

THE RICH AXIS

For universal immunisation, the world would need 2 doses of vaccines for 7.8 billion people. But the rich countries have already ordered a bulk of the vaccines to be manufactured in 2021

○ Countries with ongoing phase 3 clinical trials → Top 6 vaccine manufacturers and destination of their product



7.8 billion
total people to be vaccinated

4.7 billion
People to be vaccinated for herd immunity***

162
vaccine candidates in pre-clinical trials

2.2 billion
Adults at severe risk of infection

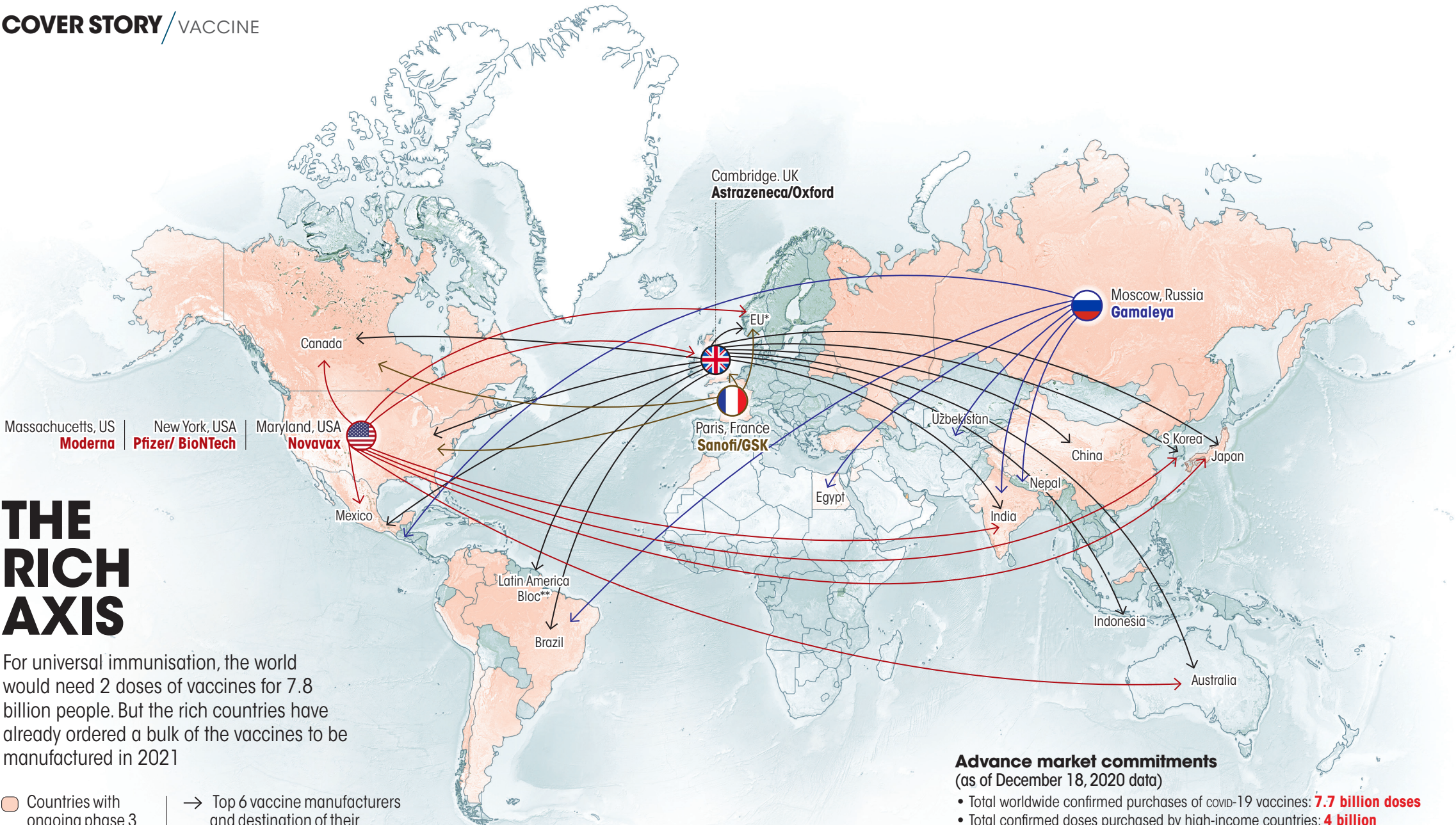
2.3 million
Total vaccine doses administered****

52
vaccine candidates in clinical trials

3.7 billion
People are willing to take the vaccine

2 billion
doses COVAX will be provided in 2021

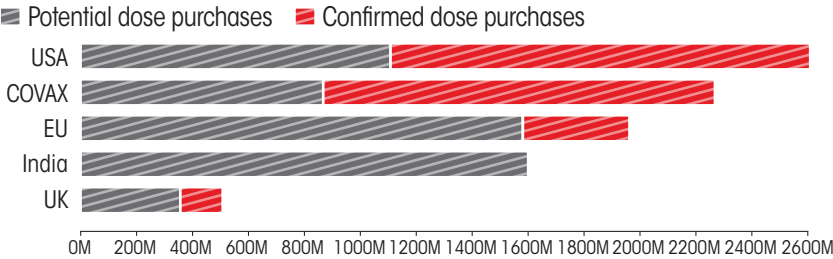
13
vaccine candidates in phase 3



Advance market commitments (as of December 18, 2020 data)

- Total worldwide confirmed purchases of COVID-19 vaccines: **7.7 billion doses**
- Total confirmed doses purchased by high-income countries: **4 billion**
- Total confirmed doses purchased by upper-middle-income countries: **1.1 billion**
- Total confirmed doses purchased by lower-middle-income countries: **1.8 billion**
- Purchases by low-income countries: **0**
- Total purchased by COVAX: **870 million**

Top 5 hoarders of COVID 19 vaccines



Explanation: *EU: 27 countries of the European Union; **Latin America bloc: all countries in the region, except Brazil; ***at least 60% population needs to be vaccinated for herd immunity. The companies are providing to their home countries too. ****as of December 22, 2020; Covax is a global body which would supply to most countries in the world

Source: London School of Hygiene & Tropical Medicine Vaccine Centre, Duke Global Health Innovation Center, www.bloomberg.com, www.ourworldindata.org, www.who.int; www.pib.nic.in; <https://www.bmj.com/content/371/bmj.m4704>

THE INDIAN VACCINE BAZAAR

Seven vaccines are in various stages of clinical trials on humans in India. The vaccine industry is working on both international and domestic vaccine candidates

Covishield (chimpanzee adenovirus platform)
SII + AstraZeneca
Phase 2/3
✓ Applied for EUA

Covaxin (inactivated virus)
Bharat biotech + ICMR
Phase 3
✓ Applied for EUA

ZyCoV-D (DNA vaccine)
Cadilla healthcare + dept of biotechnology
Phase 2

Sputnik V (human adenovirus vaccine)
Dr. Reddy's Lab + Gamaleya National Centre
phase 3 about to begin

NVX-CoV2373 (protein subunit)
SII + Novavax
phase 3 under consideration

COVID-19 vaccine (recombinant protein antigen based vaccine)
Biological E
Phase 1 and 2

HGCO 19 (mRNA based vaccine)
Gennova + HDT USA
phase 1 and 2 human trials approved

