IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AMGEN INC. and AMGEN MANUFACTURING, LIMITED, Plaintiffs, v. HOSPIRA, INC. and PFIZER INC., Defendants.	C.A. No. _____ DEMAND FOR JURY TRIAL

COMPLAINT

Plaintiffs Amgen Inc. and Amgen Manufacturing, Limited (collectively, "Plaintiffs"), by and through their undersigned attorneys, for their Complaint against Defendants Hospira, Inc. and Pfizer Inc. (collectively, "Defendants") hereby allege as follows:

THE PARTIES

1. Amgen Inc. is a corporation existing under the laws of the State of Delaware, with its principal place of business at One Amgen Center Drive, Thousand Oaks, California, 91320. Amgen Inc. discovers, develops, manufactures, and sells innovative therapeutic products based on advances in molecular biology, recombinant DNA technology, and chemistry. Founded in 1980, Amgen Inc. is a pioneer in the development of biological human therapeutics. Today, Amgen Inc. is one of the largest biotechnology companies in the world, fueled in part by the success of NEUPOGEN® (filgrastim).

2. Amgen Manufacturing, Limited ("AML") is a corporation existing under the laws of Bermuda with its principal place of business in Juncos, Puerto Rico. AML manufactures and sells biologic medicines for treating particular diseases in humans. AML is a wholly-owned subsidiary of Amgen Inc.

3. On information and belief, Hospira, Inc. ("Hospira") is a corporation existing under the laws of the State of Delaware, with its principal place of business at 275 North Field Drive, Lake Forest, Illinois 60045.

4. On information and belief, Pfizer Inc. ("Pfizer") is a corporation existing under the laws of the State of Delaware, with its principal place of business at 235 East 42nd Street, New York, New York 10017.

5. On information and belief, Hospira is a wholly-owned subsidiary of Pfizer.

6. On information and belief, Defendants collaborate to develop, manufacture, seek regulatory approval for, import, market, distribute, and sell biopharmaceutical products (including products intended to be sold as biosimilar versions of successful biopharmaceutical products developed by others) in this judicial District and throughout the United States.

NATURE OF THE ACTION

7. This is an action for patent infringement arising under the patent laws of the United States, Title 35, United States Code, including 35 U.S.C. § 271(e)(2)(C), which was enacted in 2010 as part of the Biologics Price Competition and Innovation Act ("the BPCIA").

8. By amendment to the Public Health Service Act, the BPCIA created a new, abbreviated pathway for the approval of biological products that are highly similar to previously-licensed innovative biological products. Codified at 42 U.S.C. § 262(k), the new abbreviated pathway, often referred to as "the subsection (k) pathway," allows a biosimilar applicant to secure a license from the Food and Drug Administration ("the FDA") by relying on a prior license granted to an innovator company ("the Reference Product Sponsor" or "RPS") for its innovative biological product ("the reference product"). The reference product must have been licensed by the FDA under the innovator pathway of 42 U.S.C. § 262(a), often referred to as "the

subsection (a) pathway," which requires proof of safety and efficacy through a series of phased clinical trials.

9. In this case, Hospira is a biosimilar applicant and manufacturer acting in concert with Pfizer, its corporate parent, and Amgen Inc. is a Reference Product Sponsor. Hospira sought FDA licensure under the subsection (k) pathway for a biosimilar version of Amgen Inc.'s NEUPOGEN® (filgrastim) product.

10. Seeking the benefits of the subsection (k) pathway, Hospira, acting in concert with Pfizer, submitted its abbreviated Biologic License Application ("aBLA") No. 761080 ("the Hospira aBLA") to the FDA, requesting that its biological product ("the Hospira Filgrastim Biosimilar Product") be licensed by relying on Amgen Inc.'s demonstration of the safety and efficacy of NEUPOGEN® (filgrastim).

11. The asserted patent is U.S. Patent No. 10,577,392 ("the '392 Patent"), attached hereto as Exhibit 1. The '392 Patent is directed to methods of purifying proteins used in the manufacture of a biological product. The parties are litigating in this District a related case based on Amgen's claim that Defendants' activities with respect to the Hospira Filgrastim Biosimilar Product infringe the related U.S. Patent No. 9,643,997 ("the '997 Patent"). *See Amgen Inc. et al. v. Hospira, Inc. et al.*, No. 18-cv-1064-CFC (D. Del.).

12. Amgen Inc. included the '392 Patent in its list pursuant to 42 U.S.C. § 262(*l*)(3)(A) by providing a supplement to that list under 42 U.S.C. § 262(*l*)(7) on March 11, 2020, within 30 days of the '392 Patent's issuance on March 3, 2020.

13. On information and belief, Hospira, acting in concert with Pfizer, submitted the Hospira aBLA to the FDA before the expiration of the '392 Patent.

14. Defendants committed an act of infringement as to the '392 Patent under 35 U.S.C. § 271(e)(2)(C) when they caused Hospira to submit the Hospira aBLA, including on information and belief, any amendments thereto, for the purpose of obtaining FDA approval to engage in the commercial manufacture, use, or sale of the Hospira Filgrastim Biosimilar Product.

15. On July 20, 2018, Hospira and Pfizer received FDA approval for NIVESTYM® (filgrastim-aafi). Pfizer's news release dated July 20, 2018, attached hereto as Exhibit 2, states: "Pfizer Inc. (NYSE:PFE) today announced that the United States (U.S.) Food and Drug Administration (FDA) has approved NIVESTYM™ (filgrastim-aafi), a biosimilar to Neupogen (filgrastim), for all eligible indications of the reference product." Pfizer's Form 10-Q dated November 8, 2018 and filed with the U.S. Securities and Exchange Commission, attached hereto as Exhibit 3, states: "Product: Nivestym (filgrastim-aafi); Indication: A biosimilar to Neupogen® (filgrastim) for all eligible indications of the reference product; Date Approved: July 2018." Exhibit 3, Pfizer's Form 10-Q, at 82.

16. At least by September 24, 2018, Defendants began to import the Hospira Filgrastim Biosimilar Product into the United States, and Defendants began to offer to sell, sell, or use the Hospira Filgrastim Biosimilar Product within the United States. For example, FDA's National Drug Code Directory lists a Nivestym® "Start Marketing Date" of September 24, 2018. *See* Exhibit 4, FDA NAT'L DRUG CODE DIRECTORY SEARCH RESULTS FOR "NIVESTYM" (Mar. 26, 2019), https://www.accessdata.fda.gov/scripts/cder/ndc/index.cfm.

17. By Defendants' importation of the Hospira Filgrastim Biosimilar Product into the United States, or offer to sell, sale, or use of that product within the United States, Defendants have infringed at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(g).

JURISDICTION AND VENUE

18. This action arises under the patent laws of the United States, Title 35 of the United States Code, Title 42 of the United States Code, and under the Declaratory Judgment Act of 1934 (28 U.S.C. §§ 2201-2202), Title 28 of the United States Code. This Court has subject-matter jurisdiction under 28 U.S.C. §§ 1331, 1338(a), 2201(a), and 2202.

19. This Court has personal jurisdiction over Hospira because, among other things, on information and belief, Hospira is a Delaware corporation, has conducted business in this District, has availed itself of the rights and benefits of Delaware law, and has engaged in substantial and continuing contacts with Delaware.

20. This Court has personal jurisdiction over Pfizer because, among other things, on information and belief, Pfizer is a Delaware corporation, has conducted business in this District, has availed itself of the rights and benefits of Delaware law, and has engaged in substantial and continuing contacts with Delaware.

21. Amgen Inc. is a Delaware corporation and has suffered injury in Delaware as a result of the Defendants' infringement of Amgen Inc.'s patent.

22. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b) and (c), and 28 U.S.C. § 1400(b) at least because, on information and belief, each Defendant is a corporation incorporated in the State of Delaware.

BACKGROUND

A. Amgen Inc.'s innovative biological product, NEUPOGEN® (filgrastim)

23. The active ingredient in Amgen Inc.'s NEUPOGEN® (filgrastim) is filgrastim, a recombinantly expressed, 175-amino-acid form of a protein known as human granulocyte-colony stimulating factor ("G-CSF"). NEUPOGEN® (filgrastim) is indicated to (1) decrease the incidence of infection, as manifested by febrile neutropenia, in patients with nonmyeloid

malignancies receiving myelosuppressive anti-cancer drugs; (2) reduce the time to neutrophil recovery and duration of fever, following induction or consolidation chemotherapy treatment of patients with Acute Myeloid Leukemia; (3) reduce the duration of neutropenia and neutropenia-related clinical sequelae in cancer patients undergoing bone marrow transplantation; (4) mobilize autologous hematopoietic progenitor cells into the peripheral blood for collection by leukapheresis; (5) reduce the incidence and duration of sequelae of severe neutropenia in symptomatic patients with congenital neutropenia, cyclic neutropenia, or idiopathic neutropenia; and (6) increase survival in patients acutely exposed to myelosuppressive doses of radiation.

24. By binding to specific receptors on the surface of certain types of cells, NEUPOGEN® (filgrastim) stimulates the production of a type of white blood cell known as neutrophils. Neutrophils are the most abundant type of white blood cells and form a vital part of the human immune system. A deficiency in neutrophils is known as neutropenia, a condition which makes the individual highly susceptible to infection. Neutropenia can result from a number of causes; it is a common side effect of chemotherapeutic drugs used to treat certain forms of cancer. NEUPOGEN® (filgrastim) counteracts neutropenia.

25. The availability of NEUPOGEN® (filgrastim) represented a major advance in cancer treatment by protecting chemotherapy patients from the harmful effects of neutropenia and by thus facilitating more effective chemotherapy regimens.

26. Amgen Inc. is the sponsor of the BLA for NEUPOGEN® (filgrastim).

27. AML manufactures NEUPOGEN® (filgrastim).

28. Amgen USA Inc. is a wholly-owned subsidiary of Amgen Inc. Amgen USA Inc. purchases NEUPOGEN® (filgrastim) from AML, and is the distributor of NEUPOGEN® (filgrastim) in the United States.

29. Plaintiffs profit from each sale of NEUPOGEN® (filgrastim) in the United States.

B. Defendants sought approval to market a biosimilar version of NEUPOGEN® (filgrastim) by taking advantage of the abbreviated subsection (k) pathway of the BPCIA

30. Defendants sought approval from the FDA to sell a "biosimilar" version of NEUPOGEN® (filgrastim) by taking advantage of a new, abbreviated approval pathway under the BPCIA.

31. Congress enacted the BPCIA on March 23, 2010. The purpose of the BPCIA is to establish "a biosimilars pathway balancing innovation and consumer interests." Biologics Price Competition and Innovation Act of 2009, Pub. L. No. 111-148, § 7001(b), 124 Stat. 119, 804 (2010) (amending 42 U.S.C. § 262). The statutory requirements of the BPCIA reflect Congress's intent to achieve this balance.

32. The BPCIA created the subsection (k) pathway, 42 U.S.C. § 262(k), for FDA licensure of biological products upon a determination that the biological product is "biosimilar" to a previously-licensed "reference product." The BPCIA defines a "biosimilar" to be a biological product that: (1) "is highly similar to the reference product notwithstanding minor differences in clinically inactive components," and (2) has "no clinically meaningful differences between the biological product and the reference product in terms of the safety, purity, and potency of the product." 42 U.S.C. §§ 262(i)(2)(A) and (B). The BPCIA defines a "reference product" to be "the single biological product licensed under subsection (a) against which a biological product is evaluated in an application submitted under subsection (k)." 42 U.S.C. § 262(i)(4).

33. As opposed to applicants following the § 262(a) pathway, biosimilar applicants following the § 262(k) pathway have the advantage of referencing the innovator's license—the FDA evaluates the safety and efficacy of the applicant's biological product by relying on the innovator's prior demonstration of safety, purity, and potency of the reference product. Specifically, the § 262(k) pathway may only be used where the prior applicant for the reference product has submitted an application under 42 U.S.C. § 262(a) for approval of a reference product, and the FDA has determined that the Reference Product Sponsor has demonstrated that "the biological product that is the subject of the application is safe, pure, and potent." 42 U.S.C. § 262(a)(2)(C)(i)(I).

34. Before the BPCIA, reference to another's biological license could be made only with the permission of the Reference Product Sponsor. An innovator RPS enjoyed permanent and exclusive rights to its clinical trial data and FDA license. The BPCIA advanced the public's interest in price competition in part by diminishing these rights, allowing a biosimilar applicant to "reference" the innovator RPS's license rather than incurring the delay and costs of generating its own clinical data.

35. Consequently, the subsection (k) pathway allows the biosimilar applicant to avoid the time and expense incurred by the RPS for development and clinical testing, and to gain licensure to commercialize its biological product in the market sooner as a biosimilar than it could have done through an independent demonstration of safety, purity, and potency under the § 262(a) pathway. The subsection (k) pathway is thus referred to as an "abbreviated" approval pathway.

36. In addition to providing these benefits, approval under the subsection (k) pathway offers another benefit to the biosimilar applicant: a product that is approved as a biosimilar can take advantage of the existing market for the reference product created by the RPS.

37. On information and belief, Hospira, acting in concert with Pfizer, submitted the Hospira aBLA to the FDA under the subsection (k) pathway. The Hospira aBLA sought approval to commercially manufacture, use, offer to sell, sell, and import into the United States, the Hospira Filgrastim Biosimilar Product, a biosimilar version of Plaintiffs' NEUPOGEN® (filgrastim) product.

38. The applicant named in the Hospira aBLA is "Hospira, Inc., a Pfizer Company." The Hospira Filgrastim Biosimilar Product is described in the Hospira aBLA as PF-06881893.

39. The Hospira Filgrastim Biosimilar Product is designed to copy and compete with Amgen Inc.'s NEUPOGEN® (filgrastim). Hospira instructs or directs others to administer the Hospira Filgrastim Biosimilar Product to certain patients in the U.S. to treat particular diseases in the same way that Amgen Inc.'s NEUPOGEN® (filgrastim) is administered. Hospira sought FDA approval for one or more indications for which NEUPOGEN® (filgrastim) is already approved.

40. Amgen Inc. holds Biologic License Application ("BLA") No. 103353 for filgrastim and is therefore the Reference Product Sponsor with respect to any biosimilar versions of filgrastim. Hospira did not seek to independently demonstrate to the FDA that its biological product is "safe, pure, and potent" pursuant to 42 U.S.C. § 262(a), as Amgen Inc. did in its BLA for its innovative biological product NEUPOGEN® (filgrastim). Rather, Hospira requested that the FDA evaluate the suitability of its biological product for licensure by expressly referencing NEUPOGEN® (filgrastim) and thereby relying on the data supporting Amgen Inc.'s FDA license for NEUPOGEN® (filgrastim). 42 U.S.C. § 262(k)(2)(A)(iii)(I).

C. The information exchange under 42 U.S.C. § 262(*l*)

41. In addition to creating an abbreviated pathway for the approval of biosimilars, the BPCIA also creates an intricate and carefully orchestrated set of procedures for the biosimilar applicant and the RPS to engage in a series of information exchanges and good-faith negotiations between parties prior to the filing of a patent infringement lawsuit. These exchanges are set forth in 42 U.S.C. §§ 262(*l*)(2) through (*l*)(5) and culminate in an "immediate patent infringement action" pursuant to 42 U.S.C. § 262(*l*)(6).

42. On December 4, 2017, Defendants, through their counsel, sent a letter to Amgen Inc. providing notice that the Hospira aBLA "was recently accepted for filing by FDA" and that "Pfizer intends to provide [Amgen Inc.], as the holder of BLA No. 103353 for filgrastim and the 'reference product sponsor,' a copy of the [Hospira aBLA]." Through its counsel, Amgen responded on December 8, 2017, designating outside counsel and in-house counsel to have access to the Hospira aBLA.

43. Under 42 U.S.C. § 262(*l*)(2)(A), Defendants were required to provide to Amgen Inc. "a copy of the application submitted to [the FDA] under subsection (k), and such other information that describes the process or processes used to manufacture the biological product that is the subject of such application."

44. On December 11, 2017, Defendants produced some sections of the Hospira aBLA to Amgen Inc. with a cover letter indicating that Defendants were providing "the full" Hospira aBLA.

45. Following a brief review of Defendants' December 11 production, counsel for Amgen Inc. suspected that Defendants had not produced their entire aBLA, and on December 12, 2017, counsel for Amgen Inc. asked Defendants' counsel to "confirm whether Pfizer has produced its entire ABLA, or whether it has redacted or withheld any portions of it."

Defendants' counsel responded on December 15, 2017 indicating that Amgen Inc. "should have the entire ABLA."

46. Following further review of Defendants' production, however, it was apparent to Amgen Inc. that Defendants had not produced the entirety of the Hospira aBLA. Amgen Inc. promptly brought this concern to Defendants' attention in a letter on December 21, 2017. In response, Defendants produced additional portions of the Hospira aBLA on December 22, 2017, and January 4, 2018, which Defendants characterized as a "few minor additional sections" of the Hospira aBLA that "were inadvertently not included with" Defendants' production on December 11, including "a couple minor items that were not included as part of module 1.1."

47. Yet, despite these repeated assurances that Defendants had produced a complete copy of the Hospira aBLA, and Defendants' supplemental productions of additional portions thereof, after continued review of Defendants' production, Amgen Inc. concluded that Defendants still had not produced numerous sections of the Hospira aBLA to Amgen Inc. In part, Amgen Inc. concluded that some sections were missing from the production because some of the missing sections were cross-referenced in the limited sections of the aBLA that Defendants had produced. Counsel for Amgen Inc. once again brought this failure to comply with § 262(*l*)(2)(A) to Defendants' attention in a letter dated January 30, 2018, which provided examples of numerous sections that were referenced in the Hospira aBLA, but had not been produced to Amgen Inc.

48. On February 13, 2018, over a week after the deadline for Amgen Inc. to serve its disclosure under § 262(*l*)(3)(A), Defendants responded to Amgen Inc.'s January 30, 2018 letter by producing additional documents that Defendants claimed "were inadvertently not included in [Defendants'] original production." This late production included over 70,000 additional pages

of the Hospira aBLA, far exceeding the approximately 10,000 pages that Defendants had previously produced.

49. Despite Defendants' deficient and/or untimely disclosure under § 262(*l*)(2)(A), Amgen Inc. has nevertheless engaged in the statutory process to the extent possible. On February 8, 2018, Amgen Inc. provided its disclosure under 42 U.S.C. § 262(*l*)(3)(A) to Defendants identifying six patents for which, based on the information Defendants had provided to date, Amgen Inc. believed a claim of patent infringement could reasonably be asserted if a person not licensed by Amgen Inc. engaged in the making, using, offering to sell, selling, or importing into the United States of the biological product that is the subject of the Hospira aBLA (as described in the portions of the Hospira aBLA provided to Amgen Inc. on December 11 and 22, 2017, and January 4, 2018).

50. On March 5, 2018, Amgen Inc. timely disclosed a newly-issued patent to Defendants under 42 U.S.C. § 262(*l*)(7).

51. On April 4, 2018, Defendants provided to Amgen Inc. a statement under 42 U.S.C. § 262(*l*)(3)(B)(ii)(I), and on June 1, 2018, Amgen Inc. provided to Defendants a statement under 42 U.S.C. § 262(*l*)(3)(C).

52. Beginning with a telephone conference on June 7, 2018, the parties engaged in a negotiation under 42 U.S.C. § 262(*l*)(4)(A), which requires the parties to engage in "good faith negotiations" in an effort to "agree on which, if any, patents . . . shall be the subject of an action for patent infringement under [42 U.S.C. § 262(*l*)(6)]."

53. After additional communications among counsel, on June 22, 2018, the parties agreed that only the '997 Patent would be the subject of an action for patent infringement under

42 U.S.C. § 262(*l*)(6). The parties reached this agreement within 15 days of beginning their negotiations under 42 U.S.C. § 262(*l*)(4)(A).

D. The Related 1064 Action

54. Amgen Inc. brought a Complaint in this District for patent infringement on July 18, 2018 ("the Related 1064 Action"), within 30 days of the parties reaching agreement that only the '997 Patent would be the subject of an action for patent infringement under 42 U.S.C. § 262(*l*)(6). The case number assigned to Related 1064 Action is No. 18-cv-1064-CFC and it remains pending in this District. The accused process in the Related 1064 Action and this action are the same: Defendants' FDA-approved process for purifying the filgrastim in its biosimilar NIVESTYM® product.

55. Following FDA's approval and Defendants' launch of the Hospira Filgrastim Biosimilar Product, *see generally infra* Section E, Amgen filed its First Amended and Supplemental Complaint on March 29, 2019 in the Related 1064 Action. No. 18-cv-1064-CFC, D.I. 49. In its First Amended and Supplemental Complaint, Amgen asserted that "Amgen Inc. has suffered lost profits of its NEUPOGEN® (filgrastim) product because of Defendants' infringing acts with respect to NIVESTYM™ (filgrastim-aafi), including sales of NEUPOGEN® (filgrastim) that would have been made by Plaintiffs—such as sales to and through Amgen Inc.'s wholly-owned subsidiary Amgen USA Inc.—that were either lost as a result of Defendants' infringement or were made at eroded prices because of Defendants' infringement." *Id.* ¶ 88.

56. On May 15, 2019, the Court held a claim construction hearing and issued an oral order construing certain claim terms of the '997 Patent. *See* No. 18-cv-1064-CFC, D.I. 64. The parties in the Related 1064 Action have completed fact discovery and expert discovery including for infringement, validity, and damages—except as to Defendants' on-sale and public use or knowledge defenses under 35 U.S.C. §§ 102(a) and (b). *See* No. 18-cv-1064-CFC, D.I. 129.

Under the current Scheduling Order, the parties are to complete such discovery by January 27, 2021. *Id.* In the Related 1064 Action, Defendants have deposed Roger Hart, named inventor of the '997 Patent and '392 Patent, and the parties have deposed numerous witnesses who have testified to the scientific, marketing, and other facts about Amgen's NEUPOGEN® and Defendants' NIVESTYM® products. *See* No. 18-cv-1064-CFC, D.I. 71-73, 75-80, 87-90, 119-125.

57. A five-day jury trial in the Related 1064 Action is scheduled for May 17, 2021. No. 18-cv-1064-CFC, D.I. 129.

E. Defendants Receive FDA Approval for and Launch NIVESTYM®

58. On July 20, 2018, Defendants received FDA approval for NIVESTYM® (filgrastim-aafi). Pfizer's Form 10-Q dated November 8, 2018 and filed with the U.S. Securities and Exchange Commission states: "Product: Nivestym (filgrastim-aafi); Indication: A biosimilar to Neupogen® (filgrastim) for all eligible indications of the reference product; Date Approved: July 2018." Exhibit 3, Pfizer's Form 10-Q, at 82; *see* Exhibit 2, "U.S. FDA Approves Pfizer's Biosimilar Nivestym™ (Filgrastim-aafi)" (July 20, 2018), https://www.pfizer.com/news/press-release/press-release-detail/u_s_fda_approves_pfizer_s_biosimilar_nivestym_filgrastim_aafi-0.

59. Pfizer stated in a press release the same day that "NIVESTYM is expected to be available in the U.S. at a significant discount to the current wholesale acquisition cost (WAC) of Neupogen." Exhibit 2.

60. Prior to launch, upon information and belief, Pfizer informed the Center for Biosimilars® that NIVESTYM®'s wholesale price would undercut Plaintiffs' wholesale price by more than 30%. Specifically, on or about October 3, 2018, in an email correspondence with the Center for Biosimilars®, Pfizer indicated that "Nivestym will be priced at a wholesale acquisition cost (WAC) of $350.40 per 480-mcg prefilled syringe, a WAC that is 30.3% lower than that of

the reference Neupogen, 20.3% lower than that of Zarxio (Sandoz's biosimilar filgrastim), and 14.1% lower than that of Granix (or tbo-filgrastim, Teva's follow-on filgrastim product cleared by the FDA prior to the establishment of a biosimilar approval pathway)." Exhibit 5, Kelly Davio, "Pfizer Launches Biosimilar Filgrastim, Nivestym, at a Substantial Discount," CTR. FOR BIOSIMILARS (Oct. 3, 2018), https://www.centerforbiosimilars.com/news/pfizer-launches-biosimilar-filgrastim-nivestym-at-a-substantial-discount; *see* Exhibit 6, Jessica Merrill, "Pfizer Launches Nivestym at an Aggressive Discount to Other Filgrastim Products," SCRIP (Oct. 2, 2018), https://scrip.pharmaintelligence.informa.com/SC123936/Pfizer-Launches-Nivestym-At-An-Aggressive-Discount-To-Other-Filgrastim-Products.

61. On or about July 24, 2018, on information and belief, Pfizer spokesperson Thomas Biegi stated that the launch of NIVESTYM® would "create competition." Exhibit 7, Flora Southey, "Pfizer challenges Amgen with fourth biosimilar approval in US," BIOPHARMA-REPORTER.COM (July 24, 2018), https://www.biopharma-reporter.com/Article/2018/07/24/Pfizer-challenges-Amgen-with-fourth-biosimilar-approval-in-US.

62. Defendants' public statements evidence both price erosion and Defendants' intent to cause price erosion by infringing the '392 Patent.

63. The actions of Pfizer and Hospira are evidence of Defendants' infringement, including without limitation Defendants' offering for sale, sale, and marketing of infringing products.

64. Defendants' infringement causes injury to Plaintiffs including without limitation as a result of Defendants' offering for sale, selling, and marketing infringing products.

65. At least by September 24, 2018, Defendants began to sell NIVESTYM® in the United States. FDA's National Drug Code Directory says that NIVESTYM®'s "Start Marketing

Date" is September 24, 2018. *See* Exhibit 4, FDA NAT'L DRUG CODE DIRECTORY SEARCH RESULTS FOR "NIVESTYM" (Mar. 20, 2019).

66. Upon information and belief, NIVESTYM® launched at a 30.3% discount to NEUPOGEN®'s wholesale acquisition cost. *See* Exhibit 6, Scrip, "Pfizer Launches Nivestym at an Aggressive Discount to Other Filgrastim Products" (Oct. 2, 2018).

67. There is a market and demand for filgrastim in the United States.

68. Plaintiffs are capable of meeting the demand for filgrastim in the United States.

69. NIVESTYM® (filgrastim-aafi) competes with Plaintiffs' innovative product, NEUPOGEN® (filgrastim) because NIVESTYM® (filgrastim-aafi) shares indications with NEUPOGEN® (filgrastim). The FDA label for NEUPOGEN® (filgrastim) states that "Neupogen is a leukocyte growth factor indicated to [d]ecrease the incidence of infection, as manifested by febrile neutropenia, in patients with nonmyeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a significant incidence of severe neutropenia with fever." *See* Exhibit 8 (FDA label for NEUPOGEN® (filgrastim)). Likewise, the FDA label for NIVESTYM® (filgrastim-aafi) states that "Nivestym is a leukocyte growth factor indicated to [d]ecrease the incidence of infection, as manifested by febrile neutropenia, in patients with nonmyeloid malignancies receiving myelosuppressive anti-cancer drugs associated with a significant incidence of severe neutropenia with fever." *See* Exhibit 9 (FDA label for NIVESTYM® (filgrastim-aafi)).

70. Including Plaintiffs and Defendants, there are very few suppliers of FDA-approved filgrastim product to consumers in the United States.

71. Defendants' sales of NIVESTYM® (filgrastim-aafi) are sales that, but for Defendants' infringement, would have been sales of NEUPOGEN® (filgrastim).

72. Additionally, Defendants' submission of the Hospira aBLA and related offers for sale or sales of NIVESTYM® (filgrastim-aafi) at prices below that of NEUPOGEN® (filgrastim) erode the price of NEUPOGEN® (filgrastim).

73. Defendants' submission of the Hospira aBLA and related sales and marketing of NIVESTYM® (filgrastim-aafi), including without limitation Pfizer's statements to the public such as the statements identified above and Defendants' confidential or non-confidential statements to market participants such as, without limitation, health care providers and formularies, cause Plaintiffs to lose sales of NEUPOGEN® (filgrastim) and erode the price of NEUPOGEN® (filgrastim), and Plaintiffs are entitled to recover lost profits to compensate for this damage.

74. But for Defendants' infringement, Plaintiffs would have made additional sales of its filgrastim product, NEUPOGEN® (filgrastim), and the price of NEUPOGEN® (filgrastim) would not have been eroded by competition with Defendants' substantially-lower-priced infringing NIVESTYM® product, including Defendants' submission of the Hospira aBLA and related sales and marketing of NIVESTYM®, for which Defendants did not shoulder any of the cost or burden of the years of research and development that Plaintiffs undertook to make NEUPOGEN® (filgrastim) available to patients and doctors.

75. The profits lost by Plaintiffs as a result of lost sales and price erosion caused by Defendants' infringement of the '392 Patent include at least the profits Plaintiffs would have made absent price erosion on sales of NEUPOGEN® (filgrastim) that were lost as a result of Defendants' infringement; the profits Plaintiffs would have made absent price erosion on Amgen Inc.'s own sales of NEUPOGEN® (filgrastim); and Plaintiffs' other lost profits resulting from Defendants' infringement.

F. Amgen's Supplement to its Paragraph 3(A) List Under 42 U.S.C. § 262(*l*)(7)

76. On March 3, 2020, the '392 Patent issued to Amgen Inc. Exhibit 1.

77. On March 11, 2020, pursuant to 42 U.S.C. § 262(*l*)(7), Amgen provided to Defendants a supplement to the list provided by Amgen under 42 U.S.C. § 262(*l*)(3)(A) that included the '392 Patent. Paragraph (*l*)(7) is entitled "Newly issued or licensed patents" and provides that for patents issued to Amgen after Amgen had provided its disclosure under paragraph 3(A) and for which Amgen "reasonably believes that, due to the issuance of such patent, a claim of patent infringement could reasonably be asserted" against Defendants for their aBLA, "not later than 30 days after such issuance or licensing, [Amgen] shall provide to [Pfizer] a supplement to the list provided by the reference product sponsor under paragraph (3)(A) that includes such patent . . . ."

78. Amgen timely provided its supplement under 42 U.S.C. § 262(*l*)(7) to Defendants not later than 30 days after the issuance of the '392 Patent.

79. Under 42 U.S.C. § 262(*l*)(7), "not later than 30 days after such supplement is provided, the subsection (k) applicant shall provide a statement to the reference product sponsor in accordance with paragraph (3)(B)."

80. Defendants failed to provide "a statement to [Amgen] in accordance with paragraph (3)(B)" by April 10, 2020, which is not later than 30 days after Amgen provided its March 11, 2020 supplement under Paragraph (*l*)(7). As of the filing date of this Complaint, Defendants have not provided "a statement to [Amgen] in accordance with paragraph (3)(B)" in response to Amgen's March 11, 2020 supplement.

81. 42 U.S.C. § 262(*l*)(9)(B) provides that:

(B) Subsequent failure to act by subsection (k) applicant

If a subsection (k) applicant fails to complete an action required of the subsection

> (k) applicant under paragraph (3)(B)(ii), paragraph (5), paragraph (6)(C)(i), paragraph (7), or paragraph (8)(A), the reference product sponsor, but not the subsection (k) applicant, may bring an action under section 2201 of Title 28 for a declaration of infringement, validity, or enforceability of any patent included in the list described in paragraph (3)(A), including as provided under paragraph (7).

THE PATENT-IN-SUIT

82. Amgen Inc. is the owner of all rights, title, and interest in U.S. Patent No. 10,577,392 ("the '392 Patent").

83. AML holds an exclusive license to the '392 Patent.

84. The '392 Patent is titled "Capture Purification Processes for Proteins Expressed in a Non-Mammalian System." The '392 Patent was duly and legally issued on March 3, 2020 by the United States Patent and Trademark Office. A true and correct copy of the '392 Patent is attached to this Complaint as Exhibit 1.

85. The '392 Patent is directed to a process for purifying proteins.

86. The '392 Patent issued from an application that is a continuation of the application that resulted in the '997 Patent being litigated in the Related 1064 Action.

87. The '392 Patent and the related '997 Patent share the same inventors and materially identical specifications.

CAUSES OF ACTION

FIRST COUNT
(INFRINGEMENT UNDER 35 U.S.C. § 271(e)(2)(C))

88. Plaintiffs incorporate by reference the foregoing paragraphs as if fully set forth herein.

89. On information and belief, Defendants sought FDA approval under the subsection (k) pathway to engage in the commercial manufacture, use, or sale of the Hospira Filgrastim

Biosimilar Product, a proposed biosimilar version of Amgen Inc.'s NEUPOGEN® (filgrastim) product.

90. Pursuant to 42 U.S.C. § 262(*l*)(7), Amgen Inc. timely included the '392 Patent on a March 11, 2020 supplement to its list provided under 42 U.S.C. § 262(*l*)(3)(A), provided within 30 days of the '392 Patent's issuance on March 3, 2020.

91. Defendants committed an act or acts of infringement with respect to the '392 Patent under 35 U.S.C. § 271(e)(2)(C)(i) when they caused Hospira to submit the Hospira aBLA for the purpose of obtaining FDA approval to engage in the commercial manufacture, use, or sale of the Hospira Filgrastim Biosimilar Product.

92. On information and belief, Defendants intended to manufacture, use, sell, and/or offer for sale within the United States, and/or import into the United States, the Hospira Filgrastim Biosimilar Product before the expiration of the '392 Patent.

93. Defendants have manufactured, used, sold, and/or offered for sale within the United States, and/or imported into the United States, the Hospira Filgrastim Biosimilar Product before the expiration of the '392 Patent.

94. The manufacture, use, sale, and/or offer for sale within the United States, and/or the importation into the United States, of the Hospira Filgrastim Biosimilar Product infringes at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(e)(2)(C).

95. Representative claim 22 of the ’392 Patent depends from claim 10 which recites:

> A method of purifying a protein expressed in a non-native limited solubility form in *E. coli.* comprising:
>
> (a) expressing a protein in a non-native limited solubility form in *E. coli;*
>
> (b) lysing the *E. coli;*
>
> (c) solubilizing the expressed protein in a solubilization solution comprising one or more of the following:
>
> (i) a denaturant;
>
> (ii) a reductant; and
>
> (iii) a surfactant;
>
> (d) forming a refold solution comprising the solubilized protein and a refold buffer, the refold buffer comprising one or more of the following:
>
> (i) a denaturant;
>
> (ii) an aggregation suppressor;
>
> (iii) a protein stabilizer; and
>
> (iv) a redox component;
>
> (e) applying the refold solution to a separation matrix under conditions suitable for the protein to associate with the separation matrix and obtaining a purified protein.

’392 Patent at 23:7-27. Claim 22 then recites:

> The method of claim **8** or **10**, wherein the separation matrix is: a non-affinity resin selected from the group consisting of: ion exchange, mixed mode, and a hydrophobic interaction resin.

Id. at 24:30-33.

96. On information and belief, the process by which Defendants manufacture the Hospira Filgrastim Biosimilar Product satisfies each limitation of at least Claim 22 of the ’392 Patent, literally or equivalently, under 35 U.S.C. § 271(e)(2)(C). With respect to the requirement that a protein is expressed in a non-native limited solubility form in *E. coli*, Defendants practice a process for purifying a protein expressed in a non-native limited solubility form in *E. coli*. With respect to the requirement of the “lysing” step, Defendants lyse the *E. coli* in the accused process. With respect to the requirement of the “solubilizing” step, in Defendants’ process, Defendants solubilize the protein in a solubilization solution comprising one or more of a

denaturant, reductant, and surfactant. With respect to the requirement of the "forming" step, in Defendants' process, Defendants form a refold solution comprising the solubilized protein and a refold buffer, the refold buffer comprising one or more of a denaturant, aggregation suppressor, protein stabilizer, and redox component. With respect to the requirement of the "applying" step, Defendants apply the refold solution to a separation matrix under conditions suitable for the protein to associate with the separation matrix and obtain a purified protein. With respect to the requirement that "the separation matrix is: a non-affinity resin," Defendants apply the refold solution to a separation matrix that is a non-affinity resin selected from the group consisting of: ion exchange, mixed mode, and a hydrophobic interaction resin.

97. Plaintiffs will be irreparably harmed if Defendants are not enjoined from infringing the '392 Patent. Plaintiffs do not have an adequate remedy at law and are entitled to injunctive relief preventing Defendants from any further infringement under 35 U.S.C. § 271(e)(4)(B).

98. The manufacture, use, offer for sale, or sale within the United States, or importation into the United States, of the Hospira Filgrastim Biosimilar Product before the expiration of the '392 Patent causes injury to Plaintiffs, entitling them to damages or other monetary relief under 35 U.S.C. § 271(e)(4)(C). For example, Amgen Inc. has suffered lost profits of its NEUPOGEN® (filgrastim) product because of Defendants' infringing acts with respect to NIVESTYM® (filgrastim-aafi), including sales of NEUPOGEN® (filgrastim) that would have been made by Plaintiffs—such as sales to and through Amgen Inc.'s wholly-owned subsidiary Amgen USA Inc.—that were either lost as a result of Defendants' infringement or were made at eroded prices because of Defendants' infringement. But for Defendants' infringement, Plaintiffs would not have suffered injury, entitling Plaintiffs to damages in the

form of lost profits resulting from at least diverted sales and price erosion, and in no event less than a reasonable royalty under 35 U.S.C. § 284.

SECOND COUNT
(INFRINGEMENT UNDER 35 U.S.C. § 271(g))

99. Plaintiffs incorporate by reference the foregoing paragraphs as if fully set forth herein.

100. Defendants sought FDA approval under the subsection (k) pathway to manufacture and sell the Hospira Filgrastim Biosimilar Product, a biosimilar version of Amgen Inc.'s NEUPOGEN® (filgrastim) product.

101. On information and belief, Defendants obtained approval to import into the United States, or offer to sell, sell, or use within the United States, the Hospira Filgrastim Biosimilar Product (NIVESTYM®) before the expiration of the '392 Patent.

102. Defendants have manufactured, used, sold, and/or offered for sale within the United States, and/or imported into the United States, the Hospira Filgrastim Biosimilar Product before the expiration of the '392 Patent.

103. The manufacture, use, sale, and/or offer for sale within the United States, and/or the importation into the United States, of the Hospira Filgrastim Biosimilar Product infringes at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(g). Specifically, Defendants' importation into the United States or offers to sell, sales, or uses within the United States of the Hospira Filgrastim Biosimilar Product which is made by a process patented in the United States has infringed and continues to infringe at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(g). Thus, Plaintiffs are entitled to judgment that Defendants have infringed at least Claim 22 of the '392 Patent, literally or

equivalently, by using, offering to sell, or selling within the United States, or importing into the United States the Hospira Filgrastim Biosimilar Product before the expiration of the ’392 Patent.

104. Plaintiffs will be irreparably harmed if Defendants are not enjoined from infringing the ’392 Patent. Plaintiffs do not have an adequate remedy at law and are entitled to injunctive relief under 35 U.S.C. § 283 prohibiting Defendants from making, using, offering to sell, or selling within the United States, or importing into the United States, the Hospira Filgrastim Biosimilar Product before the expiration of the ’392 Patent.

105. Defendants’ manufacture, use, offer for sale, or sale within the United States, or importation into the United States, of the Hospira Filgrastim Biosimilar Product before the expiration of the ’392 Patent causes injury to Plaintiffs, entitling them to damages under 35 U.S.C. § 284 or other monetary relief, including lost profits and at least a reasonable royalty. For example, Amgen Inc. suffers lost profits of its NEUPOGEN® (filgrastim) product because of Defendants’ infringing acts with respect to NIVESTYM® (filgrastim-aafi), including sales of NEUPOGEN® (filgrastim) that would have been made by Plaintiffs—such as sales to and through Amgen Inc.’s wholly-owned subsidiary Amgen USA Inc.—that were either lost as a result of Defendants’ infringement or were made at eroded prices because of Defendants’ infringement. But for Defendants’ infringement, Plaintiffs would not have suffered injury, entitling Plaintiffs to damages in the form of lost profits resulting from at least diverted sales and price erosion, and in no event less than a reasonable royalty under 35 U.S.C. § 284.

106. On information and belief, Defendants’ infringement of the ’392 Patent is exceptional and entitles Plaintiffs to attorneys’ fees and costs incurred in prosecuting this action in accordance with 35 U.S.C. § 285.

THIRD COUNT
(DECLARATORY JUDGMENT OF INFRINGEMENT)

107. Plaintiffs incorporate by reference the foregoing paragraphs as if fully set forth herein.

108. Pursuant to 42 U.S.C. § 262(*l*)(7), Amgen Inc. timely included the ’392 Patent on a March 11, 2020 supplement to its list provided under 42 U.S.C. § 262(*l*)(3)(A), provided within 30 days of the ’392 Patent’s issuance on March 3, 2020.

109. Defendants did not provide a “statement to [Amgen] in accordance with paragraph (3)(B)” by April 10, 2020, which is not later than 30 days after Amgen provided its March 11, 2020 supplement pursuant to 42 U.S.C. § 262(*l*)(7).

110. Because Defendants did not provide a “statement to [Amgen] in accordance with paragraph (3)(B)” “not later than 30 days after” Amgen provided its March 11, 2020 supplement, Defendants failed to complete an action required under 42 U.S.C. § 262(*l*)(7).

111. Under 42 U.S.C. § 262(*l*)(9)(B), Defendants’ failure to complete an action required of them under paragraph (7) means that Amgen, but not Defendants “may bring an action under section 2201 of title 28 for a declaration of infringement, validity, or enforceability” of the ’392 Patent which is a “patent included in the list described in paragraph (3)(A), including as provided under paragraph (7).”

112. An actual controversy has arisen and now exists between the parties concerning whether the Hospira Filgrastim Biosimilar Product infringes one or more claims of the ’392 Patent.

113. Amgen is entitled to a declaratory judgment pursuant to 28 U.S.C. § 2201 and 42 U.S.C. § 262(*l*)(9)(B) that Defendants have infringed at least one claim of the ’392 Patent, literally or equivalently, under 35 U.S.C. §§ 271(e)(2)(C)(i) and 271(g).

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court enter judgment in their favor against Defendants and grant the following relief:

A. A judgment that Defendants have infringed at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(e)(2)(C)(i);

B. A judgment that Defendants have infringed at least Claim 22 of the '392 Patent, literally or equivalently, under 35 U.S.C. § 271(g);

C. A declaratory judgment pursuant to 28 U.S.C. § 2201 and 42 U.S.C. § 262(*l*)(9)(B) that Defendants have infringed at least one claim of the '392 Patent, literally or equivalently, under 35 U.S.C. §§ 271(e)(2)(C)(i) and 271(g);

D. An order enjoining Defendants, their officers, partners, agents, servants, employees, attorneys, affiliates, divisions, subsidiaries, other related business entities, and those persons in active concert or participation with any of them, from infringing the '392 Patent, or contributing to or inducing anyone to do the same, including the manufacture, use, offer to sell, or sale within the United States, or importation into the United States, of any current or future versions of the Hospira Filgrastim Biosimilar Product, in accordance with 35 U.S.C. § 271(e)(4)(B) and 35 U.S.C. § 283;

E. A judgment compelling Defendants to pay to Plaintiffs damages adequate to compensate for Defendants' infringement or other monetary relief, in accordance with 35 U.S.C. § 271(e)(4)(C) and 35 U.S.C. § 284, in an amount to be ascertained at trial, including without limitation lost profits resulting from at least diverted sales and price erosion, and in no event less than a reasonable royalty;

F. A declaration that this is an exceptional case and awarding to Amgen its attorneys' fees and costs pursuant to 35 U.S.C. § 285; and

G. Such other relief as this Court may deem just and proper.

DEMAND FOR A JURY TRIAL

Amgen hereby demands a jury trial on all issues so triable.

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Dated: April 24, 2020

/s/ Robert W. Whetzel

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