LICENSE AGREEMENT

by and between

IRONWOOD PHARMACEUTICALS, INC.

and

ASTELLAS PHARMA INC.

November 10, 2009

[**] = Portions of this exhibit have been omitted pursuant to a confidential treatment request. An unredacted version of this exhibit has been filed separately with the Commission.

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LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the “Agreement”) is entered into on this 10th day of November, 2009 (the “Effective Date”), by and among Ironwood Pharmaceuticals, Inc., a Delaware corporation (“Ironwood”) and Astellas Pharma Inc., a corporation organized under the laws of Japan (“Astellas”). Ironwood and Astellas may be referred to in this Agreement individually as a “Party” and collectively as the “Parties.”

RECITALS

A. Ironwood is developing and has rights to the Licensed Compound (as defined below) which has uses or potential uses in the treatment and prevention of disease in humans.

B. Ironwood (formerly Microbia, Inc.) has entered into a Collaboration Agreement with Forest Laboratories, Inc. (“Forest”), effective as of September 12, 2007 (the “Forest Agreement”), under which Ironwood exclusively licensed to Forest certain rights to the Licensed Compound in the Forest Territory (each, as defined below) and Ironwood and Forest agreed to collaborate on the development and commercialization of such compound in the Forest Territory.

C. Ironwood has entered into a License Agreement with Laboratorios Almirall, S.A. (“Almirall”) effective as of April 30, 2009 (the “Almirall Agreement”), under which Ironwood exclusively licensed to Almirall certain rights to the Licensed Compound in the Almirall Territory (defined below) and Ironwood and Almirall agreed to collaborate on the development and commercialization of such compound in the Almirall Territory.

D. Astellas is engaged in the research, development, and commercialization of human pharmaceutical products.

E. Ironwood desires to grant to Astellas and Astellas desires to receive an exclusive license to develop, market, and distribute the Product and the Licensed Compound in certain territories in Asia on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth below and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS

For purposes of this Agreement, the following terms, when used in this Agreement, have the meanings assigned to them in this Section 1.
1.1. “Administrator” is defined in Section 10.1.3(a).

1.2. “Affiliate” means, with respect to a Person, any Person that controls, is controlled by, or is under common control with such first Person. For purposes of this definition only, “control” means (a) to possess, directly or indirectly, the power to direct the management or policies of a Person, whether through ownership of voting securities or by contract relating to voting rights or corporate governance, or (b) to own, directly or indirectly, more than 50% of the outstanding voting securities or other ownership interests of such Person.

1.3. “Agreement” is defined in the Introduction.

1.4. “Almirall Agreement” is defined in Section C of the Recitals.

1.5. “Almirall Patent Rights” means any Patent Rights licensed to Ironwood under, and all rights granted to Ironwood under such Patent Rights pursuant to, the Almirall Agreement.

1.6. “Almirall Territory” means the current and any future member states of the European Union (consisting of the following countries as of the Effective Date: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom), Albania, Andorra, Lichtenstein, Iceland, San Marino, Switzerland, Turkey, Norway and Russia, as well as other countries of the former Yugoslavia and those other countries forming the Commonwealth of Independent States.

1.7. “Almirall” is defined in Section C of the Recitals.

1.8. “API Manufacturing” means the Manufacture and supply of the Licensed Compound that is to be included in a Product for Commercialization hereunder.

1.9. “Applicable Law” means all applicable statutes, ordinances, regulations, rules, or orders of any kind whatsoever of any Regulatory Authority, as amended from time to time, in the Territory.

1.10. “Arbitrator” is defined in Section 10.1.3(a).

1.11. “Astellas Indemnified Party” is defined in Section 9.1.

1.12. “Astellas Know-How” means (a) Know-How that Astellas Controls as of the Effective Date or that comes into the Control of Astellas during the Term (other than Collaboration Know-How) and that is (i) necessary or useful to manufacture, develop, or commercialize the Licensed Compound or Product in an Oral Formulation, and (ii) used or practiced by Astellas, its Affiliates, or Sublicensees in the Development, Manufacture, etc.

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or Commercialization of the Licensed Compound or Product, and (b) Collaboration Know-How (other than Joint Know-How) (i) to the extent necessary or useful to Manufacture, Develop, or Commercialize the Licensed Compound or Product in an Oral Formulation in the Field, including without limitation any method specifically directed to making the Licensed Compound or Product, any composition or formulations of the Licensed Compound or Products, or any method necessary or useful to using or administering the Licensed Compound or Product, and (ii) that is invented, conceived, or developed solely by employees of Astellas or its Affiliates, or Third Parties acting on behalf of Astellas or its Affiliates, and (iii) that is Controlled by Astellas.

1.13. “Astellas Patent Rights” means (a) Patent Rights that Astellas Controls as of the Effective Date or that come into the Control of Astellas during the Term (other than Collaboration Patent Rights and Joint Patent Rights) and that (i) claim the Licensed Compound, or (ii) are practiced by Astellas, its Affiliates or Sublicensees in the Development, Manufacture, or Commercialization of the Licensed Compound or Product and which, but for a license granted thereto, would be infringed by such Development, Manufacture, or Commercialization of the Licensed Compound or Product in an Oral Formulation in the Field, and (b) Collaboration Patent Rights (other than Joint Patent Rights) Controlled by Astellas to the extent claiming Astellas Know-How.

1.14. “Astellas Related Party” is defined in Section 5.5.

1.15. “Astellas Sublicensable Patent Rights” means Astellas Patent Rights to the extent such rights cover or recite the Licensed Compound or Product, any method of making the Licensed Compound or Product, any composition or formulations of the Licensed Compound or Product, or the method of using or administering the Licensed Compound or Product (“Product Specific Patent Rights”) excluding all patent applications included in the Astellas Patent Rights that Astellas Controls as of the Effective Date except for patent applications included in Product Specific Patent Rights which specifically claim the Licensed Compound. Patent applications included in Product Specific Patent Rights Controlled by Astellas as of the Effective Date which issue after the Effective Date shall be considered Astellas Sublicensable Patent Rights as of the time such Product Specific Patent Rights issue.

1.16. “Astellas Technology” means Astellas’s interest in (a) the Astellas Know-How, and (b) the Astellas Patent Rights, and (c) all other (non Patent-Right) intellectual property rights in any Astellas Know-How.

1.17. “Astellas” is defined in the Introduction.

1.18. “Audited Party” is defined in Section 4.5.

1.19. “Auditing Party” is defined in Section 4.5.

1.20. “Authorized Recipient” is defined in Section 5.1.1.

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1.21. “Business Day” means any day other than a Saturday, Sunday or a day on which banks are required or permitted to be closed in either Boston, Massachusetts or Tokyo, Japan or, for purposes of Section 10.5.1, at the place of delivery.

1.22. “Calendar Quarter” means each of the three consecutive month periods ending on March 31, June 30, September 30, and December 31.

1.23. “CC” means chronic constipation.

1.24. “Cessation of Manufacture” is defined in Section 3.4.

1.25. “Change of Control” means any of the following: (i) the sale or disposition of all or substantially all of the assets of a Party to a Third Party, (ii) the acquisition by a Third Party, other than an employee benefit plan (or related trust) sponsored or maintained by a Party or any of its Affiliates, of more than 50% of such Party’s outstanding shares of voting capital stock (e.g., capital stock entitled to vote generally for the election of directors), (iii) the appointment or election to the board of directors of a Party of members constituting a majority of such board who were not appointed, approved or recommended for election by the board of directors as constituted immediately prior to the appointment or election of such majority, or (iv) the merger or consolidation of a Party with or into another corporation, other than, in the case of (ii) or (iv) of this Section 1.25, an acquisition or a merger or consolidation of a Party in which holders of shares of such Party’s voting capital stock immediately prior to the acquisition, merger or consolidation have at least 50% of the ownership of voting capital stock of the acquiring Third Party or the surviving corporation in such merger or consolidation, as the case may be, immediately after the merger or consolidation. Notwithstanding the foregoing, a Change of Control will not be deemed to occur on account of an initial public offering, the acquisition of securities of a Party by an institutional investor, or Affiliate thereof, that acquires a Party’s securities in a transaction or series of related transactions as a passive investment which does not affect the management of such Party, or a sale of assets, merger or other transaction effected exclusively for the purpose of changing the corporate domicile of a Party.

1.26. “Claim” is defined in Section 10.1.3(a).

1.27. “CMC Activities” is defined in Section 3.2.2.

1.28. “Collaboration Know-How” means Know-How that is first invented, conceived, or developed by or on behalf of either or both Parties’ (or their Affiliates’) employees or Third Parties acting on such Parties’ behalf, in each case after the Effective Date and in the course of such Party’s performance under this Agreement.


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1.31. “Combination Product” is defined in Section 1.90.

1.32. “Commercial Launch” means the initial First Commercial Sale of a Product in the Territory.

1.33. “Commercialization Plan” means the strategic commercialization plan for the Product in the Field in the Territory which sets forth, among other things (a) a multi-year marketing strategy that includes plans for market research, health economics, pricing and reimbursement, medical affairs and value added initiatives, (b) a multi-year communications strategy that includes plans for public relations, conferences and exhibitions and other external meetings, internal meetings and communications, publications and symposia, internet activities and core brand package, (c) a multi-year strategy for Phase IV studies and lifecycle management activities, (d) a high level operating plan for the implementation of such strategies on an annual basis, including without limitation, information related to product positioning, core messages to be communicated, share of voice requirements and pricing strategies, (e) a level of detailing activity that would be Commercially Reasonable for a company comparable to Astellas for a product having similar market potential in the Territory, (f) a commercialization budget, and (g) other activities to be conducted in connection with the Commercialization of the Product in the Field in the Territory. The Commercialization Plan will be updated at least once a year.

1.34. “Commercialization” means any and all activities of importing, marketing, promoting, distributing, offering for sale, or selling a Product (directly or indirectly through multiple levels of distribution), including for example pre-Commercial Launch market development activities conducted in anticipation of Regulatory Approval of a Product, seeking pricing and reimbursement approvals for a Product, if applicable, preparing advertising and promotional materials, sales force training, all interactions and correspondence with a Regulatory Authority regarding Phase IV clinical trials. Commercialization does not include Development or Manufacturing. When used as a verb, “Commercialize” means to engage in Commercialization.

1.35. “Commercially Reasonable Efforts” means, for each Party, those efforts and resources comparable to those normally used by such Party hereunder for a product or compound owned by such Party or to which such Party has rights of the type such Party has hereunder, taking into account, without limitation, issues of safety and efficacy, product profile, the proprietary position of the product or compound, the regulatory environment and status of the compound, and other relevant scientific factors, market conditions then prevailing, including the competitive environment, profitability, the extent of market exclusivity, the cost to Develop the compound or product, health economic claims, and other similar factors reasonably determined by the Party to be relevant. Without limiting the foregoing, Commercially Reasonable Efforts as it applies to the clinical development of the Licensed Compound and Product hereunder means implementation of the Development and Regulatory
Plan in accordance with the time lines set forth therein to the extent that such implementation in accordance with such time lines is controllable by the Party responsible for performing such implementation, and subject to (i) any amendment of such Development and Regulatory Plan from time to time in accordance with Section 3.2.1 based on the results of studies conducted with the Licensed Compound and Product, and (ii) regulatory, safety, and efficacy factors, [*] set forth therein. Without limiting any of the foregoing, for all purposes of Section 4.3.4, “Commercially Reasonable Efforts” shall take into account [*]. “Commercially Reasonable” as used in this Agreement will be interpreted in a corresponding manner.

1.36. “Confidential Information” means, with respect to a Party, all non-public information (and all tangible and intangible embodiments thereof), which is Controlled by such Party, is disclosed by such Party to the other Party pursuant to this Agreement, and is designated as confidential in writing by the disclosing Party whether by letter or by use of an appropriate stamp or legend, prior to or at the time any such information is disclosed by the disclosing Party to the other Party. In addition, any non-public information which is orally, electronically or visually disclosed by a Party, or is disclosed in writing without an appropriate letter, stamp or legend, will constitute Confidential Information if the disclosing Party, within [*] after such disclosure, delivers to the receiving Party a written document or documents describing the information disclosed and referencing the place and date of such oral, visual, electronic or written disclosure and the names of the Person(s) to whom such disclosure was made; provided, however, that any non-public information disclosed at a meeting of the JSC will constitute Confidential Information unless otherwise specified if it should reasonably be deemed confidential under the circumstances.

1.37. “Control” or “Controlled” means, with respect to any intellectual property right of a Party, that the Party or its Affiliate has the right and ability to grant access and a license or sublicense to such intellectual property right to the other Party as provided in this Agreement without violating an agreement with or other rights of any Third Party and without any such sublicense under Third Party rights or the licensee Party’s activities under such sublicense resulting in a payment obligation to such Third Party (other than an Affiliate of the licensor Party) under the licensor’s agreement with such Third Party, unless the licensee Party agrees to make and makes all such payments.

1.38. [*].

1.39. “Development and Regulatory Plan” means the plan for the Development of the Licensed Compound for Regulatory Approval and Post-Approval Research prepared by Astellas and approved by the JSC and as amended or updated from time to time in accordance with this Agreement.

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1.40. “Development Material” means the Licensed Compound in bulk form that is intended to be used solely for Development purposes.

1.41. “Development” means all activities performed by or on behalf of either Party in the performance of any Development and Regulatory Plan for the Product in the Field in the Territory. Development will include, without limitation, all activities related to research (including, without limitation, Post-Approval Research), preclinical testing, test method development and stability testing, toxicology, formulation, process development, manufacturing scale-up, quality assurance/quality control, clinical studies including Phase I, Phase II, Phase III and pricing studies, seeking Regulatory Approval and
otherwise handling regulatory affairs, statistical analysis and report writing performed pursuant to the Development and Regulatory Plan with respect to the Product. When used as a verb, “Develop” means to engage in Development.

1.42. “Direct Costs” means the costs of raw materials, utilities, and supplies directly consumed or used in Manufacturing the Development Material and Licensed Compound, as applicable, as calculated in accordance with United States generally accepted accounting principles as in effect from time to time and consistently applied, and excluding, in any event any idle capacity charges or costs, facility costs, and other depreciation costs and general and administrative overhead.

1.43. “Disclosing Party” is defined in Section 5.1.1.

1.44. “Effective Date” is defined in the Introduction.

1.45. “Excess Amount” is defined in Section 4.3.4.

1.46. “Failure To Supply” is defined in Section 3.4.

1.47. “Fair Market Value” means with respect to a valuation required by any provision of this Agreement, the price which a willing buyer would pay, on an arm’s length basis, for Astellas’s economic interests in the intellectual property assets, data, and other rights and assets being valued, in light of the status of development and reasonably anticipated risks and costs of further development and the market potential for the commercialization of such assets, data or rights, which price may include future, ongoing, and/or recurring license fees, royalties, and other payments. In any case where Fair Market Value must be determined but is not determined by good faith negotiations between the Parties, pursuant to Section 8.5.2(a), the determination will be made by [**]. In addition, but solely for purposes of Section 8.6.2 (and not for purposes of Section 8.5.2(a)), if Fair Market Value is determined prior to the First Commercial Sale, such Fair Market Value will be [**].

1.48. “Field” means all human prophylactic, and therapeutic uses of a product in all formulations and dosage forms for any and all indications, including but not limited to IBS-C, CC, OIC, and other lower gastrointestinal disorders.

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1.49. “Final Award” is defined in Section 9.1.

1.50. “First Commercial Sale” means, with respect to the Product and any country of the Territory, the first sale of such Product under this Agreement for use in the Field to a Third Party in such country, after such Product has been granted Regulatory Approval for use in the Field by the competent Regulatory Authorities in such country.

1.51. “Force Majeure” is defined in Section 10.2.
1.52. “Forest Agreement” is defined in Section B of the Recitals.

1.53. “Forest Patent Rights” means any Patent Rights licensed to Ironwood under, and all rights granted to Ironwood under such Patent Rights pursuant to, the Forest Agreement.

1.54. “Forest Territory” means the countries of North America, consisting of the United States, Canada, and Mexico, and their respective territories and possessions (including Puerto Rico, irrespective of political status).

1.55. “Forest” is defined in Section B of the Recitals.

1.56. “FTE Rate” means the agreed upon [**] directly associated with the activities of such employee. The JSC will arrange for the finance departments of each Party to discuss and agree upon the appropriate FTE Rate for the various functional areas of this collaboration and to periodically review the appropriateness of and to adjust such rates.

1.57. “Fully Absorbed Cost” means Ironwood’s costs to Manufacture the Development Material and Licensed Compound, or Astellas’s cost to Manufacture and supply Product, as applicable, consisting of Direct Costs and Indirect Costs, all determined in accordance with United States generally accepted accounting principles, or GAAP, as applicable, as in effect from time to time and consistently applied.

1.58. “GAAP” means Japan generally accepted accounting principles, as in effect from time to time.

1.59. “Generic Competition” means, with respect to a Product in a given country, that one or more Generic Products is or was commercially available in such country. For the avoidance of doubt, once Generic Product is commercially available in such country, Generic Competition shall be deemed to exist in such country regardless of whether such Generic Product subsequently remains commercially available in such country.

1.60. “Generic Product” means: (a) any pharmaceutical product sold in an Oral Formulation by a Third Party for use in the Field (other than a Product sold by Astellas, its Affiliates or Sublicensees) that contains as an active ingredient the Licensed Compound or (b) any pharmaceutical product (other than a Product that is Developed or Commercialized by a Party pursuant to this Agreement) that is included in an application made before a Regulatory Authority for marketing approval in the Territory (i) as being “generic,” “comparable,” “interchangeable with,” “essentially similar to,” or “bioequivalent to” a Product, or as having any other similar designation with respect to such Product as provided under Applicable Law, or (ii) in which the applicant of such application relies, or seeks to rely, in whole or in part on clinical data included in an application for Regulatory Approval of a Product.

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1.61. "Good Clinical Practice" or "GCP" means the standards of good clinical practice as are required by governmental agencies in countries in which the Products are intended to be sold under this Agreement, and in which the Licensed Compound is Manufactured by or on behalf of Ironwood, as applicable.

1.62. "Good Laboratory Practice" or "GLP" means the standards of good laboratory practice as are required by governmental agencies in countries in which the Products are intended to be sold under this Agreement, and in which the Licensed Compound is Manufactured by or on behalf of Ironwood, as applicable.

1.63. "Good Manufacturing Practice" or "GMP" means the standards of good manufacturing practice as are required by governmental agencies in countries in which the Products are intended to be Manufactured or sold by under this Agreement, and in which the Licensed Compound is Manufactured by or on behalf of Ironwood, as applicable.

1.64. "Group" is defined in Section 5.5.8.

1.65. "IBS-C" means irritable bowel syndrome with the primary manifestation of constipation.

1.66. "Impairment" is defined in Section 8.5.2(b).

1.67. "Indemnified Party" is defined in Section 9.3.

1.68. "Indemnifying Party" is defined in Section 9.3.

1.69. "Indirect Costs" means the costs of [**], all to the extent directly related to, and only to the extent reasonably and fairly attributable to, the Manufacture of the Development Materials and Licensed Compound supplied to Astellas hereunder, as applicable.

1.70. "Infringement" is defined in Section 7.6.1.

1.71. "Initial Development and Regulatory Plan" is defined in Section 3.2.1.

1.72. "Insolvency Event" is defined in Section 8.3.

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1.73. [**].

1.74. "Ironwood House Marks" is defined in Section 7.5.3.
1.75. “Ironwood Indemnified Party” is defined in Section 9.2.

1.76. “Ironwood Know-How” means (i) Know-How that Ironwood Controls as of the Effective Date or that otherwise comes into the Control of Ironwood during the Term (other than Joint Know-How), including Know-How that has arisen or arises under the Forest Agreement or the Almirall Agreement (whether solely owned or jointly owned by Ironwood or licensed to Ironwood), to the extent necessary or useful to Manufacture, Develop, or Commercialize the Licensed Compound or Product in accordance with this Agreement, including without limitation any method of making the Licensed Compound or Product, any composition or formulation of theLicensed Compound or Product, or any method of using or administering the Licensed Compound or Product, and (ii) Collaboration Know-How (other than Joint Know-How) that is invented, conceived or developed solely by employees of Ironwood or its Affiliates, or Third Parties acting on behalf of Ironwood or its Affiliates.

1.77. “Ironwood Patent Rights” means (a) any Patent Rights claiming Ironwood Know-How, and (b) any other Patent Rights that Ironwood Controls as of the Effective Date or that otherwise come into the Control of Ironwood during the Term (other than Joint Patent Rights and Patent Rights which are Astellas Patent Rights licensed to Ironwood pursuant to this Agreement), including Patent Rights under the Forest Agreement and the Almirall Agreement (including Almirall Patent Rights and Forest Patent Rights to the extent licensed thereunder), to the extent such rights (i) cover or recite the Licensed Compound or Product or their use in the Field in the Territory, any method of making the Licensed Compound or Product in or outside the Territory, any composition or formulation of the Licensed Compound or Product or the use thereof in the Field in the Territory or (ii) would otherwise be infringed, but for a license granted thereto, by (A) the Development or Commercialization of the Licensed Compound or Product in the Field in the Territory, or (B) the Manufacture of the Licensed Compound or Product in or outside the Territory.

1.78. “Ironwood Technology” means Ironwood’s interest in (i) the Ironwood Know-How, (ii) the Ironwood Patent Rights, and (iii) all other (non Patent-Right) intellectual property rights in any Ironwood Know-How.

1.79. “Ironwood” is defined in the Introduction.

1.80. “Joint Know-How” means any Collaboration Know-How that is invented, conceived or developed jointly by an employee of Ironwood or its Affiliates (or a Third Party acting on any of their behalf) and an employee of Astellas or its Affiliates (or a Third Party acting on any of their behalf).

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1.81. “Joint Patent Right” means any Collaboration Patent Right that claims Joint Know-How and names as the inventors one or more employees or agents of Ironwood or its Affiliates together with one or more employees or agents of Astellas or its Affiliates, where inventorship for purposes hereof shall be determined by U.S. law.

1.82. “Joint Technology” means (i) Joint Know-How, (ii) Joint Patent Rights, and (iii) all
other (non Patent-Right) intellectual property rights in any Joint Know-How.

1.83. "JSC” is defined in Section 3.1.1.

1.84. “Know-How” means all inventions, discoveries, data, information (including scientific, technical or regulatory information), processes, methods, techniques, materials, technology, results, analyses, laboratory, pre-clinical and clinical data, or other know-how, whether or not patentable, including without limitation pharmacology, toxicology, drug stability, manufacturing and formulation methodologies and techniques, clinical and non-clinical safety and efficacy studies, marketing studies, absorption, distribution, metabolism and excretion studies.

1.85. “Launch Plan” means the plan regarding the Commercial Launch of the Product in the Territory attached hereto as Exhibit A.

1.86. “Liability” is defined in Section 9.1.

1.87. “Licensed Compound” means Ironwood’s proprietary guanylate cyclase C agonist polypeptide generally referred to as “linaclotide” and having the chemical structure set forth on Schedule 1.87.

1.88. “Manufacture,” “Manufactured” or “Manufacturing” means all activities involved in the production, packaging, and labeling of the Licensed Compound (including Development Materials) or Product, as applicable, to be supplied, Developed, and/or Commercialized under or pursuant to this Agreement.

1.89. “Manufacturing and Supply Agreement” is defined in Section 3.4.

1.90. “Necessary License” is defined in Section 4.3.4.

1.91. “Net Sales” means, on a country-by-country basis, with respect to any period for each country in the Territory, the gross amounts invoiced by Astellas, its Affiliates, or its permitted Sublicensees as applicable, to unrelated Third Parties for sales of the Product in the Field in such country, less the following deductions to the extent included in the gross invoiced sales price for the Product or otherwise directly paid or incurred by Astellas, its Affiliates, or its permitted Sublicensees as applicable, with respect to the sale of the Product in such country: (i) trade, quantity or cash discounts credits, adjustments or allowances, including without limitation, those granted pursuant to indigent patient programs or patient discount programs or on account of price adjustments, billing errors, rejected goods, or damaged goods, expired goods, returned goods, and amounts otherwise repaid or credited by reason of defects, rejection, or recalls or retroactive price reductions; (ii) rebates and chargebacks allowed, given or accrued (including, but not limited to, cash, governmental and managed care rebates, hospital or other buying group chargebacks, and governmental taxes in the nature of a rebate based

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on usage levels or sales of the Product); (iii) sales, excise, turnover, inventory, and similar taxes (not offset or refunded, except in the case of consumption taxes) assessed on the sale of the Product; (iv) bad debts reserved for on the basis utilized by Astellas, its Affiliates, or its permitted Sublicensees as applicable, in its branded pharmaceutical business generally or, if greater, bad debts actually written off, in each case which are attributable to sales of Product; (v) freight and insurance charges; and (vi) amounts paid or credited to customers for inventory management services. Net Sales will be determined in accordance with GAAP for sales in Japan and with the respective generally accepted accounting principles in each other country in the Territory for sales in such other country. Without limiting the generality of the foregoing, sales, transfers, or dispositions of Product for charitable, promotional (including samples), pre-clinical, clinical, or regulatory purposes will be excluded from Net Sales, as will sales or transfers of Product among a Party and its Affiliates. In the event that a Product contains the Licensed Compound in combination with one or more other product or active ingredient (a “Combination Product”), Net Sales shall be calculated by first determining Net Sales of such combination Product (in its entirety) pursuant to the foregoing and then multiplying the Net Sales of the Combination Product by the fraction A/(A+B), where A is the gross invoice price of the Licensed Compound or Product if sold separately in a country and B is the gross invoice price of the other product(s) included in the Combination Product if sold separately in such country. In the event no such separate sales are made by Astellas, its Affiliates or Sublicensees in a country, Net Sales of the Combination Product shall be calculated by multiplying such Net Sales by a fraction fairly and reasonably reflecting the relative value contributed by the Licensed Compound to the total value of the Combination Product as determined by the Parties in good faith.

1.92. “New Drug Application” or “NDA” means a new drug application filed with a Regulatory Authority (not including pricing and reimbursement approval), that is analogous to the new drug application with the United States Food and Drug Administration described in 21 C.F.R. § 314.

1.93. “Non-Required Studies” is defined in Section 3.3.5.

1.94. “OIC” means opioid induced constipation.

1.95. “Oral Formulation” means any finished dosage form that is taken by mouth and that [**] from the formulation of the Product covered by Ironwood patent application numbers [**].

1.96. “Order” is defined in Section 5.1.3.

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1.97. “Party” and “Parties” is defined in the Introduction.

1.98. “Patent Expiration” is defined in Section 3.4.

1.99. “Patent Filing Materials” is defined in Section 7.4.1(b).

1.100. “Patent Right” means any and all (a) U.S. or foreign patent applications, including, without limitation, all provisional applications, substitutions, continuations, continuations-in-part,
divisions, renewals, and all patents granted thereon, (b) all U.S. or foreign patents, reissues, reexaminations and extensions or restorations by existing or future extension or restoration mechanisms, including, without limitation, supplementary protection certificates or the equivalent thereof, and (c) any other form of government-issued right substantially similar to any of the foregoing.

1.101. “Patent Term Extension” is defined in Section 7.4.4.

1.102. “Person” means any individual, corporation, company, limited liability company, partnership, limited liability partnership, trust, estate, proprietorship, joint venture, association, organization, or entity.

1.103. “Pharmacovigilance Agreement” is defined in Section 3.3.4.

1.104. “Phase I” in reference to a clinical trial means a trial defined in 21 C.F.R. 312.21(a), as may be amended from time to time, or any foreign equivalent thereto.

1.105. “Phase II” in reference to a clinical trial means a trial defined in 21 C.F.R. 312.21(b), as may be amended from time to time, or any foreign equivalent thereto.

1.106. “Phase III” in reference to a clinical trial means a trial defined in 21 C.F.R. 312.21(c), as may be amended from time to time, or any foreign equivalent thereto.

1.107. “Phase IV” in reference to a clinical trial means a trial conducted for purposes of further characterizing and supporting the Product for marketing but not for purposes of seeking Regulatory Approval or otherwise fulfilling a requirement of a Regulatory Authority.

1.108. “Post-Approval Research” means ongoing research and development of a Product after such Product has received Regulatory Approval in a country of the Territory, including, without limitation, Phase IV clinical studies and clinical studies in support of indications within the Field or labeling changes for such Product within the Field in such country during the Term of this Agreement.

1.109. “Product Specific Patent Rights” is defined in Section 1.15.

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1.110. “Product” means any pharmaceutical product in finished form that contains the Licensed Compound either as the sole active ingredient or in combination with one or more other active ingredients and all present and future formulations, dosages, and dosage forms thereof.

1.111. “Receiving Party” is defined in Section 5.1.1.

1.112. “Regulatory Approval” means the approval and authorization of a Regulatory Authority in a country necessary to develop, manufacture, distribute, sell, or market a Product in that country,
including pricing and reimbursement approval.

1.113. “Regulatory Authority” means any international, national (e.g., the U.S. Food and Drug Administration), regional, state, or local regulatory agency, department, bureau, commission, council, or other governmental entity in each country of the world involved in the granting of Regulatory Approval for a Product in the Territory.

1.114. “Regulatory Submission” means applications for Regulatory Approval, notification, and other submissions made to or with a Regulatory Authority that are necessary or reasonably desirable to Develop, Manufacture, or Commercialize the Product in the Field in a particular country, whether obtained before or after a Regulatory Approval in the country. Regulatory Submissions include, without limitation, investigative new drug applications and NDAs, and amendments and supplements to any of the foregoing and their foreign counterparts, applications for pricing and reimbursement approvals, and all proposed labels, labeling, package inserts, monographs, and packaging for the Product in the Territory.

1.115. “Relevant Countries” is defined in Section 8.6.1.

1.116. “Representative” is defined in Section 5.5.

1.117. “Right of Reference” is defined in Section 2.4.

1.118. [**] means, on a country by country and Product by Product basis, [**] in such country in the Territory.

1.119. “Senior Management” of a Party includes, at a minimum, each of the Chief Executive Officer, Head of Research and Development, Head of Marketing, and President or Chief Operating Officer of the pharmaceutical business or division.

1.120. [**].

1.121. “Standstill Period” is defined in Section 5.5.

1.122. “Subject Technology” is defined in Section 7.6.2.

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1.123. “Sublicense” means an agreement pursuant to which Astellas grants a sublicense to a Third Party under the Ironwood Technology pursuant to Section 2.6 of this Agreement authorizing such Third Party to Manufacture and/or Commercialize the Product for its own benefit (and not for the benefit of Astellas or its Affiliates). For the avoidance of doubt, an extension of rights pursuant to Section 2.5 shall not be deemed a “Sublicense” for purposes hereof.

1.124. “Sublicensee” means a Third Party that is granted a Sublicense.
1.125. “Sued Party” is defined in Section 7.7.2.

1.126. “Target Party” is defined in Section 8.5.2(a).

1.127. “Tax Benefit Amount” is defined in Section 4.6.1(a).

1.128. “Tax” is defined in Section 4.6.


1.130. “Term” is defined in Section 8.1.

1.131. “Territory” means Japan, South Korea, Taiwan, Thailand, Philippines, and Indonesia and any other countries that may be added to the definition of “Territory” pursuant to Section 2.8.

1.132. “Third Party” means any Person other than Ironwood, Astellas and their respective Affiliates.

1.133. “Trademark” means all trade names, logos, common law trademarks, common law service marks, trademark and service mark registrations, and applications therefore and all other rights corresponding thereto throughout the world.

1.134. “Transfer Price” means, (i) for Development Material and for Licensed Compound provided for samples that are provided by Astellas to third parties without charge, [**] and (ii) for Licensed Compound provided for Commercial supply that meets the specifications set forth in Exhibit B and is provided in accordance with this Agreement and the Manufacturing and Supply Agreement, (a) [**] for such Licensed Compound [**], and (b) [**] for such Licensed Compound [**]. For the avoidance of doubt, the Transfer Price does not include any value added tax, the payment of which will be made by Astellas to the extent required under Applicable Law.

1.135. “United States” or “U.S.” means the United States of America, its territories and possessions (including Puerto Rico, irrespective of political status).

1.136. [**].

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1.137. “Useful License” is defined in Section 4.3.4.

1.138. “U.S.-Japan Tax Treaty” is defined in Section 4.6.
1.139. "Valid Claim" means a claim of an issued and unexpired Patent Right in the Territory, which claim has not been revoked or held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction, which is not appealable or has not been appealed within the time allowed for appeal, and which has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination, or disclaimer or otherwise.

1.140. "Valuation Panel" means a panel of [**]. In the event the Parties are required by the terms of this Agreement to select a Valuation Panel, each Party will [**]. Each Party will [**] of the panel entered into will be deemed the decision of the Valuation Panel. The Parties will instruct the Valuation Panel to reach its decision as promptly as practicable, and if possible within [**]. The costs of this Valuation Panel will be [**] by the Parties.

1.141. "Year" means each 12 month period ending December 31st.

2. LICENSE GRANT

2.1. License to Astellas. Subject to the terms and conditions of this Agreement, Ironwood hereby grants to Astellas, effective on the Effective Date, an exclusive license (even as to Ironwood, provided that Ironwood shall have such rights under the Ironwood Technology and its interest in the Joint Technology as are necessary for Ironwood to perform its obligations hereunder), with the right to sublicense as expressly provided in Section 2.5, under the Ironwood Technology and Ironwood’s interest in the Joint Technology to Develop the Product in an Oral Formulation pursuant to the Development and Regulatory Plan for Commercialization in the Field in the Territory, to Commercialize the Product in an Oral Formulation in the Field in the Territory, to Manufacture the Product in an Oral Formulation (including, subject to the restrictions set forth herein, the Licensed Compound) inside or outside of the Territory for Commercialization in the Field in the Territory, and to use the Licensed Compound, Ironwood Technology, and Joint Technology in connection with such Development, Commercialization, and Manufacture of Products (including the Licensed Compound). Notwithstanding the foregoing, Ironwood reserves the right under the Ironwood Technology to develop the Product (x) outside the Field in the Territory, and (y) in any field outside the Territory, and to manufacture the Product inside or outside of the Territory, provided that Ironwood shall have no right to, and shall not, and shall not permit any third party to, (a) develop or manufacture (directly or indirectly) the Licensed Compound or Products (whether in an Oral Formulation or any other formulation) for sale or other commercialization in the Field in the Territory (other than by Astellas pursuant to this Agreement), and (b) sell, offer for sale, import, or otherwise commercialize the Licensed Compound or Products (whether in an Oral Formulation or any other formulation) in the Field in the Territory (other than sales of the Licensed Compound to Astellas pursuant to this Agreement). In addition, Ironwood and its Affiliates will not assert any Technology against Astellas or its Affiliates or Sublicensees on account of their Manufacture, Development, and Commercialization of the Product in the Field in the Territory in accordance with this Agreement.

2.2. License to Ironwood. Subject to the terms and conditions of this Agreement, and only to the extent permitted under Applicable Law (including antitrust laws and regulations), Astellas hereby grants to Ironwood (i) a royalty-free non-exclusive license, during the Term, under the Astellas
Technology and Astellas’s interest in the Joint Technology, with the right to sublicense, in each case to the extent necessary for Ironwood to exercise its rights and perform its obligations under this Agreement, all in accordance with the terms of this Agreement, and (ii) a royalty-free, exclusive (subject to Astellas’s retained rights as set forth below) license, with the right to freely sublicense only Astellas Sublicensable Patent Rights (only to an Ironwood licensee in connection with a license of rights in the Licensed Compound or Product, and subject to Section 2.6.2(a) and 2.6.3, and provided that and only to the extent such corresponding rights are granted to Astellas) without any duty to account or compensate (which sublicenses shall survive the termination of this Agreement except as set forth in Section 8.6) under Astellas’s interest in the Astellas Technology and Astellas’s interest in the Joint Technology solely to (A) develop, manufacture, and commercialize theLicensed Compound and Product in an Oral Formulation outside of the Territory in the Field, and (B) manufacture the Product in an Oral Formulation in the Territory for purposes of commercialization in the Field outside the Territory. For the avoidance of doubt, the licenses in this Section 2.2 will not prohibit Astellas from, and Astellas expressly retains all rights required for, conducting pre-clinical research inside or outside of the Field anywhere in the world, and Manufacturing the Licensed Compound or Product outside of the Territory for Development or Commercialization inside the Territory. Each Party will use Commercially Reasonable Efforts to ensure that all Collaboration Know-How and Collaboration Patent Rights invented, conceived, or developed by a Third Party on behalf of such Party will be Controlled by such Party.

2.3. **Joint Technology.** Each Party hereby grants the other Party a world-wide, non-exclusive, perpetual, royalty-free, fully paid up, freely sublicensable right and license under its interest in the Joint Technology to exploit compounds that are not guanylate cyclase C agonists anywhere in the world, without compensating or accounting to the other Party on account of the use and practice of such Joint Technology.

2.4. **Right of Reference.** Ironwood hereby grants to Astellas a “Right of Reference,” as that term is defined in 21 C.F.R. § 314.3(b) and any foreign counterpart to such regulation in the Field in the Territory to the data included in the Ironwood Technology to the extent necessary or useful to Develop the Licensed Compound or Product solely for IBS-C or CC, and Astellas hereby grants to Ironwood (and Ironwood’s partners and/or licensees, as long as such Ironwood partners and/or licensees grant a corresponding right of reference, in connection with Astellas’s rights hereunder, to their corresponding data to Astellas) such a Right of Reference to the data included in the Astellas Technology to the extent necessary or useful to (i) manufacture the Licensed Compound or Product in an Oral Formulation throughout the world for purposes of commercialization in the Field outside the Territory, (ii) develop the Licensed Compound or Product in an Oral Formulation in the Field outside the Territory, or (iii) to commercialize the Licensed Compound or Product in an Oral Formulation in the Field outside the Territory, in all cases solely for IBS-C or CC, and in each case subject to the terms and conditions of this Agreement. Each Party will provide a signed statement to this effect, if requested by the other, in accordance with 21 C.F.R. § 314.50(g)(3) or any foreign counterpart to such regulation, in the case of a request by either Party, for the limited purpose of such Party exercising its rights or performing its obligations under this Agreement. For the avoidance of doubt, neither Party may publish or otherwise publicly disclose any data to which a Right or Reference is granted under this Section 2.4, and each Party will treat such data as the Confidential Information of the other Party in accordance with the terms hereof.

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2.5. **Extension of Rights to Affiliates and Third Parties.** Astellas may extend any or all of its rights hereunder (i) to its Affiliates, and (ii) to Third Parties performing manufacturing, development, or other services on behalf of Astellas or its Affiliates (and the rights granted to Astellas in this Agreement shall include the right to have any of such rights exercised for and on behalf of Astellas by such Third Parties). In each such case such Affiliates and Third Parties shall abide by the applicable terms and conditions of this Agreement (and all references to Astellas herein shall be deemed to include such Third Parties or Affiliates, as appropriate).

2.6. **Sublicensing.**

2.6.1. In addition to the rights under Section 2.5, Astellas may grant sublicenses under the rights granted to it under this Agreement [**]. In connection with any such sublicense under this Section 2.6, (i) Astellas shall [**], and (ii) the terms of such sublicense shall be consistent with the terms of this Agreement. Astellas will notify Ironwood of the execution of each sublicense hereunder and provide a copy of any such executed sublicense to Ironwood promptly following execution thereof.

2.6.2. In addition, to the extent permitted under Applicable Law (including antitrust laws and regulations), (a) each Party will require any licensee, in the case of Ironwood, or Sublicensee, in the case of Astellas, whether within or outside the Territory, of Technology with respect to the Licensed Compound or the Product, to grant back to the granting Party rights to Technology arising out of the use or exercise of the Technology licensed by such Party to the other Party hereunder and developed by such licensee or Sublicensee relating to the Licensed Compound or Product so that such Technology will be Controlled by the granting Party for purposes and to the extent of the licenses to the other Party provided by Sections 2.1 and 2.2 above and (b) Astellas will require any Sublicensee to transfer ownership of all Regulatory Submissions and Regulatory Approvals pertaining to the Licensed Compound or Product to Astellas upon a termination of this Agreement to the extent necessary for Astellas to assign to Ironwood such Regulatory Submissions and Regulatory Approvals under Section 8.6.1(c) hereunder.

2.6.3. For the purposes of the sublicense rights granted by Astellas to Ironwood in Section 2.2(ii), the Astellas Patent Rights that Ironwood may sublicense will be limited at any given time to the Astellas Patent Rights that are Astellas Sublicensable Patent Rights at such time.

2.7. **Co-Promotion.** Notwithstanding Section 2.6 above, Astellas may use co-promotion partners in connection with the Commercialization of Products in the Territory, [**]. Astellas may extend all rights under this Agreement to such partner [**] to Commercialize Products through or with such partner, in which case such partners shall abide by the applicable terms and conditions of this Agreement.

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2.8. **Expansion of Territory.** Astellas shall have a right of first negotiation with respect to a license for the Licensed Compound and Product for [**]. Ironwood shall not initiate or pursue any discussions or negotiations with any Third Party regarding such a license in such territories unless Ironwood (i) has first offered to Astellas the right to negotiate such a license, and (ii) if Astellas notifies Ironwood in writing within [**] of receipt of the notice described in clause (i) of this Section that it desires to negotiate the terms of such a license, negotiated the terms and conditions of such license with Astellas in good faith for a period of [**]. If, at the end of such [**] period, the Parties are unable to reach agreement on the terms of such a license or if Astellas has not timely notified Ironwood that it desires to negotiate such a license in accordance with this Section, then Ironwood shall be free to enter into such a license with any Third Party without any further obligation to Astellas under this Section 2.8 with respect to such license.

2.9. **No Other Rights.** No rights, other than those expressly set forth in this Agreement are granted to either Party hereunder, and no additional rights will be deemed granted to either Party by implication, estoppel, or otherwise. All rights not expressly granted by either Party to the other hereunder are reserved.

3. **DEVELOPMENT, REGULATORY, AND COMMERCIALIZATION**

3.1. **Joint Steering Committee.**

3.1.1. **Overview.** The Parties will establish a joint steering committee ("JSC") as a forum to discuss and coordinate issues related to the Development and Commercialization of Products in the Field in the Territory as described in more detail herein. The JSC will serve as a forum for discussing data, information, and

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strategy regarding the development and commercialization of the Product in the Territory and outside of the Territory to the extent provided for in this Agreement. The JSC will perform the functions assigned to it in this Section 3.1; provided, however, that the functions and operations of the JSC may be altered from time to time during the Term by the mutual agreement of the Parties. In addition to the committee meetings, members of Senior Management from Ironwood and Astellas will meet periodically as necessary or appropriate during the Term (and in any event at least once per Year) in order to review significant issues and developments in the Development and Commercialization of the Licensed Compound or Product.

3.1.2. **Membership.** The JSC will consist of three senior representatives from each Party. Ironwood and Astellas will each designate a co-chair for the JSC. The co-chairs will be responsible for calling meetings and setting the agenda (which will include a list of all participants expected at a meeting) and circulating such agenda at least ten days prior to each meeting and distributing minutes of the meetings within 30 days following such meeting (which minutes will be in the English language), but will not otherwise have any greater power or authority than any other member of the JSC. JSC members must have such expertise as appropriate to the activities
of the JSC, and from time to time the JSC may invite personnel of the Parties having formulation, manufacturing, commercial, marketing, and other expertise to participate in discussions of the JSC as appropriate to assist in the activities of the JSC. Either Party may also, from time to time, designate one or more consultants to such Party who are under written obligations of confidentiality to such Party as JSC observers who may attend JSC meetings in an observational capacity only.

3.1.3. Responsibilities. The JSC’s responsibilities will include, among others: (i) approving the Development and Regulatory Plan and any amendments to such plan (other than amendments required to comply with Applicable Laws or requirements imposed by Regulatory Authorities), including, without limitation, approval of any amendment to the Development and Regulatory Plan to undertake Development of a Combination Product that includes the Licensed Compound and another active pharmaceutical ingredient, (ii) approving (or establishing procedures to approve) protocols for pre-clinical or clinical studies (including Post-Approval Research) and any amendments or modifications to such protocols or studies and amendments thereto (other than amendments required to comply with Applicable Laws or requirements imposed by Regulatory Authorities), (iii) approving any proposed amendment to the Launch Plan (other than amendments required to comply with Applicable Laws or requirements imposed by Regulatory Authorities), (iv) performing quarterly reviews of progress of pre-clinical and clinical studies and proposed additional studies, (v) reviewing and commenting on the Commercialization Plan (and amendments thereto) prepared and presented by Astellas, (vi) reviewing and commenting on Regulatory Submissions relating to the Product prepared by Astellas, (vii) facilitating the exchange of data and information relating to the development of the Product in and outside the Territory, (viii) receiving updates on the strategy for Commercializing the Product in the Field in the Territory (including strategies related to reimbursement, advertising and promotion, brand integrity, sales, and launch sequence), (ix) receiving updates on the annual marketing plans and activities for the Product in the Field in the Territory, (x) commenting on the target product profile for the Product (including current and future formulations, indications, and delivery forms, and key labeling claims, and (xi) performing such other functions as are expressly assigned to it in this Agreement. The JSC may appoint additional committees as agreed by the Parties. For the avoidance of doubt, the JSC shall not have the authority to amend or modify any term or condition, or take any action inconsistent with or in violation of, this Agreement.

3.1.4. Meetings. The JSC will meet at such frequency as will be established by the Parties (but not less frequently than four times per year prior to Commercial Launch and during the first five years of Commercialization, if so requested by a Party). In addition, the JSC will meet within seven Business Days of a proposal by either Party to amend the Development and Regulatory Plan to consider such amendment. Meetings of the JSC will alternate between the offices of the Parties, unless otherwise agreed upon by the members of the JSC, or may be held telephonically or by video conference. Meetings of the JSC will be effective only if at least one representative of each Party is in attendance or participating in the meeting. Members of the JSC may participate in and vote at meetings by telephone. Each Party will be responsible for expenses

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incurred by its employees and its members of the JSC in attending or otherwise participating in JSC meetings. Each Party will use reasonable efforts to cause its representatives to attend the meetings of the JSC. If a representative of a Party is unable to attend a meeting, such Party may designate an alternate with equivalent experience and authority as such representative to attend such meeting in place of the absent representative.

3.1.5. Minutes. The minutes of each JSC meeting must provide a description in reasonable detail of the discussions held at the meeting and a list of any actions, decisions or determinations approved by the JSC. Minutes of each JSC meeting shall be submitted by the Party preparing such minutes to the other Party within ten days of such meeting and the other Party shall notify such submitting Party in writing whether it disagrees with the minutes and specifying in detail the subject matter of, and the reason for, its disagreement. If the other Party has not so notified the submitting Party within ten days, the minutes shall be deemed approved. Otherwise the Parties shall cooperate to revise and approve the minutes as expeditiously as feasible. No decision of the JSC will be considered final until the minutes of the meeting at which such decision was made are approved.

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3.1.6. Elevation and Dispute Resolution. Each Party’s representatives on the JSC will collectively have one vote on all matters that are within the responsibility of such committee. The members of the JSC will use reasonable efforts to reach consensus on all decisions. In the event that the members of the JSC are unable to agree on a particular issue within ten Business Days after the JSC first meets to consider the issue, the issue will be resolved as follows:

(a) Commercialization of the Product in the Territory and all related decisions shall be in Astellas’s reasonable discretion, and if the unresolved issue relates to Commercialization, such issue will be resolved by Astellas in its reasonable discretion giving good faith consideration to Ironwood’s views on the issue. Notwithstanding the foregoing sentence, all Commercialization Plans will be consistent with the provisions of the Launch Plan.

(b) If the unresolved issue relates to a proposed amendment to the Launch Plan, such dispute will be resolved through arbitration pursuant to Section 10.1.3, and the Arbitrators will be instructed solely to determine whether it is Commercially Reasonable to amend the Launch Plan as so proposed (and, if so determined, the Launch Plan shall be so amended), provided that Astellas may unilaterally amend the Launch Plan to the extent required to comply with Applicable Laws or requirements imposed by Regulatory Authorities, after providing advance written notice to Ironwood with an explanation as to why such modifications and amendments are required, and such amendment and modification shall be deemed approved by the JSC.

(c) If the unresolved issue relates to Development, such issue will be referred to the Parties’ respective Chief Scientific Officers or equivalent or their designees. In the event such individuals are unable to resolve such issue within [**]
Business Days, such issue will be referred to the Chief Executive Officers of each Party or their designees for resolution. Subject to the remaining provisions of this Section 3.1.6, all matters relating to Development that are expressly within the scope of the responsibilities of the JSC under Section 3.1.3, including, without limitation, amendments and modifications to the Development and Regulatory Plan, must be determined by consensus of the Parties, provided that (i) neither Party shall withhold its consent unreasonably, and (ii) no consensus shall be required with respect to Development activities (including any modifications or amendments to the Development and Regulatory Plan, the Launch Plan, or study protocols) that are required to comply with Applicable Laws or requirements imposed by Regulatory Authorities, and Astellas may modify and amend the Development and Regulatory Plan as necessary to comply with such Applicable Laws or requirements, subject to the requirements of Section 3.2.1. If a matter for which consensus cannot be reached is addressed by the then current Development and Regulatory Plan, then such Development and Regulatory Plan and the activities required thereunder will control despite any inability of the Parties to reach consensus. Notwithstanding the foregoing, the Parties acknowledge and agree that Astellas shall control the Development of the Product in accordance with this Agreement and the then-effective Development and Regulatory Plan and shall have the right to conduct the Development and implement the Development and Regulatory Plan in its reasonable discretion in accordance with this Agreement (including without limitation the provisions of this Section 3.1.6, requiring that matters expressly within the responsibility of the JSC be decided on a consensus basis) and the Development and Regulatory Plan, as long as such activities will not adversely affect the development or commercialization of Products for the Forest Territory or the Almirall Territory.

3.2. Development

3.2.1. Product Development and Regulatory Plan. The initial Development and Regulatory Plan for the Product in the Field is set forth in Exhibit C (the “Initial Development and Regulatory Plan”). Astellas will direct, coordinate, and manage the Development of the Product in the Field, according to the Development and Regulatory Plan. The Development and Regulatory Plan for the Product will include, among other things, the indications in the Field for which the Product is to be Developed and other exploratory indications in the Field for which the Product may be developed, critical activities to be undertaken, certain timelines, go/no go decision points and relevant decision criteria and certain allocations of responsibilities between the Parties for the various activities to be undertaken under the Development and Regulatory Plan. During the Term, the JSC will review the Development and Regulatory Plan at least once per year, and will amend the Development and Regulatory Plan as necessary pursuant to such review. During the Term, Astellas may amend the Development and Regulatory Plan on an ongoing basis as necessary, any modifications being subject to approval by the JSC, [**] as necessary to comply with Applicable Laws or requirements imposed by Regulatory Authorities, [**], and such amendment and modification shall be deemed approved by the JSC. Any amendment to the Initial Development
and Regulatory Plan or any subsequent Development and Regulatory Plan will contain least that level of detail and cover at least the same matters as the Initial Development Plan.

3.2.2. **Responsibility.** Astellas will implement and conduct the Development activities in accordance with the Development and Regulatory Plan and Applicable Law. Upon written request from Astellas, Ironwood will provide

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technology transfer activities relating to the transfer of chemistry, manufacturing, and control technology for the Licensed Compound (“CMC Activities”), as specified in the Development and Regulatory Plan and as otherwise reasonably required or useful in connection with the Development.

3.2.3. **Development Expenses.** Astellas will be responsible for the payment of all of the expenses incurred after the Effective Date in connection with the Development of the Product exclusively for the Territory and pursuant to the Development and Regulatory Plan. Ironwood will be responsible for Ironwood’s internal costs, calculated at the FTE Rate, for CMC Activities that are performed by Ironwood for the first 12 months after the date that Astellas first requests in writing that Ironwood commence such CMC Activities, after which such costs will be reimbursed by Astellas by payment within 60 days of quarterly invoices from Ironwood to Astellas.

3.2.4. **Future Development Activities.** Astellas may make recommendations regarding whether to Develop a Product for new indications or new formulations. If approved by the JSC, such additional Development activities will become part of the Development and Regulatory Plan.

3.2.5. **Reports of Development Activities.** Each Party will report on Development activities, if any, undertaken by it in accordance with Development and Regulatory Plan in connection with meetings of the JSC, including by providing a reasonably detailed summary of all results, data, and material inventions, if any, obtained from such activities. In addition, each Party will, at its own expense, make appropriate scientific and regulatory personnel available to the other Party, either by telephone or in person as the Parties may mutually agree, as reasonably required to keep the other Party informed of Development activities. In addition, Ironwood will report on development activities relating to the Product undertaken by it or its licensees outside the Territory, including by providing a reasonably detailed summary of all results, data, and material inventions, if any, obtained from such activities.

3.3. **Regulatory Matters.**

3.3.1. **Responsibility For Regulatory Interactions.** Regulatory strategy for the Product in the Territory and all decision-making with respect thereto will be determined by Astellas consistent with the Development and Regulatory Plan. Astellas will use Commercially Reasonable Efforts to obtain in a timely manner Regulatory Approvals with respect to the Product
to the extent contemplated by the Development and Regulatory Plan. Astellas will be solely responsible for conducting all activities relating to obtaining Regulatory Approvals with respect to the Product, including without limitation, preparing and submitting Regulatory Submissions and attending meetings with Regulatory Authorities.

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Notwithstanding anything contained in this Agreement to the contrary, Astellas acknowledges and agrees that [**]. Astellas will provide Ironwood with advanced copies of any substantive Regulatory Submissions made in the Territory reasonably in advance of submission to a Regulatory Authority, and will not [**] to the extent they are related to issues potentially affecting the [**] and are communicated to Astellas in a reasonably prompt manner and in no event later than 30 Business Days, or such shorter timeline as is reasonably determined by Astellas in order to timely file such Regulatory Submission, from Astellas’s provision of such copies. Astellas will not submit any Regulatory Submissions unless it has complied with its obligations pursuant to the foregoing with respect to such Regulatory Submissions. In no event shall Astellas be required to delay the filing of any Regulatory Submission beyond the applicable timeline for comments. Ironwood [**] shall be responsible for any translations of Regulatory Submissions provided by Astellas and shall bear all costs incurred in connection with the provision, review (and translation, if applicable) of such Regulatory Submissions pursuant to the foregoing. Ironwood will make available to Astellas with respect to the Licensed Compound or Products any Regulatory Submissions made pursuant to the Forest Agreement. Astellas will own all right, title, and interest in all Regulatory Submissions and Regulatory Approvals for Products in the Territory.

3.3.2. Regulatory Cooperation. Astellas will keep Ironwood reasonably informed regarding the status and progress of Development activity, including without limitation, providing Ironwood with advance written notice of substantive meetings scheduled with a Regulatory Authority related to the Licensed Compound, such as Clinical Trial Consultation, Initial Meeting with PMDA, and Reliability Inspections in Japan and their foreign counterparts. Astellas will also provide to Ironwood copies of all Regulatory Submissions in the form actually submitted to Regulatory Authorities. Subject to its agreements with its applicable licensees, Ironwood will keep Astellas reasonably informed regarding the status and progress of development activity, related to the Licensed Compound outside the Territory. Ironwood will also provide to Astellas copies of all Regulatory Submissions made pursuant to the Forest Agreement. Astellas will own all right, title, and interest in all Regulatory Submissions and Regulatory Approvals for Products in the Territory.

3.3.3. Quality Agreement. Reasonably promptly after the Effective Date, the Parties will enter into an agreement governing the quality standards required under this Agreement or by Third Party vendors (including Third Parties performing API Manufacturing).

3.3.4. Adverse Events. Reasonably promptly after the Effective Date, the Parties will enter into a pharmacovigilance agreement, which upon such execution will be attached as Exhibit D hereto and thereby incorporated into this Agreement by reference (the “Pharmacovigilance Agreement”). The Parties will comply with the
provisions of such agreement. Astellas will be responsible for responding to all safety inquiries regarding the Product in the Field in the Territory. Ironwood shall promptly, and otherwise in accordance with the Pharmacovigilance Agreement, inform Astellas of adverse events or safety inquiries regarding the Product or the Licensed Compound outside the Territory.

3.3.5. **Non-Required Studies**. Astellas [**], including, without limitation, [**], and due consideration will be given [**], provided that [**]. Ironwood will use Commercially Reasonable Efforts to ensure that [**] regarding any Non-Required Studies intended to be undertaken by [**] and (ii) give due consideration to [**] on such Non-Required Studies. For the avoidance of doubt, any Non-Required Studies constitute Post-Approval Research under the Development and Regulatory Plan. With respect to studies required for registration purposes or imposed by a Regulatory Authority, [**] with respect to any such proposed studies as provided by Section 3.3.1.

3.4. **Manufacture of Products**. Ironwood will be responsible for Manufacture of Development Materials and for API Manufacturing; provided, however, that nothing in this Agreement will prevent Ironwood from contracting with any Third Parties to Manufacture Development Materials or to conduct API Manufacturing, provided that such Third Parties shall comply with all requirements pursuant to this Agreement and the Manufacturing and Supply Agreement and that Ironwood shall be fully responsible for such Third Party’s compliance with such requirements. Ironwood will perform all such Manufacturing activities in accordance with GCP, GLP and GMP. Ironwood will supply Development Material and Licensed Compound for Commercial supply to Astellas in bulk form ready for formulation, packaging and labeling. Ironwood will be responsible for shipping the bulk Development Material and other Licensed Compound to the locations designated by Astellas. Development Material and Licensed Compound for Commercial supply will be shipped to Astellas F.O.B. [**], and title to such Development Material and other Licensed Compound will pass to Astellas upon placement by Ironwood with a carrier for delivery to Astellas. Astellas will be responsible, at its sole cost and expense, to complete the drug product manufacturing, packaging, and labeling of the Licensed Compound. In furtherance of the foregoing, the Parties will execute a manufacturing and supply agreement promptly following the Effective Date, (a) under which Astellas will pay Ironwood [**] for supplying Development Material and Commercial supply of the Licensed Compound for the Product to Astellas, [**], and (b) which will contain, at a minimum, such terms and conditions as are described in Schedule 3.4 hereto and the last sentence of Section 4.10 (“Manufacturing and Supply Agreement”). notwithstanding anything else contained herein, Astellas may not exercise its right to Manufacture Development Materials or Licensed Compound pursuant to the grant of rights under Section 2.1 unless (i) Ironwood has failed to supply Development Materials or Licensed Compound for Commercialization to Astellas under circumstances which, under the Manufacturing and Supply Agreement, would permit Astellas to Manufacture Development Materials or

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Licensed Compound for Commercialization, (“Failure To Supply”) in which event, Astellas shall consult with Ironwood on the appointment of one or more Third Parties as manufacturer of Licensed Compound and shall reasonably consider Ironwood’s comments regarding such appointment, (ii) the expiration of the last-to-expire of all, or the absence of any (including because Valid Claims never issued or were otherwise invalidated), Valid Claims in the Ironwood Patent Rights in Japan that cover the Licensed Compound (“Patent Expiration”), (iii) Ironwood notifies Astellas that it intends to cease Manufacture of Development Material or Licensed Compound for Commercialization (“Cessation of Manufacture”), or (iv) an Insolvency Event affecting Ironwood.

3.5. Commercialization in the Territory.

3.5.1. Responsibility. Astellas is solely responsible for, and will bear all costs relating to, Commercializing the Products in the Field in the Territory.

3.5.2. Commercialization Activities. Subject to the provisions of Section 3.5.3, Astellas will use Commercially Reasonable Efforts to Commercialize the Product in each country in the Territory, subject to compliance by Ironwood with its obligations hereunder to the extent such compliance would be material to Astellas’s performance of its Commercialization obligations hereunder. In conducting the Commercialization activities, Astellas will comply with all Applicable Law, applicable industry professional standards, and compliance policies of Astellas which have been previously furnished to Ironwood, as the same may be updated from time to time and provided to Ironwood.

3.5.3. Diligence. Astellas will achieve the Commercial Launch of a Product in each country in the Territory within three months of receiving Regulatory Approval (including, for the avoidance of doubt, where required, all final pricing, reimbursement, and other approvals required for Commercial Launch) in such country for such Product. Astellas will use Commercially Reasonable Efforts to Commercialize a Product in each country in the Territory in which Regulatory Approval has been received.

3.5.4. Commercialization Expenses. As between the Parties, Astellas will book (directly itself or indirectly through any of its Affiliates and Sublicensees) all sales of Products and will have the sole responsibility for the sale, invoicing, promotion, and distribution of the Product in the Territory. Astellas will be solely responsible for all of its Commercialization expenses.

3.6. Publication Strategy. Subject to Ironwood’s obligations to coordinate worldwide publication strategy with Forest under the Forest Agreement and with Almirall under the Almirall Agreement, Astellas will coordinate with Ironwood (i) its publication strategy involving the Product and (ii) activities involving the Product related to scientific conferences and other presentations. The Parties intend that the provisions of this Section 3.6 apply to Astellas and its Affiliates, licensees and Sublicensees. For the avoidance of

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doubt, no Sublicensee will be permitted to publish or present materials regarding the Product, and any Sublicense agreement hereunder will contain a provision prohibiting such activities.

3.6.1. **Prior Review.** Ironwood and Forest will be afforded the opportunity to review and approve any scientific paper, abstract, or presentation with respect to the Product proposed for publication, presentation, or distribution by Astellas or its Affiliates, which review will be made and approval or disapproval communicated within ten days of receipt of any such scientific paper, abstract or presentation, or such shorter period as may reasonably be required by applicable publication deadlines promptly communicated to Ironwood and/or Forest. If no comments are received by, and no disapproval was communicated to, Astellas within such ten day period, the respective paper, abstract, or presentation shall be deemed approved. Astellas will not unreasonably reject comments furnished by Ironwood, will comply with Ironwood’s request to delete references to its Confidential Information in any such publication, abstract, or presentation and will delay publication for such reasonable period requested by Ironwood to permit the filing of patent applications disclosed in material proposed for such publication or presentation. Ironwood will provide to Astellas, solely for informational purposes, prior to publication, any scientific paper, abstract, or presentation with respect to the Product proposed for publication, presentation, or distribution by Ironwood or its Affiliates and, to the extent available to Ironwood and permitted under applicable agreements, its licensees. In no event will Confidential Information of either Party be published without the consent of that Party.

3.6.2. **Clinical Study Results.** The Parties will (i) amongst each other, and (ii) with Forest, to the extent required by Applicable Law or best industry practices, coordinate the disclosure of the initiation and results of clinical studies performed pursuant to the Development and Regulatory Plan by Astellas, or its Affiliates with respect to the Licensed Compound or Product; provided that all proposed disclosures and publications will be submitted for review by the JSC and, by Ironwood, to the Joint Development Committee constituted under the Forest Agreement, and due regard will be given to the comments of each Party, the maintenance of confidentiality of Confidential Information of each Party and allowing time for intellectual property registrations. Nothing set forth in this Agreement will be deemed to limit or restrict (a) either Party from disclosing the results of clinical trials (whether performed by the Parties or by Third Parties) to the extent required by Applicable Law or best industry practices, and (b) Astellas from disclosing the results of clinical trials as reasonably determined by Astellas to be necessary in connection with Regulatory Submissions and other regulatory activities regarding the Product in the Territory.

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3.7. **Project Team.** Each Party will designate a project team that will coordinate and facilitate ongoing communication between the Parties.

4. **CONSIDERATION**

4.1. **Upfront Payment.** No later than five Business Days after the Effective Date, Astellas will pay to Ironwood $30,000,000 as an upfront, non-credible, non-refundable fee and such fee will not be reduced
by the amount of any consumption tax or similar taxes required to be paid by Astellas under any Applicable Law, subject, however, to Section 4.6.

4.2. **Milestones.** As additional consideration hereunder, Astellas will pay to Ironwood the following one-time milestone payments:

4.2.1. $[**] upon initiation (i.e., enrollment of the first study subject) of a Phase III study for the Product in Japan;

4.2.2. $[**] upon the first filing of an NDA for the Product with a Regulatory Authority in Japan; and

4.2.3. $[**] upon the first approval of an NDA for the Product by a Regulatory Authority in Japan.

For the avoidance of doubt, each such milestone payment shall be owed only once. Once Astellas has made any particular milestone payment under this Section 4.2, Astellas will not be obligated to make any payment with respect to the re-occurrence of the same milestone or the subsequent occurrence of a similar milestone or event anywhere in the Territory and with respect to any Product. In addition, if a milestone event occurs and any previous milestone event has not occurred (such as, for example, an NDA being filed in Japan without the initiation of a Phase III study in Japan), then all prior unpaid milestones shall be paid at the same time as the milestone payment is made based on the occurrence of such milestone. The milestone payment will not be reduced by the amount of any consumption tax or similar taxes required to be paid by Astellas under any Applicable Law, subject, however, to Section 4.6.

4.3. **Royalties and Other Payments.**

4.3.1. **Royalty.** Astellas will pay to Ironwood royalties based on the aggregate annual Net Sales of Products sold by Astellas or its Affiliates in the Field in the Territory at the rates set forth in the table below. The royalty payments will not be reduced by the amount of any consumption tax or similar taxes required to be paid by Astellas under any Applicable Law, subject, however, to Section 4.6.

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<table>
<thead>
<tr>
<th>Aggregate Annual Net Sales in the Territory</th>
<th>Royalty rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000,000 or less</td>
<td>[**]%</td>
</tr>
<tr>
<td>$100,000,001 to $200,000,000</td>
<td>[**]%</td>
</tr>
<tr>
<td>$200,000,001 to $300,000,000</td>
<td>[**]%</td>
</tr>
<tr>
<td>$300,000,001 to $400,000,000</td>
<td>[**]%</td>
</tr>
<tr>
<td>$400,000,001 to $500,000,000</td>
<td>[**]%</td>
</tr>
<tr>
<td>More than $500,000,000</td>
<td>[**]%</td>
</tr>
</tbody>
</table>
For the avoidance of doubt, the above rates are incremental rates that apply to the Net Sales indicated for each applicable rate only. For example, if Astellas receives $40,000,000 of Net Sales of Products in each Calendar Quarter in a given Year, then Astellas will pay a royalty of [**]% of $40,000,000) in each of the first two Calendar Quarters, a royalty of [**]% of $20,000,000 plus [**]% of $20,000,000) in the third Calendar Quarter, and a royalty of [**]% of $40,000,000) in the fourth Calendar Quarter.

4.3.2. Royalty Credit. Astellas may deduct from the royalties owed for a particular Calendar Quarter pursuant to Section 4.3.1 the following amounts:

(a) the aggregate Transfer Price paid by Astellas for Commercial supply of Licensed Compound pursuant to Section 3.4 in the applicable Calendar Quarter or any previous Calendar Quarter (and not previously credited), but only up to an amount equal to the product that is the result of multiplying (i) the aggregate quantity of Licensed Compound included in Products actually sold (excluding, for the avoidance of doubt, samples and other Products transferred without consideration) in the applicable Calendar Quarter expressed in grams (“Sold Quantity”), and (ii) the applicable Transfer Price per gram;

(b) in the event of a Failure To Supply or an Insolvency Event affecting Ironwood, any costs reasonably incurred by Astellas or its Affiliates in connection with the manufacture, by Astellas, its Affiliates, or a Third Party, and/or procurement of Licensed Compound from a Third Party corresponding to the Sold Quantity (“Cover Costs”); provided that such Cover Costs may only be deducted from royalties due hereunder if Astellas has complied with the provisions of Section 3.4 hereof requiring Astellas to consult with Ironwood and reasonably consider Ironwood’s comments regarding the Manufacture of Licensed Compound following Ironwood’s failure to supply;

(c) in the event of a Manufacturing Cessation, in lieu of any deduction pursuant Sections 4.3.2(a) and 4.3.2(b), the higher of (i) Astellas’s Cover Costs, or (ii) an amount equal to the product that is the result of multiplying (A) the Sold Quantity, and (B) Ironwood’s Fully Absorbed Cost per gram at such time;

(d) in the event of Patent Expiration, unless Astellas continues to procure Licensed Compound from Ironwood (in which case Astellas may continue to make deductions pursuant to Sections 4.3.2(a) and 4.3.2(b)), an amount equal to the product that is the result of multiplying (i) the Sold Quantity, and (ii) Ironwood’s Fully Absorbed Cost per gram at such time;

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any amounts owed to an Astellas Indemnified Party in accordance with the IP Indemnity set forth in Section 9.1; it being understood that any such amounts owed to an Astellas Indemnified Party are not deductible pursuant to Section 4.3.4 to the extent deducted under this clause (e).

In case that the deductible amounts, in any Calendar Quarter calculation, are higher than the royalty that would otherwise be owed for such Calendar Quarter, no payment will be due from Astellas to Ironwood, and the difference will be credited to Astellas to be deducted from future royalty payments owed to Ironwood.

In no event will Ironwood be required under this Section 4.3.2 to refund to Astellas any Transfer Price paid by Astellas pursuant to Section 3.4, provided that the foregoing shall not limit or otherwise affect any remedies Astellas may have on account of a failure by Ironwood to timely supply Licensed Compound to Astellas in accordance with the terms and conditions of this Agreement and the Manufacturing and Supply Agreement.

However, Astellas will in no event be obliged to pay to Ironwood any royalties under Section 4.3.1 in any Year in which the Transfer Price and/or the Cover Costs paid or incurred by Astellas and/or other amounts deductible pursuant to this Section 4.3.2, to the extent that such amounts are creditable against royalties in accordance with the terms hereof, in such Year exceeds the aggregate royalties that would otherwise be owed to Ironwood in such Year, and Astellas may carry forward any such excess to be credited against future royalty payments owed.

4.3.3. Occurrence of a [**]. Notwithstanding any other provision of this Agreement, the [**] has occurred during the applicable Calendar Quarter.

4.3.4. Third Party Rights. If Astellas obtains a license or similar rights from a Third Party (including, but not limited to, pursuant to a settlement) (a) in the absence of which it could not legally (including, without infringing any Third Party patent rights) use or practice the Ironwood Technology (including the Licensed Compound) in the Territory pursuant to this Agreement (“Necessary License”), or (b) that is otherwise necessary or useful to Develop or Commercialize the Licensed Compound pursuant to this Agreement (a “Useful License”), then [**]; provided that, in no event (x) [**] and (y) [**]. For the avoidance of doubt, the foregoing sentence shall not apply to a Necessary License. If Ironwood does not [**] pursuant to this Section, then Astellas shall have the right to [**], and Astellas shall promptly notify Ironwood if it has made a [**]. If Astellas makes a [**], Ironwood may, [**] in accordance with this Section. If (i) Ironwood does not bring such Claim within such period or (ii) the Arbitrators find that Astellas has made a [**] in accordance with this Section and Ironwood does not, [**], then Astellas will [**], with respect to the affected country or countries. If the Arbitrators find that it would be [**]. To the extent [**]. For the avoidance of doubt, nothing in this Section 4.3.4 shall prevent any [**], including, without

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Quarterly Reports. Within 30 days after the beginning of each Calendar Quarter beginning with the Calendar Quarter in which the First Commercial Sale following receipt of Regulatory Approval occurred, Astellas will deliver to Ironwood a report setting forth for the previous Calendar Quarter the following information on a Product-by-Product and country-by-country basis: (a) the gross sales and Net Sales of each Product in the Territory, (b) the number of units sold by Astellas, its Affiliates or Sublicensees and provided as samples without charge to any Third Party, (c) the basis for any adjustments to the royalty payable for the sale of each Product, (d) the royalty due hereunder for the sales of each Product, and (e) the applicable exchange rate as determined in accordance with this Agreement. The total royalty due for the sale of Products during such Calendar Quarter will be remitted at the time such report is made. Within 45 days after the beginning of each Calendar Quarter beginning with the Calendar Quarter in which Licensed Compound is first supplied by Ironwood to Astellas, or at such other times as reasonably requested by Astellas, Ironwood will deliver to Astellas a reasonably detailed report setting forth its Fully Absorbed Costs and the calculation thereof.

Records and Audits. During the Term of this Agreement, Astellas will keep and maintain accurate and complete records regarding Net Sales during the three preceding Years and Ironwood will keep and maintain accurate and complete records regarding the Fully Absorbed Cost covering the three preceding Years. Upon 15 days prior written notice from the other Party (the “Auditing Party”), the Party required to maintain such records (as applicable, the “Audited Party”) will permit an independent certified public accounting firm of internationally recognized standing, selected by the Auditing Party and reasonably acceptable to the Audited Party, to examine the relevant books and records of the Audited Party and its Affiliates, as may be reasonably necessary to verify the royalty reports submitted by Astellas in accordance with Section 4.4, or Fully Absorbed Cost reported by Ironwood and the resulting Transfer Price payments and royalty credits, as applicable. An examination by the Auditing Party under this Section 4.5 will occur not more than once in any Year and will be limited to the pertinent books and records for any Year ending not more than 36 months before the date of the request. The accounting firm will be provided access to such books and records at the Audited Party’s facility or facilities where such books and records are normally kept and such examination will be conducted during the Audited Party’s normal business hours. The Audited Party may require the accounting firm to sign a standard non-disclosure agreement before providing the accounting firm access to its facilities or records. Upon completion of the audit, the accounting firm will provide both the Auditing Party and the Audited Party a written report disclosing whether the reports submitted by Astellas, or the Fully Absorbed Cost reported by Ironwood and the resulting Transfer Price payments and royalty credits, as applicable, are correct or incorrect and the specific details concerning any discrepancies. No other information will be provided to the Auditing Party. If the report or information submitted by the Audited Party results in an underpayment or overpayment, the Party owing underpaid or overpaid amount will promptly pay such amount to the other Party, and, if, as a result of such inaccurate report or information, such amount is more than five percent of the amount that was owed the Audited Party will reimburse the Auditing Party for the reasonable expense incurred by the Auditing Party in connection with the audit.
4.6. **Taxes and Withholding.** Other than as set forth in Sections 4.6.1 and 4.6.2 below, the Parties expect that the Convention between the Government of the United States of America and the Government of Japan for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, entered into force on March 30, 2004 (the “U.S.-Japan Treaty”), shall apply to eliminate any Japanese withholding tax on all payments made by Astellas to Ironwood under this Agreement (including without limitation the Upfront Payment, Milestones and Royalty payments), and, as a result, Astellas will make all such payments free and clear of any withholding tax (including interest, penalties, and additions thereto) (a “Tax”). Astellas acknowledges that, prior to the Effective Date, Ironwood has provided to Astellas all documentation reasonably necessary evidencing Ironwood’s eligibility for benefits under the U.S.-Japan Treaty regarding withholding taxes on payments due under this Agreement, including but not limited to the documents described on Schedule 4.6. Subject to Ironwood’s compliance with the foregoing Astellas will timely file all documentation reasonably necessary to comply with the U.S.-Japan Treaty in accordance with the rules and regulations prescribed by the Japanese tax authorities. If, however, after the Effective Date, the paying Party reasonably believes that a deduction or withholding of a Tax on any payment made under this Agreement is required by any applicable law, then the paying Party will promptly (i) notify the other Party of such requirement; (ii) pay to the relevant authorities the full amount required to be deducted or withheld promptly upon the earlier of determining that such deduction or withholding is required or receiving notice that such amount has been assessed; and (iii) forward to the other Party an official receipt (or a certified copy), or other documentation reasonably acceptable to the other Party evidencing such payment to such authorities. The paying Party is solely responsible for ensuring the timely payment of any such Tax that might be required and any related tax information reporting with respect to any payments under the Agreement that may be deemed to arise in the Territory.

4.6.1. **Change in Status Under the U.S.-Japan Treaty.**

(a) **Assignment by Astellas or Astellas Change of Ownership.** Notwithstanding Section 10.8, Astellas may not delegate to any of its Affiliates its obligation to pay Ironwood an amount or amounts due in accordance with Section 4.1, Section 4.2, and/or Section 4.3 of this Agreement, except as provided in this Section 4.6.1(a). Astellas may, on written notice to Ironwood, delegate any or all of the foregoing obligations to any of its Affiliates, whether or not created or organized in the United States or under the law of the United States or of any State within the United States; provided, however, that if, as a result of such delegation (or as a result of any change of ownership of Astellas), a deduction or withholding of Tax on any payment to Ironwood under Section 4.1, Section 4.2, and/or Section 4.3 is required by any applicable law (other than the law of the United States or any State within the United States) that would not have been required absent such delegation (or change of ownership of Astellas), then Astellas (including its successors, transferees, and assigns) will pay (or authorize payment) to Ironwood such additional amount as is necessary to ensure that the net amount actually received by Ironwood (free and clear of any Tax, including any Tax imposed on or with respect to the additional amount, whether assessed against Astellas or Ironwood) will equal the full
amount Ironwood would have received had no such deduction or withholding been required. For purposes of this Section 4.6.1(a), the term “Tax” will not include taxes imposed upon or measured by the net income of Ironwood, in each case imposed by the jurisdiction in which Ironwood’s principal place of business is located or by any jurisdiction in which Ironwood conducts business through an office, branch or permanent establishment. Ironwood will make Commercially Reasonable Efforts to assist Astellas in obtaining an exemption from, or refund of, any deduction or withholding of Tax on any payment to Ironwood under Section 4.1, Section 4.2, and/or Section 4.3 pursuant to the foregoing. In the event that Astellas (including its successors, transferees, and assigns) makes an additional payment to Ironwood under this paragraph and Astellas’s deduction or withholding of Tax results in a Tax Benefit Amount (as defined below) for any taxable year, Ironwood will so notify Astellas and, within 12 months of the close of the taxable year, promptly pay to Astellas the Tax Benefit Amount. “Tax Benefit Amount” means the amount, if any, that is equal to the excess of the United States federal, state or other income taxes that would have been imposed on Ironwood had there been no deduction or withholding giving rise to an additional payment over the United States federal, state or other income taxes actually imposed on Ironwood when there is such deduction or withholding.

(b) Assignment by Ironwood or Ironwood Change. Notwithstanding Section 10.8, Ironwood may not assign to any of its Affiliates its right to receive an amount or amounts due from Astellas in accordance with Section 4.1, Section 4.2, and/or Section 4.3 of this Agreement, except as provided in this Section 4.6.1(b). Ironwood may, on written notice to Astellas, assign any or all of the foregoing rights to any of its Affiliates, whether or not created or organized in the United States or under the law of the United States or of any State within the United States; provided, however, that if, as a result of such assignment (or as a result of any change of ownership of Ironwood), a deduction or withholding of Tax on any payment to Ironwood under Section 4.1, Section 4.2, and/or Section 4.3 is required by any applicable law and Astellas is the paying Party, then such payment obligation(s) by Astellas (including its successors, transferees, and assigns) hereunder shall be reduced by the amount(s) required to be deducted or withheld. For any Taxes withheld or to be withheld, each Party agrees to timely deliver all certificates and forms as may be necessary and appropriate to file Tax returns as would be necessary with respect to such Taxes.

4.6.2. Change in Applicable Law. In the case of any change in applicable law that eliminates a previously available exemption from Japanese withholding tax on any payment to Ironwood under Section 4.1, Section 4.2, and/or Section 4.3, including without limitation any amendment, renegotiation or termination of the U.S.-Japan Treaty, the following provisions will be effective for any payment(s) occurring on or after the effective date of such change:

(a) Upfront Payment and Milestones. With respect to the Upfront Payment under
Section 4.1 and any Milestone payments under Section 4.2 only, Astellas (including its successors, transferees, and assigns) will pay (or authorize payment) to Ironwood such additional amount as is necessary to ensure that the net amount actually received by Ironwood (free and clear of any Tax, including any Tax imposed on or with respect to the additional amount, whether assessed against Astellas or Ironwood) will equal the full amount Ironwood would have received had no such deduction or withholding been required. For purposes of this Section 4.6.2(a), the term “Tax” will not include taxes imposed upon or measured by the net income of Ironwood, in each case imposed by the jurisdiction in which Ironwood’s principal place of business is located or by any jurisdiction in which Ironwood conducts business through an office, branch or permanent establishment. Ironwood will make Commercially

reasonable efforts to assist Astellas in obtaining an exemption from, or refund of, any deduction or withholding of Tax on any payment to Ironwood under Section 4.1 or Section 4.2 pursuant to the foregoing. In the event that Astellas (including its successors, transferees, and assigns) makes an additional payment to Ironwood under this paragraph and Astellas’s deduction or withholding of Tax results in a Tax Benefit Amount for any taxable year, Ironwood will so notify Astellas and, within 12 months of the close of the taxable year, promptly pay to Astellas the Tax Benefit Amount.

(b) Royalty Payments. With respect to royalties payable to Ironwood under Section 4.3 only, Astellas may reduce its payment obligation under Section 4.3 by the amount required to be deducted or withheld. For any Taxes withheld or to be withheld, each Party agrees to timely deliver all certificates and forms as may be necessary and appropriate to file Tax returns as would be necessary with respect to such Taxes.

4.7. Currency. With the exception of the royalty rate determination in Section 4.3.1, all amounts payable and calculations hereunder will be in United States dollars. Net Sales will be translated into United States dollars, based on the average TTM rate published by Tokyo Mitsubishi UFJ Bank for the applicable Calendar Quarter for which such Net Sales are reported. If, due to restrictions or prohibitions imposed by national or international authority, payments cannot be made as provided in this Section 4, the Parties will consult with a view to finding a prompt and acceptable solution, and the paying Party will deal with such monies as the other Party may lawfully direct at no additional cost or expense to the paying Party.

4.8. Confidentiality. All financial information of a Party which is subject to review under this Section 4 will be deemed to be Confidential Information subject to the provisions of Section 5.1, and such Confidential Information will not be disclosed to any Third Party or used for any purpose other than verifying payments to be made by one Party to the other hereunder; provided, however, that such Confidential Information may be disclosed to Third Parties only to the extent necessary to enforce a Party’s rights under this Agreement.

4.9. Interest. Any payment under this Section 4 that is more than [**] past due will be subject to interest at an annual percentage rate of [**] (as published in the “Money Rates” table of the Eastern Edition
of The Wall Street Journal during the period such amount is overdue) if a Party does not make payment within 30 days of its receipt of notice that such amount is past due. Likewise, any overpayment that is not refunded within after the date such overpayment was made will thereafter be subject to interest at an annual percentage rate of (as published in the “Money Rates” table of the Eastern Edition of The Wall Street Journal during period such amount is overdue); provided, however, that if the overpayment is due to errors in reports provided by the overpaid

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Party, such interest will accrue from the date the overpayment was made. Notwithstanding the preceding, if a Party contests any amounts due hereunder in good faith and promptly notifies the other Party of such dispute, interest will not accrue as to amounts being so contested until following the presentation of such notice to the other Party.

4.10. Without limiting anything in Section 4.3, Astellas shall. The Manufacturing and Supply Agreement shall provide that pursuant to the Manufacturing and Supply Agreement.

5. COVENANTS

5.1. Confidentiality.

5.1.1. Confidential Information. Except to the extent expressly permitted by this Agreement and subject to the provisions of Sections 5.1.2 and 5.1.3, at all times during the Term and for years following the expiration or termination of this Agreement or, if later, compliance with Section 5.1.5 hereof, each Party (a “Receiving Party”) (a) will keep completely confidential and will not publish or otherwise disclose any Confidential Information furnished to it by the other Party (a “Disclosing Party”), except to those of the Receiving Party’s employees, Affiliates, marketing partners, consultants, manufacturing partners, or representatives who have a need to know such information (collectively, “Authorized Recipients”) to perform such Party’s obligations or exercise such Party’s rights hereunder and/or to potential Sublicensees and/or, in the case of Ironwood being the Receiving Party, to Forest and to Almirall to the extent necessary to comply with its obligations or conduct activities under the Forest Agreement and the Almirall Agreement, in each case under an obligation of confidentiality no less protective than the terms hereof, and (b) will not use Confidential Information of the Disclosing Party directly or indirectly for any purpose other than performing its obligations or exercising its rights hereunder. The Receiving Party will be liable for any breach by any of its Authorized Recipients of the restrictions set forth in this Agreement.

5.1.2. Exceptions to Confidentiality. The Receiving Party’s obligations set forth in this Agreement will not extend to any Confidential Information of the Disclosing Party:

(a) that is or hereafter becomes part of the public domain through no wrongful act, fault or negligence on the part of a Receiving Party or its Authorized Recipients;
(b) that is received from a Third Party without restriction and without breach of any agreement or fiduciary duty between such Third Party and the Disclosing Party;

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(c) that the Receiving Party can demonstrate by competent evidence was already in its possession without any limitation or restriction on use or disclosure prior to its receipt from the Disclosing Party;

(d) that is generally made available to Third Parties by the Disclosing Party without any restriction imposed by the Disclosing Party on disclosure, whether such restriction is by contract, fiduciary duty or by operation of law; or

(e) that the Receiving Party can demonstrate by competent evidence was independently developed by the Receiving Party without any reference to Confidential Information.

5.1.3. Authorized Disclosure. Each Party and its Authorized Recipients may disclose Confidential Information to the extent that such disclosure is (a) made in response to a valid order, governmental inquiry, or request (each an “Order”) of a court of competent jurisdiction or other agency, as applicable; provided, however, that the Receiving Party must first have given notice to the Disclosing Party and given the Disclosing Party a reasonable opportunity to quash such Order or to obtain a protective order requiring that the Confidential Information and/or documents that are the subject of such Order be held in confidence by such court or Agency or, if disclosed, be used only for the purposes for which the Order was issued; and provided further that if an Order is not quashed or a protective order is not obtained, the Confidential Information disclosed in response to such Order will be limited to that information that is legally required to be disclosed in such response to such Order, and (b) required by Applicable Law. In addition, Astellas and its Authorized Recipients may disclose Confidential Information to the extent that such disclosure is reasonably deemed necessary by Astellas in connection with Regulatory Submissions or other regulatory activities regarding the Product in the Territory.

5.1.4. Notification. The Receiving Party will notify the Disclosing Party immediately, and cooperate with the Disclosing Party as the Disclosing Party may reasonably request, upon the Receiving Party’s discovery of any loss or compromise of the Disclosing Party’s Confidential Information.

5.1.5. Destruction of Confidential Information. Upon the expiration or earlier termination of this Agreement, the Receiving Party will (a) destroy all tangible embodiments of Confidential Information of the Disclosing Party, including any and all copies thereof, and those portions of any documents, memoranda, notes, studies, and analyses prepared by the Receiving Party or its Authorized Recipients that contain or incorporate such Confidential Information and provide written certification of such destruction to the Disclosing Party in a form reasonably acceptable to the Disclosing Party, provided that the legal department of the
Receiving Party will have the right to retain one copy of any such tangible embodiments (i) for archival purposes, and (ii) as may be required to comply with Applicable Law, provided such copy will continue to be maintained on a confidential basis subject to the terms of this Agreement, and (b) immediately cease, and will cause its Authorized Recipients to cease, use of such Confidential Information as well as any information or materials that contain or incorporate from such Confidential Information.

5.1.6. **Use of Name and Disclosure of Terms.** Each Party will keep the existence and the terms of this Agreement confidential and will not disclose such information to any other Person through a press release or otherwise, or mention or otherwise use the name, insignia, symbol, trademark, trade name, or logotype of the other Party or its Affiliates in any manner without the prior written consent of the other Party in each instance (which will not be unreasonably withheld) except as otherwise expressly permitted in this Agreement. The restrictions imposed by this Section 5.1.6 will not prohibit either Party from making any disclosure (a) pursuant to Section 7.12, or (b) that is required by Applicable Law, rule, or regulation or the requirements of a national securities exchange or another similar regulatory body including disclosing such information in any clinical trial database maintained by or on behalf of a Party or to (i) potential investors and advisors, (ii) attorneys and consultants, and (iii) Affiliates and potential Sublicensees and marketing partners, under an obligation of confidentiality. Further, the restrictions imposed on each Party under this Section 5.1.6 are not intended, and will not be construed, to prohibit a Party from identifying the other Party in its internal business communications, provided that any Confidential Information in such communications remains subject to this Section 5.1.6.

5.1.7. **Remedies.** The Parties acknowledge and agree that the restrictions set forth in this Section 5.1 are reasonable and necessary to protect the legitimate interests of the Parties and that neither Party would have entered into this Agreement in the absence of such restrictions, and that any breach or threatened breach of any provision of this Section 5.1 will result in irreparable injury to the other Party for which there will be no adequate remedy at law. In the event of a breach or threatened breach of any provision of Section 5.1 by a Party, the other Party will be authorized and entitled to obtain from any court of competent jurisdiction injunctive relief, whether preliminary or permanent, specific performance and an equitable accounting of all earnings, profits and other benefits arising from such breach, which rights will be cumulative and in addition to any other rights or remedies to which such Party may be entitled in law or equity. The breaching Party agrees to waive any requirement that the non-breaching Party (i) post a bond or other security as a condition for obtaining any such relief and (ii) show irreparable harm, balancing of harms, consideration of the public interest or inadequacy of monetary damages as a remedy. Nothing in this Section 5.1.7 is
intended, or will be construed, to limit the Parties’ rights to equitable relief or any other remedy for a breach of any provision of this Agreement.

5.2. **Restrictions.** During [**], without the prior written consent of the other Party, and [**], neither Party nor such Party’s Affiliates will (i) [**], (ii) [**], or (iii) at any time prior to Regulatory Approval of the Product, [**]. Nothing in this Section 5.2 shall limit either Party’s or its Affiliates’[**], and, except as expressly set forth in subclauses (ii) and (iii) above, [**], with respect to any [**]. For the avoidance of doubt, if this Agreement is terminated with respect to certain countries in the Territory, the restrictions pursuant to this Section 5.2 shall terminate with respect to such countries.

5.3. **Compliance with Law.** Each Party hereby covenants and agrees to comply with all Applicable Law applicable to its activities connected with the Development, Manufacture, and Commercialization (as applicable) of Products. Without limiting the generality of the foregoing:

5.3.1. **Patient Information.** Each Party agrees to abide by all laws, rules, regulations, and orders of all applicable supranational, national, federal, state, provincial, and local governmental entities concerning the confidentiality or protection of patient identifiable information and/or patients’ protected health information, as defined by any other applicable legislation in the course of their performance under this Agreement.

5.3.2. **Debarment.** Each Party agrees that it will not use, in any capacity, in connection with any of its obligations to be performed under this Agreement any individual who has been debarred under the FD&C Act or the Generic Drug Enforcement Act or analogous law.

5.4. **Nonsolicitation of Employees.** During the Term of this Agreement and for a period of [**] thereafter, each Party agrees that neither it nor any of its Affiliates will recruit, solicit or induce any employee of the other Party that is involved in the activities conducted pursuant to this Agreement to terminate his or her employment with such other Party and become employed by or consult for such other Party, whether or not such employee is a full-time employee of such other Party, and whether or not such employment is pursuant to a written agreement or is at-will. For purposes of the foregoing, “recruit”, “solicit” or “induce” does not include (a) circumstances where an employee of one Party initiates contact with the other Party or any of its Affiliates with regard to possible employment, or (b) general solicitations of employment not specifically targeted at employees of a Party or any of its Affiliates, including responses to general advertisements. In addition, during the Term of this Agreement and for a period of [**] thereafter, neither Party may hire or employ any such employee of the other Party (including personnel who were employees of such other Party within a period of [**] or less from the date of the proposed hiring or employment) without the prior

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written consent of such other Party, unless such other Party had previously terminated the employment of such former employee.

5.5. **Standstill Agreement.** During [**] following the termination or expiration of this Agreement (the “Standstill Period”), neither Astellas nor any of its Representatives (as defined below) (each an “Astellas Related Party”) will, in any manner, directly or indirectly:

5.5.1. make, effect, initiate, directly participate in or cause

(a) any acquisition of beneficial ownership of any securities of Ironwood or any securities of any Affiliate of Ironwood, if, after such acquisition, the Astellas Related Parties would beneficially own more than ten percent of the outstanding common stock of Ironwood; or

(b) any acquisition of all or substantially all of the assets of Ironwood or of any Affiliate of Ironwood; provided this subsection (b) will not apply to the acquisition by the Astellas Related Parties of a license or other rights to Ironwood assets or technology under terms negotiated by the Parties; or

(c) any tender offer, exchange offer, merger, business combination, recapitalization, restructuring, liquidation, dissolution or extraordinary transaction involving Ironwood or any Affiliate of Ironwood, or involving any securities or assets of Ironwood or any securities or assets of any Affiliate of Ironwood; or

(d) any “solicitation” of “proxies” (as those terms are used in the proxy rules of the Securities and Exchange Commission) or consents with respect to any securities of Ironwood; or

5.5.2. form, join or participate in a Group with respect to the beneficial ownership of any securities of Ironwood; or

5.5.3. act, alone or in concert with others, to seek to control the management, board of directors or policies of Ironwood; or

5.5.4. take any action that might require Ironwood to make a public announcement regarding any of the types of matters set forth in Section 5.5.1(a); or

5.5.5. agree or offer to take, or encourage or propose (publicly or otherwise) the taking of, any action referred to in Sections 5.5.1(a), 5.5.1(b), 5.5.1(c), or 5.5.1(d); or

5.5.6. assist, induce or encourage any other person to take any action of the type referred to in

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Sections 5.5.1(a), 5.5.1(b), 5.5.1(c), or 5.5.1(d); or

5.5.7. enter into any discussions, negotiations, arrangement or agreement with any other person relating to any of the foregoing; or

5.5.8. request or propose, publicly or to shareholders of Ironwood or its Affiliates, that Ironwood or any of Ironwood’s Representatives (as defined below) amend, waive or consider the amendment or waiver of any provision set forth in this Section 5.5.

Notwithstanding the foregoing, the provisions of this Section 5.5 will not apply to (i) the exercise by any of the Astellas Related Parties of any rights available to shareholders generally pursuant to any transaction described in this Section 5.5, provided that such Astellas Related Party has not then either directly or as a member of a Group made, effected, initiated or caused such transaction to occur, or (ii) any activity by any of the Astellas Related Parties after Ironwood or any other Third Party unrelated to any of the Astellas Related Parties has made any public announcement of its intent to solicit or engage in any transaction of the type referred to in this Section 5.5; provided however, with respect to subpart (ii), if any of the Astellas Related Parties or such Third Party terminates or announces its intent to terminate such transaction and such Astellas Related Party (A) has not previously made any public announcement of its intent to solicit or engage in any transaction of the type referred to in this Section 5.5, or (B) in the event that such public announcement has been made by any of the Astellas Related Parties, such Astellas Related Party has terminated or announced its intent to terminate such transaction, then the provisions of this Section 5.5 will again be applicable.

For purposes of this Section, a “Representative” of a Party will be deemed to include each person or entity that is or becomes (i) an Affiliate of such Party, or (ii) an officer, director, employee, Astellas, attorney, advisor, accountant, agent or representative of such Party or of any of such Party’s Affiliates, provided such person is acting on behalf of such Party or such Party’s Affiliate. “Group” means two or more persons acting as a partnership, limited partnership, syndicate or other group for the purpose of acquiring, holding or disposing of securities of Ironwood.

5.6. Export Restrictions. Astellas will not knowingly sell, export, or distribute, directly or indirectly, any Product to any location outside of the Territory or take any action that Astellas reasonably believes will result in such export. Ironwood will not knowingly sell, export, or distribute, or permit any Third Party to do any of the foregoing, directly or indirectly (including through Forest), any Product or the Licensed Compound to any location within the Territory or take any action that Ironwood reasonably believes will result in any of the foregoing (except for the supply of Licensed Compound and Product to Astellas pursuant to the terms and conditions of this Agreement and the Manufacturing and Supply Agreement).

5.7. Communications with other Linaclotide Partners. Except and to the extent required by this Agreement or otherwise with the prior consent of Ironwood, Astellas will not communicate with any other
Third Parties that have licensed Ironwood’s rights to the Licensed Compound about the subject matter of this Agreement or any activities under this Agreement or the license agreement between Ironwood and such Third Parties. Ironwood shall be responsible under this Agreement for the performance of any acts contemplated in this Agreement to be undertaken by Forest and/or Almirall and Ironwood shall ensure compliance by Forest and/or Almirall with any corresponding obligations of Forest and/or Almirall under the Forest Agreement and the Almirall Agreement, as applicable.

6. REPRESENTATIONS AND WARRANTIES

6.1. Representations and Warranties of Each Party. As of the Effective Date, each of Astellas and Ironwood hereby represents and warrants to the other Party hereto as follows:

(a) it is a corporation or entity duly organized and validly existing under the laws of the state or other jurisdiction of its incorporation or formation;

(b) the execution, delivery and performance of this Agreement by such Party has been duly authorized by all requisite corporate action and does not require any shareholder action or approval;

(c) it has the power and authority to execute and deliver this Agreement and to perform its obligations hereunder;

(d) the execution, delivery and performance by such Party of this Agreement and its compliance with the terms and provisions does not and may not conflict with or result in a breach of any of the terms and provisions of or constitute a default under (i) a loan agreement, guaranty, financing agreement, agreement affecting a product or other agreement or instrument binding or affecting it or its property; (ii) the provisions of its charter or operative documents or bylaws; (iii) any order, writ, injunction or decree of any court or governmental authority entered against it or by which any of its property is bound; or (iv) any other agreement with any Third Party; and

(e) it has the full right, power and authority to grant all of the right, title and interest in the licenses granted to the other Party under this Agreement.

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6.2. Additional Representations and Warranties of Ironwood. Ironwood hereby represents and warrants to Astellas that as of the Effective Date (and, only as expressly provided in subclause (i) below, thereafter):

(a) Ironwood has the sole right, title and interest in and to the Ironwood Patent Rights listed in Schedule 6.2(a) to this Agreement and Ironwood has the rights with respect to all Ironwood Technology that it purports to grant to Astellas hereunder;
(b) Ironwood is not subject to any agreement with a Third Party that includes a royalty or similar payment obligation to, or other restriction or limitation in favor of, such Third Party (including, for this purpose, to current or former officers, directors, employees, consultants or personnel of Ironwood or any predecessor) with respect to its rights to practice the Ironwood Technology in the Territory and its right and ability to perform its obligations under this Agreement;

(c) No Ironwood Patent Rights are subject to, or were developed pursuant to any funding agreement with any government or government agency;

(d) Ironwood is not in breach of any material provisions of any agreements with Third Parties relating to the Ironwood Patent Rights and the execution of this Agreement and Ironwood’s performance of its obligations hereunder and the consummation of the transactions contemplated herein will not result any such breach;

(e) Ironwood has not received any written or oral claim of ownership, inventorship or patent infringement from any Third Party (including without limitation, by current or former officers, directors, employees, consultants, or personnel of Ironwood or any predecessor) with respect to the Ironwood Technology, and Ironwood is not aware of any reasonable basis for any such claim;

(f) There are no challenges, oppositions, interferences, or other proceedings pending or, to Ironwood’s knowledge, threatened with respect to the Ironwood Technology;

(g) Ironwood has no knowledge of any Third Party Patent Rights in the Territory that would be infringed by the Development or Commercialization of Products in the Territory;

(h) Ironwood has not brought any claim against any Third Party relating to the infringement, misappropriation, or other violation of any Ironwood Technology; and

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(i) To Ironwood’s knowledge all data, study results, and other information relating to the Licensed Compound and the Product presented by Ironwood to Astellas prior to the Effective Date and during the Term of the Agreement is, as of the time such data, study results, and other information were or are presented to Astellas, complete in all material respects and accurate.

6.3. **Additional Representations and Warranties of Astellas.** Astellas hereby represents and warrants to Ironwood that as of the Effective Date, except as set forth on Schedule 6.3, Astellas has no products currently under Phase II or later development or commercialization for diagnostic, prophylactic or therapeutic uses in IBS-C, CC or OIC indications.
6.4. **Representation by Legal Counsel.** Each Party hereto represents that it has been represented by legal counsel in connection with this Agreement and acknowledges that it has participated in the drafting. In interpreting and applying the terms and provisions of this Agreement, the Parties agree that no presumption will exist or be implied against the Party which drafted such terms and provisions.

6.5. **No Inconsistent Agreements.** Neither Party has in effect and after the Effective Date neither Party may enter into any oral or written agreement or arrangement that would be inconsistent with its obligations under this Agreement or limit the ability of either Party to grant the licenses set forth in Section 2 of this Agreement.

6.6. **Disclaimer.** THE FOREGOING WARRANTIES OF EACH PARTY ARE IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF NONINFRINGEMENT, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE ALL OF WHICH ARE HEREBY SPECIFICALLY EXCLUDED AND DISCLAIMED. EACH PARTY HEREBY DISCLAIMS (WITHOUT LIMITING ANY EXPRESS WARRANTIES HEREUNDER) ANY REPRESENTATION OR WARRANTY THAT THE DEVELOPMENT, MANUFACTURE OR COMMERCIALIZATION OF ANY PRODUCT UNDER THIS AGREEMENT WILL BE SUCCESSFUL. Nothing in this Section 6.6 shall be deemed to disclaim or otherwise affect any warranties, rights, or remedies under the Manufacturing and Supply Agreement.

7. **INTELLECTUAL PROPERTY**

7.1. **Disclosure.** During the Term, the Parties will promptly disclose to one another all Collaboration Know-How (whether patentable or not).

7.2. **Ownership.**

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7.2.1. **Ownership of Technology.** Determinations as to which Party has invented any Patent Rights or Know-How will be made in accordance with the standards of inventorship under U.S. patent law. Subject to the license grants under Section 2 of this Agreement, as between the Parties, Ironwood will own all Ironwood Technology and Astellas will own all Astellas Technology. Each Party will own an undivided one-half interest in and to the Joint Technology. In the event inventorship and ownership of any Collaboration Technology cannot be resolved by the Parties with advice of their respective intellectual property counsel, such dispute will be resolved through arbitration pursuant to Section 10.1.3, provided such arbitration panel will include at least a single arbitrator who is a specialist in U.S. chemical and pharmaceutical patent law and in chemical and pharmaceutical patents.

7.2.2. **Employee Assignment.** To the extent permissible under Applicable Law, each Party will cause each employee and contractor conducting work on such Party’s behalf under this Agreement
to be bound by an obligation that (i) compels prompt disclosure to the Party of Technology licensed by such Party to the other Party hereunder, as applicable, conceived or reduced to practice by such employee or contractor during any performance under this Agreement, (ii) automatically assigns to the Party all right, title and interest in and to all such Technology, and (iii) obligates such persons to similar obligations of confidentiality as set forth in this Agreement. Each Party will require each employee and contractor conducting work on such Party’s behalf under this Agreement to maintain records in sufficient detail and in a good scientific manner appropriate for patent purposes to properly reflect all work done.

7.3. **Intellectual Property Working Group.** The Parties will promptly establish an intellectual property working group comprised of at least one senior patent attorney from each Party, together with research and development personnel and such other representatives of the Parties as the Parties may determine to be appropriate from time to time, to discuss patent issues arising under this Agreement.

7.4. **Prosecution and Maintenance of Patent Rights.**

7.4.1. **Patent Prosecution and Maintenance.**

(a) Each of Ironwood and Astellas will be primarily responsible, at its own expense, for the preparation, filing, prosecution and maintenance of the Ironwood Patent Rights and the Astellas Patent Rights, respectively.

(b) Subject to the remaining provisions of this Section 7.4.1, each Party will provide the other with advance copies of, and a reasonable opportunity to comment upon, proposed patent filings, related prosecution strategies and proposed correspondence with patent offices or other Third Parties relating to Ironwood Patent Rights in the Territory, in the case of

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Ironwood, and Astellas Patent Rights, in the case of Astellas (collectively, “Patent Filing Materials”), and will consider comments received in good faith and will not unreasonably reject such comments.

(c) Astellas acknowledges that Ironwood may share advanced copies of Patent Filing Materials relating to the Astellas Sublicensable Patent Rights with Forest to the extent required under the Forest Agreement, provided that Forest is under an obligation to keep such Patent Filing Materials in confidence. However, Ironwood shall not provide Forest advance copies of Patent Filing Materials for Astellas Patent Rights other than the Astellas Sublicensable Patent Rights. Except as expressly permitted in the foregoing, Ironwood shall not disclose any non-public Patent Filing Materials for Astellas Patent Rights to any Third Party (including Almirall).

(d) Ironwood will not be obligated to provide Astellas with advance copies of
Patent Filing Materials for (x) Forest Patent Rights other than Patent Rights that are “Joint Patent Rights” as defined in the Forest Agreement or (y) Almirall Patent Rights, in each of clause (x) and (y), that are included in the Ironwood Patent Rights.

(e) Patent Filing Materials which relate to the validity of Collaboration Patent Rights, to the extent such Collaboration Patent Rights are necessary or useful in the Territory to Manufacture, Develop or Commercialize a Collaboration Compound or Product in the Territory, that are made during the course of an action before a national or regional patent office in the Territory or national court in the Territory will require the mutual approval of both Parties.

(f) A Party providing comments in accordance with this Section will provide such comments expeditiously and in any event in reasonably sufficient time to meet any filing deadline communicated to it by the other Party. The Party receiving any Patent Filing Materials will maintain such information in confidence, except for patent applications that have been published and official correspondence that is publicly available.

7.4.2. Joint Patent Rights. Absent an agreement by the intellectual property working group to the contrary, Astellas will be responsible for such activities in the Territory, with the costs of such activities to be shared equally by the Parties, and Ironwood will be responsible for such activities outside the Territory, with the costs of such activities to be borne by Ironwood. Irrespective of which Party is responsible for filing, prosecuting and maintaining Joint Patent Rights, Astellas and Ironwood will equally share the costs for filing, prosecuting and maintaining Joint Patent Rights in the Territory.

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7.4.3. Reversion Rights. If a Party decides not to file, prosecute or maintain as applicable, any Ironwood Patent Right, Astellas Patent Right that is a Collaboration Patent Right, or Joint Patent Right, to the extent such Patent Right is licensed to the other Party hereunder, it will give the other Party reasonable notice to that effect sufficiently in advance of any deadline for any filing with respect to such Patent Right to permit the other Party to carry out such activity. After such notice, the other Party may, subject to the Forest Agreement and the Almirall Agreement, file, prosecute and maintain the Patent Right, and perform such acts as may be reasonably necessary for the other Party to file, prosecute or maintain such Patent Right, at its sole cost and expense. If such other Party does so elect, then the Party which has elected not to pursue such filing, prosecution or maintenance will provide such cooperation to the other Party, including the executing and filing of appropriate instruments, as may be reasonably requested, to facilitate the transition of such prosecution and maintenance activities.

7.4.4. Patent Term Extensions. The Parties agree to cooperate in the selection of the appropriate Ironwood Patent Rights, Astellas Patent Rights or Joint Patent Rights as listed in the patent information section of the Product NDA for filing to obtain a patent term extension pursuant to all applicable laws and regulations (“Patent Term Extension”), including without limitation supplementary protection certificates and any other extensions that are now or become
available in the future wherever applicable to Patent Rights that are applicable to the Product.

7.5. Trademarks.

7.5.1. Product Trademark. All Products will be sold in the Territory under the Trademarks selected by Astellas in its sole discretion. The Parties acknowledge and agree that trademarks developed or used in connection with the Forest Agreement and the Almirall Agreement may not be used by the Parties in the Territory unless agreed to by Ironwood and Forest, or Ironwood and Almirall, as applicable, in writing. If so requested by Astellas, Ironwood shall not unreasonably withhold such consent, and shall encourage Forest and Almirall to grant such consent. Astellas shall solely own such Trademarks and is responsible for the filing, prosecution and maintenance of such Trademarks in the applicable country or countries within the Territory. Ironwood may reference Astellas and the Product name and display the Trademarks and logos embodying the Trademarks, as provided by Astellas, on its website and similar promotional material for the purpose of general product and company promotion, but not, in any event, for the purpose of Commercializing the Product. Other than as set forth in the foregoing sentence, Ironwood shall have no rights to use the Trademarks except to the extent expressly agreed by Astellas in writing.

7.5.2. Trademark Use. The manner of use of the Trademarks will be determined by Astellas in its reasonable discretion. Neither Party will use a trademark confusingly similar to one of the Trademarks with any of its other products or, except as otherwise provided herein.

7.5.3. Party Name on Product Promotional Material. Subject to Applicable Law, all Product promotional material in the Territory will include Ironwood’s trade name, trademark, and other logos reasonably requested by Ironwood (the “Ironwood House Marks”) in a manner that has equal prominence with Astellas’s marks, provide that the Ironwood House Marks and such use thereof do not infringe or otherwise violate any rights of any Third Party in the Territory. To effectuate the purposes of this Agreement, Ironwood hereby grants to Astellas a royalty free license, to use and display the Ironwood House Marks in connection with the Commercialization of a Product in the Field in accordance with this Agreement. All goodwill arising from the use of such Ironwood House Marks will inure to the benefit of Ironwood. All goodwill arising from the use of the Trademarks will inure to the benefit of Astellas.


7.6.1. Notice. If Ironwood or Astellas becomes aware that any Ironwood Technology, Astellas Technology, or Collaboration Technology (including Joint Technology) is infringed, or misappropriated by a Third Party, in the Territory in the Field or is subject to a declaratory judgment action arising from such infringement (any of the foregoing, being an “Infringement”), Ironwood or Astellas, as the case may be, will promptly notify the other Party.
7.6.2. **Enforcement.** Astellas has the first right (but not the obligation) to enforce any Ironwood Technology, Astellas Technology, and Collaboration Technology (including Joint Technology), to the extent either Party has the legal power to enforce such Technology (“Subject Technology”), against an Infringement in the Territory, provided that Astellas may not admit the invalidity or unenforceability of any Ironwood Technology without first consulting with Ironwood and obtaining Ironwood’s prior written consent. If Astellas exercises its right to enforce any Subject Technology against an infringer pursuant to this Section 7.6.2, (i) Ironwood shall reasonably cooperate with Astellas with respect to such enforcement, including by joining any lawsuit or proceeding as a party where such joinder is required under applicable law to enforce the Subject Technology, and (ii) Astellas shall pay all expenses incurred in connection with such enforcement, including reasonable expenses incurred by Ironwood in connection with its cooperation in such enforcement. In the event that Astellas declines to enforce the Subject Technology against an Infringement within 90 days (or such shorter period as may be required to comply with legal or regulatory deadlines which relate to such Infringement) of becoming aware thereof, Ironwood will have the right to so enforce the Subject Technology at its own expense. Irrespective of which Party controls an action pursuant to this Section, the Parties will collaborate with respect to such action and the comments of the other Party will not be unreasonably rejected with respect to strategic decisions and their implementation with respect to such action. In furtherance of the foregoing, the Party responsible for any such action will keep the other Party reasonably informed, in person or by telephone, regarding the status and costs of such action or proceeding prior to and during any such enforcement. Neither Party will settle any such action without the written consent of the other Party, such consent not to be unreasonably withheld. Neither Party will incur any liability to the other as a consequence of such litigation or any unfavorable decision resulting therefrom, including any decision holding any such Subject Technology invalid, not infringed, not misappropriated or unenforceable.

7.6.3. **Costs and Recoveries.** Any proceeds of any awards, judgments or settlements obtained in connection with an Infringement in the Territory shall [**]. If Astellas exercises its first right to enforce the Subject Technology against such Infringement, as set forth in Section 7.6.2, then [**], for purposes of this Agreement. If Astellas declines to enforce the Subject Technology against such Infringement, and Ironwood exercises its rights and enforces the Subject Technology against such Infringement, as set forth in Section 7.6.2, then [**].

7.7. **Third Party Claims.**

7.7.1. **Third Party Claims - Course of Action.** If the Development, Commercialization or Manufacture of a Product under this Agreement is alleged by a Third Party to infringe a Third Party’s patent right(s) or misappropriate a Third Party’s trade secret, the Party becoming aware of such allegation will promptly notify the other Party thereof, in writing, reasonably detailing the claim.
7.7.2. **Third Party Suit.** If a Third Party sues a Party (the “Sued Party”) alleging that the Sued Party’s or the Sued Party’s Affiliates’ or Sublicensees’, Development, Manufacture or Commercialization of the Licensed Compound or the Product infringes or will infringe said Third Party’s patent right(s) or misappropriates said Third Party’s trade secret, then upon the Sued Party’s request and in connection with the Sued Party’s defense of any such Third Party suit, the other Party will provide reasonable assistance to the Sued Party for such defense and will join such suit if deemed a necessary party. The Sued Party will keep the other Party, if such other Party has not joined in such suit, reasonably informed on a quarterly basis, in person or by telephone, prior to and during the pendency of any such suit. The Sued Party will not admit the invalidity of any Patent Right licensed to a Party hereunder, nor settle any such suit, without written consent of the other Party, such consent not to be unreasonably withheld. Subject to the Parties’ respective indemnity obligations pursuant to Section 9.1 and 9.2, and without limiting anything in Section 4.3.4, all litigation expenses, including settlement costs, royalties paid in settlement of any such suit, and the payment of any damages to the Third Party, will be paid by the Sued Party. Notwithstanding the foregoing, if the Sued Party seeks an indemnification pursuant to Section 9.1 or Section 9.2, then the provisions of such Section 9.1 or Section 9.2, and the provisions of Section 9.3 will apply and will control and will supersede this Section 7.7.2. to the extent it is inconsistent with Section 9.1, Section 9.2, or Section 9.3.

7.8. **Patent Marking.** Each Party agrees to mark and have its Affiliates and all Sublicensees mark all Products (or their containers or labels) sold pursuant to this Agreement in accordance with and as required by the applicable statutes or regulations in the country or countries of manufacture and sale thereof.

7.9. **Patent Certifications.** Each Party will immediately give written notice to the other of any certification of which it becomes aware has been filed pursuant to any foreign equivalent to 21 U.S.C. § 355(b)(2)(A) or § 355(j)(2)(A)(vii) (or any amendment or successor statute thereto) claiming that any of its Patent Rights licensed to the other Party hereunder are invalid or that infringement will not arise from the manufacture, use or sale in the Territory of such Third Party product by a Third Party. If Astellas decides not to bring infringement proceedings against the Third Party making such a certification with respect to any Product, Astellas will give notice to Ironwood of its decision not to bring suit within ten Business Days after receipt of notice of such certification (or, if the time period permitted by law is less than 20 Business Days, within half of the time period permitted by law for Astellas to commence such action) and Ironwood may then, but will not be obligated to, bring suit against the Third Party that filed the certification. Any suit by either Party may be in the name of either or both Parties, as may be required by law. For this purpose, the Party not bringing suit will execute such legal papers necessary for the prosecution of such suit as may be reasonably requested by the Party bringing suit.

7.10. **No Implied Licenses.** Except as expressly set forth in this Agreement, no right or license under any Ironwood Technology or Astellas Technology (or any other Astellas Technology) is granted or will be granted by implication as a result of the respective rights of the Parties under this Agreement. All such rights or licenses are or will be granted only as expressly provided in this Agreement.
7.11. **Privileged Communications.** In furtherance of this Agreement, it is expected that Astellas and Ironwood will, from time to time, disclose to one another privileged communications with counsel, including opinions, memoranda, letters and other written, electronic and verbal communications. Such disclosures are made with the understanding that they will remain confidential, they will not be deemed to waive any applicable attorney-client privilege and that they are made in connection with the shared community of legal interests existing between Ironwood and Astellas, including the community of legal interests in avoiding infringement of any valid, enforceable patents of Third Parties and maintaining the validity of Ironwood Patent Rights, Astellas Patent Rights and Joint Patent Rights.

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7.12. **Recordation of License.** The Parties agree and acknowledge that notwithstanding anything in Section 5.1.6 Astellas shall have the right to record or file this Agreement or, to the extent permitted, a summary of the terms of this Agreement disclosing the least amount of the terms of this Agreement as is necessary to effect such recordation or filing with any patent office or similar authority in the Territory if Astellas reasonably determines that such recordation is beneficial or required to give effect to or protect its rights under this Agreement. Ironwood shall provide all such cooperation and assistance, and perform all such acts and execute and deliver all such documents, as Astellas may reasonably request in connection with such recordation or filing.

8. **TERM AND TERMINATION**

8.1. **Term.** The term of this Agreement will commence on the Effective Date and, unless earlier terminated as provided in this Section 8, will continue in full force and effect until the later of (i) the last-to-expire Valid Claim in the Ironwood Patent Rights in the Territory that covers the Licensed Compound has expired or was invalidated, and (ii) Astellas is no longer Developing or Commercializing any Products in the Territory (the “**Term**”), following which all licenses granted by each Party to the other pursuant to Section 2 of this Agreement will become fully paid up, irrevocable, perpetual licenses.

8.2. **Termination for Cause.**

8.2.1. **Termination for Material Breach by Ironwood.**

(a) **Fundamental Breach.** This Agreement may be terminated by Ironwood, with the consequences set forth in Section 8.6.1, by written notice by Ironwood, in the event of a material breach by Astellas of its material obligations hereunder relating to the Development and Commercialization of Products (A) which material breach (x) (i) substantially adversely impacts the Development and Commercialization of Products in the Territory in a manner that essentially precludes successful Development and Commercialization of Products in the Territory as contemplated in this Agreement, and (ii) is of a nature and severity so that other remedies at law or in equity would be inadequate, or (y) has or, unless abated will have, a material adverse effect on the successful development and commercialization of the Licensed Compound or Product
outside of the Territory and/or results or, unless abated will result, in Ironwood’s breach of its obligations to Forest or Almirall under the Forest Agreement or the Almirall Agreement, as applicable, and (B) which material breach remains uncured for [**] days measured from the date written notice of such breach is given to Astellas, which notice will specify the nature of the breach and demand its cure; provided, however, that if such breach is not capable of being cured within the stated period and Astellas uses Commercially Reasonable Efforts to

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cure such breach during such period and presents a reasonable remediation plan for such breach, this Agreement may not be terminated by Ironwood and the cure period will be extended for such period provided in the remediation plan as long as Astellas continues to use Commercially Reasonable Efforts to pursue the cure as provided in such remediation plan; and provided further that if Astellas disputes the alleged breach in good faith, such cure period shall be tolled until such dispute is finally resolved in favor of Ironwood.

(b) **Other Material Breach.** This Agreement may be terminated by Ironwood, with the consequences set forth in Section 8.6.2, by written notice by Ironwood if Astellas materially breaches a material term of this Agreement, which breach remains uncured for [**] days measured from the date written notice of such breach is given to Astellas, which notice will specify the nature of the breach and demand its cure; provided, however, that if such breach is not capable of being cured within the stated period and Astellas uses Commercially Reasonable Efforts to cure such breach during such period and presents a mutually agreeable remediation plan for such breach, this Agreement will not terminate and the cure period will be extended for such period provided in the remediation plan as long as Astellas continues to use Commercially Reasonable Efforts to pursue the cure as provided in such remediation plan; and provided further that if Astellas disputes the alleged breach in good faith, such cure period shall be tolled until such dispute is finally resolved in favor of Ironwood.

(c) **In the event of a material breach under Section 8.2.1(a) or Section 8.2.1(b),** Ironwood shall only be entitled to terminate this Agreement in accordance with such Sections at Ironwood’s election, (i) in its entirety or only with respect to Japan if such breach relates to and affects Japan, or (ii) only for the affected country or countries in all other cases.

8.2.2. **Termination for Material Breach by Astellas.** This Agreement may be terminated by written notice by Astellas if Ironwood materially breaches a material term of this Agreement, which breach remains uncured for [**] days measured from the date written notice of such breach is given to Ironwood, which notice will specify the nature of the breach and demand its cure; provided that if Ironwood disputes the alleged breach in good faith, such cure period shall be tolled until such dispute is finally resolved in favor of Astellas. For the avoidance of doubt, (i) nothing in the foregoing shall limit any other rights or remedies Astellas may have on account of any breach by Ironwood either in addition to or in lieu of termination, including specific
performance, injunctive relief, damages, and other equitable or legal remedies, and any rights or remedies pursuant to this Agreement, and (ii) nothing herein shall require Astellas to terminate this Agreement.

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8.2.3. **Non-Exclusive Remedy.** A termination by either Party in accordance with this Section 8.2 shall be a non-exclusive remedy and shall not preclude the terminating Party from seeking any other legal or equitable remedy, subject to the limitations set forth in Section 9.5 and the other applicable terms and conditions of this Agreement.

8.3. **Bankruptcy.** This Agreement may be terminated by written notice by either Party at any time during the Term of this Agreement if the other Party will file in any court or agency, pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of that Party or of its assets, or if the other Party proposes a written agreement of composition or extension of its debts, or if the other Party will be served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within 60 days after the filing thereof, or if the other Party proposes or is a Party to any dissolution or liquidation, or if the other Party makes an assignment for the benefit of its creditors (each of the foregoing an “Insolvency Event”).

8.4. **Termination for Convenience.** Prior to its expiration, this Agreement may be terminated (a) in its entirety, or (b) with respect to any country for which Ironwood has not consented to a sublicense pursuant to Section 2.6, at any time by Astellas effective upon at least [**] days prior written notice to Ironwood for any reason. If Astellas terminates for a material safety issue, Astellas will provide all assistance reasonably requested by Ironwood for at least [**] days after the effective date of such termination to identify, further characterize, and fully document such safety issue, and will provide such other assistance as may be reasonably useful or necessary for Ironwood to continue with the development or commercialization of the Licensed Compound. Notwithstanding the foregoing sentence, Astellas will not be required to undertake any Development, Manufacturing, or Commercialization activities after providing notice of termination for a material safety issue under this Section 8.4.

8.5. **Change of Control.**

8.5.1. **Change of Control Notice.** Astellas will notify Ironwood in writing, referencing this Section 8.5.1 of this Agreement, immediately upon any Change of Control of Astellas, and will provide such notice where possible at least 60 days prior to the Change of Control.

8.5.2. **Consequences of a Change of Control.**

(a) In the event that Astellas is subject to a Change of Control which could reasonably be expected to lead to an Impairment (as defined below), Astellas will notify Ironwood at least [**] days prior to the closing of such transaction, and Ironwood may elect, in its sole discretion, to (i) continue this Agreement in accordance with its terms,
(ii) terminate this Agreement

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on [**] months notice, during which period this Agreement would continue in effect in accordance with its terms, such notice to be delivered within [**] days after the Fair Market Value is determined pursuant to this Section 8.5.2(a). Within [**] days following Ironwood’s receipt of notice from Astellas of a Change of Control that could reasonably be expected to lead to an Impairment, Ironwood will provide notice to Astellas requesting a determination of the Fair Market Value upon a termination of this Agreement pursuant to this Section 8.5.2(a), and the failure to so request such valuation will be deemed the election to continue this Agreement in accordance with its terms. Such determination must be made by the Parties in good faith, and if such determination is not made within [**] days of the request, then as determined by a Valuation Panel. In connection with such termination, Ironwood will be required to pay Astellas an amount equal to the upfront portion of the Fair Market Value within ten days of the effective date of the termination, and, as they become due, payment of any ongoing, and/or recurring license fees, royalties, and other payments that may be part of Fair Market Value.

(b) For purposes of this Section 8.5.2, an “Impairment” will only be deemed to occur if (a) it is reasonably anticipated that the entity resulting from such Change of Control will be unable to perform its obligations in accordance with the terms of this Agreement, as reasonably determined based on objective criteria available to both Parties, including without limitation, the new entity’s financial position and product pipeline, (b) the product line of the entity that survives following the Change of Control includes a product in an Oral Formulation in the Field that is in clinical development which is indicated for the treatment of IBS-C, CC, OIC (unless as to any such indication, the JSC has determined not to pursue Development for such indication) or any other indication for which the Product is then being Commercialized in the Territory pursuant to this Agreement.

8.6. Effects of Termination.

8.6.1. If this Agreement is terminated by Ironwood under Sections 8.2.1(a), 8.3 or 8.5, or by Astellas under Section 8.4, then the following provisions will be effective, but only for the country or countries for which such termination is effective (the “Relevant Countries”), as applicable, upon such termination (subject to, in the case of a termination pursuant to Section 8.5, any payments due under Section 8.5 having been made):

(a) All licenses granted by Ironwood to Astellas hereunder will automatically terminate for the Relevant Countries.

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(b) All licenses granted by Astellas to Ironwood hereunder will become fully paid up, irrevocable, perpetual, royalty-free licenses for the Relevant Countries in the event of a termination pursuant to Sections 8.2.1(a), 8.3, or 8.4. In the event of a termination pursuant to Sections 8.2.1(b) or 8.5, such licenses shall be subject to such payments as may be required as part of the determination of Fair Market Value.

(c) Astellas will (i) transfer to Ironwood all Regulatory Submissions and Regulatory Approvals in the Relevant Countries pertaining to the Licensed Compound or Product Controlled by Astellas, provided that Astellas shall retain all rights relating thereto reasonably necessary for Astellas to continue to exercise its rights hereunder and Manufacture, Develop, and Commercialize the Product in all countries in the Territory that are not Relevant Countries, and (ii) assign to Ironwood all right, title, and interest in and to all of Astellas’s interest in any Trademark (including, without limitation, the goodwill symbolized by such Trademark) exclusively used to brand the Product in the Relevant Countries.

(d) Astellas will grant to Ironwood an exclusive and fully sublicensable (only to an Ironwood licensee in connection with a license of rights in the Licensed Compound or Product) license, in the Relevant Countries, under the Astellas Technology and Astellas’s interest in the Joint Technology to Develop and Commercialize the Licensed Compound or the Product in an Oral Formulation in the Field. For the avoidance of doubt, the license in this Section 8.6.1(d) will not restrict Astellas from, and Astellas expressly retains all rights required for, conducting any research inside or outside of the Field anywhere in the world. The license pursuant to this Section 8.6.1(d) shall be fully paid up, irrevocable, perpetual, and royalty-free in the event of a termination pursuant to Sections 8.2.1(a), 8.3, or 8.4. In the event of a termination pursuant to or Sections 8.2.1(b) or 8.5, such licenses shall be subject to such payments as may be required as part of the determination of Fair Market Value.

(e) Astellas will offer for sale to Ironwood all Development Material, Licensed Compound, and Product that it has in inventory at the time of such termination and that Astellas can or will not use in any countries in the Territory that are not Relevant Countries, which Ironwood may purchase from Astellas at the Transfer Price plus, for any finished Product, Astellas’s cost of finishing such Product,

(f) If termination is effective for the entire Territory, Astellas will furnish Ironwood with reasonable cooperation to assure a smooth transition of any clinical or other studies in progress related to the Licensed Compound or Product which Ironwood determines to continue in

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compliance with Applicable Law and ethical guidelines applicable to the transfer or
termination of any such studies.

(g) For the avoidance of doubt, until termination is effective, both Parties will
continue to perform their obligations under this Agreement.

8.6.2. If this Agreement is terminated by Ironwood under Section 8.2.1(b), then the provisions
of Section 8.6.1(a) through 8.6.1(g) will apply in connection with such termination, subject to
Ironwood paying to Astellas an amount equal to the Fair Market Value, which Fair Market Value
shall be determined as described in Section 8.5.2(a) (and shall include Astellas’s total documented
expenditures on Development of the Licensed Compound and the Product during the Term of this
Agreement).

8.6.3. If Astellas terminates this Agreement pursuant to Sections 8.2.2 or 8.3, all licenses
granted by Ironwood to Astellas, and all licenses granted by Astellas to Ironwood (together with
all sublicenses granted by Ironwood pursuant to such licenses), will terminate and neither Party
will have any further liability to the other except to the extent of provisions which survive the
termination of this Agreement by their respective terms and obligations accrued but remaining
outstanding as of the effectiveness of termination.

8.6.4. Notwithstanding anything to the contrary set forth in this Agreement but subject to
the limitations set forth in Section 9.5 and the other applicable terms and conditions of this
Agreement, termination pursuant to this Agreement on account of a default will not be deemed to
relieve a defaulting party from any liability under this Agreement on account of such default.

8.7. Survival of Certain Obligations Survival. The following Sections of this Agreement will, to the
extent applicable, survive expiration or termination and will continue in full force and effect: 1
(Definitions), 2.3 (Joint Technology), 2.9 (No Other Rights), 4.5 (Records and Audits) (for a period of one
year from termination or expiration), 4.8 (Confidentiality), 4.10 [**], 5.1 (Confidentiality), 5.2
(Restrictions) (for [**] months after termination, in accordance with the terms of such Section), 5.4
(Nonsolicitation of Employees) (for [**] year after termination, in accordance with the terms of such
Section), 5.5 (Standstill Agreement) (for three years after termination, in accordance with the terms of such
Section), 6.6 (Disclaimer), 7.2.1 (Ownership of Technology), 7.10 (No Implied Licenses), 7.11 (Privileged
Communications), 8.7 (Survival), 8.5.2 (Consequences of a Change of Control), 8.6 (Effects of
Termination), 8.7 (Survival of Certain Obligations), 9.1 through 9.3 (Indemnification, Procedure) (solely
with respect to claims concerning events prior to termination), 9.5 (Liability Limitations), and 10
(Miscellaneous). In addition, expiration or termination of this Agreement will not relieve the Parties of any
obligation accruing before such expiration or termination. Any expiration or early termination of this
Agreement will be without

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prejudice to the rights of either Party against the other accrued or accruing under this Agreement before termination. Notwithstanding anything to the contrary set forth in this Agreement but subject to the limitations set forth in Section 9.5 and the other applicable terms and conditions of this Agreement, termination pursuant to this Agreement on account of a default will not be deemed to relieve a defaulting party from any liability under this Agreement on account of such default.

9. **PRODUCT LIABILITY, INDEMNIFICATION, AND INSURANCE**

9.1. **Indemnification by Ironwood.** Ironwood will indemnify, defend and hold harmless Astellas, its Affiliates, sublicensees, distributors, and each of its and their respective employees, officers, directors agents (each, a “Astellas Indemnified Party”) from and against any and all losses, damages, liabilities, settlements, penalties, fines, and expenses (including, without limitation, reasonable attorneys’ fees and expenses) (collectively, “Liability”) that the Astellas Indemnified Party is required to pay to one or more Third Parties to the extent resulting from or arising out of (i) any Ironwood representation or warranty set forth in this Agreement being untrue in any material respect, (ii) any material breach by Ironwood of any of its covenants or obligations hereunder, except to the extent caused by the negligence or willful misconduct of Astellas or any Astellas Indemnified Party, or by breach of this Agreement by Astellas, (iii) any recall or withdrawal of the Product in the Field in the Territory, to the extent attributable to acts of Ironwood, and (iv) any use of the Ironwood House Marks in accordance with this Agreement. Additionally, Ironwood will [**]. As used in this Section “Final Award” means (i) any damages and other amounts awarded by a court of competent jurisdiction issued in a final, non-appealable order, and will also include (ii) the reasonable attorney’s fees and expenses incurred in obtaining the judgment or in connection with such settlement. For the avoidance of doubt, the Parties agree that any amounts required to be paid pursuant to a settlement in connection with an [**]. The foregoing sentence shall not limit Ironwood’s obligations under this Section 9.1 with respect to other settlements.

9.2. **Indemnification by Astellas.** Astellas will indemnify, defend and hold harmless Ironwood, its Affiliates, sublicensees, distributors and each of its and their respective employees, officers, directors and agents (each, an “Ironwood Indemnified Party”) from and against any and all Liabilities that the Ironwood Indemnified Party is required to pay to one or more Third Parties, and all reasonable attorney’s fees and expenses incurred by an Ironwood Indemnified Party in connection therewith, to the extent resulting from or arising out of (i) any Astellas representation or warranty set forth in this Agreement being untrue in any material respect, (ii) any material breach by Astellas of any of its covenants or obligations hereunder, and (iii) the Development of the Product by Astellas hereunder or the Commercialization of the Product by Astellas in the Field in the Territory hereunder, except to the extent caused by (A) any material breach of Ironwood of any of its covenants or obligations hereunder or any failure of Ironwood to supply the Licensed Compound in accordance with this Agreement and the Manufacturing and Supply Agreement, or (B) the infringement of any Technology rights of Third Party related to the use of the Licensed Compound in the Product; or (iv) any recall or withdrawal of the Product in the Field in the Territory, to the extent attributable to acts of Astellas; except in each case, to the extent caused by the negligence or willful misconduct of Ironwood or any Ironwood Indemnified Party, or by breach of this

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9.3. Procedure. Each Party will notify the other in the event it becomes aware of a claim for which indemnification may be sought hereunder or for which Liability is shared pursuant to this Section 9. In case any proceeding (including any governmental investigation) is instituted involving any Party in respect of which indemnity may be sought pursuant to this Section 9, such Party (the “Indemnified Party”) will promptly notify the other Party (the “Indemnifying Party”) in writing and the Indemnifying Party and Indemnified Party will meet to discuss how to respond to any claims that are the subject matter of such proceeding. The Indemnifying Party, upon request of the Indemnified Party, will retain counsel reasonably satisfactory to the Indemnified Party to represent the Indemnified Party and will pay the fees and expenses of such counsel related to such proceeding. In any such proceeding, the Indemnified Party will have the right to retain its own counsel, but the fees and expenses of such counsel will be at the expense of the Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party will have mutually agreed to the retention of such counsel or (ii) the named parties to any such proceeding (including any impleaded parties) include both the Indemnifying Party and the Indemnified Party and representation of both Parties by the same counsel would be inappropriate due to actual or potential differing interests between them. All such fees and expenses incurred pursuant to Section 9.1 or 9.2 will be reimbursed as they are incurred. The Indemnifying Party will not be liable for any settlement of any proceeding unless effected with its written consent. The Indemnifying Party will not, without the written consent of the Indemnified Party, effect any settlement of any pending or threatened proceeding in respect of which the Indemnified Party is, or arising out of the same set of facts could have been, a party and indemnity could have been sought hereunder by the Indemnified Party, unless such settlement includes an unconditional release of the Indemnified Party from all liability on claims to which the indemnity relates that are the subject matter of such proceeding. Notwithstanding anything to the contrary in the foregoing, with respect to any claim that is subject to the IP Indemnity Astellas shall have the right to control the defense of such claim. In no event shall Ironwood settle any claim that is subject to the IP Indemnity without Astellas’s prior written consent.

9.4. Insurance. Each Party further agrees to use Commercially Reasonable Efforts to obtain and maintain, during the Term of this Agreement, commercial general liability insurance, including products liability insurance, with reputable and financially secure insurance carriers to cover its indemnification obligations under Sections 9.1 or 9.1, as applicable, or self-insurance, with limits of not less than [**] million dollars per occurrence and [**] million dollars in the aggregate ($[**] in the aggregate from and after Commercial Launch).

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9.5. Liability Limitations. NOTWITHSTANDING THE FOREGOING, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE, OR EXEMPLARY DAMAGES UNDER THIS AGREEMENT, EXCEPT TO THE EXTENT THE DAMAGES RESULT FROM A PARTY’S WILLFUL MISCONDUCT AND EXCEPT FOR A PARTY’S INDEMNIFICATION OBLIGATIONS UNDER THIS SECTION 9.

10. MISCELLANEOUS.

10.1. Governing Law; Jurisdiction; Dispute Resolution.
10.1.1. **Governing Law.** The interpretation and construction of this Agreement will be governed by the laws of the State of New York, excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

10.1.2. **Dispute Resolution.** In the event of a dispute arising out of or relating to this Agreement, either Party will provide written notice of the dispute to the other, in which event the dispute will be referred to the executive officers designated below or their successors, for attempted resolution by good faith negotiations within [**]** days after such notice is received. The designated officers are initially as follows:

For Ironwood: Its Chief Executive Officer or his designate
For Astellas: Its Chief Executive Officer or his designate

In the event the designated executive officers do not resolve such dispute within the allotted [**]** days, either Party may, after the expiration of the [**]** period, seek to resolve the dispute through arbitration in accordance with Section 10.1.3. Notwithstanding the preceding, the Parties acknowledge that the failure of the JSC to reach consensus as to any matter, which failure does not involve a breach by a Party of its obligations hereunder, will not be deemed a dispute which may be referred for resolution by arbitration hereunder.

10.1.3. **Arbitration.**

(a) **Claims.** Any claim, dispute, or controversy of whatever nature arising between the Parties out of or relating to this Agreement that is not resolved under Section 10.1.2 within the required [**]** time period, including without limitation, any action or claim based on tort, contract, or statute (including any claims of breach or violation of statutory or common law protections from discrimination, harassment and hostile working environment), or concerning the interpretation, effect, termination, validity, performance and/or breach of this Agreement (“Claim”), will be

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resolved by final and binding arbitration before a panel of three experts with relevant industry experience (the “Arbitrators”). One Arbitrator will be chosen by Ironwood and one Arbitrator will be chosen by Astellas within 15 days from the notice of initiation of arbitration. The third Arbitrator will be chosen by mutual agreement of the Arbitrator chosen by Ironwood and the Arbitrator chosen by Astellas within 15 days of the date that the last of such Arbitrators were appointed. The Arbitrators will be administered by the International Chamber of Commerce (the “Administrator”) in accordance with its then existing arbitration rules or procedures regarding commercial or business disputes. The arbitration will be held in Tokyo, Japan, if requested by Ironwood and in New York, New York, if requested by Astellas. The Arbitrators will be instructed by the Parties to complete the arbitration within 90 days after selection of the final Arbitrator.
Arbitrators’ Award. The Arbitrators will, within 15 calendar days after the conclusion of the arbitration hearing, issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The decision or award rendered by the Arbitrators will be final and non-appealable, and judgment may be entered upon it in accordance with applicable law in the State of New York or any other court of competent jurisdiction. The Arbitrators will be authorized to award compensatory damages, but will NOT be authorized (i) to award non-economic damages, such as for emotional distress, pain and suffering or loss of consortium, (ii) to award punitive damages, or (iii) to reform, modify or materially change this Agreement or any other agreements contemplated hereunder; provided, however, that the damage limitations described in parts (i) and (ii) of this sentence will not apply if such damages are statutorily imposed.

Costs. Each Party will bear its own attorney’s fees, costs, and disbursements arising out of the arbitration and the costs of the arbitrator selected by it, and will pay an equal share of the fees and costs of the third arbitrator; provided, however, the Arbitrators will be authorized to determine whether a party is the prevailing party, and if so, to award to that prevailing party reimbursement for its reasonable attorneys’ fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges, travel expenses, etc.), and/or the fees and costs of the Administrator and the Arbitrators.

Compliance with this Agreement. Unless the Parties otherwise agree in writing, during the period of time that any arbitration proceeding is pending under this Agreement, the Parties will continue to comply with all those terms and provisions of this Agreement that are not the subject of the pending arbitration proceeding.

Injunctive or Other Equity Relief. Nothing contained in this Agreement will deny any Party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a bona fide emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing arbitration proceeding.

10.2. Force Majeure. No liability will result from, and no right to terminate will arise, in whole or in part, based upon any delay in performance or non-performance, in whole or in part, by either of the Parties to this Agreement to the extent that such delay or non-performance is caused by an event of Force Majeure. “Force Majeure” means an event that is beyond a non-performing Party’s reasonable control, including an act of God, act of the other Party, war, riot, civil commotion, terrorist act, malicious damage, epidemic, quarantine, fire, flood, storm, natural disaster or compliance with any law or governmental order, rule, regulation or direction, whether or not it is later held to be invalid or inapplicable. The Force Majeure Party
will within ten days of the occurrence of the Force Majeure event, give written notice to the other Party stating the nature of the Force Majeure event, its anticipated duration and any action being taken to avoid or minimize its effect. Any suspension of performance will be of no greater scope and of no longer duration than is reasonably required and the Force Majeure Party will use reasonable effort to remedy its inability to perform; provided, however, if the suspension of performance continues or is anticipated to continue for 30 days after the date of the occurrence, the unaffected Party will have the right but not the obligation to perform on behalf of the Force Majeure Party for a period of such Force Majeure and such additional period as may be reasonably required to assure a smooth and uninterrupted transition of such activities. If such failure to perform would constitute a material breach of this Agreement in the absence of such event of Force Majeure, and continues for one year from the date of the occurrence and the Parties are not able to agree on appropriate amendments within such period, such other Party will have the right, notwithstanding the first sentence of this Section 10.2, to terminate this Agreement immediately by written notice to the Force Majeure Party, in which case neither Party will have any liability to the other except for those rights and liabilities that accrued prior to the date of termination and the consequences of termination pursuant to this Agreement, as if such termination was a termination as to which such consequences applied.

10.3. **Additional Approvals.** Astellas and Ironwood will cooperate and use respectively all reasonable efforts to make all other registrations, filings and applications, to give all notices and to obtain as soon as practicable all governmental or other consents, transfers, approvals, orders, qualifications authorizations, permits and waivers, if any, and to do all other things necessary or desirable for the consummation of the transactions as contemplated hereby. Neither Party will be required, however, to divest or out-license products or assets or materially change its business if doing so is a condition of obtaining any governmental approvals of the transactions contemplated by this Agreement.

10.4. **Waiver and Non-Exclusion of Remedies.** A Party’s failure to enforce, at any time or for any period of time, any provision of this Agreement, or to exercise any right or remedy will not constitute a waiver of that provision, right or remedy or prevent such Party from enforcing any or all provisions of this Agreement and exercising any rights or remedies. To be effective any waiver must be in writing. The rights and remedies provided in this Agreement are cumulative and do not exclude any other right or remedy provided by law or otherwise available except as expressly set forth in this Agreement.

10.5. **Notices.**

10.5.1. **Notice Requirements.** Any notice, request, demand, waiver, consent, approval or other communication permitted or required under this Agreement must be in writing, must refer specifically to this Agreement and will be deemed given only if delivered by hand or sent by facsimile transmission (with transmission confirmed) or by internationally recognized overnight delivery service that maintains records of delivery, addressed to the Parties at their respective addresses specified in Section 10.5.2 or to such other address as the Party to whom notice is to be given may have provided to the other Party in accordance with this Section 10.5.1. Such Notice will be deemed to have been given as of the date delivered by hand or transmitted by facsimile (with transmission confirmed) or on the second Business Day (at the place of delivery) after
deposit with an internationally recognized overnight delivery service. This Section 10.5.1 is not intended to govern the day-to-day business communications necessary between the Parties in performing their obligations under the terms of this Agreement.

10.5.2. Address for Notice.

For Ironwood:

Ironwood Pharmaceuticals, Inc.
320 Bent Street
Cambridge, MA 02141
Fax: 617-494-0908
Attn: Vice President, Business Development

With a copy to:

Ropes & Gray LLP
One International Place
Boston, MA 02110

For Astellas:

Astellas Pharma Inc.
3-11, Nihonbashihoncho 2-chome
Chuo-ku, Tokyo 103-8411, Japan
Fax: +81 3-3244-3245
Attn: Vice President, Licensing & Alliances

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10.6. Entire Agreement. This Agreement, together with the Manufacturing and Supply Agreement, constitutes the entire agreement between the Parties with respect to the subject matter of this Agreement. This Agreement supersedes all prior agreements, whether written or oral, with respect to the subject matter of this Agreement. Each Party confirms that it is not relying on any representations, warranties or covenants of the other Party except as specifically set out in this Agreement. Nothing in this Agreement is intended to limit or exclude any liability for fraud. All Exhibits or Schedules referred to in this Agreement are intended to be and are hereby specifically incorporated into and made a part of this Agreement. In the event of any inconsistency between any such Exhibits or Schedules and this Agreement, the terms of this Agreement will govern.

10.7. Amendment. Any amendment or modification of this Agreement must be in writing and signed
by authorized representatives of both Parties.

10.8. Assignment. Neither Party may assign its rights or delegate its obligations under this Agreement, in whole or in part without the prior written consent of the other Party, except that each Party will always have the right, without such consent, (a) to perform any or all of its obligations and exercise any or all of its rights under this Agreement through any of its Affiliates, and (b) on written notice to the other Party, assign any or all of its rights and delegate or subcontract any or all of its obligations hereunder to any of its Affiliates. Notwithstanding the foregoing, each Party will remain responsible for any failure to perform on the part of any such Affiliates. Any attempted assignment or delegation in violation of this Section 10.8 will be void.

10.9. No Benefit to Others. The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they will not be construed as conferring any rights in any other persons except as otherwise expressly provided in this Agreement.

10.10. Counterparts. This Agreement may be executed in any number of counterparts, each of which will be deemed an original and all of which taken together will be deemed to constitute one and the same instrument. An executed signature page of this Agreement delivered by facsimile transmission will be as effective as an original executed signature page.

10.11. Severability. To the fullest extent permitted by applicable law, the Parties waive any provision of law that would render any provision in this Agreement invalid, illegal or unenforceable in any respect. If any provision of this Agreement is held to be invalid, illegal or unenforceable, in any respect, then such provision will be given no effect by the Parties and will not form part of this Agreement. To the fullest extent permitted by applicable law and if the rights or obligations of any Party will not be materially and adversely affected, all other provisions of this Agreement will remain in full force and effect and the Parties will use their best efforts to negotiate a provision in replacement of the provision held invalid, illegal or unenforceable that is consistent with applicable law and achieves, as nearly as possible, the original intention of the Parties.

10.12. Further Assurance. Each Party will perform all further acts and things and execute and deliver such further documents as may be necessary or as the other Party may reasonably require to implement or give effect to this Agreement.

10.13. Publicity. Notwithstanding Section 5.1.6, it is understood that the Parties will issue a press release announcing the execution of this Agreement in such form as the Parties mutually agree. The Parties will consult with each other reasonably and in good faith with respect to the text and timing of any subsequent press releases relating to this Agreement or the activity hereunder prior to the issuance thereof, provided that a Party may not unreasonably withhold consent to such releases, and that either Party may issue such press releases as it determines, based on advice of counsel, are reasonably necessary to comply with laws or regulations or for appropriate market disclosure or which are consistent with information disclosed in prior releases properly made hereunder.
10.14. **Relationship of the Parties.** The status of a Party under this Agreement will be that of an independent contractor. Nothing contained in this Agreement will be construed as creating a partnership, joint venture, or agency relationship between the Parties or, except as otherwise expressly provided in this Agreement, as granting either Party the authority to bind or contract any obligation in the name of or on the account of the other Party or to make any statements, representations, warranties, or commitments on behalf of the other Party. All Persons employed by a Party or any of its Affiliates are employees of such Party or its Affiliates and not of the other Party or such other Party’s Affiliates and all costs and obligations incurred by reason of any such employment will be for the account and expense of such Party or its Affiliates, as applicable.

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IN WITNESS WHEREOF, duty authorized representatives of the Parties have duly executed this Agreement to be effective as of the Effective Date.

IRONWOOD PHARMACEUTICALS, INC.

By: /s/ Peter Hecht

Name: Peter Hecht
Title: CEO

ASTELLAS PHARMA INC.

By: /s/ Yoshihiko Hatanaka

Name: Yoshihiko Hatanaka
Title: Senior Corporate Executive

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**EXHIBIT A**

LAUNCH PLAN

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<tr>
<th>Functional Group</th>
<th>Start (based on expected launch)</th>
<th>Key action, Program, Activities</th>
<th>Duration (approximate and non-binding)</th>
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EXHIBIT B
PRODUCT SPECIFICATION

Attributes

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EXHIBIT C
INITIAL DEVELOPMENT AND REGULATORY PLAN

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EXHIBIT D

PHARMACOVIGILANCE AGREEMENT
(To be entered into by the parties)

SCHEDULE 1.87

LICENSED COMPOUND

[**]

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SCHEDULE 3.4

MANUFACTURING AND SUPPLY – MINIMUM TERMS

[**]

SCHEDULE 4.6

TAX TREATY DOCUMENTATION

- Attachment Form for Limitation on Benefits Article
- Application Form for Income Tax Convention
- U.S. Treasury Residency Certification

SCHEDULE 5.2

EXCLUDED PRODUCTS

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<th>Mechanism of Action</th>
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## SCHEDULE 6.2(a)

### IRONWOOD PATENT RIGHTS

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## SCHEDULE 6.3

### ASTELLAS PRODUCTS

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<th>Product or Candidate Name</th>
<th>Target Indication</th>
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