

# PATENTS AND HEALTH

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**WIPO Standing Committee on the Law of  
Patents**

**Geneva, 2 December 2015**

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Medicines Law & Policy

# Function of patents

... to encourage inventors to make an investment in time and money in research and development by providing exclusive rights for a limited time in exchange for an early public disclosure of the invention.

-Patent system is a social policy tool meant to create benefits for society.

-It also has significant societal cost.

# Doha Declaration on TRIPS and Public Health

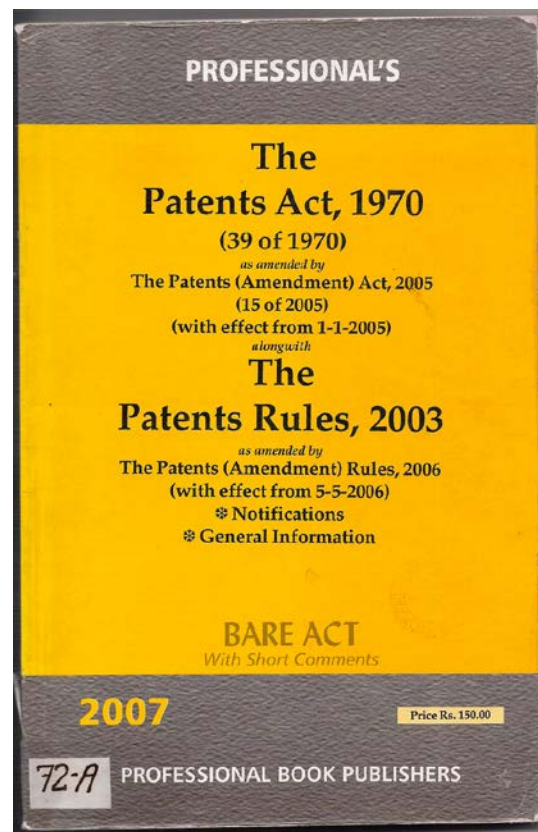
**"We agree that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health. Accordingly, while reiterating our commitment to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all.**

In this connection, we reaffirm the right of WTO members to use, to the full, the provisions in the TRIPS Agreement, which provide flexibility for this purpose."

# Health friendly IP has made a difference

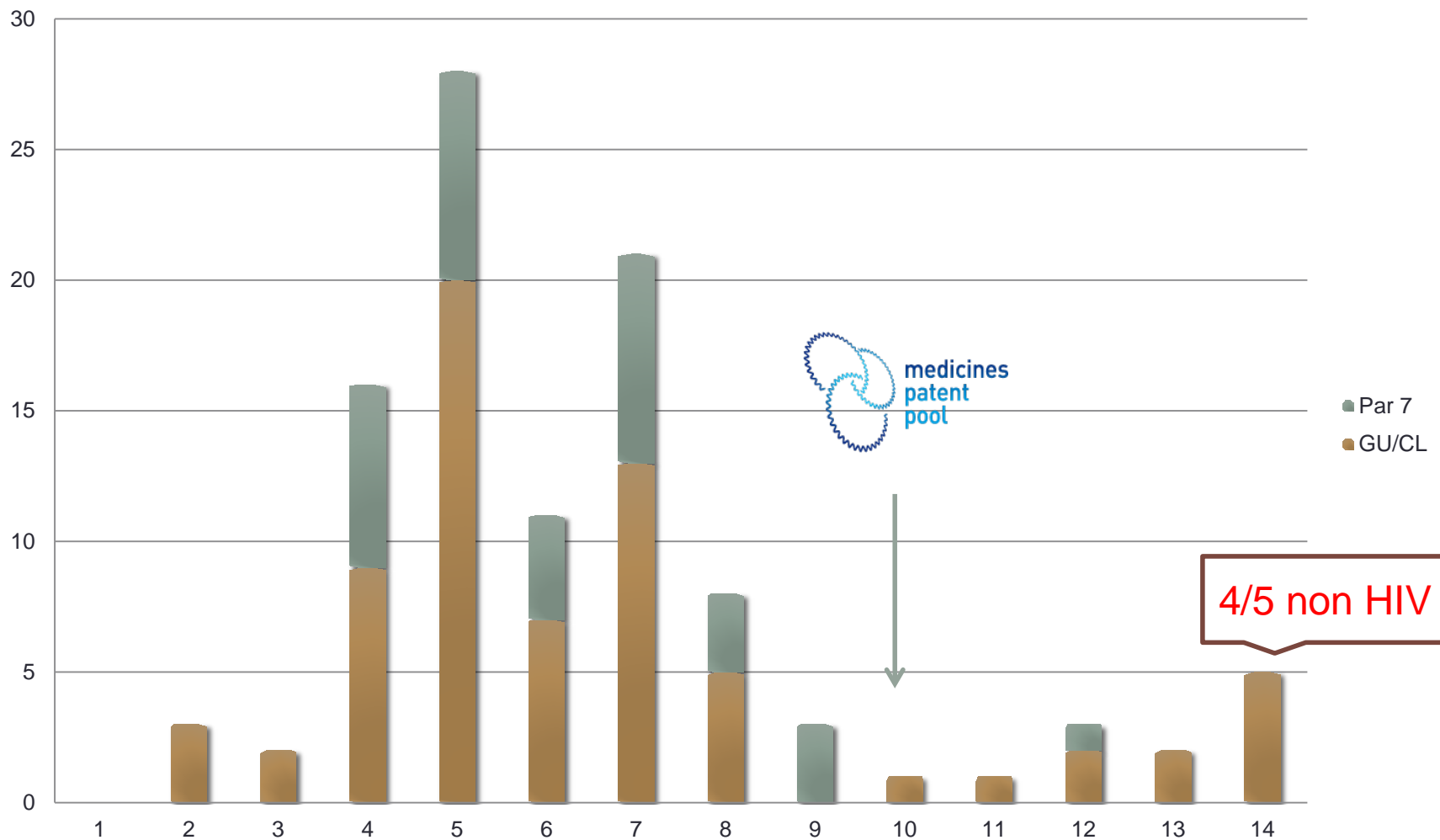
Use of Doha Declaration:

- Compulsory licensing/ Government use
- Paragraph 7 Doha (LDC extension)
- Patent oppositions
- **15.8 million people receive HIV treatment today**
- Absence of pharmaceutical product patents in India (1970 Patents Act)



... beyond HIV/AIDS ?

# Use of TRIPS flexibilities '01 – '14 widespread



# The Medicines Patent Pool

- Licence agreements covering 12 priority antiretrovirals (ARVs) with six patent holders
- 59 sub-licences with 14 generic manufacturers.
- Generic companies have supplied > six million patient-years of ARVs in 117 countries (incl. 41 new countries).
- Savings of USD 79 million through lower prices of ARVs (equivalent to one-year of treatment for 625,000 people).
- New fixed-dose combinations and paediatric formulations.
- Expected to generate total savings of up to 1.4 billion by 2028.
- MPP branching out to hepatitis c and tuberculosis

# Non-patent monopoly: regulatory data exclusivity

Regulatory Data Protection Periods		
Country	Pharmaceuticals RDP (Years)	Biologics RDP (Years)
Australia	5	5
Brunei	0	0
Canada	8	8
Chile	5	5**
Japan	8	8
Malaysia	5***	5***
Mexico	5	5**
New Zealand	5	5
Peru	5	5**
Singapore	5	5
United States	5	12
Vietnam	5	5
European Union	10	10

*\*Excludes further extensions for paediatric approval, orphan designation, new indications, and other incentives.*

*\*\*It is uncertain whether RDP will apply to biologics in Chile, Mexico and Peru. These countries do not specifically grant RDP to biologics.*

*\*\*\*Malaysia begins counting RDP from the date a product is approved and given data protection in its originator country and allows for up to five years RDP from that date.*

# Non-patent monopoly: the daraprim case

## \$750/pill pharma company reverses decision to lower drug price

Turing will offer hospitals and patients discounts, but high list price stands.

by Beth Mole - Nov 25, 2015 2:43pm CET

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## Daraprim

- First marketed 1953
- No patents
- Generic available for < 2 cent a pill n global market
- Turing increased the price from \$ 13.50 to \$ 750 in US



# FT on pricing

Financial Times The real cost of high pharmaceutical pricing:

*... the licence to manufacture a treatment exclusively is not the same as one to print money. New medicines cannot come at any price — especially when the maker uses its legal monopoly to set swingeing charges for vital remedies. Doctors do not wish to withhold drugs that can save lives. But there is a limit to what stretched healthcare systems can afford.*

<http://www.ft.com/intl/cms/s/0/bc609266-611a-11e5-a28b-50226830d644.html#axzz3syFMHg38>

# New WHO essential medicines and patents

Medicine	Company (originator)	Expiry date primary patent
<b>Tuberculosis</b>		
bedaquiline	Janssen	2023
delamanid	Otsuka	2023
terizidone		2024
<b>Hepatitis C</b>		
sofosbuvir	Gilead	2024 ('28 prodrug)
simeprevir	Janssen	2026
daclatasvir	Bristol-Myers Squibb	2027
ledipasvir	Gilead	2030
ombitasvir	Abbvie	2030
<b>Cancer</b>		
bendamustine	Cephalon (US)	2026
imatinib	Novartis	2014 (2018 second.)
rituximab	Roche (others)	2008 ('19-'20 –'30 form.)
trastuzumab	Roche	2009

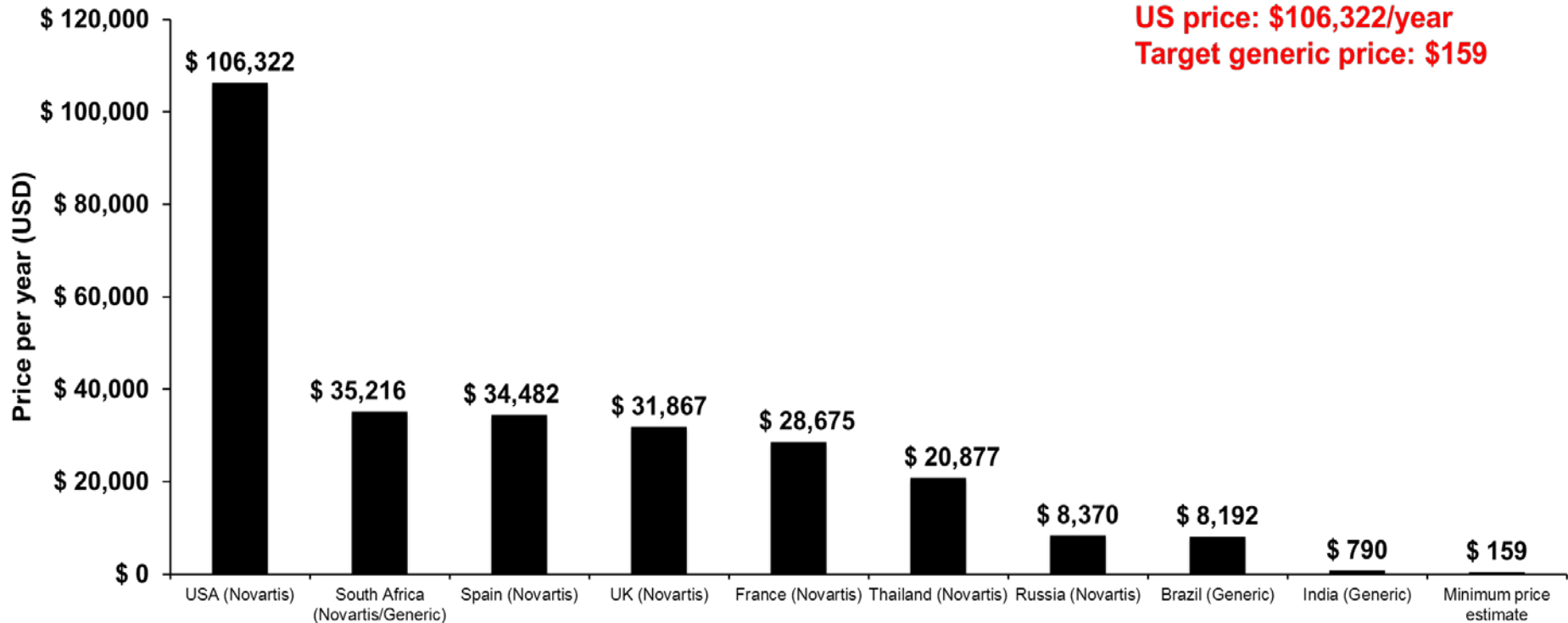
# Price and production cost of new essential medicines

Medicine	Originator price intro US	Cost of production <sup>1</sup>
<b>Tuberculosis</b>		
bedaquiline	\$ 30,000 ( 6 month)	-
<b>Hepatitis C</b>		
Sofosbuvir (SOF)	\$ 84,000 (12 week)	\$68 -136
SOF+ledipasvir	\$ 95,000 (12 weeks)	\$ 193
simeprevir	\$ 66,360 (12 weeks)	\$130 - 270
daclatasvir	\$ 63,000 (12 weeks)	\$10 - 30
<b>Cancer</b>		
imatinib	\$ 30.000 - >\$100,000 (1y)	\$ 119-159
rituximab		
trastuzumab	\$54,000 (1 year)	\$ 242

1. <http://cid.oxfordjournals.org/content/early/2014/02/13/cid.ciu012.full> (cost of production of HCV medicines)

# Imatinib – for treatment of Leukaemia (CML and ALL)

Annual prices of Imatinib (400mg) in selected countries



Imatinib (Gleevec)  
Patent expired (USA)  
US price: \$106,322/year  
Target generic price: \$159

Thanks to A.Hill who Presented this at 18<sup>th</sup> ECCO - 40<sup>th</sup> ESMO European Cancer Congress, 27<sup>th</sup> September 2015, Vienna, Austria [abstract number: 1203]

# Innovation *and* Access - Financing of R&D

- 2020 pharma spending will be US\$ 1.4 trillion (30% increase from 2015)
- Spending on R&D is US\$ 137 billion (2014 IFPMA)
- Reliance on high prices to fund R&D:
  - Important health needs unmet if profitability prospects drive R&D agenda (Ebola, antibiotics, medicines for children etc.)
  - Important new medicines increasingly unaffordable even in high income countries.

# Need for Change

- New R&D framework – focus on health needs
- Greater diversity of financing mechanisms
- De-linkage models
- International collaboration and new rules → follow up of CEWG at WHO.

# Access to new Essential Medicines

- The WHO designation “Essential Medicine” should have consequences
- Licensing of patents
  - Collaborative models → Essential Medicines Patent Pool
  - Compulsory licensing /government use
- Protect flexibility in patent law - push back on TRIPS + agreements
- Invest in health – ensure uptake

Thank you!



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