January 28, 2016

Edith Ramirez
Chairwoman
Federal Trade Commission
600 Pennsylvania Avenue NW
Washington, D.C. 20580

Re: Review of the Teva-Allergan Merger

Dear Chairwoman Ramirez:

The American Antitrust Institute (AAI) writes to express its views about the proposed merger of pharmaceutical companies Teva and Allergan.[1] The deal is currently under review by the Federal Trade Commission (FTC). The AAI has a long history of competition advocacy in the healthcare supply chain. This ranges from congressional testimony, to white papers and commentary on competition involving pharmaceutical, hospital, and health insurance mergers, and strategic competitive conduct by intermediaries such as Group Purchasing Organizations and Pharmacy Benefit Managers. The AAI has also devoted chapters to competition in healthcare in its 2008 and upcoming 2016 Transition Reports.

This letter, based on publicly available information, evaluates the likely competitive effects of the proposed merger and its implications for consumer welfare in the United States. Potentially adverse effects could be large since generic sellers introduce a critical measure of competition into pharmaceutical markets and play an important competitive role in making prescription drugs affordable. Any limitation or diminution of the competitive influence of generic pharmaceutical firms could therefore have substantial adverse consequences. Moreover, crafting relief that will adequately protect consumer interests is inherently difficult.

I. Background on the Proposed Merger of Teva and Allergan

The proposed merger joins the largest generic pharmaceutical company in the world, Teva Pharmaceuticals, with Allergan, an important rival and currently number three in worldwide generic sales. Both companies are the product of previous mergers. Teva's past includes mergers with

[1] The AAI is an independent non-profit education, research, and advocacy organization. Its mission is to advance the role of competition in the economy, protect consumers, and sustain the vitality of the antitrust laws. For more information, see www.antitrustinstitute.org. Many thanks to Bill Comanor, Professor, Economics Department, University of California, Santa Barbara and Professor, Department of Health Policy and Management, University of California, Los Angeles, and AAI Advisory Board member, for his work in crafting this letter. Professor Comanor is formerly Director of the Bureau of Economics, Federal Trade Commission, 1978–1980. We are very grateful to F.M. Scherer for his many helpful comments and suggestions. Much of the source material and data provided here came originally from him. Many thanks also to AAI Research Fellow, Kyle Virtue, for research assistance.

Copley Pharmaceuticals in August of 1999; Novophram less than a year later in February of 2000; SICOR, Inc. in January of 2004; IVAX Pharmaceuticals 19 months later on July 25, 2005; Barr Pharmaceuticals on December 23, 2008; and Cephalon, Inc. on October 14, 2014. These mergers contributed to Teva's current leading position in the generic pharmaceutical industry.

In contrast, Allergan was largely a branded pharmaceutical company before its merger with Actavis in 2015. However, Actavis' position as a generic drug supplier was enhanced by a rapid succession of earlier mergers. These include mergers with Watson Pharmaceuticals in October of 2012, Warner Chilcott in October of 2013, and Forest Labs and Furiex Pharmaeucticals in July of 2014.

The position of the merging companies is evident in the following listing of global generic market shares for the ten leading companies in 2014:[2]

Global Market Share for the
10 Leading Generic Pharmaceutical Companies (2014)

Firm	Market Share (%)
Teva	12.2
Novartis (Sandoz)	11.5
Actavis (Allergan)	8.9%
Mylan	8.8%
Sun Pharmaceuticals	6.0%
Aspen Pharmacare	4.1%
Hospira	3.6%
Sanofi	3.2%
Fresenius	3.1%
Lupin	2.7%
Top 10 firms	64.6%

As indicated by these data, if the proposed merger is consummated, the merged firm will control over 21% of the worldwide generic drug business. At the same time, the industry as a whole is relatively unconcentrated and includes a number of important firms.

For sales within the United States, the Food and Drug Administration (FDA) received in 2014 a total of 1,473 Abbreviated New Drug Applications (ANDAs) requesting authorization to produce and sell generic pharmaceuticals. Of these applications, Teva submitted 106 and Actavis (Allergan) submitted 214.[3] Together, the two companies accounted for 22% of all ANDAs filed. U.S. shares are thereby not much different from those reported on a worldwide basis.

II. Higher Concentration in Generic Markets is Associated With Higher Prices

Following the passage of the Hatch-Waxman Act in 1984, a new industry evolved which became separate and distinct from the branded pharmaceutical industry. It arose specifically from revised FDA regulatory requirements. Rather than requiring a New Drug Application (NDA), in which

[2] *Top 10 Generic Drug Manufacturers Worldwide Based on Market Share in 2014*, Statista, www.statista.com/statistics/314595/ (last visited Jan. 28, 2016).
[3] Food & Drug Admin., *Activities Report of the Generic Drug Program (FY 2014)*, FDA.gov, http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/AbbreviatedNewDrugApplicationANDAGenerics/ucm427830.htm (last updated Dec. 23, 2014).

safety and efficacy would need to be demonstrated, merely an ANDA was required. The essential requirement under an ANDA was to demonstrate that the generic firm's product was "bioequivalent" to an established one. Critically, this abbreviated task was much less costly than that imposed by an NDA, with the cost falling to under $1 million by the early 1990s.[4]

Under the new regulations, generic suppliers entered many pharmaceutical markets and prices declined sharply. For example, with only a single generic entrant, the average generic price would be roughly 60% of the branded price.[5] However, additional entrants would often appear, and prices would decline further. Although branded prices were largely set by demand-side factors, primarily the therapeutic value of the product,[6] generic prices were determined more by supply-side factors. Production costs were a particularly important determinant, although it is estimated that eight or more rivals were required to drive prices down to production costs.[7]

Not only did the number of generic rivals selling the same "molecule" affect price levels, it also influenced the rate of price increases. In a still unpublished study, Drs. Chintan V. Dave and Abraham Hartzema examined commercial claims data between January 1, 2008 and June 30, 2013 to identify a sample of 1,120 pharmaceutical agents available as generic drugs during the entire five-and-a-half-year period.[8] Dividing their sample into four nearly equally sized groups based on HHI values calculated by the relative numbers of prescriptions for the drug dispensed, they report substantially higher average price increases where seller concentration was higher and fewer firms were present.

As compared with generally stable prices for generic products in the least concentrated quadrant, Dave and Hartzema report an average increase of 60% in the highest group over the study period, and smaller price increases in the two intermediate HHI groups.[9] Strikingly, for fully half of the drugs included in their sample, the associated initial HHI values exceeded 5,000, which can be reached when there are two equal sized sellers, or a duopoly in the market.[10]

It is important to note that supply limitations (i.e., drug shortages) do not explain Dave and Hartzema's finding. In fact, the authors tested for whether the higher prices associated with fewer rivals could have resulted from supply limitations. They found that generic products with smaller numbers of sellers had *fewer*, rather than more, periods of drug shortages.[11] With fewer firms and higher prices, the opportunity costs of not filling orders are increased, so that fewer such periods were present. Although higher prices often follow from restricted supply conditions, that factor does not confound the authors' finding that the presence of fewer sellers is associated with increasing generic prices.

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[4] David Reiffen & Michael R. Ward, *Generic Drug Industry Dynamics*, 87 Rev. Econ. & Stat. 37, 38 (2005).
[5] This finding applies to the years between 1976 and 1987. *See* Richard E. Caves et al., *Patent Expiration, Entry, and Competition in the U.S. Pharmaceutical Industry*, 1991 Brookings Papers on Econ. Activity. Microeconomics 1, 35.
[6] Z. John Lu & William S. Comanor, *Strategic Pricing of New Pharmaceuticals*, 80 Rev. Econ. & Stat. 108 (1998).
[7] Reiffen & Ward, *supra* note 4, at 37–49.
[8] C.V. Dave & A.G. Hartzema, Prices and Generic Medications, and its Association with Industry Consolidation, Presentation at the International Conference on Pharmacoepidemiology & Therapeutic Risk Management (Aug. 22–26, 2015).
[9] *Id.* at tbl.1.
[10] Although Dave and Hartzema's empirical methods did not lead them to deal simultaneously for the influence of extraneous factors, they did consider two such factors separately: total molecule sales as well as periods of drug shortages. As anticipated, molecular agents with more prescriptions dispensed were generally found with lower HHI values due generally to the presence of more rivals.
[11] Dave & Hartzema, *supra* note 8.

At the same time, a factor contributing to an inadequate number of rivals in many pharmaceutical markets is the presence of regulatory lag. According to the Generic Pharmaceutical Association (GPhA), the median FDA review time for ANDA approval in 2011 was 30 months. This lag increased to 31 months in 2012, 36 months in 2013 and an estimated 42 months in 2014.[12] GPhA also stated, "At the industry's best estimate, current fiscal year median approval times [for 2015] will be 48 months – the slowest it has ever been."[13] This factor contributed to the presence of fewer rivals available to compete for sales of drugs whose patents could no longer block entry.

III. The Proposed Merger Will Eliminate Competition in Multiple Direct Molecule and Therapeutic Markets

Generic sales of individual molecules are often limited to two or three firms. The proposed merger threatens to increase market concentration still further. This observation follows from the considerable overlap existing between the product markets entered by Teva and Allergan (Actavis). Based on data from 2006 to the present, there were 67 direct molecule overlaps. These overlaps reflect instances in which both parties sold drugs with the same active ingredient or combination of active ingredients.[14]

Although there is often considerable substitutability across alternate drugs in the same therapeutic area, this does not mean that alternatives have identical effects. For example, different molecular entities often have different therapeutic effects in different patients.[15] Therefore, broadly stated therapeutic areas may include alternatives that are not highly substitutable.

Nevertheless, it is helpful to review the extent of product overlap between the merging parties within broadly stated therapeutic areas. Applying the therapeutic area definitions contained in the Physician's Desk Reference (PDR), we find there were 59 direct therapeutic overlaps between the two companies.[16] Overlapping molecules and therapeutic areas are listed in the Appendices B and C, respectively.

IV. The Proposed Merger Would Eliminate an Important Source of Entry Under Paragraph IV Challenges

A. Antitrust Precedent on Entry and the Hatch-Waxman Framework

The Hatch-Waxman Act's regulatory structure has its intended impact on generic prices when there are sufficient numbers of rivals for the same or similar molecules. However, where those conditions are not present—and the number of rival firms is more limited—generic prices are much higher and

[12] Ralph G. Neas, President, Generic Pharm. Ass'n, Statement at the FDA Public Meeting on GDUFA (June 15, 2015), at http://www.gphaonline.org/gpha-media/press/statement-by-ralph-g-neas-president-and-ceo-gpha-on-the-june-15th-fda-public-meeting-on-gdufa.

[13] *Id.*

[14] These data include products originally sold by companies acquired by Teva or Allergan so that the Teva data includes those drugs sold earlier by Barr and Ivax Corp. and the Allergan/Actavis data include products sold earlier by Watson Pharmaceuticals, Warner Chilcott, Forest Labs and Furiex.

[15] Qiang Ma & Anthony Y. H. Lu, *Pharmacogenetics, Pharmacogenomics, and Individualized Medicine*, 63 Pharmacological Rev. 437 (2001).

[16] This figure indicates the number of therapeutic areas as defined in the PDR that include generic drugs sold by both merging parties. In some cases, they include products containing the same API, while in others, APIs are different but have similar therapeutic indications.

substantial price increases can occur. Maintaining conditions in which substantial generic entry can take place is therefore an important policy objective.

The importance of entry and potential competition cannot be underestimated. Consider the Falstaff-Naragansett beer merger case of 1974.[17] In that decision, the Supreme Court stated:

> The District Court should therefore have appraised the economic facts about Falstaff and the New England market in order to determine whether in a realistic sense Falstaff could be said to be a potential competitor . . . so positioned on the edge of the market that it exerted beneficial influence on competitive conditions in that market.[18]

In *Falstaff*, that beneficial influence was that if the incumbent firms raised their prices too much, Falstaff would enter and drive prices down. In regard to generic drugs, the relevant market is not the sale of beer in a geographic area but instead the set of drug products whose patents are questionable or drawing to an end so that more rapid generic entry would lead to lower consumer prices and enhanced consumer welfare.

A more recent case concerns one of the merging parties here. In its 2013 *Actavis* decision the Court found that the principal infirmity of a reverse payment settlement with the first filer is that it "removes from consideration the most motivated challenger, and the one closest to introducing competition."[19] In this passage, Justice Breyer identifies the first mover generic company as one most likely to introduce competition into the relevant market. That factor is equally relevant for the merger at issue here.

A significant element of the regulatory structure that promotes generic entry is the "Paragraph IV" route, as specified by the Hatch-Waxman Act.[20] On filing an ANDA, generic entrants can either wait until existing patents (if there are any) on the drug expire. Alternatively, they can take the Paragraph IV route to gain quicker FDA approval and market entry. However, a Paragraph IV filing "automatically counts as patent infringement"[21] to which the branded company holding the patent can respond with an infringement suit. If the patent holder does not bring an action within forty-five days, the ANDA is accepted and the generic entrant can proceed. However, if a suit is brought, the FDA must withhold approving the ANDA for a period of up to 30 months, or until questions of patent validity or infringement are resolved.

Although generic entry is then postponed while patent litigation proceeds, the Act provides a special incentive for generic manufacturers to follow the Paragraph IV route and challenge questionable patents. If successful, a first-to-file prospective entrant is granted a six-month period of exclusivity, during which the FDA will approve no additional ANDA. As Justice Breyer observed, "If the first-to-file generic manufacturer can overcome any patent obstacle and bring the generic to market, the 180–day period of exclusivity can prove valuable, possibly 'worth several hundred million dollars.'"[22]

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[17] *United States v. Falstaff Brewing Corp.*, 410 U.S. 526 (1973).

[18] *Id.* at 533.

[19] *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2235 (2013) (internal quotation marks omitted).

[20] Fed. Trade Comm'n, *Generic Drug Entry Prior to Patent Expiration: An FTC Study* 1–10 (July 2002), *available at* https://www.ftc.gov/sites/default/files/documents/reports/generic-drug-entry-prior-patent-expiration-ftc-study/genericdrugstudy_0.pdf.

[21] *Actavis*, 133 S. Ct. at 2228.

[22] *Id.* at 2229 (citation omitted).

What this regulatory provision under Hatch-Waxman emphasizes is the importance of potential competition. For any particular molecular agent, competition begins with the first entrant, which can potentially lead a parade of followers.[23] However, the regulatory framers were concerned that generic entry could be blocked by the presence of weak patents on existing branded products. The statute thus sought to encourage legal challenges by offering the Paragraph IV route to generic entry and a reward for successful challenges in the form of a six-month period of generic exclusivity.[24]

B. Teva and Allergan are Critical Players in Paragraph IV Entry

The first company to file an ANDA plays a significant competitive role—particularly those who take the Paragraph IV route. To be sure, not all first entrants pursue this route;[25] but those that do have important competitive implications. Under the current regulatory regime, it is essential that there remain large generic companies who can both pay high litigation costs and assume the associated risks. Among those companies are Teva and Allergan (Actavis), the two merging parties.

We collected data on first-mover ANDA applications since 2006, which includes those containing paragraph IV certifications (see Appendix A). Between 2006 and the present, Teva and the firms it acquired first ANDA status for fully 131 drugs; the largest number of any generic company. There were also 67 first filings by Actavis, which included those by its acquisition of Watson Laboratories. Only Mylan Pharmaceuticals had more such filings than Actavis at 87.[26] Removing the independent decision-making of one of the merging parties would therefore likely eliminate an important source of Paragraph IV filings and diminish a significant source of competitive challenges.

What is present here is a unique problem in market definition: it concerns who will lead the way to challenging patented drugs whose protection is either dubious or drawing to an end. Unlike cases of product overlap, we cannot easily identify the candidates in advance; but we can observe the set of actors from which they are drawn. From this limited set, the proposed merger eliminates an important member. To be sure, this consideration can be recast into terms of most likely potential entrants seeking to enter more narrowly defined markets. Earlier antirust actions did that, as noted above.

V. Divestitures Are Unlikely to Remedy the Harmful Effects of the Proposed Merger

A common response to the presence of product overlaps between merging parties is to require product divestitures. However, that remedy is insufficient to fully restore competition lost by the proposed merger. The generic drug industry does not center on brands and patents. They can therefore *not* be sold as part of a structural divestiture remedy. All that can really be divested is the relevant ANDA. But that value is fleeting, and it is unlikely that potential buyers would pay much for the right to be a late mover into a generic market where prices decline with each additional entrant.

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[23] The FTC Report, supra, emphasized this objective: "The 180-day marketing exclusivity provision was intended to increase the economic incentives for a generic company to be the first to file an ANDA containing a paragraph IV certification and get to market." Fed. Trade Comm'n, *supra* note 20, at vi.

[24] The FTC Report, supra, notes that generic applicants have prevailed in 73 percent of the cases reaching judicial resolution. *Id.* at 10.

[25] Between 1998 and 2000, approximately 20 percent of all generic applications sought entry prior to patent expiration. *Id.* at ii. Of course, this percentage understates the percentage of first-movers pursing this objective.

[26] Food & Drug Admin., *supra* note 3.

As Caves, Whinston, and Hurwitz emphasize in an earlier study, "generic drug companies make money by being the first to enter after patent expiration."[27] What is lost in a possible divestiture is the earlier entrant with a presumably stronger market position; while what is gained is a later entrant in a far weaker market position. What a recipient gains may not therefore be worth much. In such circumstances, a divestiture remedy for the competitive issues raised by this merger is unlikely to fully restore competition lost by the proposed merger.

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We appreciate the opportunity to share the AAI's views on the proposed merger of Teva and Allergan with the FTC.

Sincerely,

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[27] Caves et al., *supra* note 4, at 37.

Appendix A:
First Filings and ANDAs Since January 1, 2006

Rank	Company	First-Filed ANDAs	Total ANDAs
1	Teva Pharmaceutical Industries	131	439
2	Mylan	87	703
3	Allergan (Actavis)	67	368
4	Apotex, Inc.	43	329
5	Roxane Laboratories, Inc.	43	123
6	Dr. Reddy's Laboratories	42	260
7	Novartis (Sandoz)	41	273
8	Sun Pharmaceutical Industries, Inc.	30	433
9	Par Pharmaceutical	27	115
10	Lupin Pharmaceuticals Ltd.	24	241
11	Perrigo Company	24	33
12	Aurobindo Pharma Ltd.	22	424
13	Glenmark Pharmaceuticals Ltd.	20	169
14	Torrent Pharma, Inc.	15	151
15	Hospira	14	110
16	Ranbaxy	14	0
17	Pharmaforce Inc.	13	3
18	Akorn	11	55
19	Anchen Pharmaceuticals, Inc.	11	53
20	Zydus Pharmaceuticals (USA), Inc.	9	198
21	Impax Laboratories, Inc.	9	80
22	Novel Laboratories, Inc.	9	51
23	Bedford Laboratories	9	22
24	Amneal Pharma.	7	150
25	Paddock Laboratories, Inc.	7	35
26	Tolmar, Inc.	7	14

Sources:

Food & Drug Admin., *Approved Drug Products with Therapeutic Equivalence Evaluations* (35th ed. 2015), *available at* http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/UCM071436.pdf; *ANDA (Generic) Drug Approvals*, Food & Drug Admin., http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/DrugandBiologicApprovalReports/ANDAGenericDrugApprovals/ (last visited Jan. 26, 2016).

Notes:

[1] Companies are ranked by the number of first filings. Only companies with seven or more first filings are included in this chart. There are 129 additional companies with six or fewer first filings. The complete list is on file with AAI.

[2] ANDAs and first filings made by Actavis or Watson Pharmaceuticals are attributed to Allergan due to Allergan's recent merger activity. Similarly, because Teva acquired IVAX Pharmaceuticals in 2005 and Barr Pharmaceuticals in 2008, their ANDAs and first filings are attributed to Teva in this table. There may be additional merger activity not accounted for in this data.

Appendix B:
Molecule Overlaps Between Teva and Allergan

ACITRETIN
ALBUTEROL SULFATE
ALBUTEROL SULFATE; IPRATROPIUM BROMIDE
ALENDRONATE SODIUM
AMLODIPINE BESYLATE
AMLODIPINE BESYLATE; BENAZEPRIL HYDROCHLORIDE
AMPHETAMINE ASPARTATE; AMPHETAMINE SULFATE; DEXTROAMPHETAMINE SACCHARATE; DEXTROAMPHETAMINE SULFATE
BICALUTAMIDE
BUDESONIDE
BUPRENORPHINE HYDROCHLORIDE
BUPRENORPHINE HYDROCHLORIDE; NALOXONE HYDROCHLORIDE
CABERGOLINE
CELECOXIB
CLONIDINE
CLOPIDOGREL BISULFATE
CLOZAPINE
DEXMETHYLPHENIDATE HYDROCHLORIDE
DIVALPROEX SODIUM
DOCETAXEL
DONEPEZIL HYDROCHLORIDE
DORZOLAMIDE HYDROCHLORIDE
DORZOLAMIDE HYDROCHLORIDE; TIMOLOL MALEATE
DROSPIRENONE; ETHINYL ESTRADIOL
DULOXETINE HYDROCHLORIDE
DUTASTERIDE
EPIRUBICIN HYDROCHLORIDE
ETHINYL ESTRADIOL; LEVONORGESTREL
ETHINYL ESTRADIOL; NORETHINDRONE
ETHINYL ESTRADIOL; NORETHINDRONE ACETATE
FINASTERIDE
GALANTAMINE HYDROBROMIDE
GEMCITABINE HYDROCHLORIDE
GRISEOFULVIN, MICROSIZE
GUANFACINE HYDROCHLORIDE
HYDROCHLOROTHIAZIDE; IRBESARTAN
IBUPROFEN; OXYCODONE HYDROCHLORIDE
IRBESARTAN

Appendix B (cont.):
Molecule Overlaps Between Teva and Allergan

IRINOTECAN HYDROCHLORIDE
LAMOTRIGINE
LEVALBUTEROL HYDROCHLORIDE
LEVETIRACETAM
LEVOFLOXACIN
LEVONORGESTREL
METHYLPHENIDATE HYDROCHLORIDE
METRONIDAZOLE
MORPHINE SULFATE
MOXIFLOXACIN HYDROCHLORIDE
OXALIPLATIN
OXYMORPHONE HYDROCHLORIDE
PANTOPRAZOLE SODIUM
PIOGLITAZONE HYDROCHLORIDE
PRAMIPEXOLE DIHYDROCHLORIDE
PRAVASTATIN SODIUM
QUETIAPINE FUMARATE
RALOXIFENE HYDROCHLORIDE
RAMELTEON
RISPERIDONE
SILDENAFIL CITRATE
SIMVASTATIN
SUMATRIPTAN SUCCINATE
TOPIRAMATE
TOPOTECAN HYDROCHLORIDE
TRANDOLAPRIL
TRETINOIN
VALACYCLOVIR HYDROCHLORIDE
VANCOMYCIN HYDROCHLORIDE
ZOLPIDEM TARTRATE

Source:

Food & Drug Admin., *Approved Drug Products with Therapeutic Equivalence Evaluations* (35th ed. 2015), *available at* http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/UCM071436.pdf.

Appendix C:
Therapeutic Category Overlaps Between Teva and Allergan

5-HT1B/1D AGONIST (TRIPTANS)
ACE INHIBITOR
ACE INHIBITOR/CALCIUM CHANNEL BLOCKER (CCB) (DIHYDROPYRIDINE)
ACETYLCHOLINESTERASE (ACHE) INHIBITOR
ALPHA-ADRENERGIC AGONIST
ALPHA1 ANTAGONIST
ALPHA2 AGONIST
ANGIOTENSIN II RECEPTOR BLOCKER (ARB)
ANGIOTENSIN II RECEPTOR BLOCKER (ARB) /THIAZIDE DIURETIC
ANTHRACYCLINE
ANTIANDROGEN
ANTICHOLINERGIC/BETA2 AGONIST
ANTIDEPRESSANT
ANTIDIABETIC
ANTIFUNGAL
ANTIHISTAMINE
ANTIMICROTUBULE AGENT
ANTINEOPLASTIC
ANTIPLATELET AGENT
ATYPICAL ANTIPSYCHOTIC
BETA2 AGONIST
BISPHOSPHONATE
CALCIUM CHANNEL BLOCKER (CCB) (DIHYDROPYRIDINE)
CALCIUM CHANNEL BLOCKER (CCB)/HMG-COA REDUCTASE INHIBITOR (STATIN)
CARBONIC ANHYDRASE INHIBITOR
CARBONIC ANHYDRASE INHIBITOR/NONSELECTIVE BETA BLOCKER
CNS STIMULANT
CORTICOSTEROID
COX-2 INHIBITOR
DOPAMINE RECEPTOR AGONIST
ESTROGEN/PROGESTOGEN COMBINATION
FLUOROQUINOLONE
H1 ANTAGONIST
HMG-COA REDUCTASE INHIBITOR (STATIN)
IMIDAZOLE ANTIBIOTIC
IMIDAZOPYRIDINE HYPNOTIC
MEGLITINIDE
MELATONIN RECEPTOR AGONIST
NON-ERGOT DOPAMINE AGONIST

Appendix C (cont.):
Therapeutic Category Overlaps Between Teva and Allergan

NSAID
NUCLEOSIDE ANALOGUE
OPIOID ANALGESIC
ORGANOPLATINUM COMPLEX
PARTIAL OPIOID AGONIST
PHENYLTRIAZINE
PHOSPHODIESTERASE-5 (PDE-5) INHIBITOR
PROGESTIN CONTRACEPTIVE
PROSTAGLANDIN ANALOGUE
PROTON PUMP INHIBITOR (PPI)
PYRROLIDINE DERIVATIVE
RETINOID
SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI)
SULFAMATE-SUBSTITUTED MONOSACCHARIDE ANTIEPILEPTIC
SULFONYLUREA (2ND GENERATION)
TOPOISOMERASE I INHIBITOR
TRICYCLIC GLYCOPEPTIDE ANTIBIOTIC
TYPE I AND II 5 ALPHA-REDUCTASE INHIBITOR (5-ARI) (2ND GENERATION)
TYPE II 5 ALPHA-REDUCTASE INHIBITOR (5-ARI)
VALPROATE COMPOUND

Source:

Food & Drug Admin., *Approved Drug Products with Therapeutic Equivalence Evaluations* (35th ed. 2015), *available at* http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/UCM071436.pdf; PDR.net, http://www.pdr.net/ (last visited Jan. 27, 2016).