

Disclaimer

Organizations may not re-use material presented at this AMCP webinar for commercial purposes without the written consent of the presenter, the person or organization holding copyright to the material (if applicable), and AMCP. Commercial purposes include but are not limited to symposia, educational programs, and other forms of presentation, whether developed or offered by forprofit or not-for-profit entities, and that involve funding from for-profit firms or a registration fee that is other than nominal. In addition, organizations may not widely redistribute or re-use this webinar material without the written consent of the presenter, the person or organization holding copyright to the material (if applicable), and AMCP. This includes large quantity redistribution of the material or storage of the material on electronic systems for other than personal use.





Overview

- FTC: Purpose, Authority, and Perspective
- 2009 FTC Report on Likely Competitive Effects of Follow-on Biologics (FOBs)
- 2010-2013: BPCIA and Status of FOBs in US and Ex-US
- 2014 Workshop: Likely Competitive Effects of Naming Choices and Proposed State Laws

FTC Purpose, Authority and Perspective: Protect Competition, Which Benefits Consumers

• At the time Hatch-Waxman was passed, some expressed concern that generic drugs would deplete innovator firms' revenues and thus deter the development of new innovator drugs

• 1976-1979 FTC Report on Generic Drugs

• Four economists predicted potential adverse effect while the third predicted the effects would be "non-negligible"

Competition Benefits Consumers

- FTC's 2014 workshop
- Prof. Aaron Kesselheim (Harvard/Brigham and Women's Hospital in Boston)-
- FDA's approvals of originator small-molecule drugs did not diminish after HWA, but even increased to reach a peak in the mid-1990's, after which approval rates went back to the historical mean.
- "the evidence suggests that "[the] end of market exclusivity drives innovator companies to develop new, genuinely improved products that will contribute to the next generation of therapies and medical progress."

Benefits of Competition in Pharma Markets

- Spurs Innovation
- Increases Consumer Access by Lowering Prices
- Generic drug competition results: \$1 trillion in savings over 10 years
- Projected CBO projects \$35 billion from FOB competition over 10 years
- 30% increase in access in EU in filgrastim markets over last few years

FTC: Authority and Examples

- Evaluate merger filings under Hart-Scott-Rodino Act
 - FTC has reviewed pharmaceutical and biotech mergers/ acquisitions since 1974
- Litigate:
 - Mergers
 - Pay-for-Delay Patent Settlement Agreements

- Reports;
 - 1979 Generic Drug Report
 - Generic Drug Entry Prior to Patent Expiration (July 2002): led to legislation that requires filing certain patent settlement agreements for review by the FTC and Justice Department

FTC Perspective: Patient Access Is About Patient Health

- FDA: Prevent patient harm by conservative approach to approval of biosimilars and interchangeables
- The risk to patient health does not run in just one direction, however:
 - Patients will be harmed if they cannot afford to pay for treatment
 - Recent study: patients' compliance with their treatment regimen falls off as patient costsharing for that treatment rises

1



- Biologics: Per patient/Per year \$10,000 to \$250,000
- Biologics account for ~25% of the \$320 Bn in US spent on pharmaceuticals annually
- Annual growth 15-20%
- New, more expensive biologics and drugs (Specialty) are putting unprecedented pressure on health care spending;
- Impact on federal private, and state spending.







Medicare Part B can lead to high costsharing

 Eight of the ten highest-expenditure Medicare Part B drugs in 2010 were biologics¹¹

Drug Name	Indication	Spending	
Epogen, Procrit	Anemia (ESRD)	\$2.0B	
Rituxan	Cancer, rheumatoid arthritis	\$1.3B	
Lucentis	Wet AMD	\$1.2B	
Avastin	Cancer, wet AMD	\$1.1B	
Remicade	Autoimmune disorders	\$0.9B	/
Neulasta	Infection prevention	\$0.9B	
Aranesp	Anemia	\$0.5B	
Epogen/Procrit	Anemia (non-ESRD)	\$0.4B	

- Part B beneficiaries are responsible for 20% of their prescription drug costs
 - o Part B does not cap out-of-pocket spending

AARP 15



FTC Chairwoman Edith Ramirez, Opening Remarks at Feb 4, 2014 workshop



"[T]he ultimate goal, of course, is to develop policies that protect patient health and safety, but to do so without unnecessarily chilling competition and deterring investment in follow-on biologics."

FTC 2008 Workshop on FOBs

- Purpose: Understand likely dynamics of future competition from FOBs
- Understand:Biologics different from small-molecule drugs
 - Folded, 3-dimensional proteins
 - More complex and costly to manufacture
 - Identical biologics not possible even from one batch to another for same manufacturer in same

facility



2009 FTC Report: Differences between FOBs and Small-Molecule Drugs

- FOBs Have Higher Entry and Higher Fixed Costs than Generic Drugs
 - Generics Drugs: 3-5 years, \$1 and \$5 million
 - Clinical trials \$100-200M (Skip Ph 2, slightly smaller cohorts),
 - Still will take 5-8 years for biosimilar
 Commercial scale biologics manufacturing and sterile fill capacity \$250 M

FOB Competition Will Likely to Resemble Brand-to-Brand Competition rather than the **Brand-Generic Competition** Example, Somatropin Somatropin WAC prices in the US: Prices of all the somatropins have increased even after the addition of new products 50 Humatrope® 40 Price/mg Norditropin® 30 Saizen® K— Nutropin® 20 - Tev-Tropin® 10 Data source: IMS, as compiled by Sando 0 1987 1996 1997 2000 2001 2002 2003 2004 2005 2006 2007 2008 Year Novartis company

2009 FTC Report Predicted FOB Market Dynamics:

- FOB entry likely in markets with > \$250M annual sales
- 2-3 entrants per reference biologic product; 10-30% price discounts likely
- If products don't have same name, FOB have less market penetration
- Reference product likely to retain 70-90% market share, match discounts



- Passed in 2010
- Sought similar balance as H-W Act
- BPCIA established:
 - 12.5 years data exclusivity for biologic
 - FTC opposed as unnecessary to recoup R&D costs
 - abbreviated pathway for FDA approval:
 - biosimilars
 - interchangeable biologics
 - Automatic substitution OK unless DAW
 - Patent resolution mechanism
 - query whether it speeds up, or even leads to, resolution of patent issues

2





Follow-On Biologic Competition

European Union:

- 18 biosimilars in 4 classes;
- savings from 2-73% off reference biologic pricing
- NO reports of patient harm from substitution of biosimilar for reference biologic







Purpose of 2014 FTC Workshop: Examine Potential Regulatory Barriers

- How new proposals for state laws may help or hinder competition from biosimilars
- How new proposals for naming conventions may help or hinder competition from biosimilars
- Proper answers require balancing appropriate concerns about patient safety with expanded patient access and reduced spending that can be achieved with competition

The Role of State Laws

- Under H-W Act, a generic drug approved by FDA as AB-rated is "bioequivalent" to branded drug and can be safely substituted
- States have laws that allow pharmacists automatically to substitute an A-rated generic for a branded drug, unless a doctor has indicated otherwise, DAW.
- These laws typically would not permit substitution of even an interchangeable biologic, because they don't apply to biologics.

Brands Have Advocated for New State Substitution Laws

- **Reasons:** Pharmacovigilance
 - Restrictions typically involve physician, patient notice and certain recordkeeping
- Premature ?
 - No biosimilar or interchangeable approved yet
- Necessary?
 - Cannot obtain biosimilar without a prescription; no FDA guidance for interchangeables yet; pharmacies track by patient by NDC code



Naming: Opposition

- Majority of participants opposed the use of distinct non-proprietary names for biosimilars:
 - AARP, CVS, Express Scripts, Aetna, America's Health Insurance Plans, the AMA, American Pharmacists' Association, Academy of Managed Care Pharmacy, National Association of Chain Drug Stores, Hospira, Novartis (Sandoz), and Professor Kesselheim (Harvard Medical School/Brigham and Women's Hospital)

Basic Economics: Likely Competitive Effects

- The more similar goods are to each other, the greater the price competition
- Less intense price competition occurs when goods are more differentiated in terms of quality, reputation
- Ex: generic drugs tend to compete based solely on price, whereas branded pharmaceuticals usually charge higher prices based on the perception that the branded drug is different (e.g., more effective or higherquality) than generic drugs

Competitive Effects: Conference Presentations

- Conference presentations from actual market experiences in the many countries that have biosimilars approved suggest that different non-proprietary names can reduce biosimilars' market penetration and consumer access
- These are not without controversy; correlation does not equal causation
- But they are consistent with economic theory

Competitive Effects: EPO Markets

Europe

Market penetration of epoetin biosimilars with a different INN than the brand (e.g., Hospira's Retracrit epoetin-zeta) trails the penetration of biosimilars with the same INN as the brand (e.g., Sandoz's Binocrit epoetin-alpha) because of legal challenges and other impediments associated with the different INN

Australia

Teva and Hospira biosimilar filgrastam products with the same INN as Amgen's originator product now account for 24% of the filgrastam dispensed.

By contrast, epoetin products all have different (local) nonproprietary names, and biosimilar epoetin accounts for only 2% of the epoetin dispensed

Naming: Necessary for Pharmacovigilance?

FTC Asked about Adverse Events

 No one provided anyd ata or any anecdotal reports of any adverse event involving immunogenic response due to the substitution of a biosimilar for a reference biologic in any wellregulated country

Better Pharmacovigilance Is Available

- NDC Codes Used by Many Pharmacies for Each Patient
- Even Hospitals Track Pharmaceutical Inventory by NDC Code
- Surescripts Is Available to Any Pharmacy or Physician

37

New Names Could Undermine Safety Systems Pharmacists and Pharmaceutical manufacturers have warned that the use of distinct non-proprietary names could undermine the collection of product safety

• They emphasize that the use of a common non-proprietary name provides the only commonality among pharmaceutical names

data

The Medical Community

AMA

"Any change in current nomenclature rules or standards should be informed by a better, and more complete, understanding of how such changes, including a unique identifier for biologic INNs, would impact prescriber attitudes and patient access, and affect postmarketing surveillance. Actions that solely enhance product identification during surveillance activities but act as barriers to clinical uptake are counterproductive."

Pharmacists

 Warned of confusion and the potential for medication errors. Some expressed concern that patient safety could be compromised if FDA followed through with reported plans to use prefixes for biosimilars. E.g., ado-trastuzumab and trastuzumab.

AARP perspective on

naming

Different INNs could lead to prescriber and patient confusion and possibly impact patient safety

- Prescribers would be forced to memorize the names of multiple versions of drugs with comparable clinical effects
- Would create false impression that biosimilars have a different clinical effect from the original biologic drug
- Effectively separates biosimilar from existing safety information from the brand name biologic
- Different INNs would reduce substitution and subsequent competition, increasing health care costs

AARP 40



















Staff Contacts			
Lauren Fuller, J.D.	Mary Jo Carden, RPh, J.D.		
VP, Government Affairs	Sr. Director of Regulatory Affairs		
703-684-2625	703-684-2603		
Ifuller@amcp.org	mcarden@amcp.org		
Reginia Benjamin, J.D.	Dana Whitley, IOM		
Director of Legislative Affairs	Grassroots Advocacy Coordinator		
703-684-2620	703-684-2636		
rbenjamin@amcp.org	dwhitley@amcp.org		
www.amcp.org	AMCP Academy of Managed Care Pharmacy*		



Staff Contacts			
Lauren Fuller, J.D.	Mary Jo Carden, RPh, J.D.		
VP, Government Affairs	Sr. Director of Regulatory Affairs		
703-684-2625	703-684-2603		
Ifuller@amcp.org	mcarden@amcp.org		
Reginia Benjamin, J.D.	Dana Whitley, IOM		
Director of Legislative Affairs	Grassroots Advocacy Coordinator		
703-684-2620	703-684-2636		
rbenjamin@amcp.org	dwhitley@amcp.org		
www.amcp.org	AM Academy of Managed Care Pharmacy*		