

Barriers to Competition in the US pharmaceutical industry

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Background

- Expenditures on pharmaceuticals are high and rising; there are too many examples of prices unrelated to value
- Regulation is really hard to get right when innovation is important, innovation costs are sunk, and marginal costs are low
- ⇒ Competition between drugs in well-functioning markets can bring down prices and also generate innovation that people value
- Exactly because competition is so effective, manufacturers attempt to avoid it –
 - Use influence with regulators to get regulations that dampen competition
 - Use influence with legislators to prevent pro-competitive legislation
 - Utilize creativity in complex markets to reduce rivalry

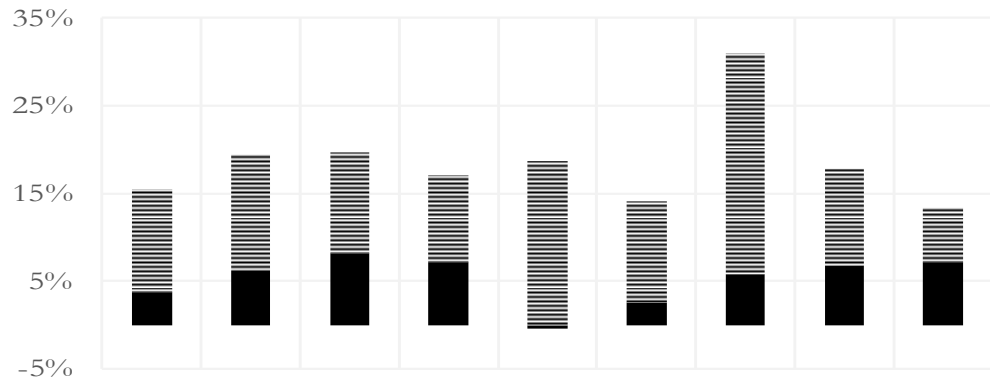


Motivation

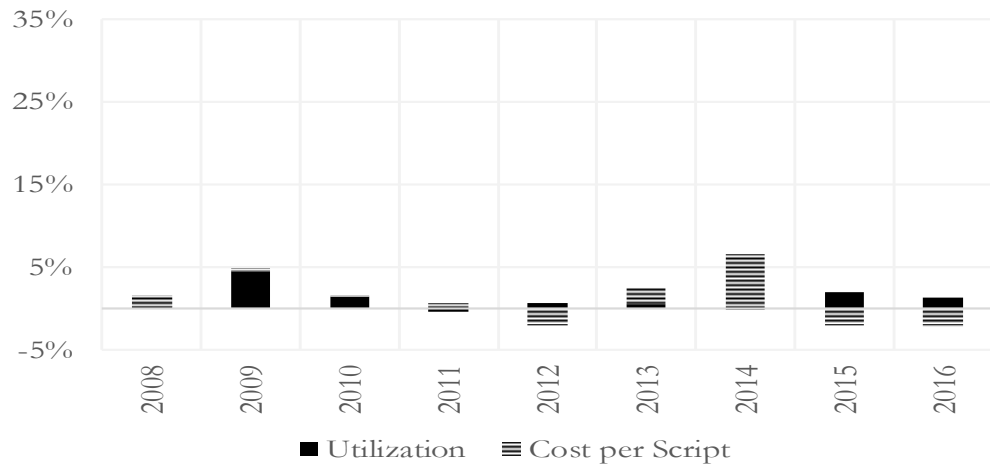
- This paper argues that enabling vigorous competition should be the first response to the problem of high pharma spending
- Remove barriers to competition
 - Some created by manufacturers
 - Some created by science
 - Some created by regulators
- If regulators pay attention to competition, enhance and enable it, may get lower prices, innovation, and no need to regulate
- Caveat: Paper does not address unique patented valuable treatments (see early paper by Richard Frank)



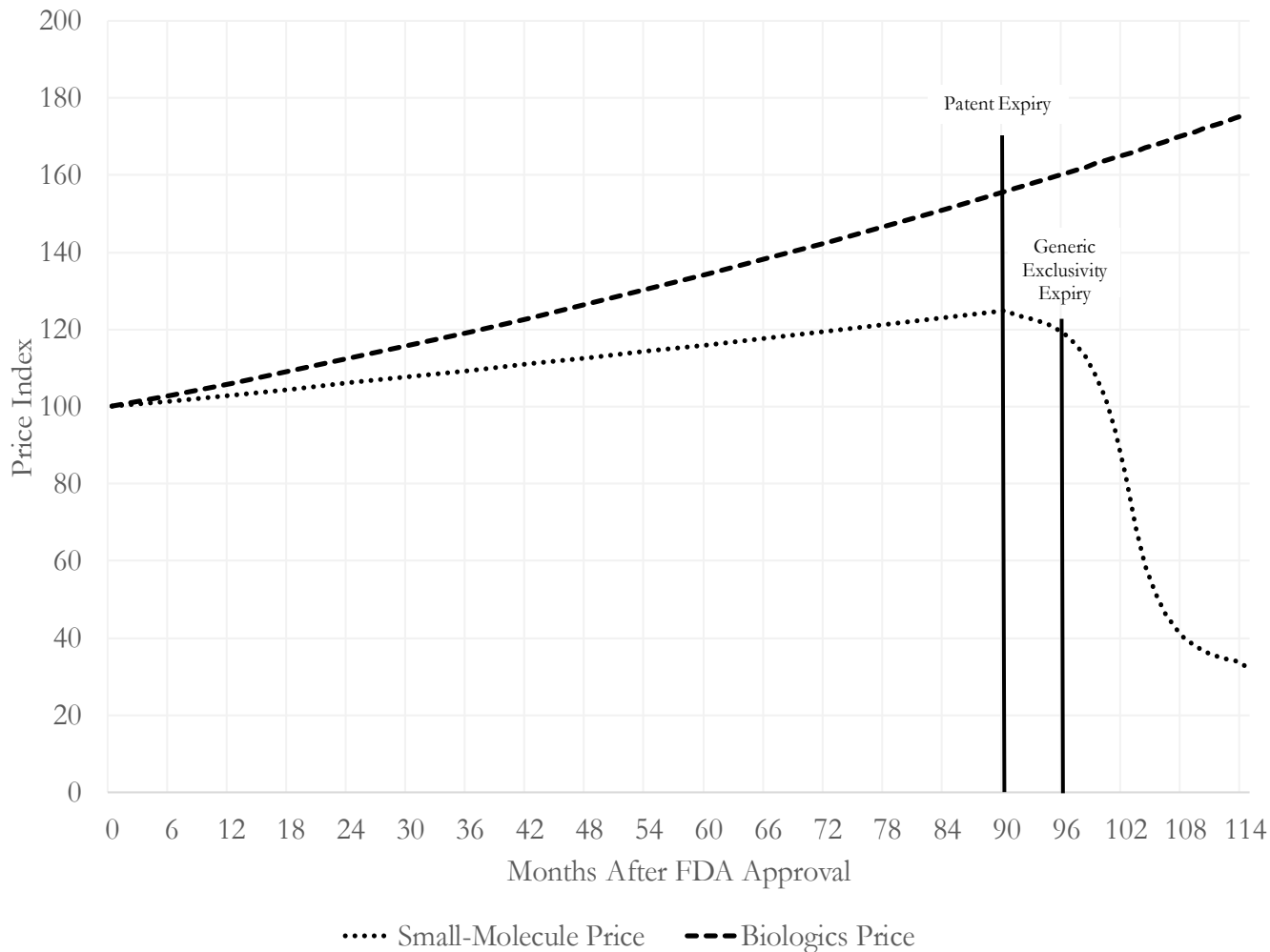
Specialty



Traditional



Price growth:
specialty / biologic
versus
small-molecule drugs



Stylized price paths:

biologics (top line)

v

small-molecule
drugs with generic
entry (bottom line)

Biologics

policy

agency

action

1) ***Biosimilar entry needed***

FDA

quick entry and

approve interchangeable biosimilars

Europe has had biosimilars since 2006. More than 20 on the market today generating significantly lower prices.

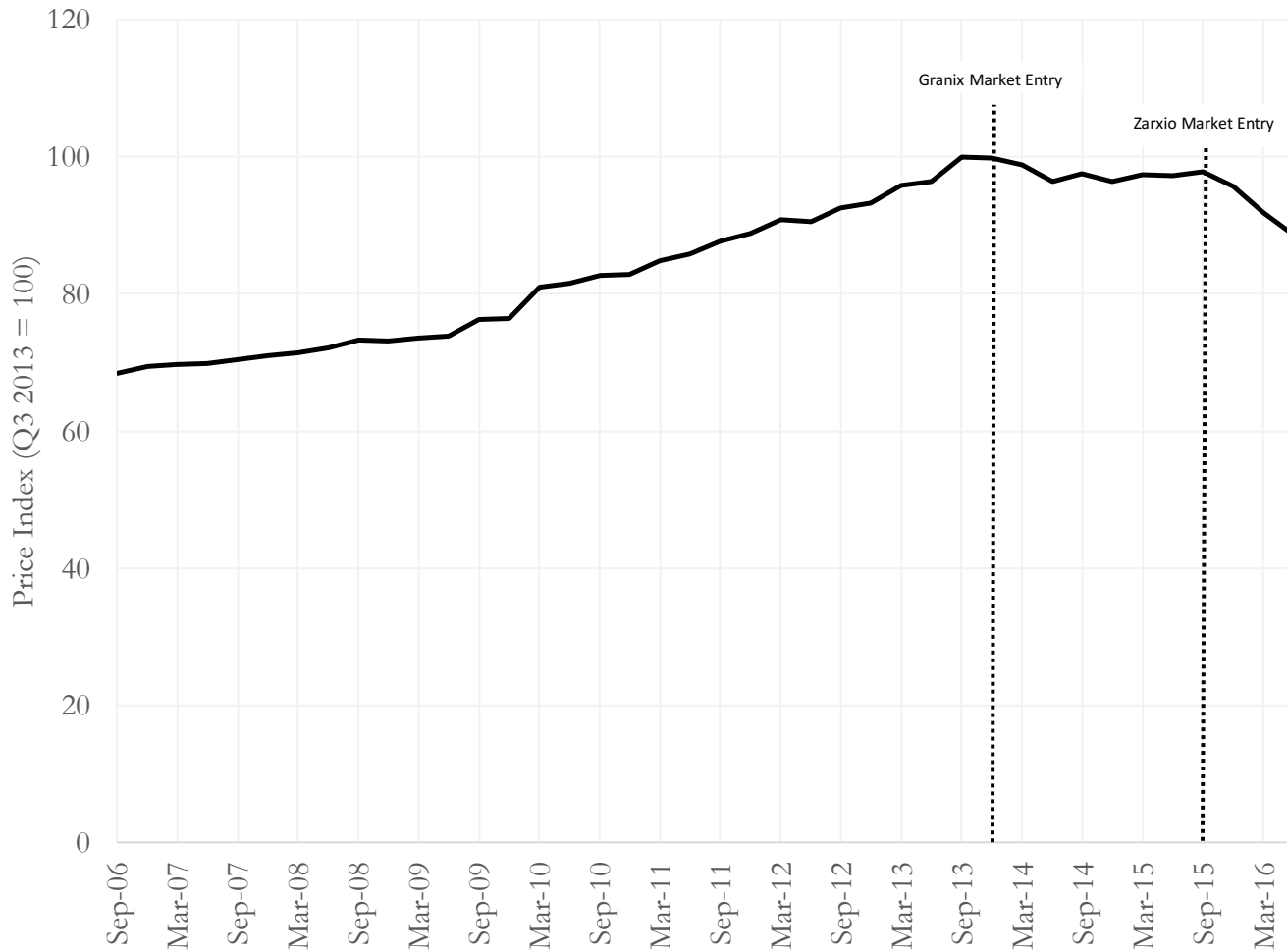
The United States has 2 biosimilars for sale.

FDA has approved a grand total of 5 biosimilars to date (disputes over patents or regulatory procedure are blocking the sale of 3)



Impact of second
filgrastim brand
(granix)

Impact of first 6
months of generic
entrant (zarxio)



Biologics

policy

agency

action

1) *Biosimilar entry needed*

FDA

quick entry and

approve interchangeable biosimilars

2) Biosimilar naming

FDA

one scientific name

3) Procurement

CMS

redesign j codes

4) Orphan drugs

Leg

reform



Generics

- Pay for delay FTC antitrust enforcement
- REMS FTC antitrust enforcement
- Product hopping FTC antitrust enforcement
- Small market monopoly Leg importation
- Approval delays FDA quicker approvals
- Complex product FDA clearer guidelines
- Shortages FDA keep inspecting



Demand side

- | | | |
|---------------------|---------|-----------------------|
| • Ther subst Part D | CMS | relax formularies |
| • Ther subst Part B | CMS/Leg | reference pricing |
| • PBM competition | FTC | 6(b) study |
| • PBM incentives | FTC/Leg | rebates flow directly |

Confidential rebates promote price competition.

If 100% of rebates flow back to plan sponsor, can then negotiate PBM compensation from position of full information = > may intensify competition



Demand side

- | | | |
|---------------------|-------------|--------------------------|
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| • Patient kickbacks | | |
| – Coupons | OIG, States | ban |
| – PAPs | IRS, CMS | limit, make unprofitable |
| – Patient benefits | OIG, CMS | limit, ban |



Rank	Foundation	Total Giving	PAP
1	Bill & Melinda Gates Foundation	\$3,439,671,894	
2	Silicon Valley Community Foundation	\$956,834,000	
3	The Abbvie Patient Assistance Foundation	\$853,356,401	✓
4	The Bristol-Myers Squibb Patient Assistance Foundation, Inc.	\$811,433,684	✓
5	Johnson & Johnson Patient Assistance Foundation, Inc.	\$711,632,110	✓
6	Merck Patient Assistance Program, Inc.	\$686,800,564	✓
7	Genentech Access To Care Foundation	\$680,278,040	✓
8	Pfizer Patient Assistance Foundation, Inc.	\$668,050,404	✓
9	GlaxoSmithKline Patient Access Programs Foundation	\$625,427,284	✓
10	The Atlantic Philanthropies	\$521,711,000	
11	Ford Foundation	\$518,380,000	
12	Lilly Cares Foundation, Inc.	\$503,299,479	✓
13	Sanofi Foundation for North America	\$485,359,572	✓
14	Novartis Patient Assistance Foundation, Inc.	\$456,825,176	✓
15	The Susan Thompson Buffett Foundation	\$416,440,853	

Largest US
foundations.

PAPs accept tax-
free donations of
medicine and
then give them
away as free
samples.



Example in trade press to illustrate the profits gained from a \$10million contribution to a Patient Assistance Program

1	Charitable Contribution	\$10,000,000
2	Charity Overhead	20%
3	Net Contribution	\$8,000,000
4	Market Share	25%
5	Subsidized Patient Revenue	\$2,000,000
6	Insurer Cost Share	88%
7	Revenue	\$16,000,000
<hr/>		
8	Charitable Margin	60%

Note the role of the contributor's market share (25%).

Then \$2m in "patient" co-payment generates \$16m in insurer payments.

The \$16m in incremental revenue is greater than the \$10m contribution. Moreover, the contribution is subsidized by the taxpayer, as it is tax deductible.

