Portfolio Media. Inc. | 860 Broadway, 6th Floor | New York, NY 10003 | www.law360.com
Phone: +1 646 783 7100 | Fax: +1 646 783 7161 | customerservice@law360.com

Economics Of Irreparable Harm In Pharma Patent Litigation

Law360, New York (November 18, 2013, 2:13 PM ET) -- The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, allows generic products to be launched while the patent(s) on the equivalent branded drug are in litigation. Such a launch is called at-risk because of the possibility that, at trial, the court finds the generic drug infringed on the branded drug's patents. Branded companies often seek a preliminary injunction to prevent the generic from launching at-risk. For such an injunction to be granted, the branded company must establish that it would suffer irreparable harm from the at-risk entry (i.e., it would not be fully compensated by a monetary damages reward if the brand ultimately prevails at trial). This article discusses the economic rationale for the different sources of irreparable harm that courts have considered, such as reductions in research and development (R&D), loss of share to therapeutic competitors, loss of goodwill and negative impacts on employment and manufacturing facilities.[1]

Background

Under the paragraph IV provision of the Hatch-Waxman Act, a generic company can attempt to launch a generic drug prior to the expiration of the branded drug's patent(s) either by challenging the validity of an extant patent on a branded drug or claiming non-infringement of the patent. The first filer(s) of a paragraph IV certification obtains 180 days of exclusivity. However, the branded drug company may seek a preliminary injunction to prevent the generic from launching at-risk, which requires establishing:

- A reasonable likelihood of success on the merits of its claims
- Irreparable harm if the injunction is not granted
- That the balance of hardships is on the branded drug
- That the injunction has a favorable impact on the public interest

When seeking preliminary injunctions, the required economic analysis of irreparable harm focuses on whether the impact of a particular generic launch would be difficult to quantify with precision or could be adequately compensated by a monetary damages award.

While in the past companies could rely on a demonstration of success on the merits for a presumption of irreparable harm, the Supreme Court's rulings in eBay v. MercExchange and Winter v. Natural Resources Defense Council challenge the presumption of irreparable harm. Further, these cases changed the standard for injunctive relief from showing a "possibility" of irreparable harm to showing a

"likelihood" of irreparable harm. It is therefore even more crucial now to fully understand the potential arguments for demonstrating irreparable harm.

Impact of Generic Entry on Sales of the Branded Drug

Studies have found that branded drugs lose a majority of their sales to the generic equivalent upon generic entry — over 75 percent in the first three months and over 80 percent in the first six months. This leads to a loss in revenues for the branded drug company upon generic entry. Reduced revenues for the branded drug overall are amenable to reasonably precise quantification. However, several forms of harm are difficult to quantify with precision and courts have considered them irreparable.

R&D Budget Reductions

The dramatic revenue losses for the branded drug manufacturer typically reduce the company's R&D budget because these companies tend to fund R&D with internal financing sources, such as cash flow and profits, as opposed to external financing sources, such as equity.

It is difficult to precisely quantify the impact of forgone R&D on a branded drug company and the patients who could have benefited from the research findings. The drug development process is lengthy, risky and highly uncertain. The FDA estimates that no more than 1-in-1,000 tested compounds pass preclinical trials, and more than three-quarters of all drugs that enter clinical testing ultimately fail to receive marketing approval in the U.S. Even for drugs that receive such approval, the average time spent from the start of clinical testing to marketing approval is over seven years.

Moreover, it is very difficult to precisely estimate the harm that a canceled research project can have on a branded drug company that is engaged in an R&D race. The U.S. patent system provides all rewards associated with an innovation to the first inventor. A branded drug company that falls behind in an R&D race stands to forgo significant — but highly uncertain — profits if it falls behind rivals in researching a drug that subsequently succeeds.

Curtailed Investments in the Branded Drug

Following at-risk generic entry, a branded drug company has a strong incentive not to pursue R&D that is specific to the branded drug at issue. Any prescriptions generated by the results of this R&D are likely to be filled by the cheaper generic drug. Because of the generic entrant's ability to free ride off the branded drug company's R&D investments, the branded drug company will often delay or curtail R&D efforts specific to that drug. In so doing, however, the branded drug company will forgo potentially valuable commercial opportunities associated with the development of new indications for the drug at issue. In addition, reduced drug specific R&D can bring significant and irreparable harm to patients who could have benefited from the findings of planned trials for additional indications.

Similarly, following at-risk entry, the branded drug company has a strong incentive to reduce promotional expenditures for its product due to these same free-ride issues. This can prevent physicians and patients from learning about a potentially helpful new therapeutic alternative, which results in patients not benefiting from treatments with that drug.

Loss in Share in Therapeutic Category

Branded drugs typically reduce or eliminate promotional expenditures upon experiencing generic entry to prevent generic drugs from benefiting from branded promotions. With branded promotional expenditures declining on an absolute basis, the branded drug will suffer a reduction in its share of marketing within its therapeutic category. This will likely cause a reduction in the prescriptions for the branded drug compared to other drugs in its therapeutic category. Due to this effect, generic entry often causes a decline in the total prescriptions for the brand and generic drug combined. However, measuring the harm that the branded drug suffers due to its diminished share of marketing requires calculating sales that the branded drug lost to each rival drug in a market that is evolving over time. Given the lack of precision inherent in such a calculation, these losses may also be deemed irreparable.

Formulary Displacement

Formularies are lists of drugs compiled by third party payors ("TPPs"), which establish the copayments for prescription drugs dispensed by pharmacists. Important drivers of the demand for prescription drugs, formularies often have three tiers. Tier 1 is typically reserved for generic drugs, Tier 2 for preferred branded drugs and Tier 3 for non-preferred branded drugs. In tiered formularies, the higher the tier, the higher the copayment is. Thus, generic drugs usually have the lowest copayments, preferred branded drugs have intermediate copayments and non-preferred branded drugs have the highest copayments.

Because of the relatively favorable copayment associated with Tier 2, branded drug makers seek to maintain this status on formularies. However, when a TPP can provide a generic version of the branded drug at issue on its formulary, the TPP will have less reason to maintain the branded version on Tier 2. When a branded drug loses its Tier 2 status, it is highly uncertain whether a subsequent restoration to Tier 2 would happen in the event of generic withdrawal because the economic conditions that prevailed when the branded drug was originally placed on Tier 2 may no longer exist by the time the generic is withdrawn.

Lost Goodwill

Generic entry can cause the branded drug at issue to suffer a loss in patient goodwill, even if it prevails in its patent infringement suit. When the generic is no longer available, patients who purchased the generic prior to its withdrawal will now have to pay more for the same drug. This will reduce patient goodwill and may cause patients who had been using the generic equivalent to switch to other generics — rather than the branded drug — in order to maintain low copayments.

Staff Reductions

At-risk generic entry could spur an exodus of talent from the branded drug company through reductions in its R&D budget, as well as the abandonment of planned research related to the patented drug. With the branded drug company having fewer products and clinical trials to design and run, many research scientists and clinicians may seek employment at other companies, including competitors, in order to stay active in their specialty areas. As a result, the branded drug company would likely suffer a long-term negative impact. The branded drug company could also scale back its manufacturing operations and lay off employees in manufacturing, packaging, marketing and quality control. The negative impact of these layoffs on the branded drug company itself, as well as its employees, may be difficult to quantify with precision and, therefore, irreparable.

Preliminary Injunctions and Irreparable Harm Arguments

The table below reviews irreparable harm findings (only accepted arguments) in nine recent cases in which the district courts granted preliminary injunc ons to branded drug companies.

Decision Date	Branded Drug	Case Name	Accepted Arguments for Irreparable Harm
2001	OxyContin	*Purdue Pharma v. Roxane, Boehringer Ingelheim*	- Price Erosion - Staff Layoffs - Lost Research Opportunities
2003	Vantin	*Pharmacia & Upjohn v. Ranbaxy*	- Price Erosion - Market Erosion - Lost Research Opportunities
2005	Accupril	*Warner-Lambert v. Teva*	- Lost Right to Exclusion
2006	Plavix	*Sanofi v. Apotex*	- Price Erosion - Formulary Displacement - Lost Goodwill - Lost Research Opportunities
2008	Biaxin	*Abbott v. Sandoz*	- Lost Market Share - Lost Goodwill - Staff Layoffs
2008	Aricept	*Eisai v. Teva*	- Lost Research Opportunities
2009	Evista	*Eli Lilly v. Teva*	- Formulary Displacement - Lost Research Opportunities - Weakened Relationships with Physicians
2010	Skelaxin	*King v. Corepharma*	- Lost Market Share - Price Erosion - Formulary Displacement - Maximum Allowable Cost Pricing
2010	Oracea	*Research Foundation of State University of New York v. Mylan*	- Lost Market Share - Price Erosion - Lost Research Opportunities - Weakened Brand Awareness

While courts have accepted the aforementioned sources of irreparable harm, this does not occur in every instance. On the contrary, whether courts sustain findings of irreparable harm depends on the economic and factual issues of the case.

—By Rahul Guha and Maria Salgado, Cornerstone Research

Rahul Guha is a vice president in the New York office of Cornerstone Research and Maria Salgado is a senior manager in the firm's San Francisco office.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of the firm, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] Citations for this article appear in the original white paper available on the Cornerstone Research website.