications pending in Europe, Cananda and other foreign countries related to the use of a combination of GLPG2534 with other Galapagos proprietary compounds. Any patents, if granted, based on this patent application are estimated to expire in 2038.

GLPG2737 product candidate: We have rights in two issued U.S. patents, a pending U.S. patent application, as well as counterpart foreign patent applications that are pending in Australia, Canada, Europe, Taiwan and other foreign countries claiming GLPG2737 compositions of matter and methods of treatment using GLPG2737, outside the field of CF. Patents, if any, that issue, based on these pending patent applications are estimated to expire in 2036, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions. We also have a pending U.K. application claiming methods of treatment using GLPG2737 in alternative indications. Patents, if any, that issue based on this pending patent application are estimated to expire in 2040.

GLPG1837 product candidate: We have four issued U.S. patents relating to GLPG1837, one patent granted via the EPO, one pending U.S. patent application and counterpart foreign patent applications that are pending in China and other foreign countries. These patents and applications claim GLPG1837 compositions of matter and methods of treatment using GLPG1837. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2034, not including any potential extensions that may be available for the marketed product via supplementary protection certificates or patent term extensions.

GLPG3121 product candidate: We have two granted U.S. patents, two pending U.S. patent applications, one patent granted via the European Patent Office (EPO), and foreign granted counterparts in Japan, China and other countries. Counterpart foreign patent applications are also pending in India, and other foreign countries. These patents and patent applications claim GLPG3121 compositions of matter and methods of treatment using GLPG3121. The issued U.S. patent, the European Patent, and any additional patents that may be granted based on our pending U.S. and foreign patent applications, are currently expected to expire in 2035, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG3312 product candidate: We have a pending patent application under the PCT, as well as patent applications pending in Taiwan and other foreign countries claiming GLPG3312 compositions of matter and methods of treatment using GLPG3312. Patents, if any, that issue based on this pending patent application are estimated to expire in 2038, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG3535 product candidate: We have a pending U.S. application, as well as counterpart foreign patent applications that are pending in Australia, Canda, Europe, Taiwan and other foreign countries, claiming GLPG3535 compositions of matter and methods of treatment using GLPG3535. Patents, if any, that issue based on this pending patent application are estimated to expire in 2038, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG3667 product candidate: We have a pending patent application under the PCT, as well as patent applications pending in Taiwan and other foreign countries claiming GLPG3667 compositions of matter and methods of treatment using GLPG3667. Patents, if any, that issue based on this pending patent application are estimated to expire in 2038, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG3808 product candidate: We have a pending patent application under the PCT, as well as patent applications pending in Taiwan and other foreign countries claiming GLPG3808 compositions of matter and methods of treatment using GLPG3808. Patents, if any, that issue based on this pending patent application are estimated to expire in 2039, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG3970 product candidate: We have a pending patent application under the PCT, as well as patent applications pending in Taiwan and other foreign countries claiming GLPG3970 compositions of matter and methods of treatment using GLPG3970. Patents, if any, that issue based on this pending patent application are estimated to expire in 2039, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG4059 product candidate: We have one pending UK patent applications claiming GLPG4059 compositions of matter and methods of treatment using GLPG4059. Patents, if any, that issue based on these pending patent applications are estimated to expire in 2040, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG4124 product candidate: We have one pending UK patent application claiming GLPG4124 compositions of matter and methods of treatment using GLPG4124. Patents, if any, that issue based on this pending patent application are estimated to expire in 2040, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG4259 product candidate: We have one pending UK patent application claiming GLPG4259 compositions of matter and methods of treatment using GLPG4259. Patents, if any, that issue based on this pending patent application are estimated to expire in 2040, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG4399 product candidate: We have one pending UK patent application claiming GLPG4399 compositions of matter and methods of treatment using GLPG4399. Patents, if any, that issue based on this pending patent application are estimated to expire in 2040, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

GLPG4471 product candidate: We have one pending UK patent applications claiming GLPG4471 compositions of matter and methods of treatment using GLPG4471. Patents, if any, that issue based on this pending patent application are estimated to expire in 2040, not including any potential extensions for the marketed product that may be available via supplementary protection certificates or patent term extensions.

We have two families of issued patents related to our target discovery platform. In one family we have a U.S. patent expected to expire in 2020, which relates to adenoviral vector modifications that enable gene delivery into T-cells, B-cells and mast cells, all of which are cell types that are resistant to gene delivery using standard transfection technologies. The second family relates to the use of certain shRNA expression vectors for *in situ* production of gene specific siRNA, leading to the knock down of the corresponding gene product. This family is a granted European patent validated in Austria, Belgium, Switzerland, Germany, France, the United Kingdom, Ireland, Luxembourg and the Netherlands, and is expected to expire in 2022. We do not believe that the expiration of these patents will materially affect our business, because they will not impact our patent coverage for our current clinical programs. We also use a variety of research tools and software products in our research platform that are non-exclusively licensed to us on commercially reasonable terms.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the date of filing the application. In the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the United States Patent and Trademark Office, or USPTO, in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed co-owned patent. In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period. However, the restoration period cannot be longer than five years and the total patent term including the restoration period must not exceed 14 years following FDA approval. In certain foreign jurisdictions similar extensions as compensation for regulatory delays are also available. The actual protection afforded by a patent varies on a claim by claim and country to country basis for each applicable product and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

Furthermore, the patent positions of biotechnology and pharmaceutical products and processes like those we intend to develop and commercialize are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in such patents has emerged to date in the United States. The patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries can diminish our ability to protect our inventions, and enforce our intellectual property rights and more generally, could affect the value of intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents.

The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Our ability to maintain and solidify our proprietary position for our product candidates and technology will depend on our success in obtaining effective claims and enforcing those claims once granted. We do not know whether any of the patent applications that we may file or license from third parties will result in the issuance of any patents. The issued patents that we own or may receive in the future, may be challenged, invalidated or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may be able to independently develop and commercialize similar drugs or duplicate our technology, business model or strategy without infringing our patents. Because of the extensive time required for clinical development and regulatory review of a drug we may develop, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent.

We may rely, in some circumstances, on trade secrets and unpatented know-how to protect our technology. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our consultants, scientific advisors and contractors and invention assignment agreements with our employees. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our consultants, contractors or collaboration partners use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Our commercial success will also depend in part on not infringing the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our product candidates or processes, obtain licenses or cease certain activities. Our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our product candidates may have a material adverse impact on us. If third parties have prepared and filed patent applications in the United States that also claim technology to which we have rights, we may have to participate in interference proceedings in the USPTO, to determine priority of invention if the patent applications were filed before March 16, 2013, or in derivation proceedings to determine inventorship for patent applications filed after such date.

In addition, substantial scientific and commercial research has been conducted for many years in the areas in which we have focused our development efforts, which has resulted in third parties having a number of issued patents and pending patent applications relating to such areas. Patent applications in the United States and elsewhere are generally published only after 18 months from the priority date. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Therefore, patent applications relating to drugs similar to our current product candidates and any future drugs, discoveries or technologies we might develop may have already been filed by others without our knowledge. For more information on these and other risks related to intellectual property, see "Item 3.D.—Risk Factors—Risks Related to Our Intellectual Property."

Collaborations

We have entered into multiple collaboration agreements with pharmaceutical partners, which have generated $5,178.2 million in cash through December 31, 2019 to fund discovery and development. We expect to continue to collaborate selectively with pharmaceutical and biotechnology companies to leverage our discovery platform and accelerate product candidate development. Our current alliances include the alliances with Gilead, Servier, the restructured alliance with AbbVie and the alliance with Novartis (together with MorphoSys) for which the date of termination is expected to occur later in 2020:

Option, License and Collaboration Agreement with Gilead

In July 2019, we entered into a 10-year global research and development collaboration with Gilead. We closed the transaction on August 23, 2019.

In connection with our entry into the option, license and collaboration agreement, we received in connection with the closing an upfront payment of $3.95 billion and a €960 million ($1.1 billion) equity investment from Gilead. Under the terms of its equity investment, Gilead nominated two individuals to our board of directors, Dr. Linda Higgins and Mr. Daniel O'Day.

Under the terms of the option, license and collaboration agreement, Gilead received (a) an exclusive research and development license for Gilead to conduct certain contributions contemplated by the license and collaboration agreement and (b) an option to acquire exclusive commercial licenses in all countries outside of Europe to all current and future clinical programs of Galapagos (other than filgotinib, which is already subject to an existing collaboration between the parties, and certain other programs already committed to other companies) being developed during the 10-year initial option term of the collaboration (subject to extension in certain circumstances). Under the option, license and collaboration agreement, we will continue to lead and fund all discovery and development of our programs until the end of the relevant Phase 2 clinical trials. After the completion of the relevant Phase 2 clinical study for each program, Gilead will have the option to acquire an exclusive commercial license to that program in all countries outside of Europe. If the option is exercised, Gilead and we will co-develop the compound and share costs equally.

In connection with entering into the option, license and collaboration agreement, we amended certain terms of our existing agreement with Gilead governing filgotinib, the candidate being advanced for rheumatoid arthritis and other inflammatory diseases, as further described in "Item 4 – Collaborations -- Exclusive collaboration agreement with Gilead for filgotinib".

In addition, under the option, license and collaboration agreement, Gilead was deemed to have exercised its option, and an exclusive commercial license was granted in all countries outside of Europe, to GLPG1690, our Phase 3 candidate for idiopathic pulmonary fibrosis. If GLPG1690 is approved in the United States, Gilead will pay us an additional $325 million regulatory milestone fee.

If Gilead exercises its option to GLPG1972, a drug candidate resulting from our osteoarthritis collaboration with Servier, in the United States, Gilead will pay us a $250 million option payment, and if certain secondary efficacy endpoints are met in the ongoing Phase 2b study in osteoarthritis, Gilead would pay us up to an additional $200 million. Following opt in, if GLPG1972 is approved in the United States, we are eligble to receive up to $550 million in regulatory and sales based milestones.

For all other programs included in the option, license and collaboration agreement, Gilead will make a $150 million opt-in payment per program with no subsequent milestones if Gilead decides to exercise its option. If Gilead declines to exercise its option with respect to a program, such program shall no longer be subject to the option, license and collaboration agreement and we may progress the program independently.

In addition, we will receive tiered royalties ranging from 20-24% on net sales of all products from all programs licensed by Gilead in all countries outside of Europe as part of the option, license and agreement (including GLPG1690 and GLPG1972), subject to customary royalty terms and adjustments.

The collaboration is managed by a set of joint committees comprised of equal numbers of representatives from each of us and Gilead. The joint steering committee monitors and provides strategic oversight of the activities under the collaboration and facilitates communications between the parties. The joint development committee oversees and coordinates the development of the licensed products. The joint commercialization committee will oversee commercialization of licensed products. The joint communication review committee will oversee publications and other public communications related to licensed products.

Upon Gilead's exercise of its option with respect to any of our programs, Gilead will assume responsibility for seeking regulatory approval for the optioned product and for all regulatory matters in its territory. Each party will be solely responsible for all commercialization activities and costs for the optioned product in its territory.

Upon termination of the option, license and collaboration agreement with respect to any program licensed by Gilead, all rights and licenses granted by us will terminate, and we will obtain an exclusive, perpetual and irrevocable license from Gilead under certain intellectual property rights to exploit the licensed product that is the subject of development or commercialization at the time of termination in the field in the applicable terminated region (provided that if such termination is the result of our material breach, such license will be royalty-bearing). Either we or Gilead may terminate the option, license and collaboration agreement for the other party's uncured material breach. Either we or Gilead may terminate the option, license and collaboration agreement in the event of specified insolvency events involving the other party. Gilead may also terminate the option, license and collaboration agreement in its entirety or on a program-by-program and country-by-country basis with advance notice for convenience.

The option, license and collaboration agreement also contains customary provisions including representations and warranties of the parties, terms as to governance of the collaboration, commercialization and regulatory responsibilities of the parties, and manufacturing and supply.

Either party may, without the consent of the other party, assign the option, license and collaboration agreement to an affiliate or successor. If we undergo a change in control, all intellectual property of our acquirer or that becomes owned or controlled by our acquirer after such change of control shall be excluded from the scope of rights granted in the option, license and collaboration agreement.

Exclusive collaboration agreement with Gilead for filgotinib

In December 2015, we entered into a global collaboration agreement with Gilead to develop and commercialize filgotinib for the treatment of inflammatory indications. In connection with entering into the option, license and collaboration agreement with Gilead, in August 2019 we amended and restated this agreement to increase our involvement in filgotinib's global strategy and participate more broadly in the commercialization of filgotinib in Europe.

In connection with our entry into the collaboration agreement, we received in January 2016 an upfront payment of $725 million consisting of a one-time, non-refundable, non-creditable license fee in the amount of $300 million and a $425 million equity investment. In November 2016, Gilead initiated a Phase 3 trial in CD, for which we received a $50.0 million payment. In December 2016, Gilead initiated a Phase 2 trial in UC for which we received a $10.0 million payment. In April 2017, Galapagos initiated a Phase 2 trial in psoriatic arthritis as a new indication, for which we received a $10.0 million payment. In May 2018, Gilead initiated a phase 3 trial in UC for which we received $15.0 million. In December 2019, Gilead initiated a Phase 3 trial in psoriatic arthritis as a new indication, for which we received $10.0 million (€9.1 million). Also in December 2019, Gilead filed an NDA for filgotinib in the U.S. for which we received a $20 million payment in January 2020. In connection with the amended collaboration, $710 million (€641.7 million) of upfront consideration was allocated to the extended cost sharing for development costs of filgotinib. We will be eligible to receive future development and regulatory milestone-based payments of up to $640 million and sales-based milestone payments of up to $600 million. All payments by Gilead to us are made in U.S. dollars.

Under the terms of the collaboration, Gilead is primarily responsible for development and for seeking regulatory approval of filgotinib. We are required to use commercially reasonable efforts as requested by Gilead to assist Gilead with certain development activities. Under the amended and restated filgotinib agreement, we agreed on a 50% / 50% cost split for development costs of filgotinib, in lieu of the 20% (us) /80% (Gilead) cost split under the original filgotinib agreement. The original filgotinib agreement included a co-promotion / co-commercialization option for filgotinib, which we exercised with respect to eight European countries in December 2017. As a result, we now have the sole right to commercialize filgotinib in the Netherlands, Belgium and Luxembourg and the right to participate, together with Gilead, in the co-commercialization of filgotinib in France, Germany, Italy, Spain and UK. We will share equally with Gilead in the net profit and net losses in each of these countries. During the period of co-commercialization, this profit and loss sharing replaces our right to receive royalties with respect to filgotinib sales by Gilead in these countries. Per the amended and restated agreement, we will be booking sales in Netherlands, Belgium, Luxembourg, France, Spain and Italy.

Gilead retains sole responsibility for commercializing filgotinib outside of the Netherlands, Belgium, Luxembourg, France, Germany, Italy, Spain and UK. We will be eligible to receive tiered royalty percentages ranging from 20% to 30% on Gilead's global net sales of filgotinib outside of these eight countries. The royalties payable to us under the filgotinib agreement may be reduced under certain circumstances. Our right to receive royalties under the filgotinib agreement continues, on a country-by-country basis, until the later to occur of certain specified events.

The collaboration is managed by a set of joint committees comprised of equal numbers of representatives from each of us and Gilead. The joint steering committee monitors and provides strategic oversight of the activities under the collaboration and facilitates communications between the parties. The joint development committee oversees and coordinates the development of filgotinib. The joint commercialization committee will oversee commercialization of filgotinib globally, and the shared territory joint commercialization committee will coordinate and integrate the activities of, and facilitate the communication and exchange of information between, us and Gilead with respect to the co-commercialization of filgotinib. Gilead and Galapagos will jointly prepare the global commercialization strategy.The filgotinib agreement will expire (a) outside of the co-commercialization countries, on a country-by-country basis at the end of the royalty term in such country and (b) in each co-commercialization country, at such time as a generic product is first sold in such country. Upon expiration of the royalty term, the licenses will become fully-paid, perpetual and irrevocable. Either we or Gilead may terminate the filgotinib agreement for the other party's uncured material breach. Either we or Gilead may terminate the filgotinib agreement in the event of specified insolvency events involving the other party. Gilead may also terminate the filgotinib agreement in its entirety for convenience following a certain period upon prior written notice.

If the collaboration agreement terminates in its entirety for any reason, all rights and licenses granted by either party will terminate, and we will obtain an exclusive, perpetual, irrevocable, royalty-bearing license from Gilead under certain intellectual property rights to exploit filgotinib. If the filgotinib agreement is terminated in a specific territory, all rights and licenses granted by us will be deemed to be amended not to include such territory, and we will have a corresponding license with respect to such terminated country. The filgotinib agreement also contains other termination rights specified therein.

Either party may, without the consent of the other party, assign the filgotinib agreement to an affiliate or successor. Any other assignment requires written consent of the other party. However, with respect to an assignment to an affiliate, the assigning party will remain bound by the terms of the filgotinib agreement. If we undergo a change in control, Gilead has the right to terminate our right to co-commercialization rights, and disband all joint committees and undertake exclusive control of their activities; provided, that Gilead has no right to exercise such rights if we undergo a change in control with a drug company that has a market capitalization less than a certain percentage of our market capitalization.

Product development, license and commercialization agreement with Servier

In 2010, we and Servier entered into an agreement to discover and develop compounds in the field of osteoarthritis. Under this agreement, we and Servier engaged in a collaborative effort pursuant to which Galapagos discovered and developed GLPG1972 through to the end of Phase 1 clinical trials. In July 2017, Servier exercised its option to obtain an exclusive license to develop and commercialize GLPG1972 in all countries outside the U.S. whereas we retained full rights to develop and commercialize GLPG1972 in the U.S.

On May 8, 2018, we and Servier amended and restated our product development, license and commercialization agreement, pursuant to which GLPG1972 is being developed in the field of OA and potentially other indications. Under the terms of the amended and restated agreement, we and Servier are jointly responsible for the costs relating to the ongoing global Phase 2 clinical trial known as ROCCELLA in knee OA patients, with Galapagos bearing the costs for the U.S., Servier bearing the costs for all other countries, and all costs that are common to both territories being split on a 50-50 basis.

We are eligible to receive development, regulatory and other milestone payments up to €136 million plus royalties in the mid single digits upon commercialization outside the U.S. As of the date of this annual report, we have received an upfront payment of €7.0 million, €6.0 million as option exercise payment and a total of €38.0 million in milestone payments under the agreement.

The collaboration is managed by a set of joint committees comprised of representatives from each of us and Servier. The joint executive committee manages the overall collaboration strategy. The joint steering committee has a leadership role over the collaboration and oversees and guides the implementation of the collaboration's strategic objectives. The joint development committee oversees the development of the licensed products, facilitates communication and reviews any development matters. The joint commercialization committee will oversee commercialization, marketing and promotion of licensed products.

The agreement will expire at the end of the last-to-expire royalty term. Upon expiration of the agreement, the licenses will become fully-paid, royalty-free and irrevocable. Either we or Servier may terminate the agreement for the other party's uncured material breach. Either we or Servier may terminate the agreement in the event of specified insolvency events involving the other party. Servier may also terminate the agreement in its entirety for convenience or for upon prior written notice.

If the agreement is terminated by Servier for convenience or our change of control, or by Galapagos for force majeure, Servier's material breach or Servier's insolvency, then we can choose from two contractual termination regimes, both including the termination of the licenses granted by us to Servier and the freedom for us to conduct research and development activities on terminated licensed products. Servier may also opt not to terminate the agreement in the event of Galapagos' change of control, but may amongst other things choose to have the licenses granted to Servier continue, with all payment obligations remaining in place, but with Servier having full control over the further development and patent strategies for the licensed product in Servier's territory. If the agreement is terminated by Servier for force majeure, our material breach or our insolvency, then Servier can choose from two contractual termination regimes, that either permit Servier to pursue any and all remedies against us, or modifies the licenses granted to Servier to become fully-paid, royalty-free and irrevocable for Servier's territory.

Second amended and restated collaboration agreement with AbbVie

On October 24, 2018, we and AbbVie amended and restated the CF collaboration agreement for a second time to restructure the entire collaboration.

Pursuant to the second amended and restated agreement, AbbVie took over all programs in CF. AbbVie obtained exclusive worldwide rights to the current CF investigational drug candidate portfolio developed by the two companies in the course of the collaboration. The portfolio includes all potentiator and corrector candidates, with the exception of GLPG1837 and a specific arrangement for GLPG2737. We retain rights to these two compounds for use outside the field of CF. AbbVie will be responsible for all future activities and will bear all costs associated with this portfolio in CF going forward.

We received an upfront payment of $45 million and a milestone of $25 million in 2019 from AbbVie. We will be eligible to receive up to $175 million in additional milestone payments from AbbVie pending completion of certain development, regulatory, and commercial achievements in CF by AbbVie. In the event AbbVie receives regulatory approval and realizes commercial sales in CF, we are further eligible to receive royalties ranging from single digit to low teens. AbbVie further agrees to pay us tiered single digit royalties of global commercial sales, if approved, from these candidates achieved in indications outside of CF.

We retain exclusive global commercial rights to develop GLPG2737, a candidate C2 corrector, in all indications outside of CF. AbbVie is eligible to receive up to $20 million upon achievement of a late stage development milestone, and tiered single digit royalties on future global commercial sales, if approved, in indications outside CF.

We further retain exclusive global commercial rights to develop GLPG1837, a candidate potentiator, in all indications outside of CF. AbbVie is eligible for a low single digit royalty on future global commercial sales, if approved, in indications outside CF.

As of the date of this annual report, we have achieved $112.5 million as milestones under the agreement, in addition to the $90 million aggregate upfront payments received upon entry into the original agreement and the second amended and restated agreement.

Exclusive license agreement with MorphoSys AG and Novartis Pharma AG

In July 2018, we entered into an exclusive license agreement with MorphoSys and Novartis, pursuant to which MOR106 will be developed further for the treatment of AtD and potentially other indications. Novartis is responsible for all future research, development, manufacturing and commercialization costs related to MOR106, and holds exclusive rights to develop, manufacture and commercialize any products arising under the license agreement. Novartis grants us a non-exclusive license to exercise our rights and perform our obligations under the Novartis Agreement.

In addition to the funding of the current and future MOR106 programs by Novartis, we received jointly with MorphoSys an upfront cash payment of €95 million. We share equally with MorphoSys all payments received under the license agreement.

On October 28, 2019, we announced the end of the clinical development program of MOR106 in AtD. On December 17, 2019, Novartis sent us a termination notice, informing us of its decision to terminate the agreement in its entirety. The notice period for such termination is still ongoing, but we expect that such termination will become effective later this year.

Seasonality

Our business is currently not materially affected by seasonality.

Manufacturing and supply

We currently do not own or operate manufacturing facilities for the production of product candidates for preclinical, clinical or commercial use. We currently outsource to a limited number of external service providers the production of all drug substances and drug products, and we expect to continue to do so to meet the preclinical and clinical requirements of our product candidates. We do not have long-term agreements with these third parties. We have framework agreements with most of our external service providers, under which they generally provide services to us on a short-term, project-by-project basis.

Currently, our drug raw materials which support our clinical trials are manufactured by multiple suppliers. We have agreements for the supply of such drug materials with manufacturers or suppliers that we believe have sufficient capacity to meet our demands. In addition, we believe that adequate alternative sources for such supplies exist. However, there is a risk that, if supplies are interrupted, it would materially harm our business. We typically order raw materials and services on a purchase order basis and do not enter into long-term dedicated capacity or minimum supply arrangements. To date, the prices of our principal raw materials have not been volatile.

Manufacturing is subject to extensive regulations that impose various procedural and documentation requirements, which govern record keeping, manufacturing processes and controls, personnel, quality control and quality assurance, among others. The contract manufacturing organizations we use to manufacture our product candidates operate under current good manufacturing practice, or cGMP, conditions. cGMPs are regulatory requirements for the production of pharmaceuticals that will be used in humans. For most of our manufacturing processes a back-up GMP manufacturer is in place or can easily be identified.

Competition

Our industry is highly competitive and subject to rapid and significant change. While we believe that our development and commercialization experience, scientific knowledge and industry relationships provide us with competitive advantages, we face competition from pharmaceutical, medical device and biotechnology companies, including specialty pharmaceutical companies, and generic drug companies, academic institutions, government agencies and research institutions.

In the field of RA, therapeutic approaches have traditionally relied on DMARDS such as MTX and sulphasalazine as first-line therapy. These oral drugs work primarily to suppress the immune system and, while effective in this regard, the suppression of the immune system leads to an increased risk of infections and other side effects. Accordingly, in addition to DMARDS, monoclonal antibodies targeting TNF, like AbbVie's Humira, or IL-6 like Roche's Actemra, have been developed. These biologics, which must be delivered via injection, are currently the standard of care as first- and second-line therapies for RA patients who have an inadequate response to DMARDS. In November 2012, Xeljanz, marketed by Pfizer, was approved by the FDA as an oral treatment of adult patients with RA who have had an inadequate response to, or who are intolerant of, MTX. Xeljanz was approved by EMA in 2017. Olumiant, a once-daily JAK1/2 inhibitor, marketed by Lilly, was approved by the EMA for RA in 2017 and by the FDA in 2018. A JAK inhibitor called Rinvoq which received approval for use in RA from FDA and EMA in 2019 is marketed by AbbVie. Filgotinib, which is a selective JAK1 inhibitor currently submitted for approval in RA in the U.S., Europe, and Japan and undergoing multiple Phase 3 and Phase 2 trials, is being developed by us in collaboration with Gilead. We expect that filgotinib will compete with all of these therapies when marketed. If generic or biosimilar versions of these therapies are approved, we would also expect to compete against these versions of the therapies.

In the field of IBD, first line therapies are oral (or local) treatments with several low-cost generic compounds such as mesalamine, more effective in UC, and azathioprine, more effective in CD. Steroids such as budesonide are used in both UC and CD. For more advanced therapy, monoclonal antibodies with various targets such as TNF and more recently, integrins by vedolizumab (Entyvio) are approved. We are also aware of other biologics currently approved or in clinical development for these indications, such as: ustekinumab (Stelara), developed by Johnson & Johnson, which is approved for UC, and risankizumab (Skyrizi), developed by AbbVie. Celgene/BMS has a new oral therapy in development: ozanimod (Zeposia), currently in Phase 3 in UC and Phase 2 in CD. Pfizer's Xeljanz was approved by the FDA for UC in 2018. Abbvie's Rinvoq is currently in Phase 3 trials in UC and CD. The large number of treatments for UC, and somewhat fewer for CD, presents a substantial level of competition for any new treatment entering the IBD market.

In the field of IPF, there are two approved disease modifying drugs, pirfenidone (Esbriet), marketed by Roche, and nintenanib (Ofev), marketed by Boehringer Ingelheim. These drugs are not well tolerated by patients and prolong life for IPF patients by a matter of months, leaving an unmet medical need for those developing disease-modifying drugs in this field. Fibrogen is running Phase 3 trials with pamrevlumab in IPF patients. Liminal Biosciences announced a Phase 3 trial design following Phase 2 results with PBI-4050 in IPF patients.

In the field of SSc, other companies with trials running in SSc include Corbus Pharmaceuticals, currently in Phase 3. In March 2019, Boehringer-Ingelheim announced that it has filed for regulatory approval with the FDA and EMA for the use of nintedanib in patients with systemic sclerosis associated interstitial lung disease (SSc-ILD). According to the company, approximately 25% of SSc patients develop significant pulmonary involvement within three years of diagnosis.

In the field of OA, there are currently no disease-modifying drugs approved. Current treatment involves weight loss, physical therapy, prednisolone, non-steroidal anti-inflammatory drugs, and pain management. Medivir announced in September 2017 that a trial in patients with knee OA with MIV-711, a cathepsin K inhibitor, demonstrated structural benefit. Sprifermin, a novel recombinant human fibroblast growth factor 18 being developed by Merck KGaA, is currently being investigated in Phase 3 as a potential disease-modifying OA drug; in a Phase 2 trial published in 2018, sprifermin showed to be effective at increasing cartilage thickness in a dose-dependent manner in knee OA patients, with an acceptable safety profile. Samumed is conducting a Phase 3 program with lorecivivint, an intra-articular approach aimed at the wnt pathway in OA joints. Sanofi acquired lixisenatide, a nanobody aimed at ADAMTS-5, but its status is unknown at the time of publication.

In the field of AS, there are six therapies approved by FDA and the EC: etanercept (Enbrel), infliximab (Remicade), adalimumab (Humira), golimumab (Simponi), certolizumab (Cimzia), and secukinumab (Cosentyx), with a seventh approved by FDA, ixekizumab (Taltz). Despite the availability of these treatments, a significant number of AS patients do not achieve low disease activity today.

Many of our competitors have significantly greater financial, technical and human resources than we have. Mergers and acquisitions in the pharmaceutical, medical device and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Our commercial opportunity could be reduced or eliminated if our competitors develop or market products or other novel therapies that are more effective, safer or less costly than our current or future product candidates, or obtain regulatory approval for their products more rapidly than we may obtain approval for our product candidates. Our success will be based in part on our ability to identify, develop and manage a portfolio of product candidates that are safer and more effective than competing products.