

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

NIVAGEN PHARMACEUTICALS, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 24-846-GBW
	)	
AMNEAL PHARMACEUTICALS, INC.,	)	JURY TRIAL DEMANDED
AMNEAL PHARMACEUTICALS of	)	
NEW YORK, LLC, AMNEAL	)	
PHARMACEUTICALS LLC, AMNEAL	)	PUBLIC VERSION
PHARMACEUTICALS PVT LTD., and	)	
AMNEAL EU, LTD.	)	
	)	
Defendants.	)	

**NIVAGEN PHARMACEUTICALS, INC.’S OPENING BRIEF IN SUPPORT
OF ITS MOTION FOR A TEMPORARY RESTRAINING ORDER (TRO) AND
FOR A PRELIMINARY INJUNCTION (PI)**

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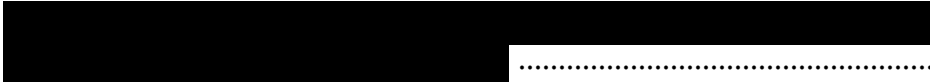
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I. INTRODUCTION

Plaintiff Nivagen Pharmaceuticals, Inc (“Nivagen”) submits this opening brief in support of its Motion for a Temporary Restraining Order and a Preliminary Injunction (“Motion”) pursuant to Fed. R. Civ. P. 65 to restrain and enjoin Defendants Amneal Pharmaceuticals, Inc., Amneal Pharmaceuticals of New York, LLC, Amneal Pharmaceuticals LLC, Amneal Pharmaceuticals Pvt Ltd., and Amneal EU, Ltd (collectively “Defendants” or “Amneal Defendants” or “Amneal” or individually as “Defendant”) from launching its infringing potassium ready-to-use product.

This is a declaratory judgment of patent infringement case. [REDACTED]

[REDACTED] Nivagen obtained two patents [REDACTED]. However, a competitor, the Amneal Defendants, ignored Nivagen’s patents, obtained FDA approval on an RTU injection product that is squarely covered by Nivagen’s patents, and are intending to imminently launch Amneal’s infringing product. If Amneal launches its infringing product, it will completely subvert Nivagen’s expectations based on its exclusive patent rights, render Nivagen’s investment nearly worthless, and prime the market detrimental [REDACTED]. Nivagen would be irreparably harmed. There is no automatic stay for FDA approval of Amneal’s product, unlike in typical Paragraph IV ANDA cases familiar to this Court. Therefore, Nivagen respectfully seeks emergency relief to restrain and enjoin Amneal from launching its infringing potassium phosphate RTU product (the “Amneal Product”),

II. SUMMARY OF ARGUMENT

1. Amneal’s launch of an infringing product would destroy the market [REDACTED] RTU potassium phosphates product. Temporary injunctive relief is warranted because all injunction factors favor Nivagen.

2. The Amneal Product infringes Nivagen’s patents. Nivagen asserts for this Motion three claims that cover stable, ready-to-use (“RTU”), low-aluminum potassium phosphates formulations. The Amneal Product is described in Amneal’s FDA-approved drug label, which shows exactly the formulations claimed by the asserted claims. The asserted patents are presumed valid, 35 U.S.C. § 282. Nivagen will address and rebut any validity challenge Amneal may raise.

3. Nivagen’s strong showing of infringement generates a presumption of irreparable harm, and notwithstanding Nivagen has shown irreparable harm. Unless temporary relief is granted, Nivagen will suffer both immediate and long-lasting, and irreparable harm in the form of lost market share, price erosion, loss of goodwill, wasted investment which would lead to severe financial hardship to Nivagen, operational difficulties including the loss of skilled management-level employees whom Nivagen is not likely to replace in the Sacramento, California job market, and severe harm to Nivagen’s future innovation and research-and-development efforts. Money damages cannot compensate Nivagen for these harms.

4. The balance of hardships favors equitable relief because the irreparable harm Nivagen will suffer absent temporary relief far outweighs the harm to Amneal that would result from maintaining the status quo. Unlike Nivagen, Amneal already sells its vial-form potassium phosphates injectable product and can continue to profit from it.

5. The public interest favors protecting rights secured by valid patents like these and promoting innovation. The public interest also favors a Sacramento-based company with manufacturing facilities in the U.S. The RTU product provides convenience to patients, but the patients can use the current vial-form products. No specialized patient group needs the RTU product.

III. STATEMENT OF FACTS

A.

[REDACTED]

Nivagen is a small pharmaceutical company located in Sacramento, California. (Declaration of Jay Shukla (“Shukla Decl.”), at ¶¶ 2, 38). [REDACTED]

[REDACTED] Nivagen solved important technical issues and started applying for patents in 2020, resulting in two patents [REDACTED]. (*Id.* at ¶ 2; D.I. 1-1, U.S. Patent Nos. 11,813,291 (the “’291 patent”) and U.S. Patent No. 11,925,661 (the “’661 patent”). Nivagen expects that by participating successfully in the U.S. patent system, the patent rights would exclude others from marketing in the U.S. a similar product, so that Nivagen could [REDACTED] (Shukla Decl. at ¶¶ 3-4).

B. Amneal Received FDA Approval for a Product that Infringes Nivagen’s Patents, and that Amneal Intends to Launch Immediately

On July 26, 2024, Amneal received FDA approval for an RTU potassium phosphates injection product. (D.I. 10-1, at Ex. D (FDA approval letter to Amneal)). Amneal quickly issued a press release, announcing that this was its “third 505(b)(2) injectable added this year – will launch in third quarter.” (D.I. 10-1, at Ex. F (Amneal 7/29/2024 press release)).

The Amneal Product is a sterile RTU diluted solution containing a mixture of monobasic potassium phosphate and dibasic potassium phosphate in 0.9% sodium chloride. (Amneal drug label, Ex. 3 to the Declaration of Dr. Rabinow (“Rabinow Decl.”), at 9). The FDA-approved label describes the Amneal Product in terms of phosphorus and potassium contents, its total volume, a limit on aluminum impurity, and intended pH value. (*Id.* at 3, 9-10). Dr. Rabinow, a chemist with extensive experience on injectable pharmaceutical formulations, compared the information on Amneal’s drug label with claims 3 and 13 of the ’661 patent and claim 11 of the ’291 patent, and

concluded that the Amneal Product infringes these claims. (Rabinow Decl. at ¶¶ 37-38, 43-44, 61-62).

C. Harm to Nivagen If Amneal Launches Its Product

Amneal will [REDACTED] in the incipient market for RTU potassium phosphates products. (Shukla Decl. at ¶¶ 3-5). Any premature launch by Amneal would cause loss of market share to Nivagen and irreversible price erosion. (*Id.* at ¶¶ 6-18). Nivagen will also suffer a loss of goodwill and its ability to hire and maintain a skilled workforce in the Sacramento area. (*Id.* at ¶¶ 19-22, 32-33). Nivagen has taken on debt, built a plant in Sacramento, California, [REDACTED], and hired new employees [REDACTED] (*Id.* at ¶¶ 26-28, 32, 34). [REDACTED] if Amneal is not in the market. (*Id.* at ¶ 7). If Amneal launches its infringing product, Nivagen expects that [REDACTED] [REDACTED] impair its operation, debt servicing, any future investments in R&D and innovation, any planned sales and marketing efforts for new products, and its ability to hire and retain skilled labor and create jobs in the U.S. (*Id.* at ¶¶ 28, 32-35, 37-44).

IV. LEGAL STANDARDS

A patentee seeking a temporary restraining order and/or preliminary injunction must establish that: (1) it is likely to succeed on the merits; (2) it is likely to suffer irreparable harm in the absence of preliminary relief; (3) the balance of equities tips in its favor; and (4) an injunction is in the public interest. *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008); *Takeda Pharms. USA, Inc. v. West-Ward Pharm. Corp.*, C.A. No. 14-1268-SLR, 2014 WL 5088690, at *1 (D. Del. Oct. 9, 2014) (“A request for a TRO is governed by the same general standards that govern the issuance of a preliminary injunction.”).

To show likelihood of success on the merits, a patentee must show: (1) it will likely prove infringement; and (2) its infringement claim will likely withstand challenges to the validity and

enforceability of the patents. *Natera, Inc. v. NeoGenomics Laboratories, Inc.*, 106 F.4th 1369, 1375 (Fed. Cir. 2024) (affirming grant of preliminary injunction). No claim construction is needed at this preliminary point. *Id.*

V. ARGUMENT

A. Nivagen Is Highly Likely to Succeed on the Merits

1. Nivagen Is Likely to Succeed in Proving Infringement

Nivagen is likely to succeed in proving infringement of at least claims 3 and 13 of the '661 patent and claim 11 of the '291 patent. Nivagen reserves all rights to assert additional claims.

Claim 3 of the '661 patent squarely covers the Amneal Product. This claim depends from claim 2 and requires that potassium phosphate monobasic is present in the solution in an amount between about 112 mg/100 ml and about 1120 mg/100 ml, and that potassium phosphate dibasic is present in the solution in an amount between about 118 mg/100 ml and about 1180 mg/100 ml. (Rabinow Decl. at ¶ 32). The Amneal Product contains 4.48 mg/ml of monobasic, which is 448 mg/100 ml, and 4.72 mg/ml of dibasic, which is 472 mg/100 ml. (*Id.*). These concentrations fall in the middle of the claimed ranges. (*Id.*).

Claim 2 of the '661 patent depends from claim 1, and requires the potassium phosphates comprise monobasic and dibasic at a molar ratio of about 0.7 to 1.3. (*Id.* at ¶ 33). In the Amneal Product, Dr. Rabinow calculated that the monobasic and dibasic amounts generate a molar ratio of 1.214, which again falls within the claimed range. (*Id.* at ¶ 33).

Claim 1 is independent. It requires “[a] sterile ready-to-use aqueous potassium solution, comprising potassium phosphates and sodium chloride, wherein the solution comprises between 1.5 mmol/100 ml and 15 mmol/100 ml phosphorous and equal or less than 50 mcg/L aluminum, and wherein the solution has a pH of between 6.2 and 6.8.” (*Id.* at ¶ 34). The Amneal drug label

states that the Amneal Product is a sterile, ready to use diluted solution. (*Id.*). The Amneal Product contains potassium phosphates and sodium chloride. (*Id.*). Each milliliter of the Amneal Product contains 0.06 mmol of phosphates, which equate phosphorous. (*Id.*). This amount is the same as 6.0 mmol/100 ml, falling within the claimed range. (*Id.*). The Amneal Product also contains no more than 25 mcg/L of aluminum, which meets the claim limit of “less than 50 mcg/L.” (*Id.*). Finally, the Amneal Product’s allowable pH range is 5.8-7.2, which centers on pH 6.5, the same as the claimed pH range of 6.2 to 6.8. (*Id.* at ¶¶ 35-36). According to Dr. Rabinow, “it is highly likely that the Amneal product it manufactures and sells in the U.S. market will have a pH value close to 6.5, well within the claimed pH range.” (*Id.* at ¶ 36).

Therefore, all limitations recited in claims 1, 2, and 3 are present in the Amneal Product. Claim 3 is literally infringed by the Amneal Product. (*Id.* at ¶¶ 37-38).

Claim 13 of the ’661 patent depends from claim 12, which in turn depends from claim 11. Compared to claim 3, claim 13 has similar claim limitations (but no pH range limitation), and claim 13 contains three additional limitations: a “flexible polymeric container,” “no more than about 22 mEq/100mL potassium,” and sodium chloride “in an amount of up to 900 mg/100 ml.” (Rabinow Decl., compare ¶ 38 with ¶ 44). The Amneal Product is supplied in an infusion bag which is a flexible polymeric container. (*Id.* at ¶ 42). Dr. Rabinow calculated that the product contains 8.8 mmol/100 ml of potassium, which is less than the 22 mEq/100mL recited in claim 13. (*Id.*). The product contains 900 mg/100 ml of sodium chloride, which is within the range claimed. (*Id.* at ¶ 40). Therefore, all claim limitations are met, and claim 13 is also infringed. (*Id.* at ¶¶ 43-44).

Claim 11 of the ’291 patent is also infringed. This claim covers a sterile RTU premixed pharmaceutical product stored in a flexible polymeric container that contains potassium

phosphates in an aqueous sodium chloride solution containing (a) less than 50 mcg/L aluminum, (b) about 15 mmol/100 ml phosphorus, and (c) about 22 mEq/100 mL potassium. (Rabinow Decl. at ¶ 62). The Amneal Product is a “sterile, RTU premixed pharmaceutical product that is stored in a flexible polymeric container.” (*Id.*). The product contains potassium phosphates in an aqueous sodium chloride solution and contains less than 50 mcg/L aluminum. (*Id.*).

Limitations (b) and (c) are met by the Doctrine of Equivalents. (*Id.* at ¶¶ 52-61). The Amneal Product contains the same amounts of phosphorus (15 mmol) and potassium (22 mEq) as these limitations require, but in 250 mL volume as opposed to 100 mL. (*See id.* at ¶ 62 (comparison)). However, as Dr. Rabinow explains, potassium phosphates for injection can be provided as a concentrate, and it is a well-known practice to dilute the concentrate before use to a volume that can range from 100 ml all the way to 250 ml. (*Id.* at ¶¶ 56-58). To support this assertion, Dr. Rabinow cited two marketed drug product labels and a compendium for pharmacists. (*Id.*). Therefore, for an RTU product that requires no dilution, a POSA would expect a volume ranging from 100 ml to 250 ml to be equivalent options. (*Id.* at ¶ 59). As Dr. Rabinow notes, if more volume is employed, it “not only is substantially the same amount of potassium and phosphates delivered to the patient, it is exactly the same, simply in more aqueous solution.” (*Id.*). It has the same function (dilution of the potassium and phosphates) achieved in substantially the same way (dilution in an amount that a POSA would understand is appropriate) and achieves the same result (delivering the identical amounts of potassium and phosphates to a patient).

The Amneal Product also infringes claim 11 of the '291 patent under the “insubstantially different” version of the DOE test. The higher volume (250 ml) in the Amneal Product has the same purpose of the claimed 100 ml volume: dilution. (*Id.* at ¶ 60). The additional volume does not make any meaningful qualitative difference. (*Id.*). The additional normal saline as a diluent

does not affect how the active ingredients are delivered to the bloodstream of a patient. (*Id.*). This would be clearly understood by the POSA to be equivalent.

As such, Nivagen is highly likely to prevail in proving the Amneal Product infringes the '661 and '291 patents.

2. Nivagen Is Likely to Succeed in Showing that the Patents-in-Suit Are Not Invalid

Nivagen is also likely to succeed on the merits on any patent invalidity allegations. Patents are presumed valid, 35 U.S.C. § 282, and Amneal's burden to show a substantial question of invalidity is very high. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1359 (Fed. Cir. 2001). Nivagen is not aware of any arguments against the validity of the asserted patents.

B. Nivagen Will Suffer Irreparable Harm Without Injunctive Relief

1. A Preliminary Injunction Should Be Granted Based on a Presumption of Irreparable Harm

In a preliminary injunctive relief analysis, irreparable harm should be presumed when the patentee makes a strong showing of likelihood of success on the merits. In *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006), the Supreme Court rejected the presumption in the context of a **permanent** injunction in a patent action. Since then, however, regarding a **preliminary** injunction, the Federal Circuit has held: "[eBay] does not swing the pendulum in the opposite direction. In other words, even though a successful patent infringement plaintiff can no longer rely on presumptions or other shortcuts to support a request for a permanent injunction, it does not follow that courts should entirely ignore the fundamental nature of patents as property rights granting the owner the right to exclude." *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148-50 (Fed. Cir. 2011).

Indeed, post-*eBay*, courts in this Circuit still hold the presumption of irreparable harm applicable to granting preliminary injunctions. *Eisai Co., Ltd v. Teva Pharmaceuticals USA, Inc.*,

2008 WL 1722098, at *10 (D.N.J. Mar. 28, 2008) (refusing to read *eBay* as overruling the presumption of harm for a preliminary injunction); *E.I. du Pont de Nemours & Co. v. MacDermid, Inc.*, 2007 WL 2332161 (D.N.J. Aug. 13, 2007), vacated on other grounds, 525 F.3d 1353 (Fed. Cir. 2008) (“The Court should presume that a patent holder will be irreparably harmed if such holder ‘establishes a strong showing of likely infringement of a valid and enforceable patent.’”); *Ortho-McNeil Pharmaceutical, Inc. v. Mylan Laboratories Inc.*, 2006 WL 3019689 (D.N.J. Oct. 23, 2006) (applying a presumption of irreparable harm in granting the patentee a preliminary injunction enjoining the defendant’s sale of a generic version of the patentee’s drug).

District courts outside of this Circuit have also found the presumption to be intact in the context of a preliminary injunction. *BorgWarner, Inc. v. Dorman Products, Inc.*, 2009 WL 4885009, at *5 (E.D. Mich. Dec. 11, 2009) (“In patent cases where the plaintiff has shown a likelihood of success on the merits, irreparable harm is presumed”); *Powell v. Home Depot U.S.A., Inc.*, 2009 WL 3855174, at *13–*14 (S.D. Fla. Nov. 17, 2009) (commenting that the presumption for preliminary injunctions in patent cases survived *eBay*); *Elantech Devices Corp. v. Synaptics, Inc.*, 2008 WL 1734748, at *9 (N.D. Cal. Apr. 14, 2008) (applying a presumption of irreparable harm in granting a preliminary injunction); *Warrior Sports, Inc. v. STX, L.L.C.*, 2008 WL 783768, at *11 (E.D. Mich. Mar. 19, 2008) (same); *Adalis Corp. v. Forbo Adhesives, LLC*, 2007 WL 673764 (M.D. N.C. Feb. 27, 2007) (same).

Because Nivagen has made a strong showing of likelihood of success on the merits, a presumption of irreparable harm should apply here, and Amneal should be enjoined from launching its infringing RTU potassium phosphates product.

2. Nivagen Will Suffer Irreparable Harm If Amneal Is Not Enjoined

Notwithstanding any presumption, Amneal’s prospective launch of an infringing product into the same commercial space will have significant and irreparable consequences for Nivagen

and Nivagen's market position. This harm is difficult to quantify and therefore not compensable through damages, making injunctive relief necessary to prevent irreparable harm. *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1368 (Fed. Cir. 2017).

As detailed in the First Amended Complaint, Amneal's launch of their infringing product is imminent. Amneal's infringing product described in NDA No. 21-8343 was recently approved by the FDA on July 26, 2024. (Ex. D to D.I. 10; D.I. 10, ¶ 41). Amneal issued a press release on July 29, 2024 that stated, among other things, that its infringing product "will launch in third quarter." (D.I. 10, ¶ 41; Ex. F to D.I. 10). Generally, the third quarter of 2024 is understood to be the months of July, August, and September. Therefore, Amneal has issued a public statement that it will launch its infringing product within the next two months. (*Id.*). This launch is therefore imminent, and if it is not enjoined, Nivagen will suffer irreparable harm.

As explained below, and as supported by the Declaration of Jay Shukla, the Founder, President, and CEO of Nivagen Pharmaceuticals, Inc., if Amneal were allowed to disrupt the status quo and introduce into the market infringing versions of [REDACTED], Nivagen would be irreparably harmed by suffering loss of market share [REDACTED], irreversible price erosion, loss of goodwill, loss of investment, difficulties in hiring and retaining key employees, and a severe negative impact on Nivagen's future innovation and research and development.

These harms are intensely magnified because Nivagen's patents issued less than a year ago. The '291 Patent issued on November 14, 2023, and the '661 Patent issued on March 12, 2024. (D.I. 1-1). Thus, Nivagen's rights to exclude competitors from the market are only just beginning. If an unlicensed competitor is allowed on the market now, it ruins and renders meaningless nearly

the full term of the patent exclusivity that Nivagen earned and deserves from disclosing its innovations to the public.

a. Amneal's Launch Will Cause Nivagen to Lose Market Share and Even Lock Nivagen out of the Market Altogether

Amneal's infringing product would [REDACTED] [REDACTED] (Shukla Decl. at ¶¶ 3-6, 9). As explained above, Amneal's [REDACTED] commercial embodiments of Nivagen's patents. There is a direct and causal connection between Amneal's infringement and the irreparable harms Nivagen will suffer. "Where two companies compete against each other, the patentee suffers the harm—often irreparable—of being forced to compete against products that incorporate and infringe its own patented inventions." *Evonik Degussa GmbH v. Materia, Inc.*, C.A. No. 09-636-NLH/JS, 2017 WL 3434156, at *2 (D. Del. Aug. 10, 2017); *see also Presidio Components, Inc. v. Am. Tech. Ceramics Corp.*, 702 F.3d 1351, 1363 (Fed. Cir. 2012).

[REDACTED] will undoubtedly cause Nivagen to lose substantial market share, resulting in [REDACTED]. (Shukla Decl. at ¶¶ 7-25). Nivagen [REDACTED] [REDACTED] but the extent of the loss is not calculable. (*Id.* at ¶¶ 11, 13-14). As Mr. Shukla explains, the direct purchasers of [REDACTED] would tend to be major purchasing consortiums that negotiate long-term contracts, and Amneal is marketing to the [REDACTED]. (*Id.* at ¶¶ 10, 13). With these customers, a first entrant can lock up key contracts quickly, for "at least 12-24 months," essentially shutting out a second entrant from the market for a long time. (*Id.* at ¶¶ 13-14, 18). Furthermore, such long-term contracts typically contain a right-of-first-refusal clause, which would make a later entry into the market [REDACTED] [REDACTED] or not possible at all. (*Id.* at ¶ 15).

This harm of being locked out of the market could last even longer than the term of Amneal's supply contracts with major purchasers because the first entrant to the market gains unique advantages. The buyers would enter Amneal's product codes into their computer systems. (Shukla Decl., at ¶ 17). If Amneal is allowed to enter the market now but is later forced to withdraw, upon Amneal's exit from the market, customers may continue to use Amneal's [REDACTED] [REDACTED] product code because it takes time for such codes and databases to be updated. (*Id.*). This would cause further harm to Nivagen.

Amneal's uncontrolled and unrestrained launch would deprive Nivagen from all of Nivagen's well-laid plans and business expectations, unfairly robbing Nivagen of its market share. It is well established that lost market share is irreparable harm, particularly where, as here, Nivagen "would be forced to compete against a rival gaining market share with [Nivagen's] technology." *E.I. DuPont de Nemours & Co. v. Unifrax I LLC*, C.A. No. 14- 1250-RGA, 2017 WL 4004419, at *5 (D. Del. Sept. 12, 2017), *aff'd sub nom. E.I. du Pont De Nemours & Co. v. Unifrax I LLC*, 921 F.3d 1060 (Fed. Cir. 2019). Nivagen's patents only just issued and Amneal would unfairly rob Nivagen of a significant portion of the patent life—this harm is irreparable. *See, e.g., Systemation, Inc. v. Engel Indus., Inc.*, 194 F.3d 1331, 1999 WL 129640, at *6 (Fed. Cir. 1999) (affirming preliminary injunction and holding that "los[s of] sales to a direct competitor" evinces irreparable harm); *see also Edwards Lifesciences AG v. CoreValve, Inc.*, C.A. No. 08-91 (GMS), 2014 WL 1493187, at *5 (D. Del. Apr. 15, 2014) ("There can be no doubt that loss of market share, sales, and business opportunities constitutes irreparable harm.").

As of today, the market [REDACTED] has not yet been established. The current version of the potassium phosphates injection is a vial-form that requires a series of preparatory steps before it can be injected to patients. (Shukla Decl. at ¶ 6). Nivagen,

the innovator, expects [REDACTED] (*Id.* at ¶¶ 3-4). Ordinarily, in pharmaceutical cases brought under the Hatch-Waxman Act, there is a “30-month stay” that blocks FDA approval of a near-identical and competing product, allowing the innovator company to enjoy market exclusivity during the patent litigation. Here, however, Nivagen must move for injunctive relief, lest Amneal, the patent infringer, [REDACTED]. Given the market is yet to be established [REDACTED] and not calculable, Nivagen stands to lose significant market share, [REDACTED] that should be protected by its patents. Nivagen’s loss cannot be recovered simply by economic damages. This factor strongly supports a preliminary injunction.

b. Amneal’s Launch Will Cause Irreversible Price Erosion

Nivagen will also be irreparably harmed by Amneal’s entry into the market due to irreversible price erosion. *See Sanofi-synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1382 (Fed. Cir. 2006) (finding price erosion a basis for irreparable harm and affirming preliminary injunction). If Amneal is allowed to launch now, [REDACTED] [REDACTED]. (Shukla Decl. at ¶¶ 10-16). Major purchasers for such hospital-used products tend to include a “right of first refusal” clause in their long-term contracts with the suppliers. (*Id.* at ¶ 15). If Amneal has already negotiated such a contract [REDACTED] [REDACTED] (*Id.*). However, [REDACTED] [REDACTED]. The market, once primed by a lower price, could reject such price increase. (*Id.* at 16). For example, customers who are used to a lower price for the new RTU product could switch back to the current vial-form products despite the latter being more cumbersome to use. (*Id.* at ¶¶ 19, 46). This would further harm Nivagen because it does not even market a vial-form potassium phosphate, unlike Amneal, which

does. (*Id.* at ¶¶ 20, 25, 47). If the specialized RTU market is primed by Amneal’s entry, followed by a switch back to the vial-form products upon Amneal’s withdrawal, it is realistic to expect that

_____ (*Id.* at ¶ 25).

The Federal Circuit has held that “[c]ompetitors change the marketplace The market is rarely the same when a market of multiple sellers is suddenly converted to one with a single seller by legal fiat. Requiring purchasers to pay higher prices after years of paying lower prices to infringers is not a reliable business option.” *Polymer Technologies, Inc. v. Bridwell*, 103 F.3d 970, 975-76 (Fed. Cir. 1996). This type of price erosion constitutes irreparable harm. *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1382 (Fed. Cir. 2006) (finding irreparable harm where “Sanofi has been forced to offer discounted rates and price concessions to third-party payors” after generic launch); *M/A-COM Tech. Sols. Holdings, Inc. v. Laird Techs., Inc.*, C.A. No. 14-181-LPS, 2014 WL 2727198, at *7 (D. Del. June 13, 2014).

c. Amneal’s Product Launch Will Cause Nivagen to Lose Goodwill and Ability to Recoup Its Investment

Nivagen spent several years and significant resources to develop its patented technology. (Shukla Decl. at ¶ 2). Nivagen built an FDA-approved, cGMP manufacturing facility in California,

_____ This facility _____

_____ (*Id.* at ¶ 39). Nivagen’s investment will be wasted and the plant will be underutilized, or even sit idle, if Amneal is allowed to raid and decimate the RTU market. (*Id.* at ¶ 28).

In connection to the new plant, Nivagen has already _____ . (*Id.* at ¶ 21).

Amneal’s unwarranted launch of an infringing product will force Nivagen to reduce Nivagen’s sales expectations, lay off employees, and postpone the on-boarding of new-hires. (*Id.* at ¶ 32).

Once highly skilled employees are laid off, it is unlikely that Nivagen can hire them back as they are in high demand and likely to leave the Sacramento area. (*Id.*). Any uncertainty about Nivagen's [REDACTED] or news of layoffs would cause Nivagen severe reputational harm and difficulties in future hiring. (*Id.* at ¶¶ 32-33). Such news would unsettle and distract not only the existing workforce, but also the community at large, from which Nivagen draws many of its workers. (*Id.* at ¶ 33).

There is also a reputational harm to Nivagen and ensuing loss of goodwill if prescribers obtain the Amneal Product first, then the Amneal Product is removed from the market, [REDACTED] (Id. at ¶¶ 21-22). This sequence of events will cause confusion in the marketplace as prescribers are left to speculate [REDACTED] (Id. at ¶ 21). Customers may believe that the [REDACTED] a drug shortage or infer a sense of negative quality to [REDACTED] (Id. at ¶ 22). Such loss of reputation and goodwill cannot be quantified.

Furthermore, Nivagen would suffer [REDACTED] the new facility and the R&D of the [REDACTED]. (Id. at ¶ 34). A loss [REDACTED] would negatively affect Nivagen's ability to operate. (Id. at ¶ 35). This harm is also incalculable.

d. Amneal's Launch Will Prevent Further R&D and Innovation

Amneal's product launch, and the resulting loss [REDACTED], will jeopardize Nivagen's ability to make significant investments into future innovation, and thwart Nivagen's plan to grow as an innovator pharmaceutical company. (Shukla Decl. at ¶¶ 37-38). These harms to research investments are difficult to quantify and thus irreparable.

Nivagen is a small pharmaceutical company, and [REDACTED] in coming years, which will contribute significantly to Nivagen's R&D budget. (*Id.* at ¶¶ 7, 38-39). As discussed above, a launch of infringing products by Amneal will cut into Nivagen's market share, imposing severe downward price pressure, which is likely to be irreversible even if Nivagen were to obtain a favorable ruling on the merits and force Amneal off the market after-the-fact. If Amneal is not enjoined now, by the time Nivagen can prove infringement at trial and remove it from the market years from now, Nivagen will be facing untenable choices. Either Nivagen will have to [REDACTED] at a very low price that the market has become used to, thereby [REDACTED] its future R&D efforts or even to recoup its investment and keep the new facility operational, or Nivagen will have to try to [REDACTED] if Amneal had never entered the RTU market, but in that case risking incurring [REDACTED].

In summary, as set forth in detail above and supported by the Shukla Declaration, any launch of the infringing product by Amneal, even for a short time, would fundamentally alter customers' pricing expectations and negotiating positions. Accordingly, the harm to Nivagen from such a launch would be palpable, severe, and irreversible. [REDACTED], even if just for a limited time, would have a substantial adverse financial impact on Nivagen starting from a loss of market share, [REDACTED] and irreversibly deflated prices. The resulting [REDACTED] would impair Nivagen's investments in R&D, its planned sales and marketing efforts for new products, and its ability to pay the skilled labor it already hired and to create new jobs in the U.S.

3. The Balance of Equities Favors Nivagen

The severe and irreparable harm Nivagen will suffer far outweighs the harm to Amneal that may result if temporary relief is granted. Being forced to compete with your own invention is a well-recognized harm weighing in favor of an injunction. *See Metalcraft*, 848 F.3d at 1369. The same is true of losing revenue to fund further research and development by a patentee, which is a hardship favoring injunction. *M/A-COM Tech.*, 2014 WL 2727198, at *5. [REDACTED] will be highly detrimental to Nivagen's R&D capabilities and its ability to hire and retain skilled employees for future innovations. (Shukla Decl. at ¶¶ 7, 32-33, 37-41).

Granting this Motion will cause Amneal minimal hardship because Amneal has not yet launched its RTU product, and Nivagen is merely asking to maintain the status quo. *See Impax Labs, Inc. v. Aventis Pharm., Inc.*, 235 F. Supp. 2d 390, 396 (D. Del. 2002) (finding a preliminary injunction will cause only minimal hardship to a generic pharmaceutical company because it would be in the same position as it was before the injunction was granted). Amneal also markets a vial-form potassium phosphates product and can continue to do so. (Shukla Decl. at ¶ 47).

Furthermore, it is inequitable to disadvantage an American company that has dutifully invested resources into U.S.-based R&D and manufacturing, created U.S. jobs, incurred the risk of building a higher cost facility in the U.S., incurred [REDACTED] its U.S. facility, and participated in the U.S. patent system. (*Id.* at ¶¶ 2-4, 26-35). On the other hand, Amneal manufactures its product in Mehsana, India. (Ex. 3 to Rabinow Decl., at 11). Amneal takes advantage of low-cost Indian manufacturing by creating Indian jobs.

4. The Public Interest Supports Injunctive Relief

Granting injunctive relief will also serve the public interest, for multiple reasons. First, “there is a strong public interest in protecting valid patents[.]” *The Research Found. of State Univ. of New York v. Mylan Pharm. Inc.*, 723 F. Supp. 2d 638, 663 (D. Del. 2010). Nivagen invested significant time and resources to [REDACTED], and then additional millions of dollars to build its U.S.-based facilities in California that ensure high quality U.S.-based supply of pharmaceutical products. (Shukla Decl. at ¶¶ 2-4, 26-30, 34). Granting injunctive relief serves the public interest in protecting the resulting patents. *See, e.g., Douglas Dynamics*, 717 F.3d at 1345; *Celsis In Vitro*, 664 F.3d at 930-32 (affirming preliminary injunction where public interest would be adversely affected by taking market benefits away from the innovator patentee).

Second, while Amneal might [REDACTED] offering lower prices, “the public interest in obtaining lower-priced pharmaceutical compounds cannot justify entirely eliminating the exclusionary rights covered by pharmaceutical patents.” *Mylan Institutional LLC v. Aurobindo Pharma Ltd.*, 857 F.3d 858, 865 (Fed. Cir. 2017) (internal quotations omitted). Lower prices in this case would also come with a price: manufacturing injectable products in India is cheaper but also replete with quality issues, which can even cause shortage. (Shukla Decl. at ¶ 30). Nivagen’s R&D activity and manufacturing capacity in the U.S. can address drug shortages caused by subpar manufacturing standards. (*Id.*). Furthermore, [REDACTED] [REDACTED] Nivagen’s made-in-the-USA products can be sold to the U.S. government. (*Id.* at ¶¶ 26, 31).

Third, patients in need of potassium phosphates injection products will not be harmed by an injunction. The RTU products are more convenient to use than the current vial-form products, but there is no specialized patient population that needs the RTU version as opposed to the vial-

form. (*Id.* at ¶¶ 6, 46). The market for all populations can be served by the existing vial-form products. (*Id.* at ¶¶ 19, 46).

Finally, [REDACTED]

Amneal's potential launch of an infringing product would also likely lead to employee layoffs or delayed employment, causing harm to the individuals involved, and in affected communities in the Sacramento area. (*Id.* at ¶¶ 7, 32-33).

VI. CONCLUSION

For the reasons stated herein, Nivagen respectfully requests that the Court grant this Motion for a Temporary Restraining Order and a Preliminary Injunction. In the alternative, Nivagen respectfully requests that the Court enter a Temporary Restraining Order to enjoin Amneal from launching the Amneal Product until the Court enters a decision on Nivagen's request for a Preliminary Injunction. Nivagen also respectfully requests an opportunity to supplement this opening brief once discovery related to preliminary injunction proceedings is completed.

Respectfully submitted,

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