## Linking medicine patent and procurement data: What can the data tell us?



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## **Talking points**

- Data sources for procurement and international medicine patents challenges and opportunities
- Discuss one example of research that's possible through linking these datasets: CL price vs Int'l price study



## Some International Medicine Procurement Data Sources

#### <u>International medicine procurement data</u>

- HIV/AIDS, TB, & Malaria
  - WHO Global Price Reporting Mechanism
  - Global Fund Price and Quality Report

#### International medicine price data

- MSF (Doctors without Borders) Untangling the Web Publications
- Health Action International
  - International sources
  - National sources



## Challenges of int'l medicine patent data

- No international medicine patent register
- Disclosure of int'l medicine patent holdings is not standard practice
- Only option is all-purpose international patent databases, like INPADOC, Derwent, and others
  - No data for many developing countries
  - Patents' legal status information is sparse and outdated
  - How accurate can these be?
    - Only 46% accurate on patent numbers, expiration dates
    - Only 67% accurate on ave for countries with patents protection
    - Many false positives and false negatives
- Conclusion => int'l patent databases alone cannot give an accurate picture globally
- Urgent need to seek consensus on international medicine patent transparency by global suppliers



## Some International Medicine Patent Data Sources

- Methodology
  - Step 1 US Orange Book & Health Canada medicine patent registers.
  - Step 2 link to INPADOC, Derwent, or other int'l patent families
     initial results
  - Step 3 Verification/corrections by global suppliers (2009/11 studies were not verified by suppliers)
- Academic patent landscape studies on essential medicines
  - Attaran, 2003 MLEM
  - Kowalski & Cavicchi, 2009, 2011
  - Beall & Attaran, 2013 MLEM
- Medicines Patent Pool database, Lawyer's Collective site for India



## **Example of using linked datasets – Health Affairs Paper**

## **Health Affairs**

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## Compulsory Licensing Often Did Not Produce Lower Prices For Antiretrovirals Compared To International Procurement

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#### **Abstract**

Compulsory licensing has been widely suggested as a legal mechanism for bypassing patents to introduce lower-cost generic antiretrovirals for HIV/AIDS in

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#### This Article

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Classifications

**Drug Pricing** 

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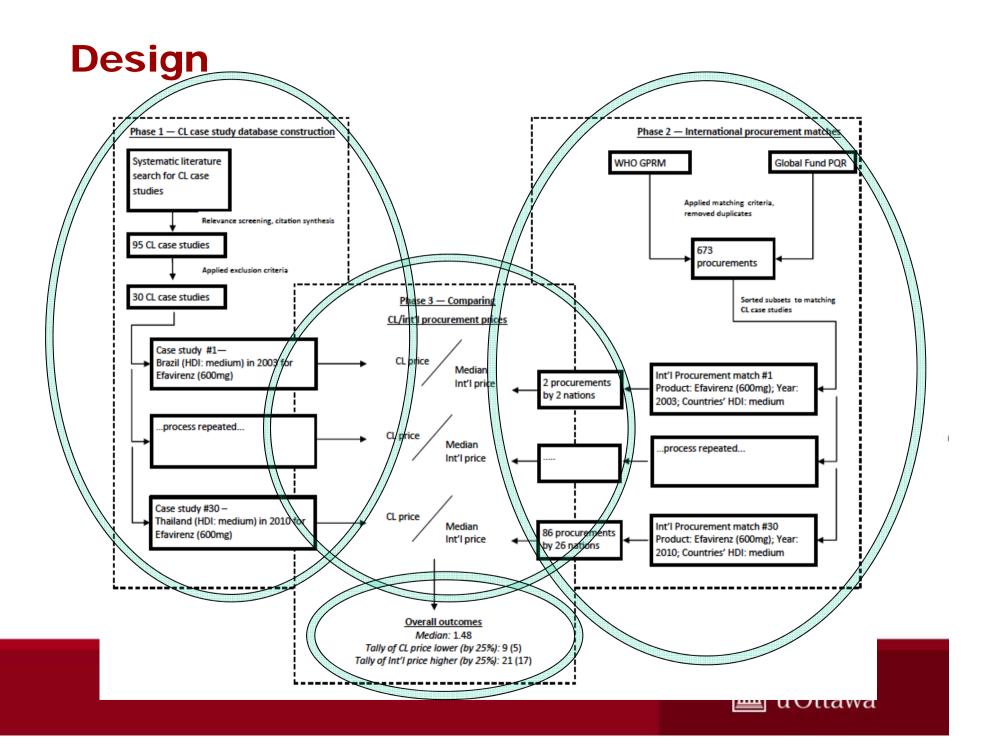
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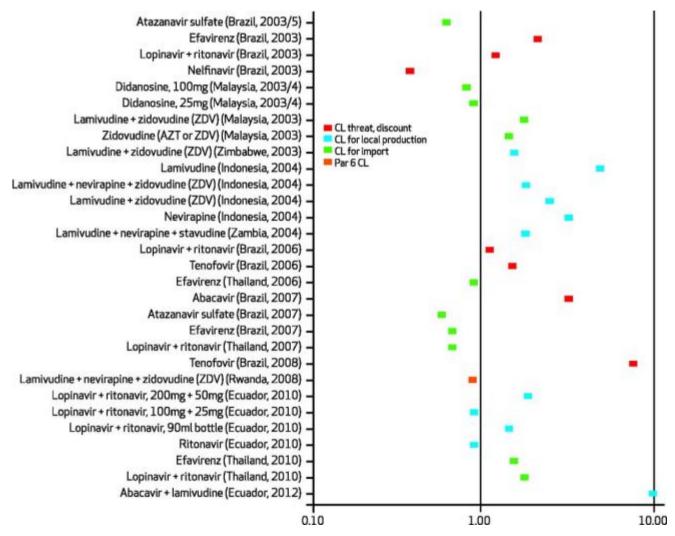
## Background of study on compulsory licensing

- Compulsory license (CL) = "when a government allows someone else to produce the patented product or process without the consent of the patent owner"
- Previous studies show that CLs save money.
- How do CL prices compare to prices gained through procurement from the international market in cooperation with third parties (e.g. PEPFAR, UNICEF, Clinton Foundation)? (HIV medicines only)





## Ratios Of Compulsory Licensing (CL) To International Procurement Prices For Antiretroviral Drugs.



Reed F. Beall et al. Health Aff 2015;34:493-501



## The results

- Both CL and int'l procurement save money, but the non-CL strategies combined saved just as much or even more
  - Compared to a notional "pre-CL price", CL saved 71%, but int'l procurement saved 79%.
- CLs for local manufacturing in low income countries was always more expensive than int'l procurement



### **Caveats**

- Only HIV/AIDS medicines
- Small sample of CLs inclusion of new or unpublished CLs may or may not change the picture
- Study period during time when generic equivalents from India were available on the market, but this could be different for new medicines in the future
- This study was to broadly compare two strategies globally
  - the point is \*not\* to say Country X, should or should not have used CLs.
  - Rather, the point: international procurement system was often able to deliver prices comparable to CL prices



## Conclusions and take-aways from the CL study

- Do not assume CL is always the cheapest solution; other solutions may save more \$\$
- Use price transparency data whenever possible
- The right to CL should remain, equalizing power at negotiating table is critical
- Int'l procurement tactics were effective at reducing cost => can this serve as prototype for other essential medicines?



## Medicine patent/procurement transparency on essential medicines

#### International medicine procurement data

- Procurement data can informing buying decisions and informing policies decisions
- Global campaign for HIV medicine access can serve as a prototype/template for more essential medicines?

#### International medicine patent data

- Accurate patent data on essential medicines is not available in most countries
- Imprecision in this area => suboptimal policy & health outcomes
- Heightening patent transparency on essential medicines by global suppliers – a consensus statement?



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## Medicine patent transparency - A Trilateral consensus statement?

- Transparency in middle-income, medicine-exporting countries, e.g., India, China
- Voluntary disclosure by brand/generic companies
- Information ideally disclosed for life-saving/-sustaining drugs
  - What MLEM products are patented (including strength, route, and formulation)
  - Kind of protection (compound, formulation, method, process, device)
  - Where companies have patents they intend to enforce (including patent numbers and expiration dates)
  - Information on steps the supplier is taking to ensure affordable access
- Central database? The WTO's TRIPS and Public Health dedicated webpage for notifications? Medicines Patent Pool? IFPMA?

