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AN EVIDENCE-BASED ASSESSMENT OF THE BLOCKING ACT

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INTRODUCTION

For the past few years, Congress has been considering various iterations of legislation known as the BLOCKING Act (The Bringing Low-cost Options and Competition While Keeping Incentives for New Generics Act). According to Food and Drug Administration ("FDA") representatives and Congressional sponsors, the BLOCKING Act is intended to accelerate the entry of generic drugs by limiting the availability of the Hatch-Waxman 180-day generic drug exclusivity incentive. This incentive works by making the first generic applicant that challenges a brand patent eligible for 180 days of exclusivity, during which FDA may not approve a second generic applicant challenging a patent for the same drug. And that incentive has unquestionably worked: it has made a significant contribution to accelerating patient access to generics for more than 35 years and has helped to increase the generic share of all prescriptions filled in the U.S. from 18% when Hatch-Waxman was enacted to 92% today.

Given the critical importance of the 180-day exclusivity incentive, we evaluated available data and five real-world examples to assess whether the stated goal of the legislation—accelerating generic entry—would actually be achieved. This evaluation revealed that, in the vast majority of circumstances, BLOCKING will not accelerate generic entry, frequently because the second generic applicant will not market its drug upon approval due to patent settlements or ongoing patent litigation. These examples also support the conclusion that, in a number of cases, delays in marketing by the first applicant are not caused by significant quality issues—one of the alleged problems that the legislation's supporters assert are the impetus for the legislation—but rather by FDA's own regulatory decisions and bottlenecks. Thus, these examples confirm that BLOCKING will not achieve its goal and will serve only to upend the 180-day exclusivity incentive. Indeed, first applicants will be less likely to take on brand patent estates if exclusivity is unpredictable and unreliable. *The BLOCKING Act thus will have the perverse effect of delaying generic drug entry and leading to higher drug prices for patients.*

In section I below, we provide data that demonstrate the importance of the 180-day exclusivity incentive to generic competition. In section II, we discuss the issues that the proponents claim justify this legislation and why those claims are often overstated. In section III, we explain the mechanics of the BLOCKING Act and why the Act will not work to achieve its goal of accelerating generic competition. We conclude that BLOCKING will substantially weaken the critical 180-day exclusivity incentive, and that it will lead to less generic competition, causing brand prices to remain high for longer periods of time.

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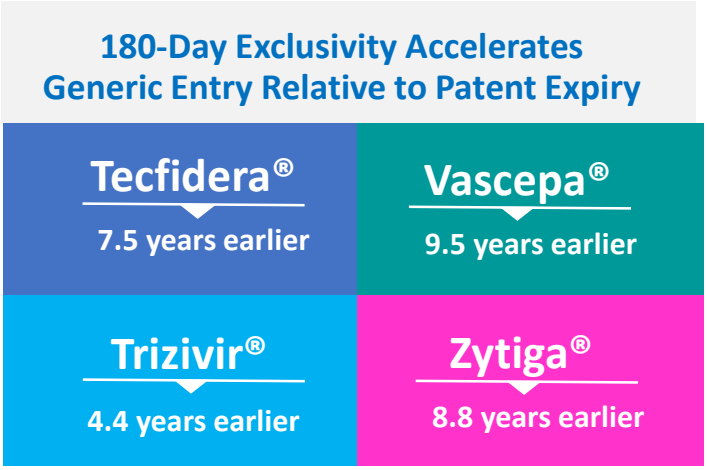
DISCUSSION

I. 180-day Exclusivity Provides an Important Incentive to Challenge Patents and to Bring Affordable Drugs to Patients

When Congress passed the 1984 Hatch-Waxman Act, later amended in the 2003 Medicare Modernization Act ("MMA"), it included an incentive for generic drug manufacturers to take on the burden of challenging brand company patents.[2] Pursuant to this provision, the applicant that is the first to file a substantially complete abbreviated new drug application ("ANDA") containing a Paragraph IV certification to a listed patent (asserting that a patent is invalid, unenforceable, or will not be infringed) is eligible for a 180-day period of exclusivity. Because it provides an incentive for generic companies to contest potentially invalid patents, the 180-day exclusivity results in earlier entry of less expensive generics.[3]

Over the years, the 180-day exclusivity incentive has led to successful patent challenges that have spurred competition and price savings for patients using many of the most widely used, expensive medicines, such as dimethyl fumarate (Tecfidera®), icosapent ethyl (Vascepa®), abacavir, lamivudine, zidovudine (Trizivir®), and abiraterone acetate (Zytiga®).

In each instance, the generic drug entered the market years earlier than if there had been no patent challenge: 7.5 years for generic Tecfidera®; 9.5 years for generic Vascepa®, 4.4 years for generic Trizivir®, and 8.8 years for generic Zytiga®. This earlier generic competition resulted in millions of dollars of cost savings for purchasers of American drugs, including patients. And there are many other examples that fit the bill, according to data included in FDA's Paragraph IV Patent Certifications List. They are described in the chart below:



Patent challenges are expensive—the average cost was "about $10 million per suit" as of 2010.[4] Based on data from Matrix Global Advisors, if the BLOCKING Act discourages just one fewer patent challenge it will, on average, lead to a 4-year delay in generic entry and $1.7 billion in lost savings nationally.[5] Despite this data, Congress and FDA continue to consider the BLOCKING Act.[6] As we describe in more detail below, the BLOCKING Act will have long-term, negative consequences for patients by weakening the 180-day exclusivity incentive, which will ultimately result in higher prices for patients and less adherence to costly treatment plans.

1 less patent challenge **= 4-year** delay in generic entry **= $ 1.7 billion** in lost savings nationally

Drug	Generic Entry Date	Patent Expiry	Time Before Patent Expiry of Launched Generic
Epiduo® (Adapalene and Benzoyl Peroxide)	7/27/2017	7/18/2027	9.9 years
Soolantra® (Ivermectin)	10/14/2019	3/13/2034	14.4 years
Jadenu® (Deferasirox)	12/17/2019	11/21/2034	14.9 years
Pristiq® (Desvenlafaxine Succinate) (25 mg)	7/29/2016	7/5/2027	10.9 years
Pennsaid® (Diclofenac Sodium)	5/27/2014	7/10/2029	15.1 years

[2] FDA 180-Day Exclusivity: Questions and Answers p. 3 at https://www.fda.gov/media/102650/download.
[3] 21 U.S.C. § 355. The one exception to this exclusive marketing period is for authorized generics, which are a brand's generic version of its NDA product. These are not blocked by the 180-day exclusivity because the FDA considers them to be another version of the brand's product. *See Mylan Pharmaceuticals, Inc. v. FDA,* 454 F.3d 270, 276 (4th Cir. 2006); *Teva Pharm. Indust. v. FDA,* 410 F.3d 51, 55 (D.C. Cir. 2005); *see also* FDA List of Authorized Generics at https://www.fda.gov/drugs/abbreviated-new-drug-application-anda/fda-list-authorized-generic-drugs.
[4] *FTC v. Actavis, Inc.*, 570 U.S. 136, 170 (2013) (Roberts, C.J., dissenting).
[5] Alex Brill, *The Unintended Economics of the BLOCKING Act*, available at: https://accessiblemeds.org/ sites/default/files/2020-01/BlockingAct-Report-AlexBrill-Jan2020.pdf.
[6] *See, e.g.*, H.R. 2853 (April 26, 2021) and S. 2910 (Sept. 30, 2021); Food and Drug Administration, Justification of Estimates for Appropriations Committee, FY 2020, available at https://www.fda.gov/media/121408/download.

II. The Issues the BLOCKING Act Purports to Address

Proponents of the BLOCKING Act argue that first generics are blocking FDA approval of ANDAs by "parking" their eligibility for 180-day exclusivity, and that the statutory 180-day exclusivity forfeiture provisions added by the Medicare Modernization Act in 2003 do not address the problem.[7]

Initially, proponents argued that the legislation would address a first applicant's ability to "park" 180-day exclusivity eligibility because of alleged "deficiencies" (*e.g.*, quality issues raised in an inspection) that prevent FDA from granting ANDA approval.[8] But a review of examples where the BLOCKING regime might apply demonstrates that the delay in approval of the first applicant can be caused by unilateral actions by FDA—for example, new requirements imposed for the first time after the filing of an application. In these instances, applying BLOCKING does not align with the stated justification for the legislation. *See* section III(B) below.

FDA has also argued that patent settlements are a justification for BLOCKING.[9] But the agency fails to acknowledge that subsequent applicants often sign on to the same patent settlement terms as first applicants and thus cannot enter the market any earlier than a first applicant, even with FDA approval. Moreover, as demonstrated by the examples below, patent settlements accelerate competition, frequently by many years and sometimes by as much as a decade. Additionally, both the Federal Trade Commission (FTC) and Department of Justice review every Hatch-Waxman patent settlement.

In that vein, the FTC has reached the following conclusions with regard to patent settlements that were once deemed problematic:

- "[A]greements using [the types of terms that [the Supreme Court] deemed problematic] decline[d] to [the] lowest level in 15 years."[10]

- "The data are clear: the Supreme Court's *Actavis* decision has significantly reduced the kinds of reverse payment agreements that are most likely to impede generic entry and harm consumers."[11]

- "Despite the high number of settlements, those that include the types of reverse payments that are likely to be anticompetitive remain very low."[12]

Again, the stated purpose of the legislation does not square with actual experience.

[7] The MMA amended the Federal Food, Drug, and Cosmetic Act to prevent first ANDA filers from blocking the approval of subsequent Paragraph IV ANDAs for extended periods of time. Specifically, the MMA added six events that will cause a first generic to forfeit its eligibility for 180-day exclusivity. 21 U.S.C. § 355(j)(5)(D). These forfeiture events are: (1) failure to market; (2) withdrawal of application; (3) amendment of certification; (4) failure to obtain tentative or final approval; (5) entry into agreement with another applicant, the listed drug application holder, or a patent owner; and (6) expiration of all patents. 21 U.S.C. § 551(j)(5)(D); FDA 180 Day Exclusivity: Questions and Answers pp. 4-5.

[8] Food and Drug Administration, Justification of Estimates for Appropriations Committee, FY 2020, available at https://www.fda.gov/media/121408/download.

[9] *Marketing of First Generic Drugs Approved by U.S. FDA from January 2010 to June 2017 at 17, available at:* https://www.fda.gov/media/154101/download.

[10] *FTC Staff Issues FY 2016 Report on Branded Drug Firms' Patent Settlements with Generic Competitors, available* at: https://www.ftc.gov/news-events/press-releases/2019/05/ftc-staff-issues-fy-2016-report-branded-drug-firms-patent

[11] *Id.*

[12] *FTC Staff Issues FY 2017 Report on Branded Drug Firms' Patent Settlements with Generic Competitors, available* at: https://www.ftc.gov/news-events/news/press-releases/2020/12/ftc-staff-issues-fy-2017-report-branded-drug-firms-patent-settlements-generic-competitors.

III. The BLOCKING Act

A. How it Works

The current version of the BLOCKING Act framework allows FDA to approve a subsequent Paragraph IV ANDA[13] if the following conditions are met:

- A subsequent Paragraph IV ANDA is ready for final approval but for a first applicant's eligibility for 180-day exclusivity;
- At least 30 months has passed since the first applicant submitted its ANDA to FDA;
- The 30-month patent litigation stay of ANDA approval invoked when patent infringement litigation is timely initiated does not preclude approval of a first applicant's ANDA; and
- FDA has not approved a first applicant's ANDA as of the date the first three requirements above are met.[14]

Thus, the BLOCKING Act would permit FDA to approve a subsequent applicant notwithstanding a first applicant's eligibility for 180-day exclusivity, provided certain triggering events occur. The theory behind the Act is that a first applicant's eligibility for 180-day exclusivity should not block generic competition if that first applicant has not been approved and a subsequent Paragraph IV ANDA is ready to be approved.

But as demonstrated in subsection (B) below, that theory is not borne out in reality. Frequently, a subsequent applicant does not and will not commercially launch its approved drug product any sooner than a first applicant, even if an earlier launch were allowed by the BLOCKING Act.

The net result of applying BLOCKING in such a scenario is that:

- There would be ***no earlier generic entry*** than what would otherwise occur under current law.
- First applicants will be ***less likely to invest the time and expense in taking on a large brand-name patent estate*** if they know that they could have their exclusivity diluted or lost entirely due to issues outside of their control.
- Because first applicants lead the charge in taking on both regulatory and patent issues, ***generic entry could be substantially delayed*** relative to current law.

B. The BLOCKING Act Is Based on Several Incorrect Assumptions; Real-World Examples Demonstrate that it Would Not Accomplish Its Purpose of Accelerating Generic Drug Market Entry

The BLOCKING Act regime is based on several assumptions, none of which are supported by actual experience:

- *First*, there is an assumption that, for its part, FDA ordinarily approves a first applicant's ANDA within 30 months of submission. *This assumption is incorrect.*
    - FDA data shows that the mean and median review times for first-filed Paragraph IV ANDAs from FY2016 to FY2020 were 57.6 months and 51 months, respectively.[15] Since these are just the mean and median figures, ANDA review will frequently take more time, which is the case for important complex generic drugs. For example, for ProAir HFA®, an asthma inhaler, FDA took nearly ***8 years*** to approve the first-filed ANDA on that product. The actual data do not square with the assumption in BLOCKING as to timing.

Approval Times for First-Filed Paragraph IV ANDAs

BLOCKING Assumption	Actual FDA Median Review Time	Actual FDA Mean Review Time
30 months	**51 months**	**57.6 months**

- *Second*, there is an assumption that a subsequent applicant will legally be able to begin marketing its drug product once FDA approval is secured. *This assumption is incorrect.*
    - Subsequent applicants frequently sign on to the same baseline patent settlement with either the same or a later launch date as the first applicant. That means that subsequent applicants will be legally precluded from launching notwithstanding an ANDA approval granted by BLOCKING. This is illustrated in the cases of Xifaxan®, Revlimid®, Cialis®, and Rytary®, described below.

[13] FDA could approve other subsequent Paragraph IV ANDAs 180 days after either the first applicant is approved and goes to market, or after the launch of a subsequent Paragraph IV ANDA drug product approved pursuant to the BLOCKING Act criteria.
[14] H.R. 2853 (April 26, 2021) and S. 2910 (Sept. 30, 2021).
[15] 2020 GDUFA III Data Call Responses for Industry.

- *Third,* there is an assumption that if FDA approves a subsequent ANDA not subject to a patent settlement, the approved drug product will be promptly launched. *This assumption is incorrect.*

    - It is far more often the case that both first and subsequent applicants would wait for the conclusion of patent infringement litigation before launching a generic drug product. After all, the sponsor risks substantial monetary damages by launching "at risk," as illustrated by the Belbuca® example below.

- *Fourth*, there is an assumption that the BLOCKING regime will remedy the submission to FDA of allegedly low-quality, first-filed Paragraph IV ANDAs that cannot be approved "due to substantive deficiencies that ha[d] not been resolved in a timely manner."[16] *This assumption is incorrect.*

    - In many instances, including in the Xifaxan® and Revlimid® examples described below, the delay in ANDA approval is due, in significant part, to FDA's own regulatory decisions and policies. In particular, FDA has issued or revised product specific guidance ("PSG") long after ANDA submission and imposes those PSGs on already-filed ANDAs.[17]

- *Fifth*, there is an assumption that subsequent applicants "beat" first applicants to approval due to a fault of the first applicant. *This assumption is incorrect.*

    - As illustrated below, calculations from FDA's own data [18] on hundreds of applications show that, on average and, in most years, FDA has reviewed subsequent applicants' applications 12-18 months faster than first applicants. This is not attributable solely to deficiencies in the first applicant's application but is much more likely attributable to the clear path that is created for subsequent applicants—by first applicants—on patent and regulatory issues.

Mean Review Time for Applications with a Paragraph IV Certification				
	2016	2017	2018	2019
Number of First Filed Applications	51	42	45	68
First Filed Applications Mean Review Time	66.9	61.3	63.3	46.5
Number of Subsequent Applications	156	176	189	175
Subsequent Applications Mean Review Time	48.1	49.2	51.2	46.4

The stated goal of the BLOCKING Act is to accelerate generic drug market entry by removing the 180-day exclusivity barrier to ANDA approval for certain applicants. However, as the examples below illustrate, the BLOCKING Act paradigm often will not accelerate generic drug market entry—it will only artificially increase the number of FDA approvals without increasing the number of generic drugs actually marketed. In fact, the BLOCKING Act would result in exactly the opposite happening: with an unreliable 180-day exclusivity incentive, there will be fewer patent challenges from generic drug manufacturers, resulting in less generic drug entry and less generic drug competition, leaving patients and the government to foot the bill for high-priced brand-name drug products for artificially long periods of time.

The five case studies described below illustrate these points.

[16] Food and Drug Administration, Justification of Estimates for Appropriations Committee, FY 2020, available at https://www.fda.gov/media/121408/download.
[17] For context, PSGs are documents that FDA publishes "describing the Agency's current thinking and expectations on how to develop generic drug products therapeutically equivalent to specific reference listed drugs." *Product Specific Guidances for Generic Drug Development*, available at: https://www.accessdata.fda.gov/ scripts/cder/psg/index.cfm.
[18] Calculations from 2020 GDUFA III Data Call Responses for Industry.

Case Study 1: Xifaxan® (rifaximin) Tablets, 550 mg

At a Glance

- Blockbuster drug Xifaxan® was Orange Book-listed with over 30 patents.
- The first applicant – but not subsequent applicants – was delayed by a revised FDA Product Specific Guidance ("PSG") issued after the first applicant's ANDA submission.
- Generic entry and patient access ***would not be accelerated*** under BLOCKING because the subsequent applicant will not launch upon approval due to a patent settlement.

Xifaxan®, a blockbuster drug used to treat irritable bowel syndrome (IBS) with approximately $1.645 billion in sales in Fiscal Year 2021, was listed in the Orange Book with over 30 patents. The first Paragraph IV ANDA for generic Xifaxan® (550 mg) was submitted to FDA in December 2015, and that generic drug manufacturer was sued on over 20 of the listed patents. The case was settled after years of costly litigation on terms that allow the first applicant to launch its drug product in January 2028, two years before patent expiration.[19] Thus, this is a textbook example of the system working as it should—the generic manufacturer submitted an ANDA early that referenced an expensive brand-name drug, took on the burden and expense of litigating a large brand patent estate, and helped blaze the trail for generic entry well before patent expiry.

The BLOCKING Act would apply in the context of this drug if it became law. The reason for that is, as of today, FDA has not approved the first applicant's ANDA. That failure to obtain approval is not due to significant quality or other compliance issues, but to FDA's decision to fundamentally change the "rules of the road" after the first applicant filed its application by revising the PSG for the drug in March 2017.[20] This change uniquely affected the first applicant but not the subsequent applicants, who were able to rely on the new guidance from the start. Revisions to PSGs often require the first applicant to "go back to the drawing board," for example by reformulating or conducting additional studies on its proposed drug product. Unlike the first applicant, the subsequent applicant did not have to resubmit its ANDA because it filed after the PSG had been finalized in 2019. That applicant, who was able to develop its proposed drug product with the benefit of knowing FDA's new requirements, quickly settled its patent infringement litigation with the same entry date as the first applicant[21] and secured tentative ANDA approval in December 2020.[22] The subsequent applicant's approval pathway was quicker and less bumpy because it was paved by the first applicant. Indeed, if the first applicant had not submitted the initial challenge to the brand patents, the subsequent applicants likely would have had later market entry dates or would have had to engage in their own costly and protracted litigation against the brand, further delaying generic drug entry.

If the BLOCKING Act had been in effect, FDA would have finally approved the subsequent Paragraph IV ANDA, but *that approval would not have accelerated generic drug market entry*. The various patent settlement agreements do not permit generic drug market entry until January 2028.

- *In the case of generic Xifaxan®, application of the BLOCKING Act would cause a result contrary to sound public policy. The first applicant, which took on 20 patents and made significant investments in formulating its proposed drug product in light of shifting FDA requirements, would have been denied 180-day exclusivity even though generic competition would not begin any sooner than it otherwise would: January 2028.*

[19] *Bausch Health Announces Resolution Of XIFAXAN® Intellectual Property Litigation, available at:* https://www.prnewswire.com/news-releases/bausch-health-announces-resolution-of-xifaxan-intellectual-property-litigation-300710753.html.
[20] Draft Guidance, available at https://www.accessdata.fda.gov/drugsatfda_docs/psg/ Rifaximin_oral%20tablet_NDA%20022554%20and%20021361_RV03-17.pdf.
[21] https://generics.pharmaintelligence.informa.com/GB149872/Sandoz-Matches-Teva-On-US-Rifaximin-Launch-Date.
[22] ANDA No. 213713, Tentative Approval Action, available at https://www.accessdata.fda.gov/scripts/cder/daf/ index.cfm?event=overview.process&ApplNo=213713.

Case Study 2: Revlimid® (lenalidomide) Capsules

At a Glance

- Mega blockbuster drug Revlimid® was Orange Book-listed with over 30 patents. Many were asserted against the first applicant in litigation that dragged on for years and that benefitted subsequent ANDA applicants.
- Approval of the first applicant was delayed for years due to a changed FDA PSG and the brand company's abuse of FDA safety programs known as Risk Evaluation and Mitigation Strategies.
- Generic entry and patient access ***would not accelerate*** under BLOCKING because the subsequent applicant would not have launched upon approval due to a patent settlement.

Revlimid®, a brand-name oncology drug used to treat multiple myeloma, with one-time U.S. annual sales of $9.685 billion, was listed in the Orange Book with approximately 30 patents. The first Paragraph IV ANDA was submitted to FDA in 2010. Patent infringement litigation on most of the 30 listed patents ensued and lasted for years until a settlement was reached in 2015. That settlement allowed for a March 2022 entry date—about three years prior to patent expiration.[23] Meanwhile, due to FDA twice changing the lenalidomide PSG and significant, well-known issues surrounding the brand's Risk Evaluation and Management Strategy (REMS), FDA never tentatively approved the first applicant's ANDA and instead finally approved the application in May 2021.[24] Significantly, those REMS programs have, in some cases, been abused by brand manufacturers to the detriment of generic manufacturers and patients, which ultimately led to the passage of the CREATES Act to prevent such abuses.[25]

A subsequent Paragraph IV ANDA was submitted to FDA in 2016, was tentatively approved in October 2021, and obtained a settlement—after the first applicant paved the way for such an outcome through their litigation—for market entry after March 2022.[26] Much like Xifaxan®, that applicant was likely able to secure a more expeditious review of its ANDA because it did not have to deal with the uncertainty that the first applicant faced and had already largely addressed.

It is notable that subsequent applicants benefited from the first applicant's scientific work and the patent litigation, which the first filer willingly undertook because of the 180-day exclusivity incentive. And in March 2022, the first applicant marketed its generic version, as agreed to, and with a period of 180-day exclusivity.[27] BLOCKING would have altered that exclusivity result with no benefit to patients.

- *In the case of generic Revlimid®, application of the BLOCKING Act once again creates a result contrary to sound public policy. The first applicant, which made significant investments in patent infringement litigation and paved both the litigation and regulatory pathways for all subsequent ANDA applicants, would have been denied 180-day exclusivity. While that may have accelerated the approval of a subsequent Paragraph IV ANDA, it would not have accelerated generic entry.*

[23] *Celgene Settles Revlimid Patent Litigation*, available at: https://ir.celgene.com/press-releases-archive/press-release-details/2015/Celgene-Settles-REVLIMID-Patent-Litigation/default.aspx.
[24] A REMS program is a "drug safety program that FDA can require for certain medications with serious safety concerns to help ensure the benefits of the medication outweigh its risks." Risk Evaluation and Mitigation Strategies, available at: https://www.fda.gov/drugs/drug-safety-and-availability/risk-evaluation-and-mitigation-strategies-rems.
[25] *Access to Product Samples: The Creates Act,* available at: https://www.fda.gov/drugs/guidance-compliance-regulatory-information/access-product-samples-creates-act.
[26] *Celgene Settles U.S. Revlimid Patent Litigation with Alvogen,* available at: https://ir.celgene.com/press-releases-archive/press-release-details/2019/Celgene-Settles-US-REVLIMID-Patent-Litigation-with-Alvogen/default.aspx.
[27] Lenalidomide Entry, Paragraph IV *List,* available at: https://www.fda.gov/media/133240/download.

Case Study 3: Cialis® (tadalafil) Tablets

At a Glance

- Blockbuster drug Cialis® was Orange Book-listed with several patents, including a hard-to-challenge compound patent. The first applicant made a standard "paragraph III" certification to that compound patent and waited for it to expire before obtaining approval.
- Paragraph III certifications – which are extremely common in the industry to the high brand success rate for compound patents – make it extremely unlikely that a first applicant can obtain final approval in 30 months.
- BLOCKING would have been triggered because FDA tentatively approved a subsequent applicant who had settled with the brand company for a date after the first applicant's launch.
- Generic entry and patient access ***would not accelerate*** under BLOCKING because the subsequent applicant would not have launched upon approval due to its patent settlement.

Cialis®, used to treat erectile dysfunction, had annual U.S. sales of about $1.93 billion before generic entry. It was initially listed in the Orange Book with six patents. The first Paragraph IV ANDA had been submitted to FDA in November 2007. Patent infringement litigation followed, and the parties ultimately settled the litigation permitting generic entry in September 2018—two years before the challenged patents expired.

As part of its application filing, the first applicant made what is known as a "paragraph III" certification to a compound patent, which covers the active ingredient in the drug. Paragraph III certifications state that the applicant will wait until that patent expires before commercially marketing the generic. They are exceedingly common for compound patents, which are almost always upheld by courts and are typically granted a patent term extension (of up to 5 years).

FDA did not grant final approval to the first applicant's application until May 2018, about six months after expiration of the patent that was subject to the paragraph III certification.[28] The first generic was launched in September 2018.[29]

Notably, BLOCKING would have applied in this case because a subsequent applicant was tentatively approved in November 2017.[30] But that subsequent applicant would not have been able to launch any earlier than the first applicant because that subsequent applicant had also settled with the brand-name company. Significantly, that agreement precluded the subsequent applicant from launching its drug product until six months after the first applicant.[31] Thus, BLOCKING would have applied, but would not have benefitted patients.

- *In the case of generic Cialis®, application of the BLOCKING Act would have ended in a result antithetical to the intent of the Hatch-Waxman Amendments and sound public policy. The first applicant, which made significant investments in patent infringement litigation and in paving the litigation pathway for the subsequent applicant, would have been denied 180-day exclusivity. Meanwhile, both ANDA applicants would have received final approval in May 2018, while only the first applicant could launch in September 2018 under the terms of the settlement agreements. Thus, while application of the BLOCKING Act would have accelerated the approval of a subsequent ANDA, once again, it would not have accelerated market entry.[32]*
- *Cialis® is also an example of how BLOCKING would further undermine a patent challenge system in which compound patents cannot be—or are exceedingly rarely— successfully challenged. In such cases, first applicants often cannot obtain approval until well after 30 months from ANDA submission.*

[28] ANDA Tentative Approval Letter, available at: https://www.accessdata.fda.gov/drugsatfda_docs/appletter/ 2017/090141Orig1s000TAltr.pdf.
[29] *Teva Announces Exclusive First-to-File Launch of a Generic Version of Cialis® in the United States*, available at: https://www.businesswire.com/news/home/20180927005757/en/Teva-Announces-Exclusive-First-to-File-Launch-Generic-Version.
[30] November 9, 2017 Memorandum from Martin Shimer to Abbreviated New Drug Application No. 090141.
[31] Pipeline Analysis, available at: https://bsmedia.business-standard.com/_media/bs/data/market-reports/equity-brokertips/2018-12/15452002020.40475200.pdf.
[32] Although in this instance the first applicant was "protected" by the second applicant's settlement, that is not always the case.

Case Study 4: Rytary® (carpidopa/levodopa) Extended-release Capsules

At a Glance

- The first applicant for generic Rytary® – Orange Book-listed with several patents – was able to settle patent infringement litigation for a market entry about 3.5 years earlier than patent expiration.
- A subsequent applicant obtained tentative approval but entered into a settlement with a launch date likely no earlier than the first applicant.
- Generic entry and patient access ***would not accelerate*** under BLOCKING because the subsequent applicant would not have launched upon approval due to its patent settlement.

Rytary®, approved for the treatment of Parkinson's disease and other related conditions, was listed in the Orange Book with about six patents. The first Paragraph IV ANDA was submitted to FDA in June 2015. Patent infringement litigation followed, and the parties ultimately settled the litigation in 2018 to allow for market entry in July 2025—about 3.5 years earlier than patent expiration.[33] In the meantime, a subsequent Paragraph IV ANDA was submitted to FDA. That subsequent applicant was tentatively approved in July 2020, which would have triggered BLOCKING.[34] As with many other examples, generic entry would not have been accelerated because a BLOCKING approval would not have resulted in a launch. Indeed, that subsequent applicant also settled with the brand, likely with a market entry date no earlier than July 2025.[35]

- *In the case of generic Rytary®, application of the BLOCKING Act would result in FDA denying the first applicant 180-day exclusivity and approving the subsequent Paragraph IV ANDA. But it is likely that neither drug product can be launched until July 2025. Thus, while application of the BLOCKING Act would have accelerated the approval of a subsequent Paragraph IV ANDA, once again, it would not have accelerated market entry.*

[33] K. Goliya, *Amneal to settle patent lawsuit against Teva regarding Parkinson's drug*, available at: https://www.spglobal.com/marketintelligence/en/news-insights/trending/rv0oksqteeurqgdp403pgq2.
[34] ANDA Tentative Approval Letter, available at: https://www.accessdata.fda.gov/drugsatfda_docs/appletter/ 2020/210911Orig1s000TAltr.pdf.
[35] Source: IPD Analytics.

Case Study 5: Belbuca® (buprenorphine) Buccal Film

At a Glance

- The first applicant for generic Belbuca® settled patent infringement litigation for a market entry about 6 months earlier than patent expiration.
- BLOCKING would have applied when a subsequent applicant's 30-month stay expired and before that subsequent applicant completed its patent litigation.
- That subsequent applicant subsequently ***lost its patent litigation*** and will be precluded from obtaining approval until after the patent expires and after the first applicant.
- BLOCKING would, once again, not accelerate patient access or market entry.

A final example of the BLOCKING Act framework leading to a result contrary to sound public policy is illustrated by Belbuca®, a drug used for pain management with 2021 net sales expected to be $147-$148 million. The first ANDAs were submitted to FDA in September and October 2016, with Paragraph IV certifications to two patents. Patent infringement litigation was initiated against the first applicant, and ultimately settled in early 2018, permitting commercial launch of a generic version in January 2027, six months prior to patent expiration.[36] In the interim, FDA concluded that the first applicant qualified for an exception to the failure to receive tentative approval in 30 months forfeiture provision because the Agency had changed the requirements for approval after the first applicant submitted its ANDAs.[37]

In March of 2021, a subsequent applicant sued FDA, challenging FDA's finding that the applicant had qualified for an exception to the forfeiture provision and arguing that the subsequent applicant should be approved.[38] The reason that the subsequent applicant could otherwise be approved was because its thirty-month stay had terminated—an event, which FDA acknowledges, sometimes occurs before patent litigation is completed.[39] But, as with all the other examples, this would not have led to faster market entry because the subsequent applicant proceeded to lose the patent litigation,[40] which will result in a reset of its final approval to patent expiration.

This once again highlights that the BLOCKING Act does not lead to faster market entry, just faster approvals—approvals that cannot be utilized due to settlements and ongoing patent litigation.

- *In the case of generic Belbuca®, application of the BLOCKING Act would have resulted in a scenario whereby FDA would have approved a subsequent Paragraph IV ANDA once the last BLOCKING criterion were met, but where that subsequent applicant was still litigating—and later lost—its patent case. In other words, although the first applicant, which undertook the patent challenge with the hope of ultimately obtaining 180-day exclusivity, had previously settled for an early market entry date of January 2027, the subsequent Paragraph IV ANDA applicant was unsuccessful in its patent infringement litigation and now may not launch its drug product until after the first applicant and after patent expiration in July 2027.*

[36] *BioDelivery Sciences Announces BELBUCA® Patent Litigation Settlement Agreement with Teva*, available at: https://www.globenewswire.com/news-release/2018/02/06/1333512/0/en/BioDelivery-Sciences-Announces-BELBUCA-Patent-Litigation-Settlement-Agreement-with-Teva.html.
[37] January 28, 2021 Memorandum from Martin Shimer to Abbreviated New Drug Application Nos. 209807, 209772, and 209704.
[38] *Alvogen et al. v. Food and Drug Administration*, Case No. 1:12-cv-672 (D.D.C.).
[39] Maryll Toufanian, Martin Shimer, *Hatch-Waxman 101*, available at: https://www.fda.gov/media/91717/download.
[40] *BioDelivery Sciences Prevails in BELBUCA® ANDA Litigation Maintaining Patent Exclusivity Against Alvogen Until 2032*, available at: https://ir.bdsi.com/news-releases/news-release-details/biodelivery-sciences-prevails-belbucar-anda-litigation.

IV. The BLOCKING Act Will Discourage Patent Challenges and Result in Fewer Generic Drugs

As the above examples illustrate, BLOCKING will not achieve its purpose of accelerating generic market entry. But its problematic effects are not limited to that: it will also significantly diminish the Hatch-Waxman incentive for patent challenges. Because the BLOCKING Act means that first applicants will be less certain of receiving 180-day exclusivity, fewer generic drug manufacturers will take on the burden of contesting vulnerable patents. Thus, BLOCKING would have a direct and significant impact on entire portfolios and the calculus that goes into selecting targets for generic development. Indeed, all of the investment in product development is impacted by an increased risk of a loss of exclusivity, including reduced research and development spending, capital expenditures, and investment in patent litigation. And the biggest impact will be felt by patients who seek more affordable options when it comes to treatment plans.

Neither FDA nor proponents of the legislation can accurately claim that the harmful effects of BLOCKING are marginal. While FDA has estimated that the passage of the BLOCKING Act would affect "only" five products per year—which could be an underestimation—even that number is significant. Without predictability about whether its drug will be affected by BLOCKING, generic manufacturers must assume that BLOCKING could have a substantial effect on the generic drug industry, which manufactures the medicines used in 9 out of every 10 prescriptions in the United States, and saved the United States healthcare system $338 billion in 2020 alone.

CONCLUSION

The BLOCKING Act, if passed, will not accelerate generic drug entry. Instead, it will upend the critical 180-day exclusivity incentive by making it far less predictable and therefore far less valuable. As a result, fewer generic drug manufacturers are likely to make the significant investment needed to challenge patent estates on expensive brand-name drugs, even when those challenges could have been successful or resulted in favorable settlements. The net effect will be that brand-name prices will remain higher for longer, and there will be fewer generic drugs available to patients.