EXHIBIT 25

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

AMGEN INC.,	)	
	)	
Plaintiff,	)	
	)	Civil Action No.: 05 Civ. 12237 WGY
v.	)	
	)	
F. HOFFMANN-LA ROCHE LTD, ROCHE DIAGNOSTICS GMBH, AND HOFFMANN LA ROCHE INC.,	)	
	)	
Defendants.	)	

AMGEN'S OPPOSITION TO DEFENDANTS' MOTIONS TO DISMISS FOR LACK OF PERSONAL JURISDICTION (AND ALTERNATIVE REQUEST FOR LEAVE TO TAKE JURISDICTIONAL DISCOVERY)

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I. INTRODUCTION

In this action, Amgen seeks a declaratory judgment that the importation, use, offer for sale and sale in the United States of the Defendants' "CERA" drug product containing recombinant human EPO (to which the Defendants have attached a biologically inert polymer called "polyethylene glycol," or "PEG") will infringe certain claims in six Amgen patents.[1]

Last November, it appeared that Defendants were completing their clinical tests of PEG-EPO and would soon seek approval from the FDA to market the product in the United States. Amgen filed this action against those Roche companies that had been publicly identified as manufacturing, importing and administering PEG-EPO to patients in the United States, including in Massachusetts. Based on Defendants' public descriptions of their PEG-EPO product and its reported effects on patients, Amgen believes that the importation, use, and sale of PEG-EPO by those companies will infringe Amgen's patents.

Amgen named Roche Diagnostics GmbH ("Roche Germany") as a defendant because Roche Germany purchased a recombinant human EPO-producing cell line from a Massachusetts-based company, Genetics Institute, and has been using those cells to produce recombinant human EPO ever since, and the publicly available evidence indicated that Roche Germany was adding PEG to the recombinant human EPO produced by those cells and shipping that PEG-EPO to the United States (this latter fact has now been confirmed by the Defendants in their motions to dismiss). Amgen named Hoffmann La Roche, Inc. ("Roche US"), a company in New Jersey, as a defendant because Roche US identifies itself as the "U.S. prescription drug unit of the Roche Group," *i.e.*, the company that distributes the Roche Group's pharmaceutical products in the U.S., and it was reasonable to believe that this included PEG-EPO (this has also now been

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[1] The Roche defendants have referred to this "pegylated" EPO product at various times as "CERA," "Ro50-3821," and/or "R744"; it is referred to herein as "PEG-EPO" or "pegylated EPO."

confirmed by the Defendants in their motions). Amgen named F. Hoffmann-La Roche Ltd. ("Roche Switzerland"), a Swiss company, as a defendant because Roche Switzerland serves as the organizational unit for the Roche Group's pharmaceutical operations and had publicly identified itself as the sponsor of Roche's clinical trials in which PEG-EPO was being administered to patients in the United States (including in Massachusetts).[2]

Roche Switzerland and Roche Germany (collectively "the foreign Roche defendants") have moved to dismiss this action under Fed. R. Civ. P. 12(b)(2) for lack of personal jurisdiction. In their motion papers,[3] the foreign Roche defendants claim to have had very little contact with Massachusetts. But the public record, and the admissions by the foreign Roche defendants in their motion papers, contradict that assertion. As noted above, Roche Germany (which was formerly known as Boehringer Mannheim GmbH) has been transacting business involving recombinant human EPO (and cell lines that produce that EPO) under development and licensing agreements with Genetics Institute, a company headquartered in Massachusetts, since the early 1980's. In the mid-1980's, Genetics Institute transferred substantial amounts of recombinant human EPO, as well as the cell lines that produce that EPO, to Roche Germany, and over the years, Roche Germany has produced recombinant human EPO using those cells and has paid Genetics Institute more than $100 million under those agreements.

The public record also indicates (and the Defendants now admit) that the PEG-EPO that Roche Germany has been manufacturing and shipping into the United States for the last several years has been administered to patients in Massachusetts. And both of the foreign Roche

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[2] Amgen is concurrently filing a First Amended Complaint to reflect the fact that on April 19, 2006, the Defendants filed a Biologic License Application ("BLA") with the FDA seeking approval to market their PEG-EPO product, but believes that the foreign Roche defendants were subject to personal jurisdiction in Massachusetts as of the filing date of the original Complaint (November 8, 2005).

[3] Docket Nos. 39 and 40 (the "Roche Switzerland Memo" and "Roche Germany Memo," respectively).

defendants admit that they have contracts with Massachusetts companies, that Roche Switzerland sponsors clinical trials for experimental drugs in Massachusetts, and that both Defendants regularly send their employees into Massachusetts for business purposes (indeed, on the last page of its memorandum, Roche Switzerland admits that at least ***137*** of its employees came to Massachusetts ***in 2005 alone*** to conduct such business).

Amgen need only make a *prima facie* showing that defendants are subject to personal jurisdiction to defeat the instant motions to dismiss. Here, the public record and the admissions by the foreign Roche defendants regarding their contacts with Massachusetts are sufficient to satisfy this *prima facie* requirement for both specific and general personal jurisdiction. Both of the foreign Roche defendants have conducted substantial, regular, and systematic activities in Massachusetts, and much of that activity is related to the recombinant human EPO that is the basis for the current cause of action.[4]

II. ARGUMENT

Because the foreign Roche defendants have challenged personal jurisdiction, Amgen bears the burden of establishing that they are subject to personal jurisdiction in this Court.[5] In a patent case such as this, the law of the Federal Circuit applies in resolving such motions.[6] The

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[4] Alternatively, if the Court believes that the facts currently of record are not sufficient to determine that the foreign Roche defendants are subject to personal jurisdiction here, Amgen requests that it be granted leave to take discovery from the Defendants to supplement that record. The motion papers raise many questions about the scope and purpose of their business activities in Massachusetts, and those questions cannot currently be answered because the foreign Roche defendants have not been forthcoming in disclosing their contacts with Massachusetts. Amgen should be permitted to pursue jurisdictional discovery so as to provide this Court with a complete factual record.

[5] *Daynard v. Ness, Motley, Loadholt, Richardson & Poole, P.A.*, 284 F. Supp. 2d 204, 211 (D. Mass. 2003) (Young, C.J.).

[6] *Deprenyl Animal Health, Inc. v. Univ. of Toronto Innov. Found.*, 297 F.3d 1343, 1348 (Fed. Cir. 2002). In their motion papers, Defendants rely on a series of First Circuit cases to support their claims for lack of personal jurisdiction. *See, e.g.*, Roche Switzerland Memo at pp. 9-13 and Roche Germany Memo at pp. 5-14. Defendants' reliance on First Circuit law is misplaced given that Federal Circuit law applies to motions to dismiss for lack of personal jurisdiction in patent cases. *Hildebrand v. Steck Mfg. Company,*

Federal Circuit applies a "*prima facie*" test to such motions, whereby "a plaintiff need only to make a *prima facie* showing that defendants are subject to personal jurisdiction."[7]

A. The legal standards for personal jurisdiction

A two-prong inquiry governs whether this Court may properly exercise personal jurisdiction over the foreign Roche defendants. First, each Defendant must be amenable to process in Massachusetts. Second, the Court's exercise of personal jurisdiction over the Defendant must comply with the requirements of federal Due Process as delineated in *International Shoe Co.*[8] and its progeny.[9] Alternatively, because Amgen's claims against the foreign Roche defendants arise under federal law,[10] if either defendant is beyond the jurisdictional reach of any single state, this Court may nevertheless exercise jurisdiction over that defendant if its contacts with the nation as a whole are sufficient to satisfy Due Process.[11]

1. Amenability to service of process

Service of process in a federal action is governed generally by Fed. R. Civ. P. 4. A defendant is amenable to service if it "could be subjected to the jurisdiction of a court of general jurisdiction in the state in which the district is located."[12] As the Federal Circuit has explained, "[s]atisfaction of this standard may be attained in a variety of ways."[13]

Inc., 279 F.3d 1351, 1354 (Fed. Cir. 2002) ("We apply Federal Circuit law to determine whether the district court properly exercised personal jurisdiction over out-of-state defendants in patent infringement cases."); *Electronics For Imaging, Inc. v. Coyle*, 340 F.3d 1344, 1348 (Fed. Cir. 2003) (finding that the district court erred by applying Ninth Circuit law to a motion under Fed. R. Civ. P. 12(b)(2) in a declaratory judgment action brought against an out-of-state patentee).

[7] *Elecs. For Imaging, Inc. v. Coyle*, 340 F.3d 1344, 1349 (Fed. Cir. 2003).

[8] *International Shoe Co. v. Washington*, 326 U.S. 310 (1945).

[9] *LSI Indus. Inc. v. Hubbell Lighting, Inc.*, 232 F.3d 1369, 1371 (Fed. Cir. 2000).

[10] The Patent Act, 35 U.S.C. § 1 *et seq.*

[11] *See* Fed. R. Civ. P. 4(k)(2); *Cochran Consulting, Inc. v. Uwatec USA, Inc.*, 102 F.3d 1224, 1232 (Fed. Cir. 1996); *U.S. v. Swiss American Bank, Ltd.*, 116 F. Supp. 2d 217, 220 (D. Mass. 2000) (Young, C.J.).

[12] Fed. R. Civ. P. 4(k)(1)(A).

[13] *LSI Indus.*, 232 F.3d at 1371.

Massachusetts has at least two different statutes under which an out-of-state defendant may be amenable to service of process: a "doing business" statute[14] and a "long arm" statute.[15] Section 38, the "doing business" statute, allows service of process on out-of-state defendants who "engage in" or "solicit" business in Massachusetts:

> In an action against **a foreign corporation**, except an insurance company, which has a usual place of business in the commonwealth, or with or without such usual place of business, **is engaged in or soliciting business in the commonwealth,** permanently or temporarily, service may be made in accordance with the preceding section relative to service on domestic corporations in general, instead of upon the state secretary under section 15.10 of subdivision A of Part 15 of chapter 156D.[16]

For service to be proper under section 38, the defendant's business activities must "affect the commerce of Massachusetts substantially."[17] The cause of action need not relate to the defendant's activities in Massachusetts.[18]

A defendant may also be amenable to process, and thus subject to "specific" personal jurisdiction, under the Massachusetts "long-arm" statute, which allows service of process on out-of-state defendants for causes of action arising from in-state business activity:

> A court may exercise personal jurisdiction over a person, who acts directly or by an agent, as to a cause of action in law or equity arising from the person's

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[14] Mass. Gen. Laws Ann., ch. 223, § 38.

[15] Mass. Gen. Laws Ann., ch. 223A, § 3.

[16] Mass. Gen. Laws. Ann., ch. 223, § 38 (emphases added). The "preceding section," § 37, provides: "In an action against a domestic corporation other than one mentioned in the preceding paragraph, service shall be made upon the president, treasurer, clerk, resident agent appointed pursuant to section 49 of chapter 156D, cashier, secretary, agent or other officer in charge of its business, or, if no such officer is found within the county, upon any member of the corporation." Mass. Gen. Laws. Ann., ch. 223, § 37.

[17] *Walsh v. National Seating Co., Inc.*, 411 F. Supp. 564, 574 (D. Mass. 1976).

[18] *Id.* at 575 ("where the activities of the corporation had a sufficiently substantial impact on the Commonwealth, the connection between the cause of action and the activities need not be present"); *Campbell v. Frontier Fishing & Hunting, Ltd.*, 405 N.E.2d 989, 991 (Mass. App. 1980) ("The fact that the cause of action arose in Canada does not defeat Massachusetts' claim to personal jurisdiction of Frontier under § 38, because this statute 'does not restrict service on resident agents of foreign corporations to causes of action arising within the Commonwealth.'" (quoting *Trojan Eng'g Corp. v. Green Mountain Power Corp.*, 200 N.E. 117, 120 (Mass. 1936)).

(a) transacting any business in this commonwealth; . . . .[19]

This Court need not, however, look solely at whether the literal requirements of the Massachusetts long-arm statute have been met. Because the foreign Roche defendants have not challenged whether they could have been properly served under the long-arm statute or § 38, and instead rest their motions on constitutional Due Process, the inquiry here turns on whether exercise of specific personal jurisdiction is consistent with Due Process.[20]

2. Due Process

Federal Due Process requires that a defendant have certain "minimum contacts" with Massachusetts such that litigating the suit here does not offend "traditional notions of fair play and substantial justice."[21] A defendant is subject to ***general*** personal jurisdiction in a forum where it has "continuous and systematic general business contacts."[22] In such a forum, a suit may be brought against a defendant "even when the cause of action has no relation to those contacts."[23] General personal jurisdiction rests on the facts of each particular case.[24]

In contrast, the Federal Circuit's Due Process test for ***specific*** personal jurisdiction in a

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[19] Mass. Gen. Laws Ann., ch. 223A, § 3. Despite the subsequent enactment of the Massachusetts long-arm statute, "Section 38 is independently viable and has not been supplanted by [the long-arm statute]." *Campbell,* 405 N.E.2d at 990. *See also* 16 James W. Moore, *Moore's Federal Practice* § 108.61 (3d ed. 2005).

[20] *Trintec Indus., Inc. v. Pedre Promotional Prods., Inc.*, 395 F.3d 1275, 1279 (Fed. Cir. 2005); *Elecs. For Imaging*, 340 F.3d at 1349-50; *Akro Corp. v. Luker*, 45 F.3d 1541, 1544 (Fed. Cir. 1995); *Freedom Wireless, Inc. v. Boston Commun. Grp., Inc.* 218 F. Supp. 2d 19, 23 (D. Mass. 2002) ("[B]ecause the Massachusetts Supreme Judicial Court has interpreted the state's long-arm statute as coextensive with the limits of due process, it is possible to "sidestep the statutory inquiry and proceed directly to the constitutional analysis."), quoting *Daynard v. Ness*, 290 F.3d 42, 52 (1st Cir. 2002); *Moldflow Corp. v. Simcon, Inc.*, 296 F. Supp. 2d 34, 39 (D. Mass. 2003) (same); *Cognex Corp. v. Lemelson Med., Educ. & Research Found., L.P.*, 67 F. Supp. 2d 5, 7 (D. Mass. 1999) (same).

[21] *International Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945).

[22] *Helicopteros Nacionales de Colombia, S.A. v. Hall*, 466 U.S. 408, 416 (1984).

[23] *LSI Indus. Inc. v. Hubbell Lighting, Inc.*, 232 F.3d 1369, 1375 (Fed. Cir. 2000).

[24] *Id.* ("Neither the United States Supreme Court nor this court has outlined a specific test to follow when analyzing whether a defendant's activities within a state are 'continuous and systematic.' Instead, a court must look at the facts of each case to make such a determination.").

patent case is a three-prong test: (1) the defendant must have "purposefully directed" activities at the forum, (2) the claim must arise from or relate to those activities, and (3) the assertion of personal jurisdiction is not unreasonable and unfair.[25] A defendant has "purposefully directed" its activities to a forum state when it "deliberately has engaged in significant activities within a State, or has created continuing obligations between himself and residents of the forum."[26] "[E]ven a single act can support [specific] jurisdiction," so long as it creates a "substantial connection" with the forum, as opposed to an "attenuated affiliation."[27] If the plaintiff makes a *prima facie* showing of minimum contacts under the first two prongs of the test, the burden switches to the defendant to "present a compelling case that that the presence of some other considerations would render jurisdiction unreasonable."[28]

B. The foreign Roche defendants are subject to specific personal jurisdiction in Massachusetts

The activities of the foreign Roche defendants regarding the distribution and use of their recombinant human EPO product in Massachusetts are sufficient to satisfy the Due Process requirements for specific personal jurisdiction.

1. Roche Germany

Roche Germany is a German corporation with its headquarters in Mannheim, Germany and production facilities in Mannheim and Penzberg, Germany.[29] It is a wholly owned subsidiary of Roche Deutschland Holding GmbH, another German corporation, which is a wholly-owned subsidiary of F. Hoffmann-La Roche AG (located in Basel, Switzerland), which is itself a

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[25] *3D Systems, Inc. v. Aarotech Labs., Inc.*, 160 F.3d 1373, 1378 (Fed. Cir. 1998).
[26] Burger King Corp. v. Rudzewicz, 471 U.S. 462, 476 (1985).
[27] Burger King Corp. v. Rudzewicz, 471 U.S. at 475 & n. 18.
[28] *Akro Corp. v. Luker*, 45 F.3d 1541, 1546 (Fed. Cir. 1995), quoting *Burger King*, 471 U.S. at 477.
[29] *See* Roche Germany Memo at p. 3.

wholly-owned subsidiary of Roche Holding AG (also located in Basel, Switzerland).[30]

Roche Germany admits that it manufactures the pegylated recombinant human EPO that is the subject of this action, that it ships its PEG-EPO to the United States, and that its PEG-EPO is administered to patients in Massachusetts.[31]

Roche Germany and its declarant, Mr. Meisiek, also admit that "Roche Germany currently maintains a limited number of contracts with partners in Massachusetts" that are "all either licensing or research and development agreements pertaining to diagnostics or pharmaceuticals."[32] What Roche Germany and Mr. Meisiek don't tell this Court, but which was revealed in the *Trustees of Columbia University v. Roche Diagnostics GmbH* case[33] (a patent infringement case filed in 1993 that went to trial before Judge Gertner in 2001), is that among these "contracts with partners in Massachusetts" were several agreements[34] with Genetics Institute, Inc. (a company headquartered in Cambridge, Massachusetts) under which Genetics Institute transferred recombinant human EPO,[35] cell lines that produce that recombinant human EPO[36] and related know-how, and a license to patents directed to such technology, to Boehringer

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[30] *See* Declaration of Michael R. Gottfried, Esq. submitted herewith (hereinafter "Gottfried Decl."), Exh. A.

[31] *See* Roche Germany Memo at p. 4. Moreover, the results of Roche's preclinical studies on PEG-EPO were presented at scientific conferences in the United States by Roche scientists employed in Mannheim and Penzberg (*i.e.*, presumably employees of Roche Germany. *See* Gottfried Decl., Exh. L.

[32] Declaration of Martin Meisiek for Defendant Roche Diagnostics GmbH (Docket No. 47) at ¶ 14; Roche Germany Memo at pp. 1, 4.

[33] The Trustees of Columbia University in the City of New York v. Roche Diagnostics GmbH (formerly known as Boehringer Mannheim GmbH), Civ. No. 93-11512 NG (D. Mass.).

[34] *See* Gottfried Decl., Exh. B at pp. 780 and 782 and Exh. C at pp. 1026-27, 1042-45, and 1050-51 (Roche Germany entered into an initial licensing and development agreement with Genetics Institute in 1985 and supplemental agreements in 1988, 1991, and 1996).

[35] *See* Gottfried Decl., Exh. B at pp. 741-742, 743 and 746 and Exh. C at pp. 1043-44 (Genetics Institute shipped bulk human recombinant EPO to Roche Germany in November 1985 and from 1988-1991, which Roche Germany then used in clinical trials or sold).

[36] These were referred to as the "DN2-3α3" cell line. *See* Gottfried Decl., Exh. B at pp. 734-35 ("On March 4, 1986, GI transferred to Roche the EPO production clone DN2-3alpha3. DN2-3alpha3 is the only production clone used by Roche to make EPO for sale."), 743, 767, 791, and 805.

Mannheim GmbH, which later became Roche Germany.[37]

Over the subsequent years, Roche Germany has used those cell lines and know-how at its production facilities in Germany to produce the Defendants' second-best-selling drug,[38] a recombinant human EPO product generically known as "epoetin beta" that is sold in Europe and other non-U.S. markets as a pharmaceutical composition called NeoRecormon.[39] Roche Germany has paid Genetics Institute more than $100 million under those agreements.[40] The public record indicates that Roche Germany uses those same cells and methods to produce the "epoetin beta" contained in the Defendants' PEG-EPO product that is being administered to patients in Massachusetts and is accused of infringing Amgen's patents in this action.[41] Consequently, the current cause of action certainly relates to Roche Germany's purposeful contacts with Massachusetts (*i.e.*, its entry into and performance under the agreements with Massachusetts-based Genetics Institute and its use of the cell lines obtained from Genetics Institute to produce the product accused of infringement here).

Roche Germany's challenge to specific jurisdiction is based on its assertion that it has "no control over where the U.S. Defendant, [Roche US], distributes [PEG-EPO]."[42] However, the touchstone of the specific jurisdiction analysis regarding this issue is whether Roche Germany should have reasonably expected that the PEG-EPO would be used in Massachusetts,

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[37] *See* Gottfried Decl., Exh. C at pp. 996-997 and 1005 and Exh. D.

[38] *See* Gottfried Decl., Exh. E at p. 8 (showing NeoRecormon sales at 2.25 billion Swiss Francs, making it Roche's second-best-selling drug).

[39] *See* Gottfried Decl., Exh. F (a finding by the European Agency for the Evaluation of Medicinal Products that NeoRecormon is epoetin beta, a recombinant human EPO).

[40] *See* Gottfried Decl., Exh. B at pp. 796-799 and 814 (Roche Germany paid Genetics Institute more than $100 million dollars for EPO made by Genetics Institute and as royalties on the resale of that EPO).

[41] *See* Gottfried Decl., Exh. G (showing that medical institutions around the U.S. (including the National Cancer Institute and the Dana-Farber Cancer Institute) define the Defendants' PEG-EPO product ("Ro50-3821") as "methoxypolyethylene glycol epoetin beta").

[42] Roche Germany Memo at p. 13.

such that it would have fair warning that its activities might subject it to litigation in this forum.[43] It is inconceivable that Roche Germany would not have known from the beginning that the PEG-EPO it has been shipping to its partner Roche US in New Jersey was destined for use in clinical trials being conducted in various States, including Massachusetts. At most, Roche Germany would only have had to look on the Roche Switzerland website to determine that its PEG-EPO product was being sent into Massachusetts and administered to Massachusetts residents.

Roche Germany has engaged in substantial activities within Massachusetts that are directly related to the current cause of action. This is sufficient to satisfy the Federal Circuit's test for specific jurisdiction.

2. Roche Switzerland

The Defendants filed for approval to administer PEG-EPO to patients in the U.S. in 2001.[44] On their website (www.roche-trials.com/patient/studies/drugplst_RO0503821.html), the Defendants identify eleven PEG-EPO clinical trials conducted in Massachusetts, beginning in 2002.[45] On the website, Roche Switzerland is identified as the "sponsor" for such trials, *i.e.*, the company that "takes responsibility for and initiates [the] clinical investigation."[46] When the data from these PEG-EPO clinical trials was presented to the medical community, representatives from Roche Switzerland came to the U.S. to present the data,[47] and last week, the Defendants

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[43] *World-Wide Volkswagen Corp. v. Woodson*, 100 S.Ct. 559, 567 (1980) (adopting the "stream-of-commerce" theory); *Beverly Hills Fan Co. v. Royal Sovereign Corp.*, 21 F.3d 1558, 1565 (Fed. Cir. 1994) (adopting the stream-of-commerce test for specific jurisdiction in patent cases).

[44] *See* Declaration of Iris Kingma-Johnson in Support of [the Roche Defendants'] Motion to Dismiss for Lack of Subject Matter Jurisdiction and Failure to State a Claim for Which Relief May Be Granted (Dkt. No. 46) at ¶¶ 5-7 ("In order to begin clinical trials . . . the drug's sponsor must file an 'investigational new drug application' or 'IND' for approval to administer the drug to humans. Once an IND is approved, clinical trials may begin. . . . . The IND for use of CERA in patients . . . was filed in the United States on December 4, 2001.").

[45] *See* Gottfried Decl., Exh. H (identifying seven such trials in Boston and four in Springfield).

[46] *Id.* and 21 C.F.R. § 312.3(b).

[47] *See* Gottfried Decl., Exh. I.

collectively told this Court that they had filed "their" Biologic License Application ("BLA") for the PEG-EPO product.[48]

It is inconceivable that the PEG-EPO clinical trials in Massachusetts could have been initiated and conducted without contracts and substantial payments between the sponsor and the physicians in Massachusetts who recruited the patients for the studies and administered the PEG-EPO to those patients. These EPO-related activities in Massachusetts constitute substantial activity purposefully directed toward Massachusetts that is directly related to Amgen's cause of action here and renders Roche Switzerland subject to specific personal jurisdiction under the Federal Circuit test.[49]

C. The foreign Roche defendants are subject to general personal jurisdiction in Massachusetts

On a *prima facie* basis, the foreign Roche defendants have sufficient contacts with Massachusetts to justify this Court's exercise of general personal jurisdiction over them. In combination with their PEG-EPO-related activities in Massachusetts, the foreign Roche defendants' admitted presence in Massachusetts and their regular and systematic business contacts with Massachusetts companies substantially affect Massachusetts commerce, thus satisfying the requirement for general jurisdiction.

Defendants' motions to dismiss for lack of personal jurisdiction rest on their assertions that they do "not have substantial or 'continuous and systematic' contacts with Massachusetts."[50]

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[48] *See* Docket No. 51, the "Supplemental Declaration of Howard Suh, Esq. in Support of Defendants' Motion [sic: Motions] to Dismiss . . . ," which states "In Defendants' Memorandum in Support of their Motion To Dismiss, Defendants' [sic] informed the Court that ***their*** Biologics License Application ('BLA') for ***their*** product, CERA . . . , was expected to be filed with the U.S. Food and Drug Administration ('FDA') this month. . . . By this declaration, Defendants inform the Court that they have submitted ***their*** BLA to the FDA on April 19, 2006 . . . ." (emphases added).

[49] *3D Systems, Inc. v. Aarotech Labs., Inc.*, 160 F.3d 1373, 1378 (Fed. Cir. 1998).

[50] Roche Switzerland Memo at p. 3; Roche Germany Memo at p. 3.

The facts of record contradict these assertions.

1. Roche Switzerland

Roche Switzerland has continuous and systematic contacts with Massachusetts. On the last page its memorandum, Roche Switzerland reluctantly admits that during last year alone, 137 of its employees came to Massachusetts for the express business purpose of "evaluat[ing] potential technology for future licensing."[51] Roche Switzerland also admits that it has a "number of clinical trials sponsorships and licensing agreements with Massachusetts partners."[52] Because Roche Switzerland chose to reveal so little to this Court about the nature and number of these contracts and agreements, one can assume that they must be substantial.

Roche Switzerland states unequivocally that "[n]o Massachusetts court has ever exercised jurisdiction over Roche Switzerland."[53] Yet Roche Switzerland was a defendant in a Massachusetts state court as recently as four years ago, in which the court found that Roche Switzerland and the other defendants were "doing business" in Massachusetts, and Roche Switzerland agreed not to have the court consider any challenge to personal jurisdiction.[54]

Thus, at the very least, Roche Switzerland has entered into contracts with Massachusetts entities (*e.g.*, doctors, clinics and hospitals) to engage in clinical trials where Massachusetts residents are subjected to Roche Switzerland's experimental drugs, and regularly sends hundreds of its employees into Massachusetts to evaluate business opportunities and to solicit and enter into licensing agreements and other contracts with Massachusetts companies (and presumably

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[51] Roche Switzerland Memo at p. 14.

[52] Roche Switzerland Memo at p. 4.

[53] Roche Switzerland Memo at p. 4.

[54] *Ciardi v. F. Hoffmann-La Roche, Ltd.*, 436 Mass. 53, 55, 762 N.E.2d 303, 306 (Mass. 2002) ("Several defendants also sought to dismiss the plaintiff's complaint for lack of personal jurisdiction . . . . These motions were not addressed by the judge pursuant to agreement by the parties. . . . The defendants, who dominate international markets for vitamin products, are foreign corporations doing business in the Commonwealth of Massachusetts.").

was and is exchanging payments with those companies). Roche Switzerland chose not to disclose the number and extent of those contacts with Massachusetts, but its vague admissions are enough to show that it has been "engaged in or soliciting business in the Commonwealth, permanently or temporarily," and its business activities "affect the commerce of Massachusetts substantially," rendering it subject to general personal jurisdiction in Massachusetts under Mass. Gen. Laws Ann., ch. 223, § 38.[55] Based on the public record and its admissions in its motion papers, Roche Switzerland's contacts with Massachusetts constitute the kind of "continuous and systematic" contacts sufficient to justify the exercise of general personal jurisdiction under Federal Due Process.

2. Roche Germany

Roche Germany has similarly been "engaged in or soliciting business in the Commonwealth, permanently or temporarily," and has the continuous and systematic business contacts with Massachusetts to justify general personal jurisdiction. Roche Germany and its declarant, Mr. Meisiek, admit that "Roche Germany currently maintains a limited number of contracts with partners in Massachusetts" that are "all either licensing or research and development agreements pertaining to diagnostics or pharmaceuticals."[56] Roche Germany describes its business connections with Massachusetts as amounting to "one unsubstantial physical contact," but admits that this "one contact" involves "intermittent visitation by various employees to the U.S., including Massachusetts . . . to evaluate potential licensing and research co-operations."[57]

Roche Germany states that it has "neither sued nor been sued in Massachusetts in over a

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[55] *Walsh v. National Seating Co., Inc.*, 411 F. Supp. 564, 574 and 575 (D. Mass. 1976).
[56] Meisiek Declaration (Docket No. 47) at ¶ 14; Roche Germany Memo at p. 4.
[57] Roche Germany Memo at p. 4.

decade."[58] But in the *Columbia University v. Roche Diagnostics GmbH* case,[59] a patent infringement case transferred to this Court from the Southern District of New York, Roche Germany appeared as the defendant and filed an Amended Answer in 2001 in which it admitted that it "is transacting business in this district."[60]

Just as has Roche Switzerland, Roche Germany has apparently been sending its employees into Massachusetts to solicit and enter into licensing and research-and-development contracts with Massachusetts companies. Indeed, Roche Germany admitted as recently as 2001 that it was transacting business in Massachusetts. Roche Germany has thus been "engaged in or soliciting business in the Commonwealth, permanently or temporarily," rendering it amenable to service of process under Mass. Gen. Laws. Ann., ch. 223, § 38, and its contacts with Massachusetts constitute the kind of continuous and systematic contacts sufficient to justify the exercise of general personal jurisdiction.[61]

D. The exercise of personal jurisdiction over the foreign Roche defendants would not be unreasonable or unfair

Amgen has made a *prima facie* showing of minimum contacts under the first two prongs of the Federal Circuit Due Process test. Therefore, to avoid jurisdiction, the foreign Roche defendants "must present a compelling case that the presence of some other considerations

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[58] Roche Germany Memo at p. 4.

[59] The Trustees of Columbia University in the City of New York v. Roche Diagnostics GmbH (formerly known as Boehringer Mannheim GmbH), Civ. No. 93-11512 NG (D. Mass.).

[60] *See* Gottfried Decl., Exh. J at ¶ 3.

[61] The foreign Roche defendants attempt a favorable contrast of their own contacts with Massachusetts against the defendant bank's contacts in *U.S. v. Swiss American Bank, Ltd.*, 274 F.3d 610 (1st Cir. 2001), in which the 1st Circuit affirmed this Court's denial of jurisdiction, asserting that "[t]his very Court has recently denied jurisdiction on such a motion where the defendant had far more contacts with the forum state than the instant defendant." Roche Germany Memo at p. 5; Roche Switzerland Memo at p. 5. But Defendants' characterization of the *Swiss American* defendant as having contacts "with the forum state" is somewhat misleading; in that case, this Court was not analyzing the defendant's contacts with Massachusetts or any other State; it was analyzing the defendant's contacts with the United States as a whole. *Swiss American*, 274 F.3d at 619-620.

would render jurisdiction unreasonable."[62] This they cannot do.

The constitutional reasonableness analysis involves the following factors: (1) the burden on the Roche defendants to litigate in this Court; (2) the interests of the people of Massachusetts in resolving this dispute; (3) Amgen's interest in obtaining relief; (4) the interstate judicial system's interest in obtaining the most efficient resolution of this controversy; and (5) the shared interest of the several States in furthering fundamental substantive social policies.[63]

This Court's exercise of jurisdiction over the foreign Roche defendants is reasonable and fair. First, because they are foreign companies, the burden on the foreign Roche defendants of litigating this action here is no more than if the action were litigated in any other District.[64] This factor does not weigh against exercising jurisdiction here.

Second, Massachusetts has an interest in having this action resolved here. The purpose of this declaratory judgment action is to determine whether the Defendants' imminent marketing, sale, and use of PEG-EPO will infringe Amgen's patents-in-suit. Massachusetts, just like any other state in which the Roche defendants will market and sell their PEG-EPO product, has an interest in preventing infringing activity. Moreover, although it is not a Massachusetts company, Amgen has a substantial presence in Massachusetts through its research facility in Cambridge.[65] Consequently, this factor is either neutral or slightly favors jurisdiction.

Third, Amgen has a distinct interest in obtaining convenient relief in this Court. This

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[62] *Akro Corp.*, 45 F.3d at 1546, quoting *Burger King*, 471 U.S. at 477; *Elecs. For Imaging*, 340 F.3d at 1350.

[63] *Inamed Corp. v. Kuzmak*, 249 F.3d 1356, 1363 (Fed. Cir. 2001). *See also Beverly Hills Fan*, 21 F.3d at 1568 (a defendant can defeat otherwise constitutional personal jurisdiction only in "the rare situation in which the plaintiff's interest and the state's interest in adjudicating the dispute in the forum are so attenuated that they are clearly outweighed by the burden of subjecting the defendant to litigation within the forum.").

[64] *See Pritzker v. Yari*, 42 F.3d 53, 62 (1st Cir. 1994) ("this factor is only meaningful where a party can demonstrate some kind of special or unusual burden").

[65] *See* Gottfried Decl., Exh. K.

Court is very familiar with Dr. Lin's inventions, the patents-in-suit, their claims, and their prosecution histories, and with some or all of the potential attacks on those patents that the Roche defendants may bring in this action. Consequently, litigating this action here is likely to be more streamlined and thus less expensive for Amgen. This factor favors jurisdiction.

Fourth, the interstate judicial system's interest in obtaining the most efficient resolution of this controversy is best satisfied in this Court, for much the same reasons as stated above for the third factor. The Roche defendants argue that this factor weighs against jurisdiction because Amgen "may still have its day in court against the U.S. Defendant, which does not dispute personal jurisdiction."[66] This argument misses the point. Given this Court's familiarity with the patents-in-suit and the technology involved, it will be more efficient for this Court to hear this action than it would be for any other District Court to do so, thus advancing the interstate judicial system's interest in the most efficient resolution. This factor thus favors exercising jurisdiction.

Fifth, litigating this action in this Court furthers "the shared interests of the several States in furthering fundamental substantive social policies."[67] The foreign Roche defendants argue that exercising jurisdiction over them will "have a chilling effect on future business dealings in the United States . . . by international businesses."[68] This argument is vacuous. Foreign companies that ship experimental drugs into the United States with the knowledge that they will be administered to residents of a given State should expect to be subject to the jurisdiction of the courts of that State. Every State has an interest in protecting its residents through its judicial system against the various harms that can result from the use of such foreign-made products, especially experimental drugs. This social policy far outweighs any hypothetical "chilling" effect

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[66] Roche Switzerland Memo at p. 11.
[67] *Burger King*, 417 U.S. at 477.
[68] Roche Switzerland Memo p. 12.

that might occur by subjecting the foreign Roche defendants to jurisdiction in this Court.

The foreign Roche defendants are both subject to service of process in Massachusetts, and the exercise of jurisdiction over them comports with the constitutional requirements of Due Process. Consequently, this Court should deny their motions to dismiss.

III. ALTERNATIVELY, AMGEN SHOULD BE GRANTED LEAVE TO TAKE JURISDICTIONAL DISCOVERY

In the First Circuit, a plaintiff confronted with a motion to dismiss for lack of personal jurisdiction will ordinarily be afforded the opportunity to conduct jurisdictional discovery.[69] As the First Circuit has said, "[w]hen the fish is identified, and the question is whether it is in the pond, we know no reason to deny a plaintiff the customary license."[70]

A. The current record establishes at least a colorable case that the foreign Roche defendants are subject to personal jurisdiction

As discussed above, Amgen has identified evidence in the public domain and the Defendants have admitted facts in their motion papers that collectively establish more than a colorable case that the foreign Roche defendants are subject to specific and/or general personal jurisdiction in this Court. Amgen is thus entitled to jurisdictional discovery.[71] Consequently, if the Court believes that the facts of record are insufficient to deny the motions to dismiss, Amgen should be granted leave to take jurisdictional discovery to create a complete factual record on

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[69] *See U.S. v. Swiss American Bank, Ltd.*, 191 F.3d 30, 45-46 (1st Cir. 1999) ("A timely and properly supported request for jurisdictional discovery merits solicitous attention."); *U.S. v. Swiss American Bank, Ltd.*, 274 F.3d 610, 625 (1st Cir. 2001) ("We have long held that 'a diligent plaintiff who sues an out-of-state corporation and who makes out a colorable case for the existence of *in personam* jurisdiction *may* well be entitled to a modicum of jurisdictional discovery if the corporation interposes a jurisdictional defense.'") (quoting *Sunview Condominium Ass'n v. Flexel Int'l, Ltd.*, 116 F.3d 962, 964 (1st Cir. 1997)); *Boit v. Gar-Tec Prods., Inc.*, 967 F.2d 671, 680-81 (1st Cir. 1992) ("The Boits underestimate their own ability and burden to create a record that supports their jurisdictional allegations. The Boits could have requested that the court allow discovery on the limited issue of personal jurisdiction. . . . it might have been an abuse of discretion to deny the request.").

[70] *Surpitski v. Hughes-Keenan Corp.*, 362 F.2d 254, 255-256 (1st Cir. 1966).

[71] *U.S. v. Swiss American Bank, Ltd.*, 274 F.3d at 625.

which this Court may consider Defendants' motions to dismiss.

B. Limited jurisdictional discovery is justified by the questions raised (but not answered) in the foreign Roche defendants' motion papers

As discussed above, the foreign Roche defendants admit that they conduct clinical trials in Massachusetts, that they solicit and enter into licensing and research-and-development contracts with Massachusetts companies, and that hundreds of their employees regularly come to Massachusetts. But they do not disclose the nature or number of these contacts (*e.g.*, just what these employees do in Massachusetts, how long they stay, how many companies they deal with, and the nature and number of deals that have been negotiated or consummated). They say they have no control over where their PEG-EPO goes or is used in the United States. But they do not address the relevant question of what they knew or believed about where their PEG-EPO product is transported or is being used. They assert a lack of connection between the Roche companies.[72] But it is entirely unclear whether Roche US is acting as an agent for either foreign Roche defendant. Amgen should be permitted to pursue the answers to these questions through limited jurisdictional discovery. For example, the regulatory documents that have already been submitted by the Defendants (*e.g.*, the IND and BLA documents) will reveal the identity of the license-holder(s), the sponsors of the clinical trials, and the role of each Defendant in the manufacture, importation, use and sale of their PEG-EPO product.

Simply put, the foreign Roche defendants' motion papers raise more questions about their contacts with Massachusetts than they answer. Amgen should be permitted limited discovery to fill in the gaps in the factual record.

C. The requested discovery

In order to investigate the nature and extent of the foreign Roche defendants' contacts

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[72] Roche Switzerland Memo at p. 8-9; Roche Germany Memo at p. 8-9.

with Massachusetts and the United States as a whole,[73] Amgen seeks limited discovery from the Defendants regarding the following subjects:

- The nature and number of the foreign Roche defendants' contacts with Massachusetts residents and companies (including but not limited to the sponsorship and conduct of clinical trials);
- The nature and extent of each Defendants' involvement in and awareness of the importation and use of their PEG-EPO product in the U.S. and in Massachusetts in particular;
- Statements by Defendants in regulatory filings seeking approval to market their PEG-EPO product (including but not limited to the Defendants' IND submissions filed on December 4, 2001 and March 17, 2003, and their BLA filed on April 19, 2006) relating to their involvement in manufacturing, importation, distribution and use of PEG-EPO in Massachusetts and the U.S.;
- Defendants' solicitation of and entry into contractual relationships with Massachusetts entities (including but not limited to Genetics Institute and Fresenius Medical Care);
- The relationship of each Defendant within the worldwide Roche Group business organization as that relationship concerns Roche business activities in the U.S.;
- The financial arrangements among Defendants regarding any anticipated or actual revenues and/or profits from their activities in Massachusetts;
- Lawsuits in which Defendants have been asserted by any party to be subject to the jurisdiction of Massachusetts courts; and
- The foreign Roche defendants' contacts with the U.S. as a whole.

The proposed order submitted herewith sets out a schedule for completing this jurisdictional discovery within 75 days from the Court's ruling on Amgen's instant request.

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[73] In federal question cases such as this, if a defendant lacks sufficient contacts with a single state to meet any state's long-arm statute, Fed. R. Civ. P. 4(k)(2) allows a court to rely upon the defendant's contacts with the United States as a whole. *See U.S. v. Swiss American Bank, Ltd.*, 116 F. Supp. 2d 217, 220 (D. Mass. 2000). The foreign Roche defendants have said nothing about their amenability to personal jurisdiction under the long-arm statute of any state other than Massachusetts, or their other contacts in the United States (save for their admitted dealings with Roche US). Amgen should be allowed discovery to pursue these facts.

IV. CONCLUSION

For the foregoing reasons, Amgen respectfully requests that this Court (1) deny the foreign Roche defendants' motions to dismiss for lack of personal jurisdiction; or alternatively (2) enter the proposed Order submitted herewith granting Amgen leave to take jurisdictional discovery and thereafter file a supplemental opposition to those motions.

April 25, 2006

Respectfully Submitted,

AMGEN INC.,
By its attorneys,

/s/ Michael R. Gottfried

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CERTIFICATE OF SERVICE

The undersigned counsel for Plaintiff Amgen Inc. hereby certifies that this document filed through the ECF System will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants on the above date.

s/ MICHAEL R. GOTTFRIED .
MICHAEL R. GOTTFRIED (BBO#542156)

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

AMGEN INC.,	)	
	)	
Plaintiff,	)	
	)	Civil Action No.: 05-CV-12237 WGY
v.	)	
	)	
F. HOFFMANN-LAROCHE LTD.,	)	
ROCHE DIAGNOSTICS GMBH, AND	)	
HOFFMANN LAROCHE INC.,	)	
	)	
Defendants.	)	

DECLARATION OF MICHAEL R. GOTTFRIED IN SUPPORT OF AMGEN'S OPPOSITION TO DEFENDANTS' MOTIONS TO DISMISS FOR LACK OF PERSONAL JURISDICTION (AND ALTERNATIVE REQUEST FOR LEAVE TO TAKE JURISDICTIONAL DISCOVERY)

I, Michael R. Gottfried, declare:

1. I am submitting this Declaration in support of Plaintiff Amgen, Inc.'s ("Amgen") opposition to Defendants' motions to dismiss for lack of personal jurisdiction. The statements of fact made herein are based on my firsthand knowledge or belief.

2. I am a partner in the law firm Duane Morris LLP, and I have filed an appearance in this action as counsel for Amgen.

3. Attached hereto as Exhibit A is a true and correct copy of the "Family Tree" for Roche Holding AG obtained from Hoovers Online (www.hoovers.com).

4. Attached hereto as Exhibit B is a true and correct copy of pages from the official trial transcript in *The Trustees of Columbia University in the City of New York v. Roche Diagnostics GmbH (formerly known as Boehringer Mannheim GmbH)*, Civ. No. 93-11512 NG (D. Mass.)

5. Attached hereto as Exhibit C is a true and correct copy of pages from the official trial transcript in *The Trustees of Columbia University in the City of New York v. Roche Diagnostics GmbH (formerly known as Boehringer Mannheim GmbH)*, Civ. No. 93-11512 NG (D. Mass.)

6. Attached hereto as Exhibit D is a true and correct copy of a "Roche – Corporate Media News" release entitled "Roche acquires Boehringer Mannheim Group" dated May 26, 1997.

7. Attached hereto as Exhibit E is a true and correct copy of an excerpt from the Roche Group 2005 Annual Report pertaining to the Roche Group "Pharmaceutical Division."

8. Attached hereto as Exhibit F is a true and correct copy of a 2001 abstract from the "Committee For Proprietary Medicinal Products European Assessment Report (EPAR)," a committee organized by the "European Agency for the Evaluation of Medicinal Products."

9. Attached hereto as Exhibit G is a true and correct copy of pages printed from the National Cancer Institute website (www.cancer.gov), the Dana-Farber Cancer Institute website (www.dfci.harvard.edu), The Ohio State University Medical Center website (www.jamesline.com), St. Jude Children's Research Hospital website (www.stjude.org), and the Rare Cancer Alliance website (www.rare-cancer.org) concerning the definition of "Ro 50-3821," which is a synonym for Roche's PEG-EPO product.

10. Attached hereto as Exhibit H is a true and correct copy of pages printed from the Roche Group website (www.Roche-trials.com) pertaining to clinical trial protocol numbers BA16286, BA16736, BA16738, BA16739, BA16740, BA17284, and BH18387, which show seven PEG-EPO trials to have been conducted in Boston, Massachusetts and four PEG-EPO trials to have been conducted in Springfield, Massachusetts.

11. Attached hereto as Exhibit I is a true and correct copy of a poster presentation entitled "CERA (Continuous Erythropoiesis Receptor Activator), an innovative erythropoietic agent: dose-dependent response in phase I studies," that was presented at the American Society of Clinical Oncology 39th Annual Meeting 2003 in Chicago, Illinois.

12. Attached hereto as Exhibit J is a true and correct copy of the "Answer To Second Amended Complaint," dated May 7, 2001, filed by Roche Diagnostics GmbH in *The Trustees of Columbia University in the City of New York v. Roche Diagnostics GmbH (formerly known as Boehringer Mannheim GmbH)*, Civ. No. 93-11512 NG (D. Mass.)

13. Attached hereto as Exhibit K is a true and correct copy of a page printed from Amgen Inc.'s website (www.amgen.com), describing Amgen's facility in Cambridge, Massachusetts.

14. Attached hereto as Exhibit L is a true and correct copy of a poster presentation entitled "Pre-clinical Pharmacokinetics and Pharmacodynamics of CERA (Continuous Erythropoiesis Receptor Activator) Indicate a Superior New Therapy for Anemia," that was presented at the American Society of Hematology 44th Annual Meeting 2002 in Philadelphia, Pennsylvania, and an abstract of a presentation, entitled "Pre-clinical and Phase I pharmacokinetic and mode-of-action studies of CERA (continuous eryhthropoiesis receptor activator), a novel erythropoietic agent with an extended serum half-life," that was presented at the American Society of Clinical Oncology 2003 national meeting in Chicago, Illinois.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Signed this 25th day of April, 2006.

s/ Michael R. Gottfried
Michael R. Gottfried (BBO#542156)

CERTIFICATE OF SERVICE

I hereby certify that this document, filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of electronic filing and paper copies will be sent to those indicated as non-registered participants on April 25, 2006.

/s/ Michael R. Gottfried

EXHIBIT B

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

VOLUME VII

THE TRUSTEES OF COLUMBIA
UNIVERSITY IN THE CITY OF
NEW YORK,

Plaintiff

v. Civil No. 93-11512-NG

ROCHE DIAGNOSTICS GmbH,
formerly known as
BOEHRINGER MANNHEIM GmbH,

Boston, Massachusetts

Defendant July 16, 2001

TRANSCRIPT OF TRIAL, DAY 7
BEFORE HON. NANCY GERTNER,
UNITED STATES DISTRICT JUDGE

APPEARANCES:

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(Continued)

Reissue of U.S. Patent No.
6,455,275 B1
Issued: September 24, 2002
REISSUE filed June 17, 2004
Exhibit 28

(Continued)
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U.S. District Court
1 Courthouse Way, Suite 3204
Boston, MA 02210

Proceedings recorded by stenotype with computer-aided transcription.

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VOLUME VII

WITNESSES FOR THE PLAINTIFF

EXHIBITS

(All agreed upon exhibits were admitted in evidence.)

PROCEEDINGS
SEVENTH DAY OF TRIAL

(The following proceedings were held in open court before the Honorable Nancy Gertner, United States District Judge, United States District Court, District of Massachusetts, at the United States Courthouse, 1 Courthouse Way, Boston, Massachusetts, on July 16, 2001, at 9:28 a.m.)

THE COURT: Good morning, everyone. You can be seated.

Dr. Fritsch?

THE COURT: Okay, go on.

EDWARD FRANCIS FRITSCH, RESUMED
CROSS-EXAMINATION, CONTINUED

BY MR. BAUER:

Q. Good morning, Dr. Fritsch. How are you today?

A. Fine, thank you.

MR. BAUER: Your Honor, if I may, I just want to let you know exactly where we're going this morning. Counsel has read the transcript extremely carefully and would like to basically have Dr. Fritsch present an overview of what GI did, when they did it, when the cell line made, when it was shipped to BMG, so that -- when the stuff was bailed, so that you could see everything, and we'll go right through that in fairly quick fashion.

THE COURT: But you'll do it in the narrative form so

that Mr. Zivin will be able to -- not in narrative form, that is to say, in question and answer form.

MR. BAUER: Correct.

THE COURT: Okay.

MR. BAUER: But I just wanted to tell your Honor where we were headed this morning.

THE COURT: Head away.

MR. BAUER: Excuse me?

THE COURT: Go. Head away.

MR. BAUER: Okay. Thank you, your Honor.

BY MR. BAUER:

Q. Dr. Fritsch, if you could, could you stand up to the board, because I'd like for you to prepare a flow chart for The Court, probably in a somewhat vertical fashion, starting with the isolation of the gene and ending up with the product -- with the EPO product being shipped overseas.

So, when did you first isolate the EPO gene, and you can put that on the board.

A. So, in the June to August time frame of 1984, we isolated the EPO gene, the genomic clone and the cDNA clone.

Q. And then, with respect to the production clone, did you then put the EPO gene into a plasmid?

A. Yes.

Q. And could you then draw with a vertical arrow down the next step in the process?

the production process efficient enough and that the quality of the EPO that is produced is appropriate.
Q. In layman's terms, does it mean it spits out enough EPO per unit of time to make it worthwhile?
A. Yeah, enough good EPO per unit of time to make it worthwhile. That would be the simplest way to describe it, yes.
Q. Dr. Fritsch, if you would, I would also like you to look at Plaintiff's Exhibit 152 and Plaintiff's Exhibit 112.
A. Okay.
Q. What are those two documents, Dr. Fritsch?
A. Well, the Plaintiff's Exhibit 152 is a telefax to Chugai from GI indicating that we will be shipping them the master cell bank and master working cell bank files from the DN2-3alpha3 cell line.
And --
Q. And what's the date on that?
A. I'm sorry?
Q. What's the date on that?
A. February 24, 1986.
Q. And why did GI ship to Chugai on February 24, 1986, an EPO production clone DN2-3alpha3, 10 micromolar?
A. Our agreement with Chugai was that they would be able to carry out the manufacturing of EPO and that, in order to accomplish that, we needed to send them the production cell

line.
Q. And this agreement was made prior to the initiation of any collaboration with Boehringer Mannheim; is that correct?
A. That's correct, yes.
Q. And the next document, Dr. Fritsch?
A. Well, the next document, the first three pages relate to a shipment of --
THE COURT: I'm sorry, the next document you're referring to is --
MR. BAUER: Plaintiff's Exhibit 112, your Honor.
THE WITNESS: Plaintiff's Exhibit 112, yes.
THE COURT: Okay. Thank you.
A. The first three pages refer to a shipment of some non-GMP EPO to Boehringer Mannheim, additional shipment of it, and this is in March of 1984.
Q. And what was the non-GMP EPO made from?
A. Yeah, this is, again, additional EPO from the DN2-3alpha3 production line.
THE COURT: And the reason why you had to send the bulk EPO to both Boehringer Mannheim and to Chugai was for their applications for the new drug IND?
THE WITNESS: Right, as part of that process. In order for them to begin to understand how they should formulate the drug and put it into vials for actual injection -- that part of the process was theirs, their responsibility -- they

needed to have some of the protein to actually work with to do that technical work. So, we were shipping them the protein, they would do the technical work, and then they figured out how to formulate it and put it in the vials. And they needed it for that purpose.
A. The latter pages, I guess, of this exhibit -- again, it's Exhibit Number 112 -- PX-112, referred to our shipment to them of vials of the master cell bank and the master working cell bank.
Q. Now, I think in the transcript you said this was transferred March of '84. Is that what you meant, Dr. Fritsch?
A. That the production clone -- the production clones, the cell bank vials, were sent in March of 19 -- oh, I'm sorry, March of 1986.
Q. Thank you, Dr. Fritsch.
Now, did Chugai -- did GI supply Chugai with bulk EPO for commercial sale in Japan?
A. I believe we never supplied them the bulk EPO for commercial sale. We supplied them bulk EPO that they used for clinical development, for preclinical development. All of the bulk EPO that they actually sold commercially was manufactured by Chugai. And our contract with Chugai allowed that they could be the sole manufacturer, if necessary.
Q. So, regardless of the relationship between GI and Boehringer, GI was making bulk EPO -- would make bulk EPO; is

that correct?
A. Yes. We needed to make the bulk EPO in order to help Chugai move the process along of its registration quickly, because they still had to build a production facility before they were able to commercially manufacture it.
Q. Now, if you take a look at -- I think it's the fourth page in, it's bearing Bates number 100793?
A. Yes, I have it.
Q. What is that describing, Dr. Fritsch?
A. This is a telefax that accompanied the transfer of the EPO production clone master cell bank and master working cell bank from DN2-3alpha3 to Boehringer Mannheim.
Q. And is these -- the vials which are designated on document 100793, is that the vials from the master cell bank and the master working cell bank that you drew this morning on that chart?
A. Yes.
Q. And could you just make a notation on the chart saying "shipped to Boehringer," "shipped to Chugai," and the dates?
A. (Complying.)
Q. And in these vials is just a gazillion of the DN2-3alpha3 cells that are from box number 7; is that correct?
A. Yes. Each vial contains approximately a million cells. Not a gazillion, but a million, yes.
Q. Now, Dr. Fritsch, I'm going to read something to you. You

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tell me if it's true.
On March 4, 1986, GI transferred to Roche the EPO production clone DN2-3alpha3. DN2-3alpha3 is the only production clone used by Roche to make EPO for sale.
Do you agree with that?
A. Yes.
Q. Now, the next sentence, which refers back to that quote, states, the cited production clone, however, is not the production clone actually used by Roche, but a predecessor cell line which had not been amplified.
Is that statement true, Dr. Fritsch?
A. No. Could you read it again, please?
Q. Sure. The cited production clone, namely the clone that was transfered on March 4, 1986, however, is not the production clone actually used by Roche, but a predecessor cell line which had not been amplified.
A. No, that's not true. It is the production --
Q. And why isn't that true?
A. Well, it is the production clone used by Roche, and it had been amplified at the time that it was shipped.
THE COURT: Because that statement is inconsistent with your characterization of how number 7 came about?
THE WITNESS: That's correct, because number 7 came about after the amplification steps had happened, and it is the production clone that's used by Roche.

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MR. BAUER: I'd like to say that that statement came right out of plaintiff's brief in the motion for support of -- or in its opposition motion to Roche's motion for summary judgment, on page 10.
BY MR. BAUER:
Q. Now, do you remember your first contact with BMG -- I'm sorry, Boehringer Mannheim, Dr. Fritsch?
A. Yes.
Q. When would that be?
A. I believe it was sometime around November of 1985, maybe December.
Q. Well, let me show you Plaintiff's Exhibit Number 149.
A. Okay.
Q. Does that refresh your recollection as to when you first met with Boehringer Mannheim?
A. Well, it -- the -- I mean, what this refers to is a telefax to Boehringer from Katherine Smith, who's our project director, introducing both myself and Dr. Shoemaker as the project leaders of the EPO project. This was at the end of October in 1985, and this was prior to the actual first meeting we had with Boehringer Mannheim in which Dr. Shoemaker and I led an EPO discussion. That was --
Q. And prior -- and prior to that date had Boehringer been given knowledge of any of the details of GI's cloning and expression of the EPO gene?

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A. No, they hadn't been given any knowledge of the details. They were, in general, aware of the fact that we had cloned the gene, that we were working on expression; but they had not been given any details.
Q. Now, are you aware that in 1987 GI bailed EPO-produced cells to Boehringer?
A. Yes.
Q. And could you explain to the Court your knowledge?
A. Prior to the issuance of the Amgen patent in the United States, our legal counsel had --
MS. SHANAHAN: Objection. Your Honor, I'd ask and instruct Dr. Fritsch not to divulge internal privileged communications that he had with GI's legal counsel.
THE COURT: Can you ask the question in a way that doesn't require privileged information?
MR. BAUER: Yes.
BY MR. BAUER:
Q. Yes Dr. Fritsch, were you aware that cells were bailed from GI to Boehringer in 1987?
A. Yes, I was aware.
Q. And what was Boehringer's role with respect to keeping those cells?
A. Boehringer was to store the cells for GI's purposes under appropriate conditions, and could return them to GI at our request, or would return them to GI at our request.

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Q. Who initiated the decision to bail cells to Boehringer? Was it Boehringer or was it Genetics Institute?
A. Genetics Institute.
Q. And whose decision was it to have those bailed cells returned?
A. Genetics Institute's.
Q. And whose property were those cells?
A. Genetics Institute.
Q. And Boehringer never used those cells in Germany, did they?
A. No.
Q. Now, if you could, Dr. Fritsch, I'd like to -- if you could, please pull out Plaintiff's Exhibit Number 117.
A. Okay.
Q. There's a -- the fifth paragraph down on the first page, 1407, there is a paragraph referring to the QA conditions?
A. That's correct, yes.
Q. What does that mean?
A. QA stands for quality assurance. So that, essentially, it's part of the sort of GMP principles or ways of conducting business; that there is an appropriate documentation and evaluation of all the various steps that are involved. In this case, it relates to the steps for the storage of cell bank files.
Q. And what would the purpose have been for having these QA

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conditions in place?
A. Well, if GI would want to have the cell bank cells returned back to GI and ever use them for manufacturing, then we would need to have all the documentation to show that they had been received and stored in the appropriate conditions.
Q. Now, if we go to the second page, we see a number of descriptions. And I'd like to contrast that with the document that we looked at earlier which described what was transferred to Boehringer in March.of -- March 4, 1986. That is Plaintiff's Exhibit Number 112.
If we take a look at Plaintiff's Exhibit 112, the page bearing Bates number 100793, there are also descriptions of vials.
A. Yes. That's correct.
Q. Excuse me?
A. That's correct. Yes.
Q. Could you explain to the Court what the relationship between these two sets of vials is?
A. Well, the set of vials shown in Exhibit 112 on page 100793, there are two sets shown there. One set is DN2-3alpha3, and it goes on, and the date of 12/4/85. These are the master cell bank files. Then, below it, is a similar description with a date of 12/18/85. These are the master working cell bank files.
Those two sets of vials that are described there are

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the same as the vials shown in Exhibit 117, on the second page where it is labeled number 1 and number 2. Number 1 refers to the master cell bank files, number 2 to the master working cell bank files.
I should point out that the date at the end of number 1 is 12/4/87. That's a typographical error. It should have been 12/4/85.
THE COURT: It should be 12/4/85.
A. But other than that, those are the same cells.
Q. Now, the cells that are referenced as being bailed to Roche, do those cells -- are those the same -- are those the same cells as the DN2-3alpha3 clone which is referred to in box number 7?
A. Yes.
Q. And with respect to category number 3 in the bailed cells on page 1408, is that also the same cell as the EPO production clone, DN2-3alpha3?
A. Right. These are basically DN2-3alpha3 cells that have been adapted to grow with no fetal bovine serum.
Q. So, these are not cells that were made after the cells that were made in box number 7; is that correct?
A. No, they all came from the same -- they all came from box number 7. No additional genetic manipulations took place. They were simply allowed to grow under different conditions.
Q. So, would it be fair to say that box number 7 in document

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number 06387 is the source of cells from essentially all of the cells originated and which were shipped to Boehringer?
A. That's correct. Yes.
Q. You didn't have the DNA, and then remake the cells, and then ship those to Boehringer after box number 7 was made; is that correct?
A. Right. We did not additional DNA modifications.
I should just point out that there was, in addition to box number 7 --
Q. Uh-huh.
A. -- the right arm of that chart refers to an additional amplification that had already taken place, and cloning of cells from that. And some of those cells are also shown here that were shipped to Boehringer Mannheim.
Q. Now, in terms of the overview, at Genetics Institute cells from the master working cell bank were used to make bulk EPO; is that correct?
A. That's correct, yes.
Q. And that bulk EPO was shipped to BMG in Germany, where it was formulated and then either used for clinical trials or sold; is that correct?
A. That's correct, yes.
Q. The master cell bank that was -- the vials of the master cell bank that were shipped to Boehringer in March of 1986 were eventually used by Boehringer to make its own EPO products; is

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that correct?
A. That's correct.
Q. And when Boehringer made it's own EPO product, Boehringer formulated that and then sold that; is that correct?
A. Yes.
Q. What is the relationship, if any, between the bulk EPO that GI shipped to Boehringer and BMG's use of this EPO production clone to make its own EPO? In other words, does Boehringer need GI's bulk EPO in order to make EPO from its own production clone?
A. No. Once Boehringer had the production clone and followed the same steps that Genetics Institute had used to make bulk EPO, it made bulk EPO on its own and no longer required GI to make bulk EPO for Boehringer.
Q. Now, when the bulk EPO goes over to Boehringer, it's formulated and then moved to the end of its life span, so to speak?
A. Right.
Q. Goes into a human?
A. It's formulated and sent to pharmacies and --
Q. The bulk EPO does not replicate itself? It's not like the cell line that keeps spitting out the EPO; is that correct?
A. That's correct. The bulk EPO is the end product of the expression and purification.
THE COURT: When you said BMG had the production

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clone in October and in December, when you sent the master cell bank and the master working cell bank to -- you were actually sending the production clone or the bulk EPO, or both?

THE WITNESS: Well, if you recall, we ended up sending two things, I believe, in October -- or November.

THE COURT: Yes.

THE WITNESS: In November we sent them bulk EPO, non-GMP EPO.

THE COURT: Um-hmm.

THE WITNESS: And in --

MR. BAUER: And what was that made from?

THE WITNESS: That was made from the production clone, DN2-3alpha3. That was material that Genetics Institute made, prepared, purified and sent to Boehringer Mannheim.

In addition, between October and December of 1985, we created the master cell bank and the master working cell bank, the production clone, itself, and that was shipped to Boehringer --

THE COURT: I see.

THE WITNESS: -- in March of 1986.

THE COURT: So, there are essentially two vectors. From the production clone, BMG can, itself, create bulk EPO for its own production. And then the bulk EPO that GI sent, they can likewise process for its own production?

THE WITNESS: They can process. It doesn't

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replicate. It doesn't make more. That's all they have. What they needed ultimately was the production clones, so that then they could make as much of their own EPO as they wanted to.

THE COURT: Why did GI send bulk EPO at all? Why not just send the production clone?

THE WITNESS: Well, because at the time, back of 1985, Boehringer didn't have any of the technology in place to make the EPO from the production clone itself. But GI had already had access to the production clone, was growing it up, and purified EPO. So that we could get them bulk EPO to work with --

THE COURT: I see.

THE WITNESS: -- before they could make it themselves.

THE COURT: Would GI have made bulk EPO in the fall of 1985, were it not for the BMG deal?

THE WITNESS: No. I think, as you'll see -- saw in some of the other documents, we shipped the same bulk EPO to Chugai. Chugai similarly -- we had a contract with them to supply bulk EPO, and even GMP EPO, but they also had the right to do all the manufacturing themselves if they wanted to.

THE COURT: And that was already in place, then, by the fall of '85, when the bulk EPO was shipped to BMG? Is that --

THE WITNESS: That's correct. That had been --

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THE COURT: That is to say, the arrangement with Chugai was already in place?

THE WITNESS: Yes. That had been in 1984, that arrangement.

THE COURT: Okay.

BY MR. BAUER:

Q. Your Honor Dr. Fritsch has a unique characteristic in that sometimes he says yes, and doesn't mean yes, in terms of following the question. And we'll have to clean it up a little bit later. But my counsel has told me that he said no, when I don't think he meant no. So, if we could --

THE COURT: I have a child like that. I don't know what to make of the information. Do you have to clean it up or not?

MR. BAUER: This is the court: At the start, would GI have made bulk EPO in the fall of 1985, were it not for THE BMG deal?

Answer: No.

But it's really yes. And then he reads on.

So, let me just ask you again, Doctor.

THE WITNESS: Okay.

THE COURT: He did the same thing in answer to some of -- during the deposition; was that a problem?

MR. BAUER: Yes.

THE COURT: Go on. I'm sorry.

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MR. BAUER: Exactly.

BY MR. BAUER:

Q. Okay, Dr. Fritsch -- well, I don't want to repeat your Honor's -- maybe you could ask the question?

All right.

At the start, would GI have made bulk EPO in the fall of 1985, were it not for the BMG deal?

A. Well, I won't say yes or no. I will say GI was making bulk EPO in 1985, independent of the Boehringer Mannheim deal.

Q. Now, GI did supply bulk EPO to Boehringer from approximately 1988 through 1991; is that correct?

A. Yes.

Q. And what was the source of the cells that were used to make this EPO?

A. It was the same production clone, DN2-3alpha3, 10 micromolar methotrexate, and it was the same master cell bank and working cell bank files.

Q. So, the EPO -- excuse me, the bulk EPO that GI made and shipped to Boehringer was made using the EPO production clone DN2-3alpha3, 10 micromolar that GI made prior to October 8, 1985; is that correct, Dr. Fritsch?

A. Yes.

Q. Now, do you know if the bailed cells ever came back into the United States, Dr. Fritsch?

A. Yes, some of the vials did come back into the United

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clinical trials and for its commercial production and sale, were made by Chugai; correct?
A. All the bulk EPO was made by Chugai, yes. The bulk EPO that we supplied them was used for other purposes prior to approval.
Q. Well, do you recall Judge Gertner asking you a question about whether you were going to make EPO for Chugai and answering, We already were required to make it for Chugai, our other partner? Do you recall that testimony?
A. Yeah, that's correct.
Q. Isn't that testimony incorrect, sir?
A. Ah, no. It's not incorrect. I mean, we were required to make EPO for Chugai. We had made clinical trial material EPO for Chugai, but they later decided that they should -- they would prefer to use EPO from their facility for their clinical trials. So that the material that we made for them, you know, was part of our obligation to them, they decided not to use and they decided to use the material they made.
Q. So -- so it isn't true that if Boehringer Mannheim had wanted commercial product from GI, that GI would have been making it anyway for Chugai; that isn't true, is it?
A. Well, when you say "commercial product," at the time when we, uhm, shipped the vials to Boehringer, at the time we manufactured the first clinical material for Boehringer, we were also doing that for Chugai. That was the material that

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they were going to use in their clinical studies. By the time Boehringer was requiring material for commercial sale, uhm, Chugai, I believe, already had their manufacturing facility in place and was manufacturing what would be their material for commercial sale.
But at the time we're talking about in late 1985, early 1986, uhm, that was not yet in place with Chugai. So we were doing it for both partners.
Q. Well, isn't it true that in October of 1985 that GI already had a contract with Boehringer Mannheim to manufacture EPO which would be commercially sold?
A. Ah, I believe in the original R & D license agreement we've had with them, we did specify that GI had the right to -- or the obligation to manufacture commercial material for Boehringer, most of it in material in the beginning, and then as the years went on, uhm, the proportion of material that was needed, uhm, reduced at GI and increased at Boehringer.
Q. So there was an obligation for GI to supply Boehringer Mannheim with commercial material; correct?
A. Yes, I believe that's correct. Yes.
Q. Now; isn't it true that there was no such obligation to supply Chugai with commercial material?
A. Uhm, I'd have to look in the wording of the -- how the original contract was worded. Initially, we were -- we had the right or the obligation, possibility of supplying Chugai

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commercial material. I think as the years went on, it was clear that Chugai wanted to make their own commercial material.
Q. Well, you --
A. So in order to develop the product, initially GI was to be manufacturing it.
Q. Well, you have there the contracts with Chugai, the June '84 and November '85 contracts; correct?
A. Yeah. Could you tell me which exhibit again?
Q. Let me just find the number for you, sir. 142.
Can you tell me where in the June 1984 contract there's an obligation for GI to manufacture commercial EPO for Chugai?
(Pause in proceedings.)
MR. BAUER: Your Honor, this is, I think, over a hundred-page document. We may need to take a break for Dr. Fritsch to go through the entire document to see if he can find what he's looking for, plus it may be an interpretation of a legal clause, I'm not sure.
MR. WHITE: Dr. Fritsch has been testifying about the obligations they had under the contracts. A moment ago he said he thought they were obligated under these contracts to manufacture the erythropoietin for Chugai. I am asking him if he can point out where in the contracts.
THE COURT: I know, that's true. You have no objection to him having an opportunity to read it?

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MR. WHITE: Absolutely not, your Honor.
THE COURT: Okay. We will take a short break to give the doctor an opportunity to read the document.
And also while we're -- let me ask about another question. I'm sorry that my questions come up in inopportune times, but I believe in our findings on partial summary judgment, there was a March '88 EPO, bulk EPO -- is that right? -- a March '88 bulk EPO transfer?
MR. BAUER: In January 1989 there was a supply agreement between Boehringer Mannheim and GI.
THE COURT: And was bulk EPO transferred after that?
MR. BAUER: What happened was in the '85 agreement, as Dr. Fritsch testified, GI was to supply the beginning number of years and eventually it phased out. The '88 agreement supplemented that, flushed it out, and that was where the parties agreed that GI would supply 130 grams of bulk EPO. And then that was supplied.
THE COURT: That was supplied in January of '89?
MR. BAUER: I'm not exactly sure when the first shipment, ah, it may have been prior to that. There may have been shipments in late '88. But that's the two agreements.
THE COURT: So did that involve a production process again, in other words, of the taking the master working cell bank, taking a vial out and putting it in the beer vat, as we call it?

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and time-consuming; correct?
A. Yes, that's correct.
Q. And it's dependent upon using a certain manufacturing process to make the product; correct?
A. Yes.
Q. And it's dependent, in this case, erythropoietin case, on using these master cells; isn't that correct?
A. For erythropoietin, yes, it's using those master cell bank cells; correct.
Q. That's the basis for approvals by the various governments, that one use these master cell bank cells to make the commercial product; correct?
A. Ah, well, at least within the current products that are approved; yes.
Q. Now, erythropoietin's not a commodity product, is it?
A. By a "commodity," you mean can be made by any of a numbe of manufacturers?
Q. Correct.
A. That's correct, it is not.
Q. It's not a commodity, is it?
A. Not at this point in time, no.
Q. Now, several times a little while ago you referred to the cells in the master cell bank and the master working cell bank as being genetically identical to the DN2-3alpha3 10 micromolar methotrexate cells that were available in 1985.

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Do you recall that testimony?
A. Yes.
Q. And there's a reason they're genetically identical, is because they're all made using the same cotransformation followed by amplification steps?
A. Well, they're genetically identical because the cells that are used for all subsequent uses are derived from the same, uhm, set of cells that had gone through that process. They don't become genetically identical by repeating that process. It is the output of that product that is what becomes the term genetically identical.
Q. Now, I'd like to ask you if you can look at this Plaintiff's Exhibit 267.
A. Okay.
Q. Now, this refers to shipments of bulk EPO from GI to Boehringer Mannheim; correct?
A. Ah, yes.
Q. So were there continuous shipments made of bulk drug from GI to Boehringer beginning in '87 and continuing through 1991?
A. Ah, yes. That's what the document indicates; that's correct.
Q. Well, did Boehringer Mannheim pay GI approximately $40 million for that bulk drug?
MR. BAUER: Objection; lack of foundation.
THE COURT: Are you simply --

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MR. WHITE: I'm asking him if he knows whether or not Boehringer Mannheim paid GI.
THE COURT: But are you asking him to tell you the figures on the invoice amount of bulk EPO?
MR. WHITE: The number's been agreed upon. There's no dispute about the number, I'm asking him if he knows whether this number was paid.
THE WITNESS: Uhm, well, yes I'm aware that Boehringer paid GI for the bulk EPO shipments. I can't specify or testify to any of the specifics, but --
BY MR. WHITE:
Q. Right.
THE COURT: But this is an agreed-upon exhibit with a total 39,758,300?
MR. WHITE: Yes, your Honor.
THE COURT: Okay.
BY MR. WHITE:
Q. Now, in addition to what's listed on this exhibit, isn't it true that GI supplied Boehringer Mannheim with erythropoietin made by the DN2-3alpha3 10 micromolar methotrexate in November of 1985?
A. Well, I think in November 1985 we shipped them non-GMP material from that cell line; correct.
Q. Right. And that was a benchmark of the October 1985 Boehringer Mannheim contract to do so, wasn't it?

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A. Ah, yes.
Q. And there was a payment for that non-GMP erythropoietin of $500,000; correct?
A. Yes.
Q. That's an additional $500,000 not listed on Exhibit 267; correct?
A. Ah, I believe that's correct; yes.
Q. Right. Now, there's another benchmark in the October 1995 contract which was to supply 400 grams of erythropoietin to Boehringer Mannheim; correct?
A. I can't testify to the number, but 400 grams or 400 milligrams, I don't remember which, but --
Q. Actually, I believe you're correct that it was milligrams.
A. Okay.
Q. And that was for the clinical trials that Boehringer Mannheim was going to conduct; correct?
A. That's correct, yes.
Q. And that 400 milligrams of erythropoietin was shipped in 1986; correct?
A. Ah, yeah. I believe it was shipped late 1986. Yes.
Q. And for that material, Boehringer Mannheim paid GI $1 million; correct?
A. If that's what the benchmark called for then, yes.
Q. And again, that number is not included in this exhibit, Plaintiff's Exhibit 267; correct?

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A. Ah, no. I have no idea why this exhibit, in particular, what the question was when it was put together, but that is not included in here; correct.
Q. Now, in addition to the payments that we just were discussing, it's true, is it not, that Boehringer Mannheim also paid Genetics Institute royalties when it resold the erythropoietin; isn't that correct?
A. Yes, that's correct.
Q. In an amount of approximately $120 million; correct?
A. Uhm, I can't testify to the specific amount.
Q. Do you know --
A. Total. I mean, if you're looking at over the total number of years it's been sold, I don't know what the exact total number is.
Q. Do you know whether it was over a hundred million dollars?
A. I believe it's over a hundred million dollars.
Q. And this is dollars in addition to the dollars we've just been discussing, the 49 million, the 1 million, the 500,000; correct?
A. That's correct; yes.
Q. Now, for all of the EPO for which Boehringer Mannheim paid GI, except for that first shipment of non-GMP EPO, all of it was made using the master working cell bank; correct?
A. Well, I -- I do believe that the very first shipment that occurred in 1986 used the master cell bank. We ended up, the

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initial production campaign that we did, we used the master cell bank. And then subsequent campaigns used the master working cell bank.
Q. Okay. So again, let me restate the question: Except for that first shipment of non-GMP material for which there was a payment of $500,000, all of the erythropoietin that was purchased by Boehringer Mannheim, for which Boehringer Mannheim paid GI, was made by either the master cell bank or the master working cell bank; isn't that true?
A. Yeah, I believe that's correct. Yes.
Q. So again, all the -- but in the commercial erythropoietin that was sold by Boehringer Mannheim, that all came from the master working cell bank; correct?
A. Ah, yes.
Q. Right. So if there's a goose that lays a golden egg, it's the master working cell bank, isn't it?
A. Ah, no, not at all. I mean --
Q. Well, isn't that the source of all the erythropoietin that's been sold throughout the world by Boehringer Mannheim?
A. Right. But that's just sort of the convenient way of producing and storing a normal production -- a routine production source as a process. I mean, the clear -- there's no question in my mind that the clear goose that laid the golden egg is the 10 micromolar methotrexate cell line. And the master cell bank, the master working cell bank are simply

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sort of practical manifestations of turning that cell line into a commercial reality.
But the clear goose is the DN2-3alpha3 10 micromolar cell line.
Q. That's the one that doesn't grow in suspension; correct?
A. Yeah. It doesn't grow in suspension, it does grow in suspension, there are -- it is the clear -- the clear source of EPO. And the ability or not to grow in suspension are, again, sort of practical decisions that one makes as far as how one manufactures it.
Q. Well, isn't that either the mother or the grandmother of the cell that was actually used to produce the erythropoietin?
A. Uhm, no. I mean, the cell is the same cell, okay. You haven't changed the cell in going from DN2-3alpha3 10 micromolar methotrexate. You keep the same -- the cell's the same the whole way through. It's simply, you know, under which conditions that cell will grow and how you have stored it that's different.
So I don't -- my terms, okay, I would not say that the 10 micromolar methotrexate is the mother or grandmother or whatever of the production clone. It is the production clone.
Q. Now, the regulatory authorities that regulate the sale of the product, however, they would not permit the product to be made using this cell line, the one that doesn't grow in suspension, they require that it be made using the cells that,

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are made in cell suspension; isn't that true?
A. Well, they require it to be made using cells from that master working cell bank. That is true. And that's because that master working cell bank was derived from the DN2-3alpha3 and under conditions in which they feel is the appropriate way, and we feel is the appropriate way to -- to store such valuable production clones.
Q. Now, I'd like to ask, if you would, to look at Plaintiff's Exhibit 141.
A. Okay.
Q. You recall testifying last week that this is a description of the plan to make erythropoietin, and there was a blowup of page 2 of the plan?
A. That's correct; yes.
Q. Right. Do you recall testifying that this plan was given to Chugai and other potential partners?
A. Ah, yes.
Q. Isn't it true that it was given to Boehringer Mannheim?
A. I believe it was given to Boehringer Mannheim; yes.
Q. Right. This is the plan that you testified provides all the information about how to make the erythropoietin-producing cell line; isn't that true?
A. Yeah. The plan described that we were using -- we were planning on using a CHO DHFR-negative cell line as the host, that was transfected with EPO genes, and it would undergo

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presumably, says something about after 1987. But the little memo refers to the master working cell bank 1 vials. And there isn't another master working cell bank derived from the same master cell bank. And I think that was the question that was being addressed, as a second master working cell bank.
Q. What's the second master working cell bank? Is that one that's got a designation like -2 or -3, or something else like that?
A. I believe it's called -3. It's made as a replica of the first master working cell bank and it's part of the process that I described earlier.
Q. When was that made, sir?
A. Uhm, specifically, I don't recall when it was made. Sometime, you know, well -- sometime well after the first working cell bank was made, yes.
Q. So sometime well after December of 1985, there was another master working cell bank made by GI; correct?
A. Ah, yeah, I believe so.
Q. And that was designated -3, because the one that was made in December of 1985 was designated -1; correct?
A. That's correct; yes.
Q. When was master -- the master working cell bank -3 transferred to Boehringer Mannheim?
A. Uhm, I don't know if it was ever transferred. I believe GI used it.

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Q. So your understanding is that that was used by GI to manufacture bulk EPO for Boehringer Mannheim; correct?
A. That's -- my understanding is, yes, that we had -- we manufactured some bulk EPO from the second master working cell bank.
Q. One that was made well after December of 1985?
A. Well, "well after" meaning a year or two after.
Q. Yeah.
A. Yeah.
Q. Meaning December 1986 or December 1987; correct?
A. It could have been, yes.
MR. WHITE: I have no further questions for this witness, your Honor.

RECROSS-EXAMINATION

BY MR. BAUER:
Q. Dr. Fritsch, you testified that you did not believe that any cells other than the bailed cells came back to GI; is that your testimony?
A. That's correct. I'm not aware that any cells other than the bailed cells have come back to GI.
Q. Could you take a look at Exhibit D1 and see if that refreshes your recollection as to whether or not any cells other than the bailed cells came back to Genetics Institute?
MR. WHITE: Your Honor, there's an objection to this document.

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THE COURT: What's the nature of the objection?
MR. BAUER: Your Honor, I'm entitled to, I believe, have the witness look at something in order to refresh his recollection regardless of whether there's an objection.
MR. WHITE: Not if it's not in evidence.
THE COURT: Wait a minute. What's the nature of the objection?
MR. WHITE: It's an affidavit of a party that's not here to give direct testimony. It has on it total numbers of vials ostensibly being shipped, which are inconsistent with testimony -- with other documents and actual testimony of this witness.
THE COURT: Well --
MR. BAUER: Well, that's not true.
THE COURT: The rules permit a witness to refresh his recollection by using anything. In other words, you know, it could be anything. It could be, you know, a napkin cover. The document itself does not then come into evidence, the question is refresh your recollection.
So the question is whether or not Dr. Fritsch, when he testified that he didn't believe any other cells other than bailed cells came back to GI, whether he has -- that is his entire recollection.
Actually, you're right. As I'm spitting this out, it seems clear that this is not refreshing his recollection.

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That's his recollection. You're trying to impeach him with another document.
Objection is sustained, go on. Sorry.
MR. WHITE: Thank you, your Honor.
MR. BAUER: Well, I guess it stands, then, that none of the cells came back other than the bailed ones?
THE COURT: That's right. It stands --
MR. WHITE: It stands as testified.
THE COURT: That's right.
BY MR. BAUER:
Q. Dr. Fritsch, counsel mentioned a number of $120 million of royalties going from Boehringer to Genetics Institute; do you remember that?
A. Correct, yes.
Q. Is that based on the bulk EPO that GI supplied to Boehringer, or a combination, or is it based on all the EPO sold by Boehringer in Europe?
A. I believe it's a combination -- it's all the EPO sold by Boehringer in Europe, so it's a combination of whatever GI shipped and what Boehringer Mannheim has manufactured as far as bulk.
Q. So it's not the sales based on solely the GI bulk data that was formulated and then sold in Europe?
A. That's correct; yeah.
Q. Now, if we go back to this -- the sets of figures, there's