

Global vaccine access landscape: Where we are now?

Othoman Mellouk, ITPC



COVID-19 vaccination World Data (End 2023)

5.47bn

Total COVID-19 vaccine doses administered

Date of first COVID-19 vaccine product introduction

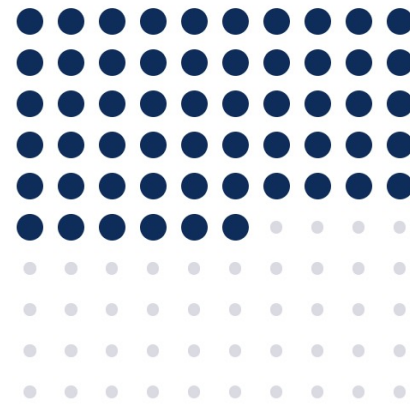
World

**14
December
2020**

Percentage of total population vaccinated with a complete primary series of a COVID-19 vaccine

World, 31 December 2023

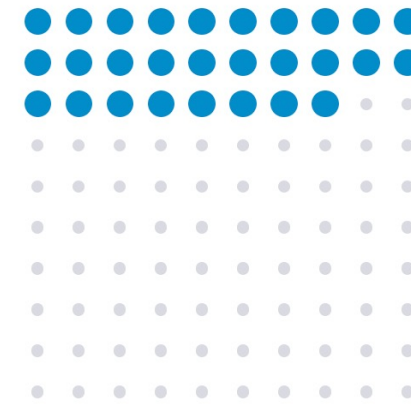
56%



Percentage of total population vaccinated with at least one booster dose of a COVID-19 vaccine

World, 31 December 2023

28%

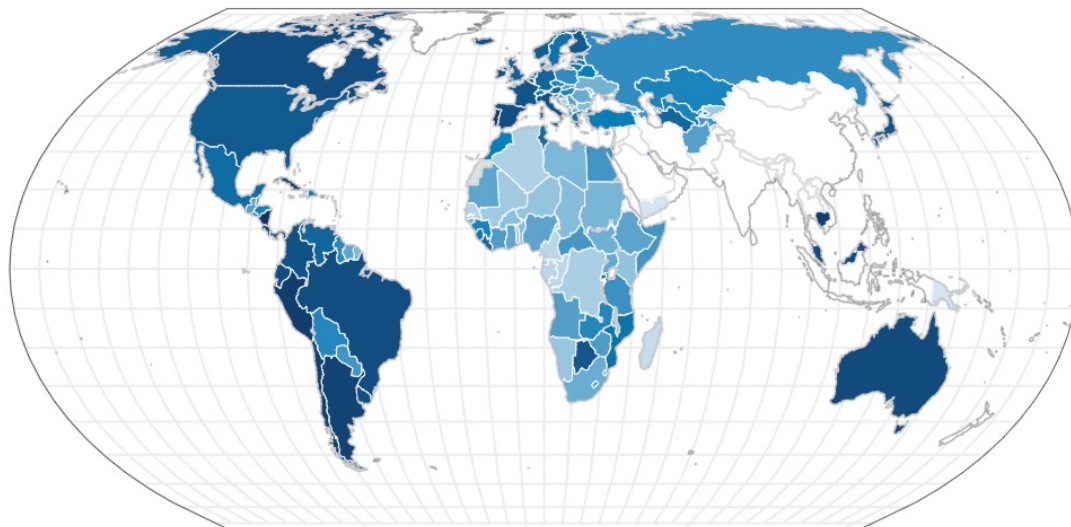


Source: World Health Organization



Percentage of total population vaccinated with at least one dose of a COVID-19 vaccine

World, 31 December 2023



% of total population



| Country | Coverage |
|-----------|----------|
| Portugal | 95% |
| Australia | 88% |
| Canada | 87% |
| Spain | 87% |
| Italy | 85% |
| France | 84% |
| Mali | 22% |
| Senegal | 14% |
| Gabon | 14% |
| Congo | 14% |
| Haiti | 5% |
| Yemen | 4% |



Access to Oxford-AstraZeneca,
Johnson and Johnson, Moderna
and Pfizer-BioNTech COVID-19
vaccines in 17 middle-income
countries in 2021



make
medicines
affordable
END UNFAIR MONOPOLIES

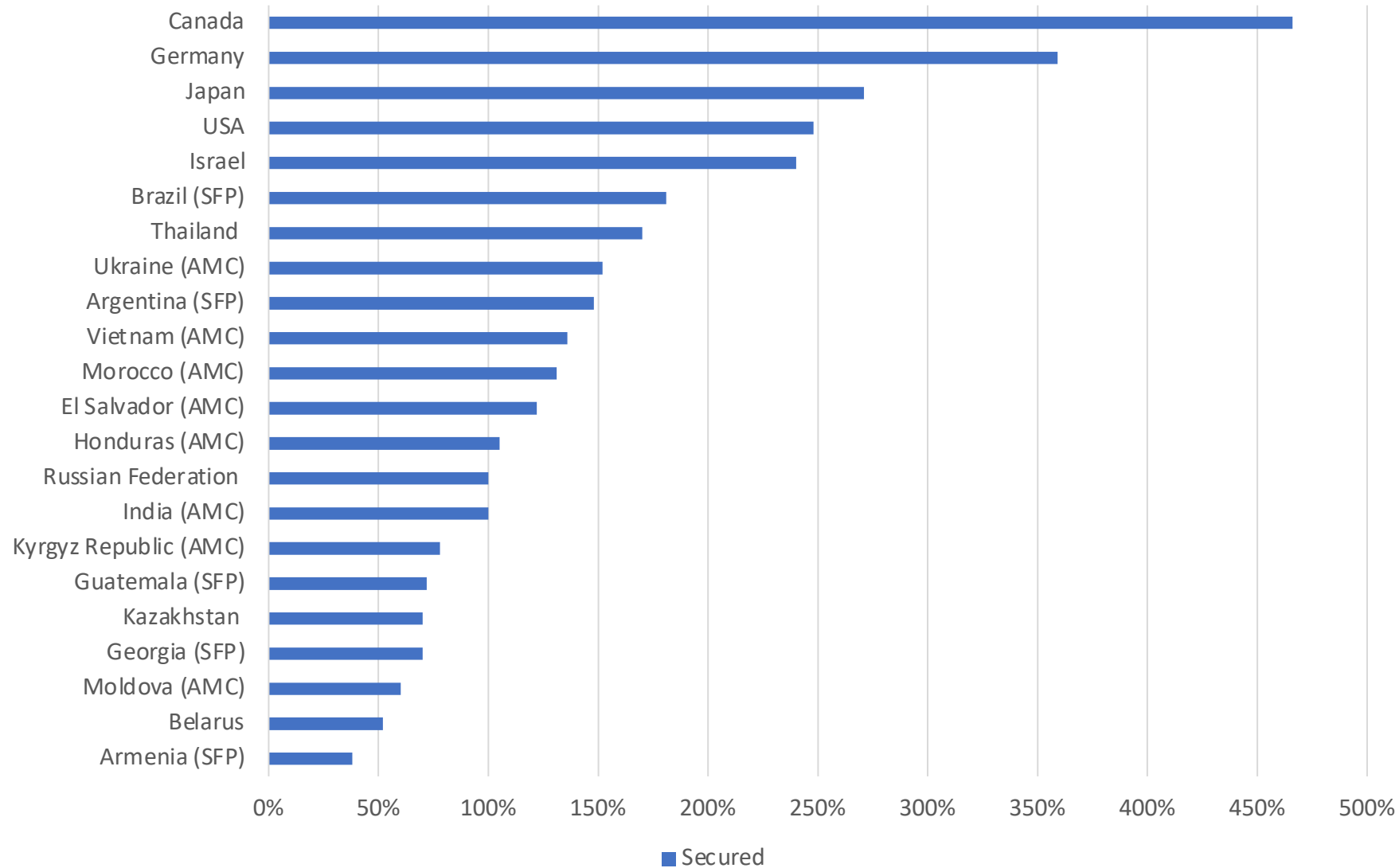
ITPC
INTERNATIONAL TREATMENT
PREFERENCE COALITION

https://itpcglobal.org/wp-content/uploads/2023/08/ACCESS_COV_VAX_FINAL_JULY2023-1.pdf

Argentina, Armenia, Belarus,
Brazil, El Salvador, Georgia,
Guatemala, Honduras, India,
Kazakhstan, Kyrgyzstan, Moldova,
Morocco, Russia, Thailand,
Ukraine and Vietnam.



% of vaccines secured to population in 2021

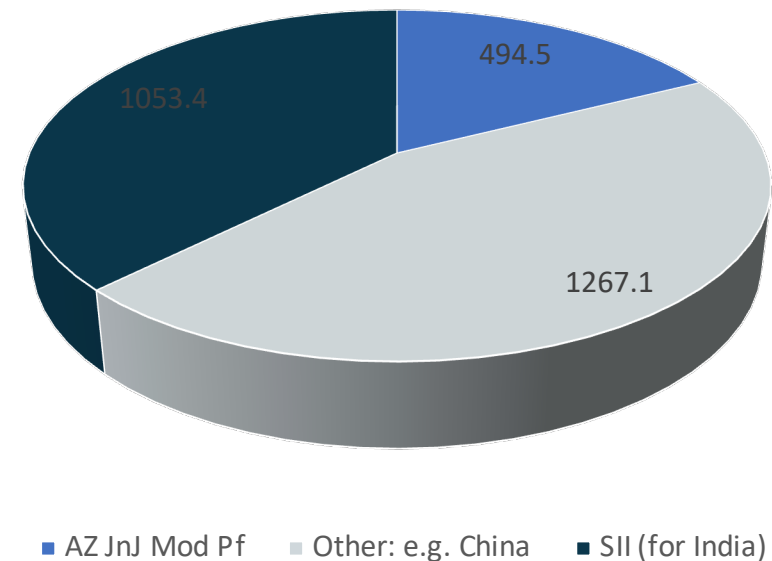


Vaccines supplies 2021

Significant delays, AZ, JnJ, Moderna, Pfizer supplied not much to 17 countries

- Pfizer/BioNtech received WHO EUL in December 2020;
- Astrazeneca/Covishield WHO EUL in February 2021
- Vax campaigns in the US and EU started on 14 December 2020 and 27 December 2020, respectively.
- Supplies to 17 MICs on average started in 2021:
 - in March by AstraZeneca,
 - in May by Pfizer/BioNTech,
 - in July by JnJ and Moderna

Millions of doses delivered, 2021

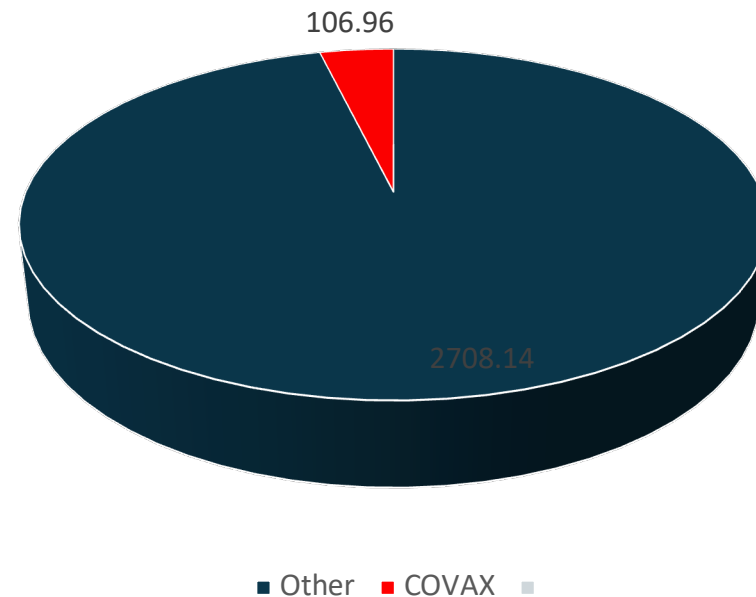


Vaccine Donations 2021 and COVAX supplies

Insignificant and inbalanced

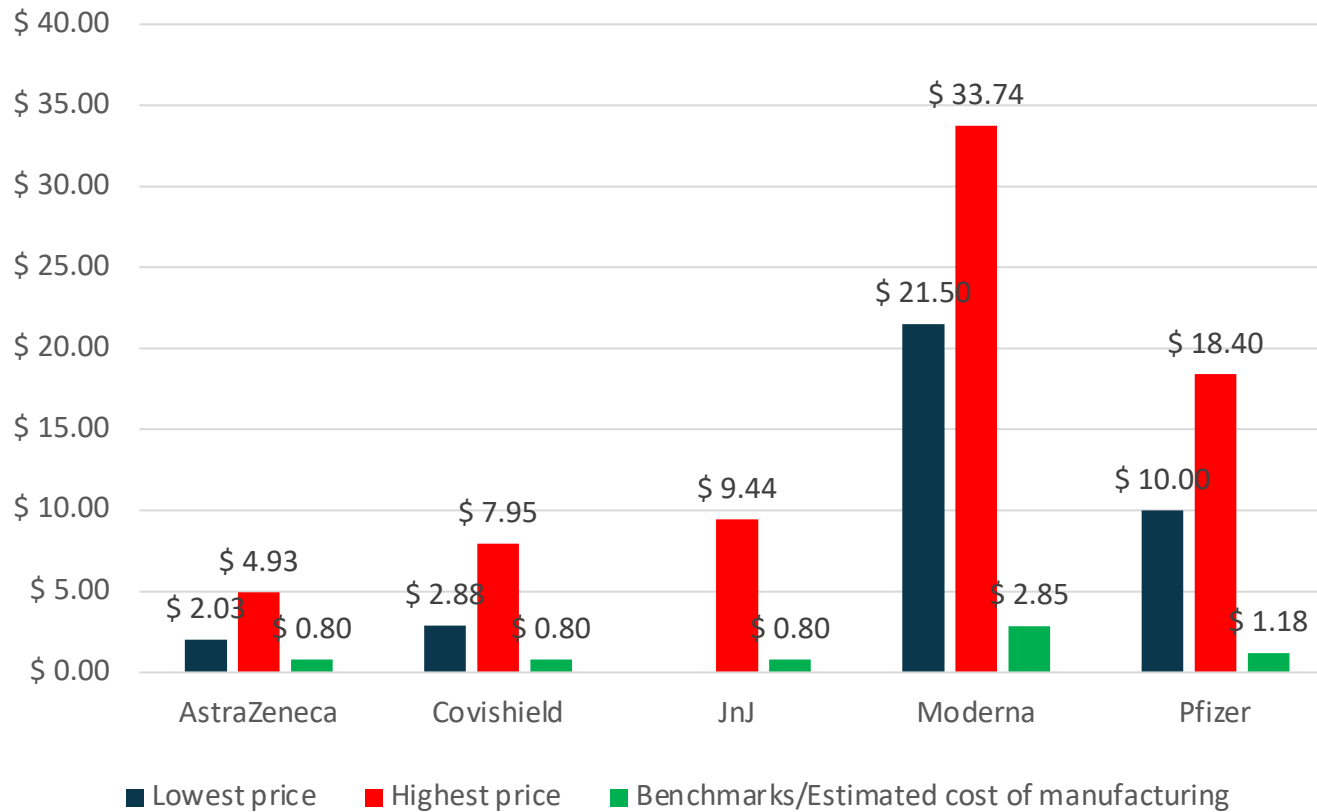
- Donations secured/expected accounted only for 3,1% total volumes
- Almost all donations to 17 MICs analyzed were provided by governments, with very few exceptions, e.g. Bharat Biotech donated 1,65M doses of its vaccines to India.
- No vaccines donated without govt funding

Millions of doses delivered, 2021



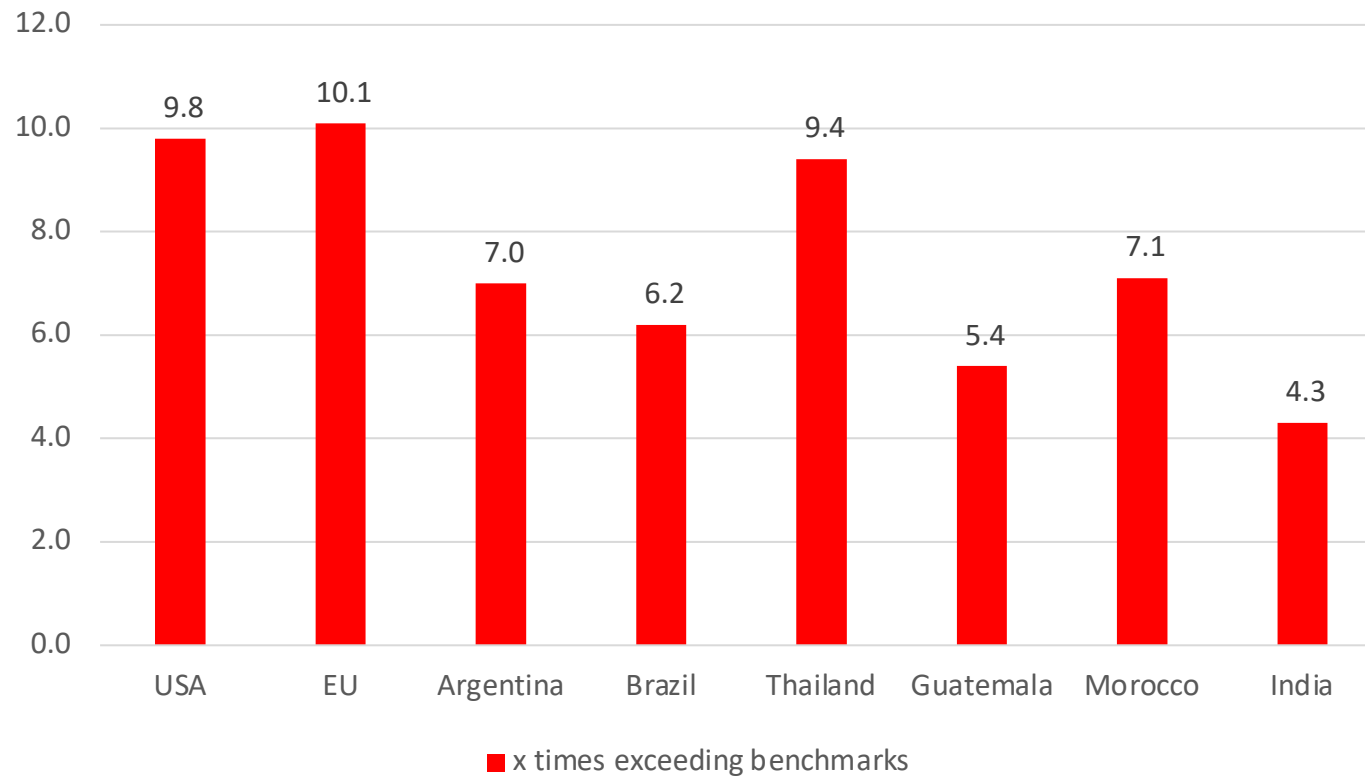
Prices vs benchmarks in 6 MICs

Lowest prices for AstraZeneca and Serum Institute, highest – for Moderna vaccine. Though JnJ and Pfizer exceeded estimated cost of manufacturing the most.



Prices vs benchmarks in 6 MICs and 2 HICs

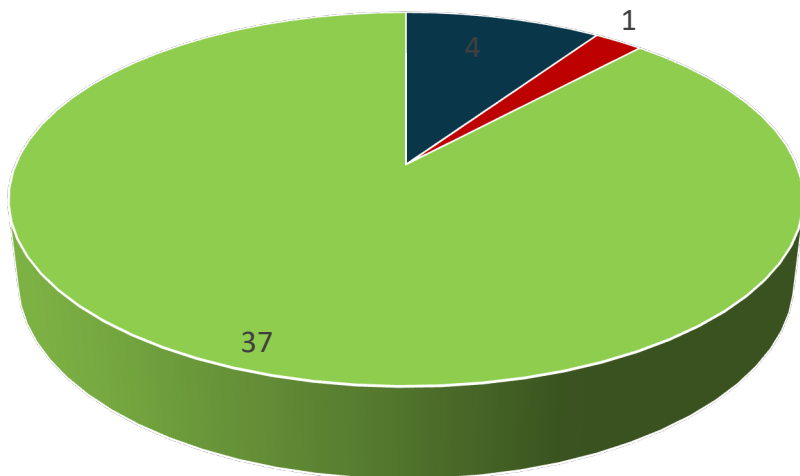
In Argentina, Brazil, Guatemala, India, Morocco, Thailand prices exceeded benchmarks by 7.5x times on average.
No consistent correlation between pricing and GNI per capita used for World Bank classification



Technology transfer and marketing approvals (MA)

Not quick and wide enough. AZ had most tech transfers and marketing approvals

Technology transfers



■ AZ ■ JnJ ■ Others: e.g. Sinovac, Gamaleya
0 tech transfers by Pfizer and Moderna

Marketing approvals:

- AstraZeneca - 7
- other manufacturers of ChAdOx1 nCoV-19 Oxford/AstraZeneca - 12
- Moderna - 6
- Pfizer/BioNTech - 6
- JnJ – 5 approvals;
- Timing of MAs:
 - other ChAdOx1 nCoV-19 vaccine manufacturers - February;
 - AstraZeneca – March;
 - Pfizer/BioNTech – March;
 - Moderna - May;
 - JnJ – June.



Results

- Existing system of IP protection contributed to delays and overpricing of four vaccines
- Global efforts were ineffective
- Donations insignificant, unpredictable
- Most supplied, lower priced are AZ and SII
- Early VL, but selective approach resulted in delays
- AZ prices exceeded UNICEF benchmark pricing 4,2-5,8 times
- Issues could be avoided, if vax technology freely available



2022: From COVID to Mpox

- 23 July 2022, WHO declared Mpox a Public Health Emergency of International Concern (PHEIC)
- Unprecedented incidence outside Africa, mostly North Africa & Europe
- Mpox still endemic in Sub-saharan Africa
- No specific Mpox vaccine (only smallpox)
 - Limited manufacturing capacity
 - Limited stocks available (for army in developed countries)
- Limited therapeutics



Access to Mpox vaccination:

- **USA:** Over 1M doses of Jynneos vaccine distributed (CDC early 2023)
- **EU:** « Tens of thousands » distributed to member states (ECDC 2022)
- **UK:** 100.000 doses administered (UKHSA 2022)
- **Canada:** 50.000 doses (Health Canada 2022)
- **Africa:** No Data
 - 3% of Global cases (recent outbreak)
 - 12% of Global death cases
 - Mpox **still endemic** in Africa but **no vaccines available**



International collaboration on Mpox:

Limited support to countries: Only 90k tests purchased for five WHO regions No proactive advocacy for access: reliance on donations (Meuri protocol for Tecovirimat, US and Japan vaccine donations):

- Meuri: 22 countries expressed interest, 6 only entered « secret agreements » with pharma
- 16 Tx donated to Brazil, 3 to Chile (by Feb 2023)



Conclusions:

- Development of vaccines and therapeutics for current and future epidemics/pandemics depends on who is most affected
- Current Pharma model is driven by profits and fails to address the needs of vulnerable populations
- IP monopolies prevent products to reach those most in need especially in developing countries
- Government support for local manufacturing has been key in developed countries



Conclusions:

- Pooled production for developing countries (India etc.) is not sustainable
- International solidarity has failed to address COVID-19 and Mpox (COVAX, TRIPS Waiver, Pandemic Treaty etc.)
- Local/regional manufacturing should be promoted and supported with a creation of favourable ecosystems and addressing IP and other market barriers.

