



Will COVID-19 make us take one more step in stronger collective international mechanisms for health R&D?

Plenary: Addressing the role of research and innovation in times of crises

John-Arne Røttingen

June 9 at 9:30 CET - Eu-SPRI 2021 Conference:
Science and innovation - an uneasy relationship?



Global Situation

173,331,478
confirmed cases

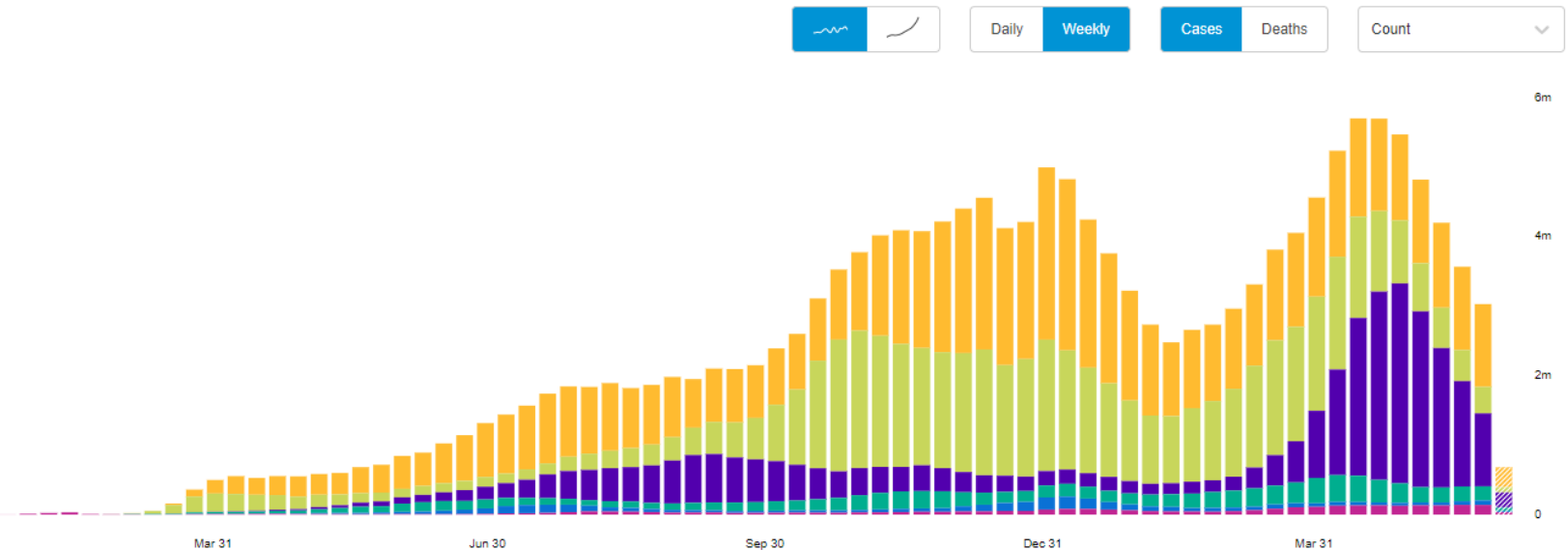
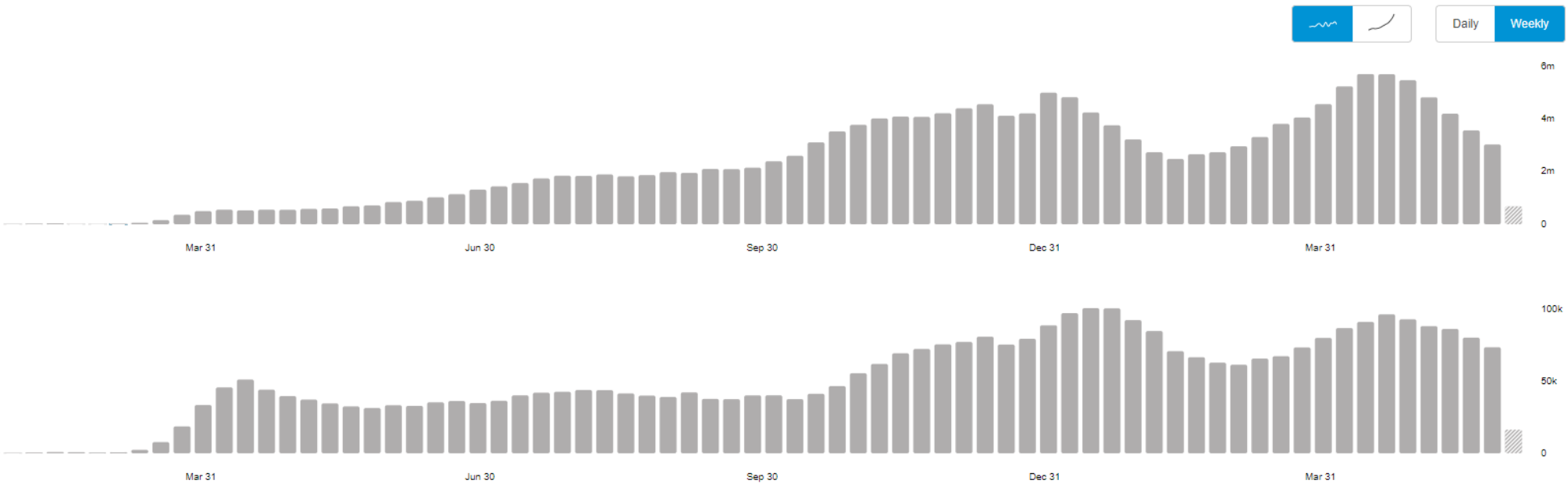
3,735,571
deaths

Source: World Health Organization
Data may be incomplete for the current day or week.

Situation by WHO Region

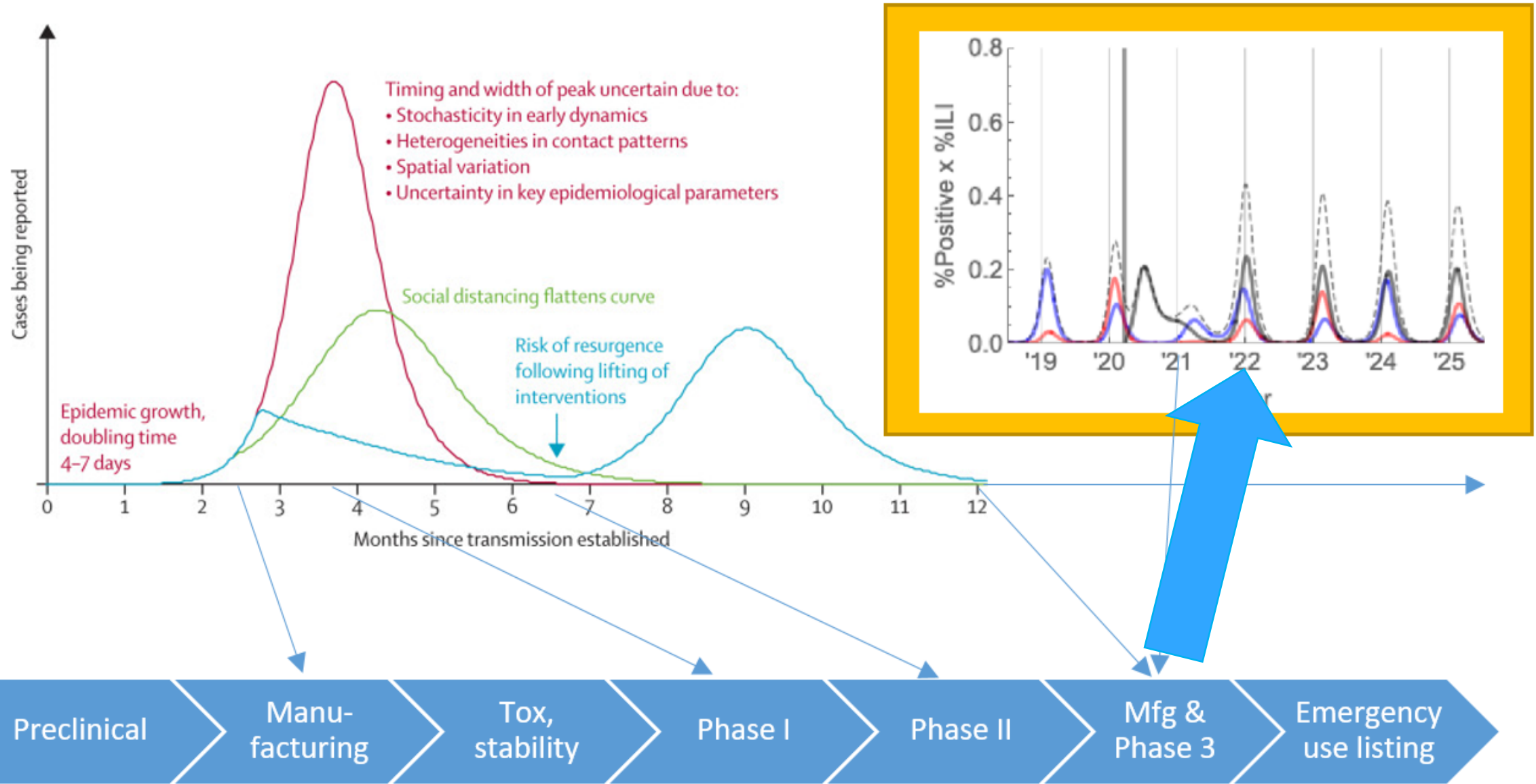
Americas	68,655,985 confirmed
Europe	54,718,053 confirmed
South-East Asia	32,877,008 confirmed
Eastern Mediterranean	10,325,014 confirmed
Africa	3,580,822 confirmed
Western Pacific	3,173,832 confirmed

Source: World Health Organization
Data may be incomplete for the current day or week.

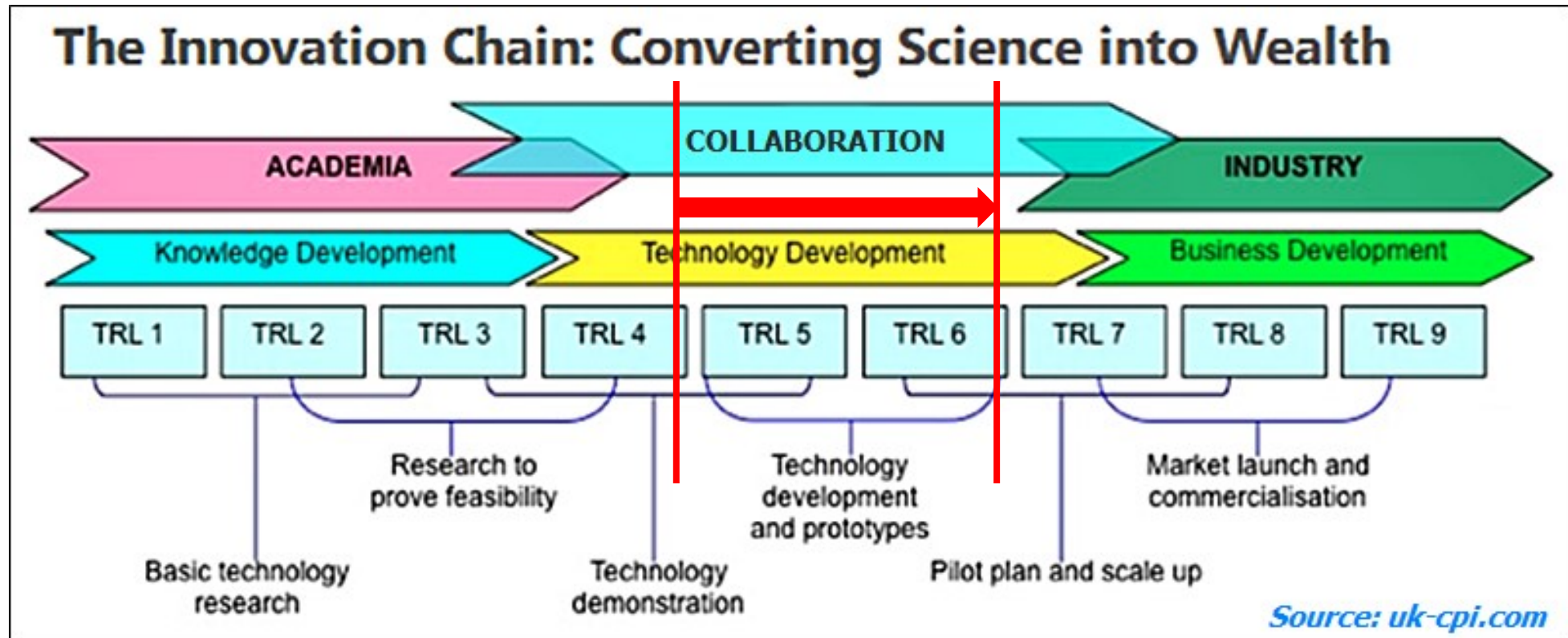


Norwegian Ministry
of Foreign Affairs

The COVID-19 epidemic curve



Need for public private partnerships (PPPs)

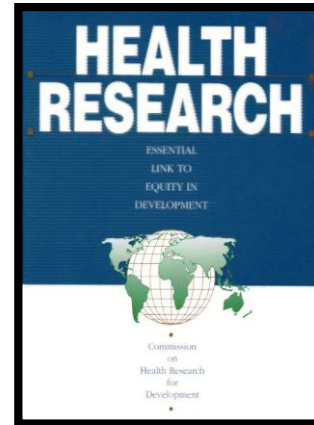


Calls for Increased R&D

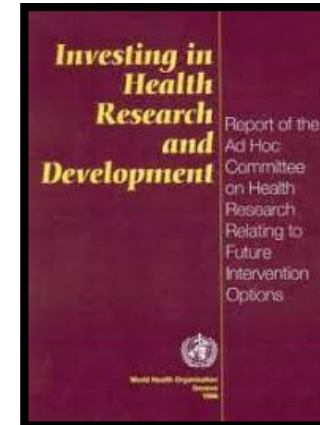
Longstanding recognition: market-driven global R&D system does not sufficiently meet the needs of majority of the world's population, 80% of which lives in developing countries



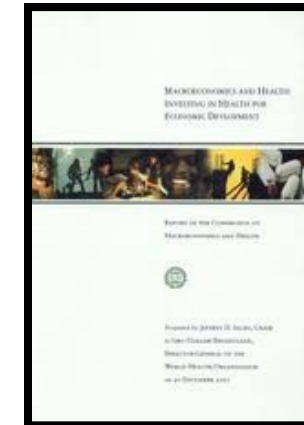
WHO-UNICEF-UNDP-World Bank
Special Programme for Research
and Training in Tropical Diseases
(1975)



Commission on
Health Research
for Development
(1990)



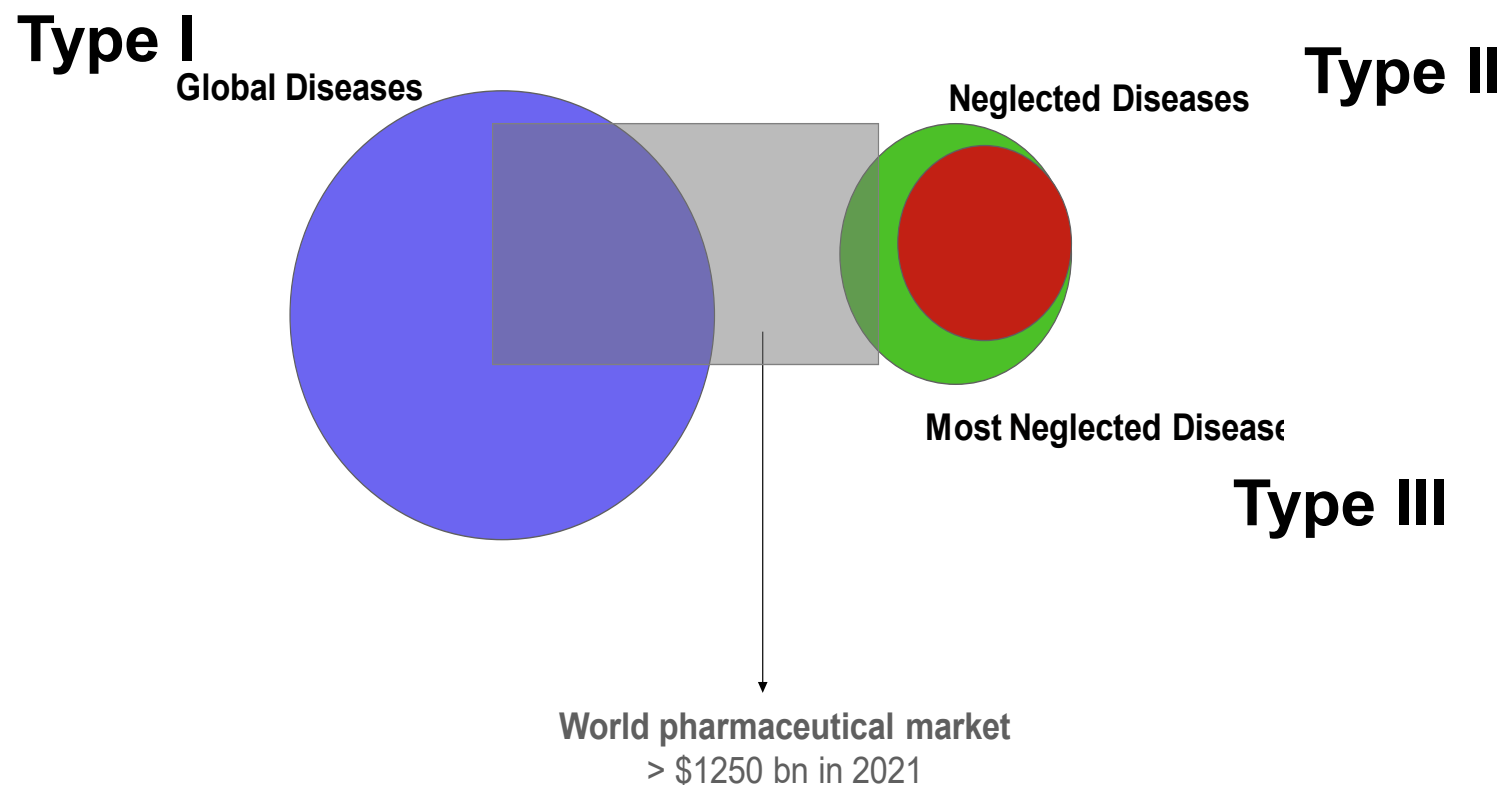
Investing in Health
Research
and Development
(1996)



Commission on
Macroeconomics
and Health
(2001)

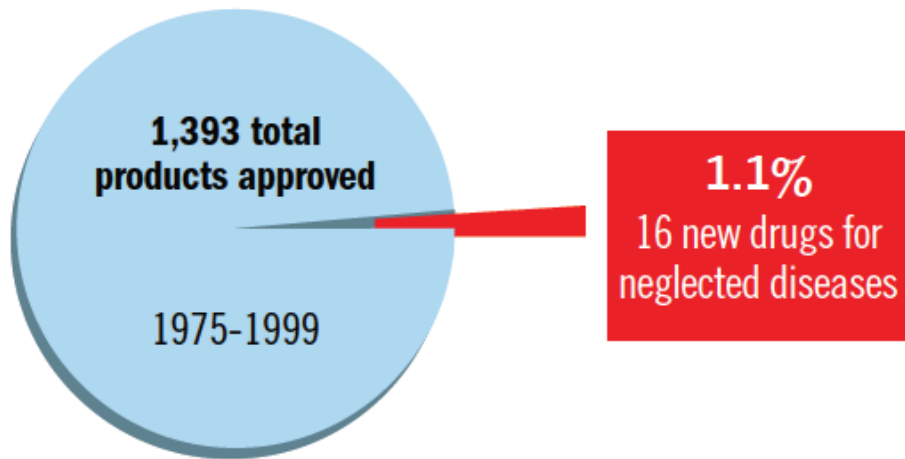


Neglected diseases

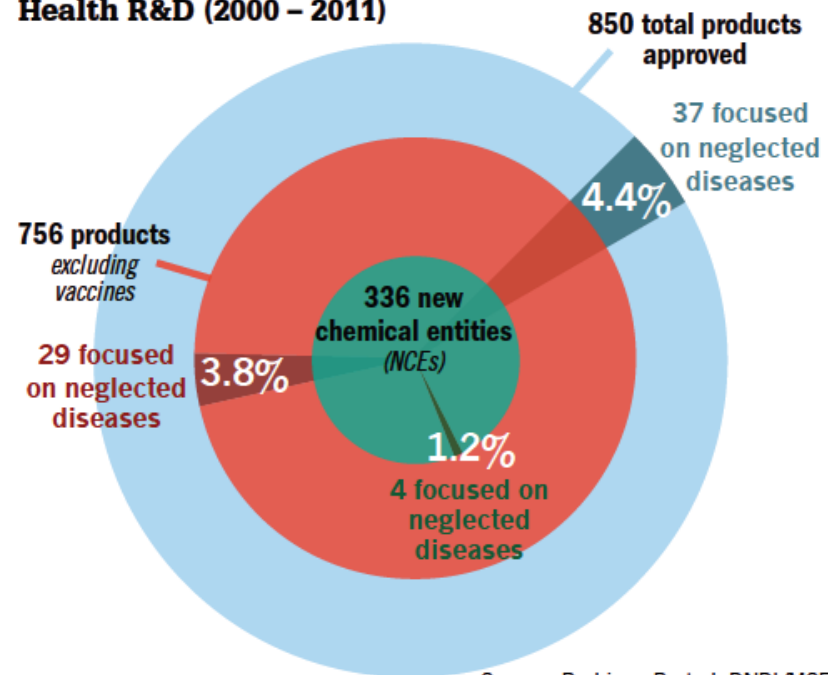


Imbalances in global R&D investments and public health needs

Health R&D (1975 – 1999)



Health R&D (2000 – 2011)



Source: Pedrique B et al, DNDI/MSF forthcoming publication, 2013*

Neglected diseases: Tuberculosis, malaria and tropical diseases, around 12% of GBD

Only \$3 billion (1-2% of total) invested globally on R&D for neglected diseases



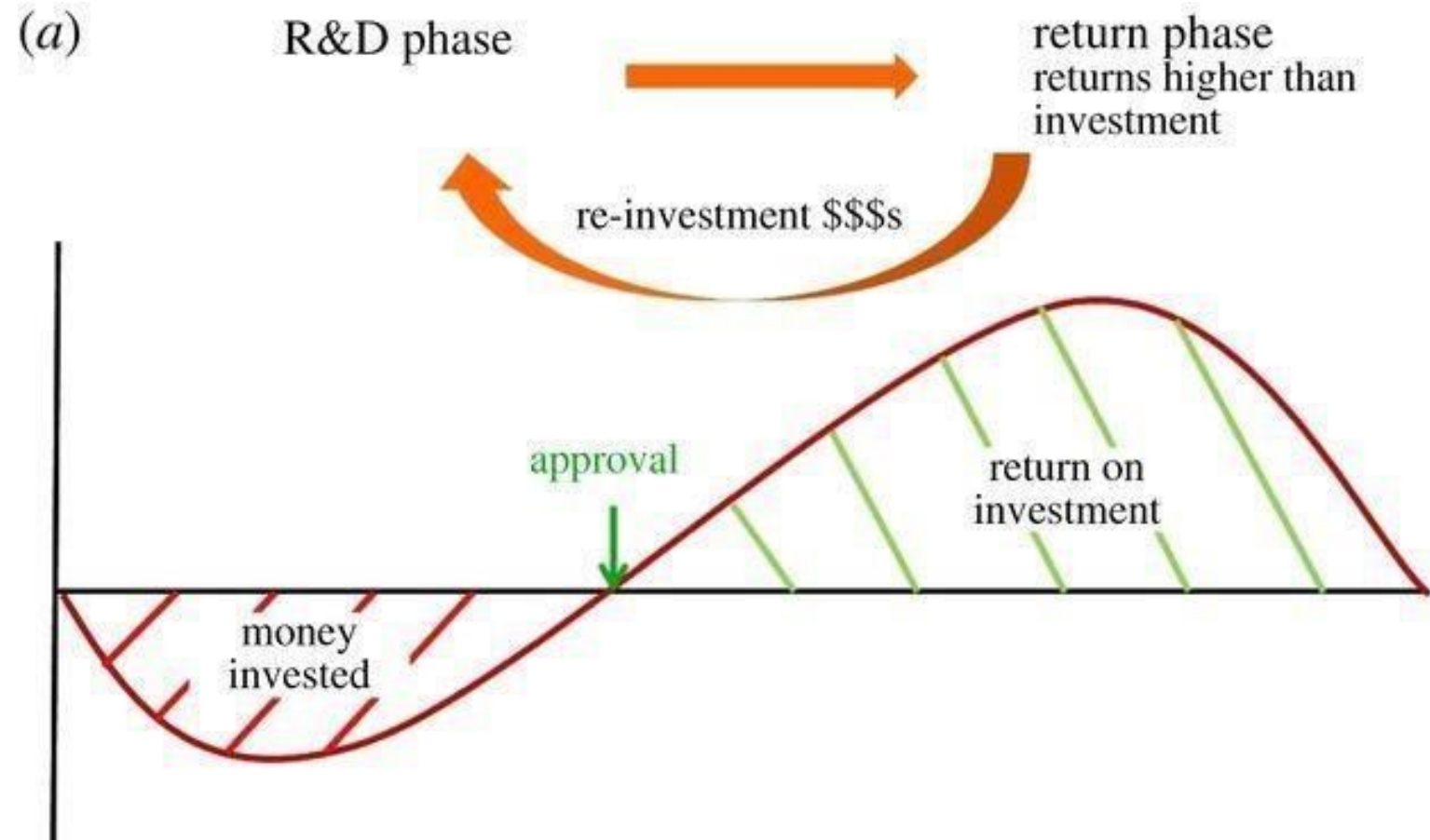
Innovation and Access



Innovation and Access



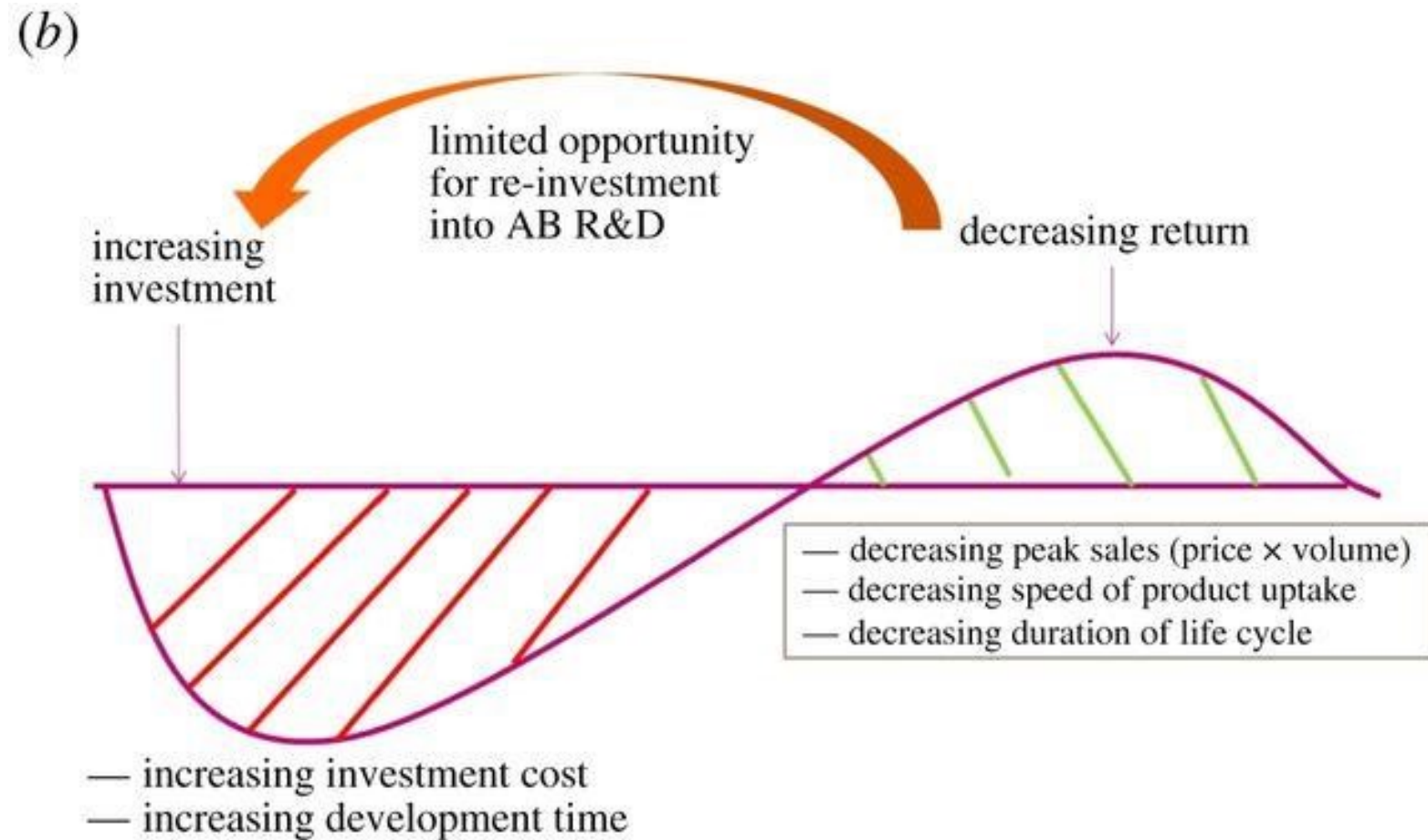
The traditional pharmaceutical commercial model



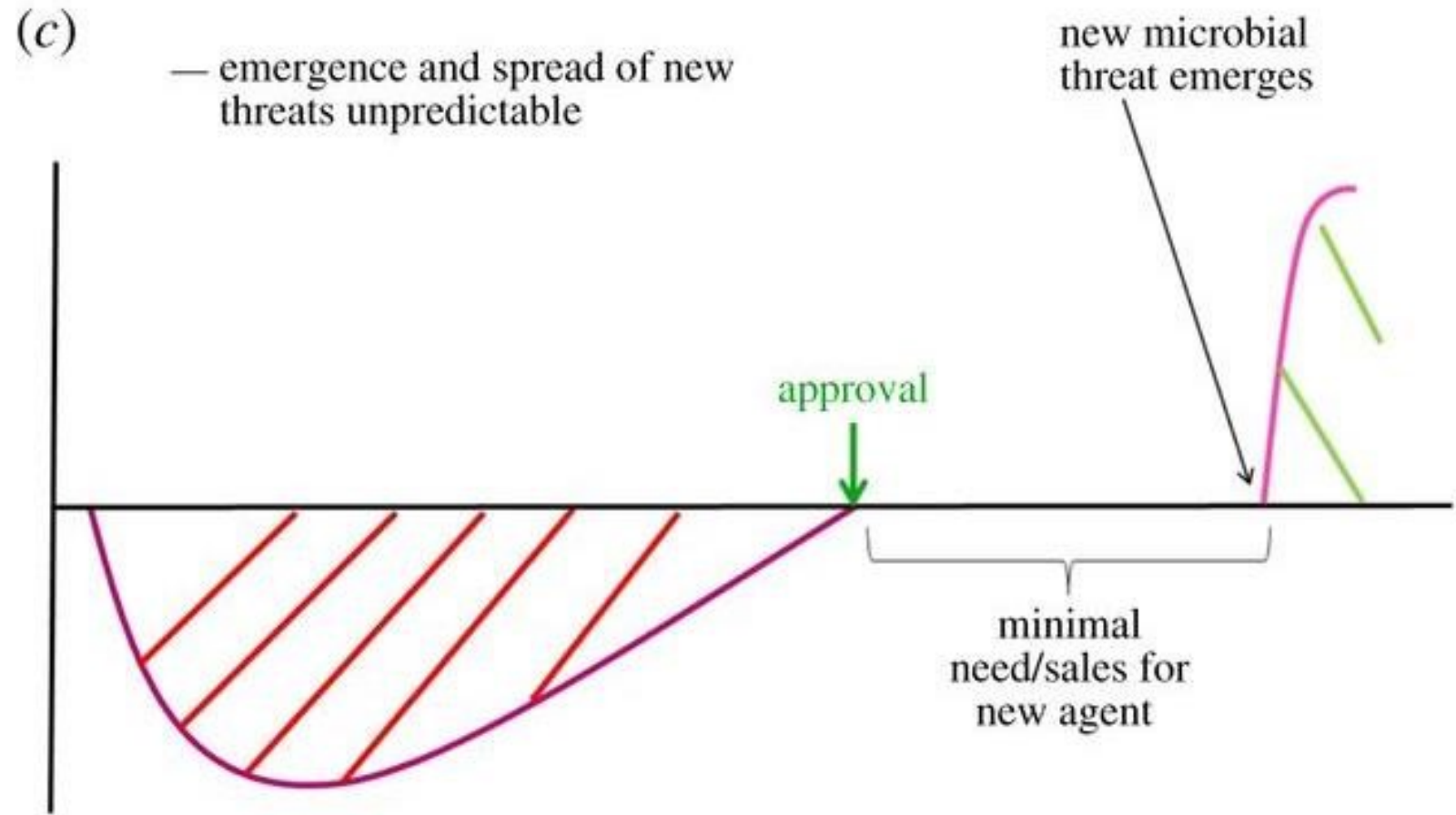
Innovation and Access



Application of traditional commercial model to antibacterials

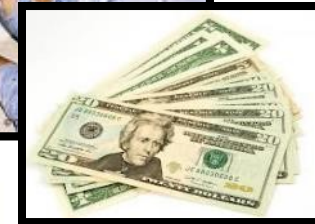


Commercial
model does
not
incentivize
future
potential
unmet needs



Innovation and Access

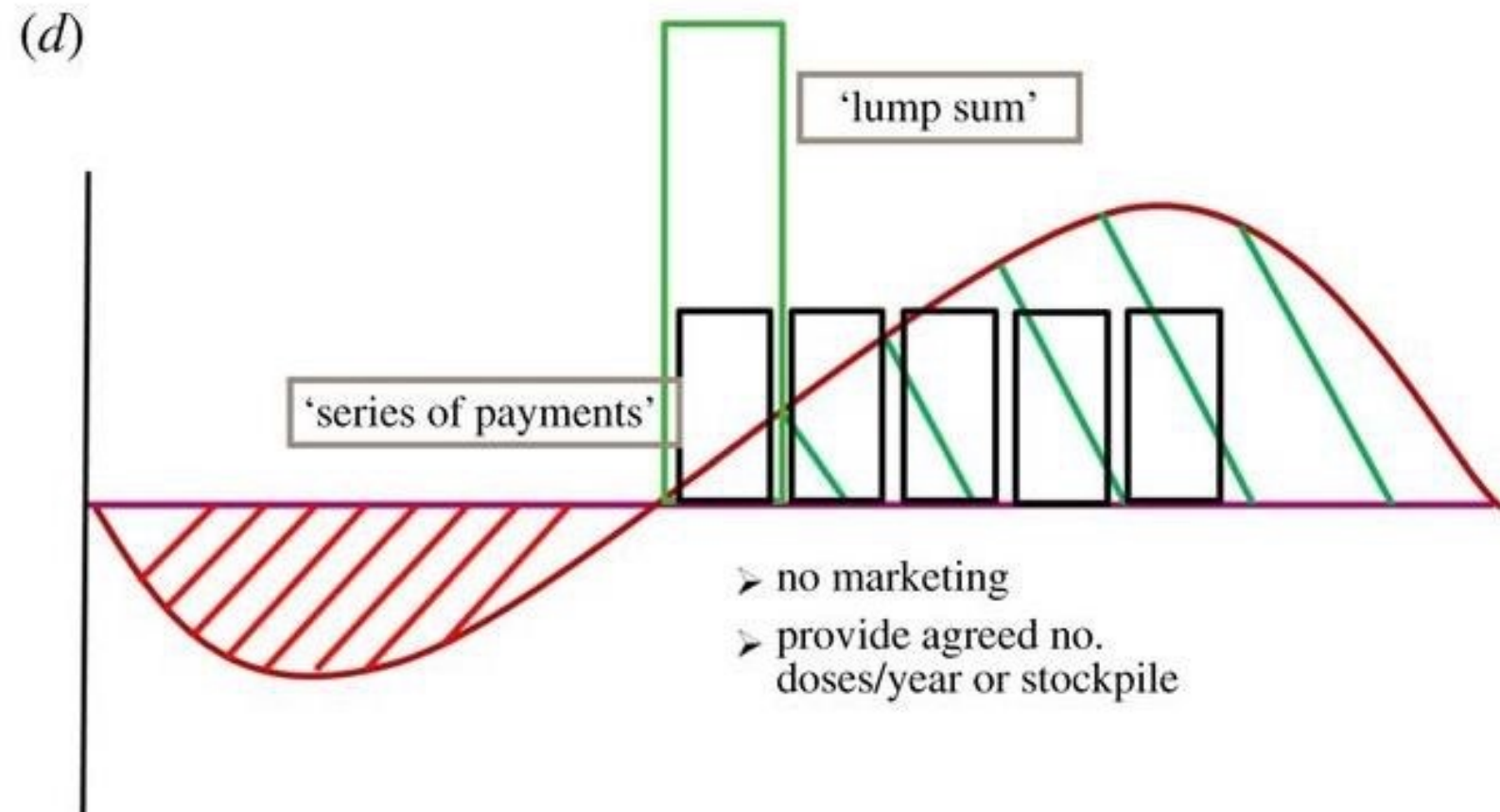
Market shaping – expand market



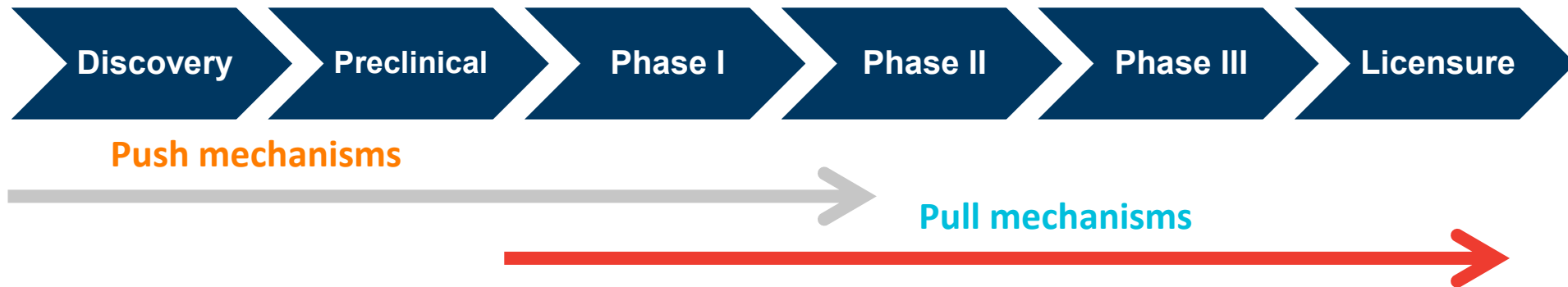
Innovation and Access Delinkage – a separate innovation market



Principles of a de-linked model



R&D financing and incentive mechanisms



EXAMPLES

- Open knowledge innovation
- PDP financing
- Grants
- Subsidies
- Tax breaks

- Advance Market Commitment (AMC)
- Milestone and end prizes
- Debt/loans
- Equity/bonds
- Government-backed volume guarantees



Poverty related diseases - Process at WHO

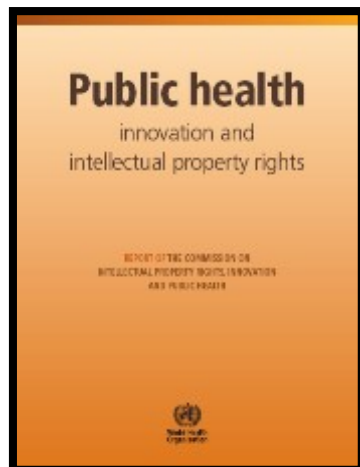
2003

Resolution
WHA56.27

*Intellectual property
rights, innovation and
public health*



Commission on Intellectual
Property Rights, Innovation
and Public Health



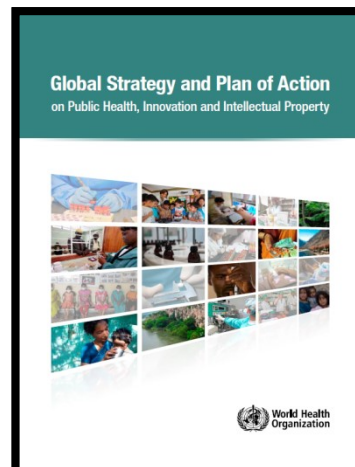
2006

Resolution
WHA59.24

*Public Health, innovation,
essential health research
and intellectual property
rights: towards a global
strategy and plan of
action*



Intergovernmental
Working Group



2008

Resolution
WHA61.21

*Global strategy and plan
of action on public
health, innovation and
intellectual property*



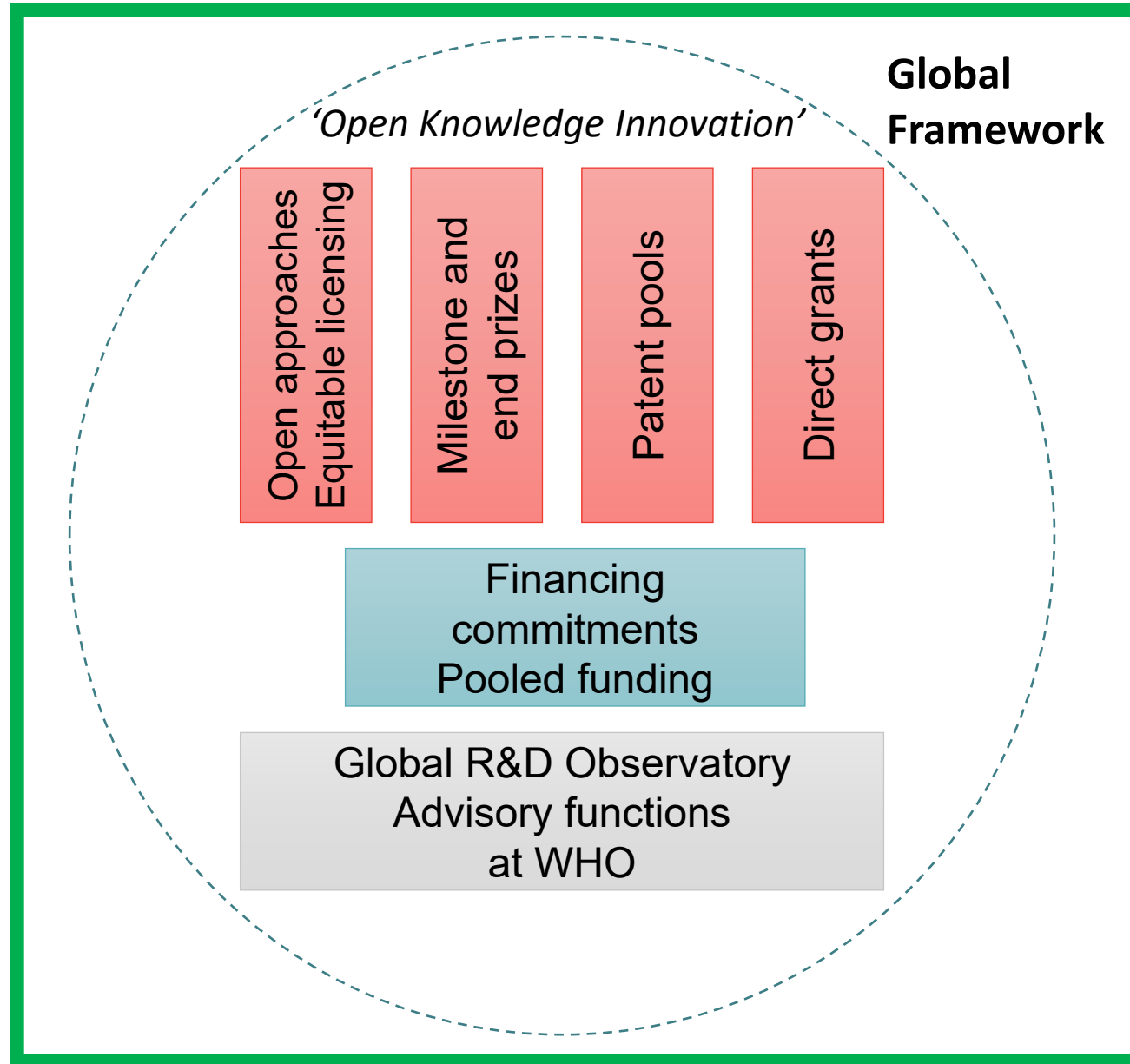
Expert Working Group on
Research and Development:
Financing and Coordination



- The main issue not resolved in the IGWG when negotiating the Global Strategy and Plan of Action:
 - *Element 7. Promoting sustainable financing mechanisms*
- Find solutions that **«secure adequate and sustainable financing for research and development, and improve coordination of its use»**

CEWG recommendations

Convention on Global Health R&D

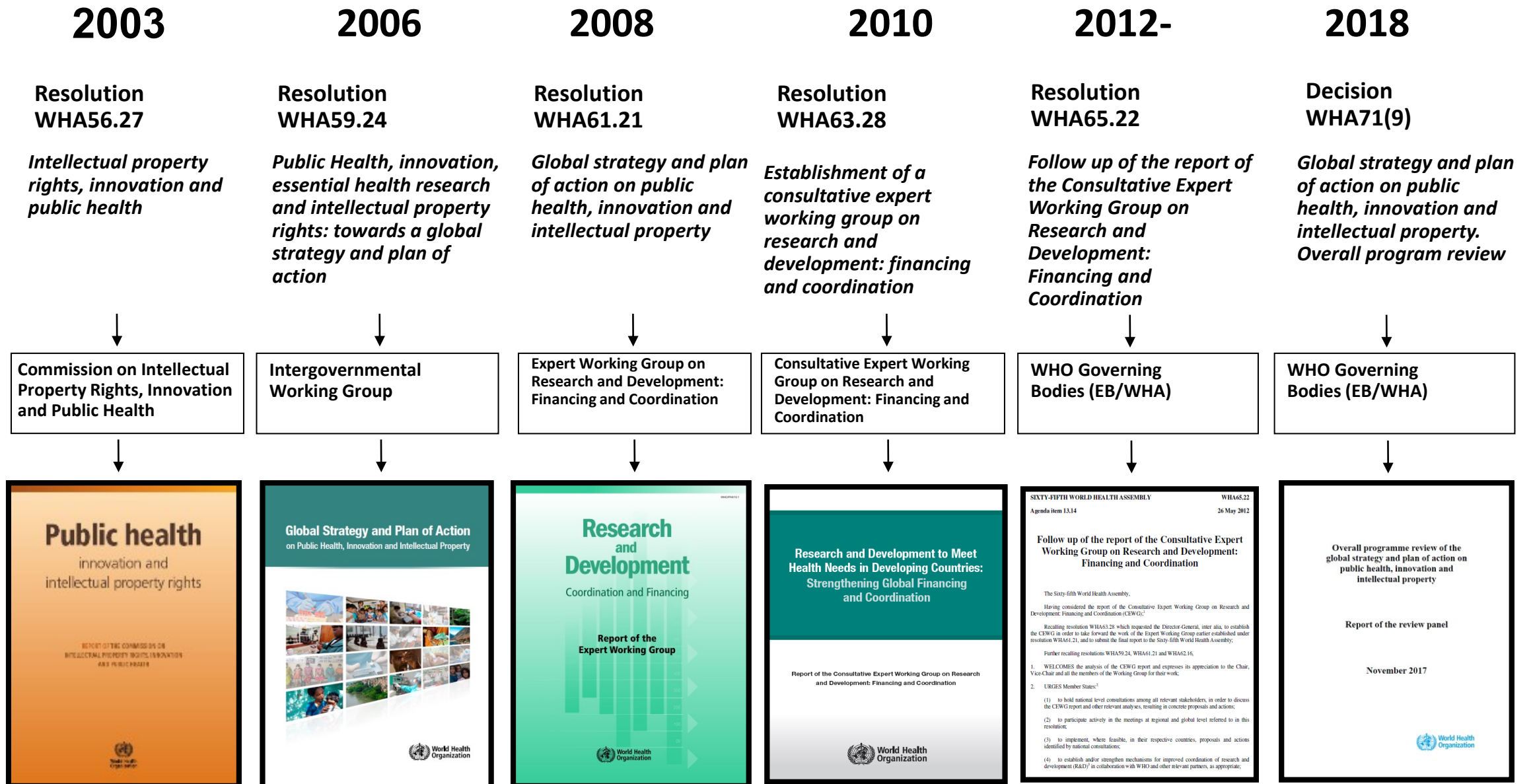


**Research and Development to Meet
Health Needs in Developing Countries:
Strengthening Global Financing
and Coordination**

Report of the Consultative Expert Working Group on Research
and Development: Financing and Coordination

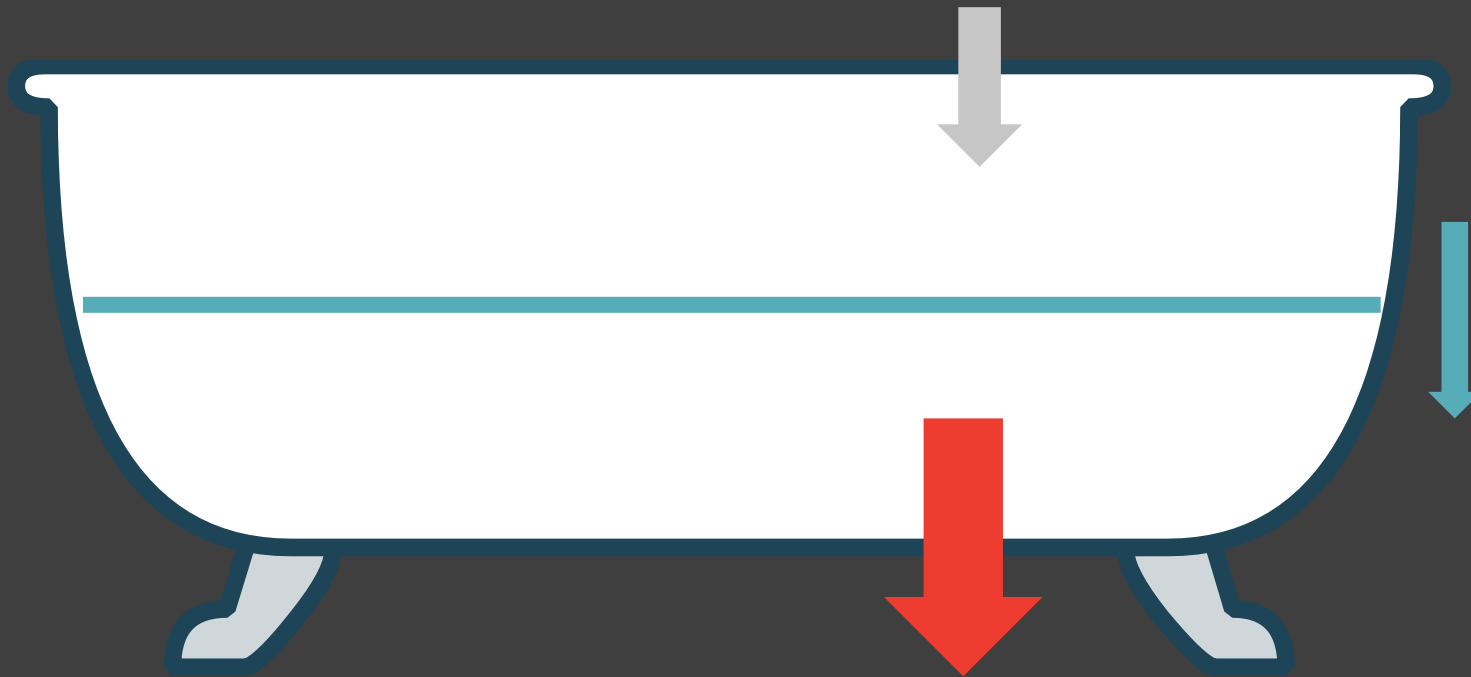


15 year long process - 2003-2018 at WHO

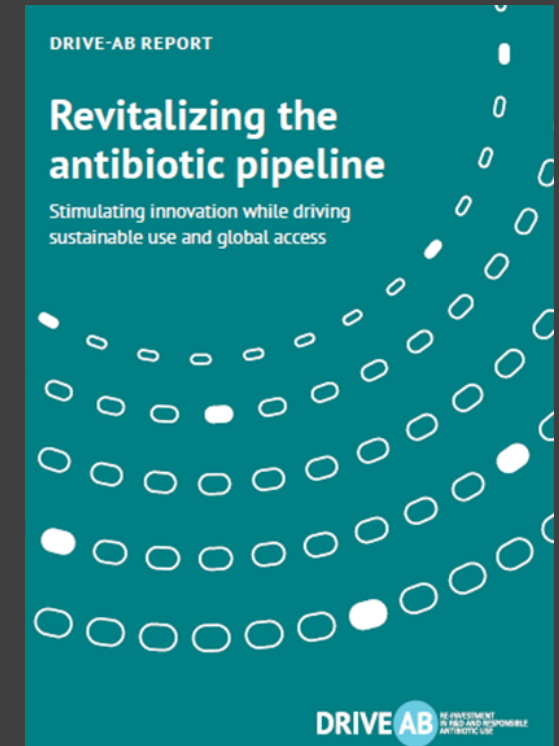


Sustainable effectiveness of antibiotics - a «bath tub problem»

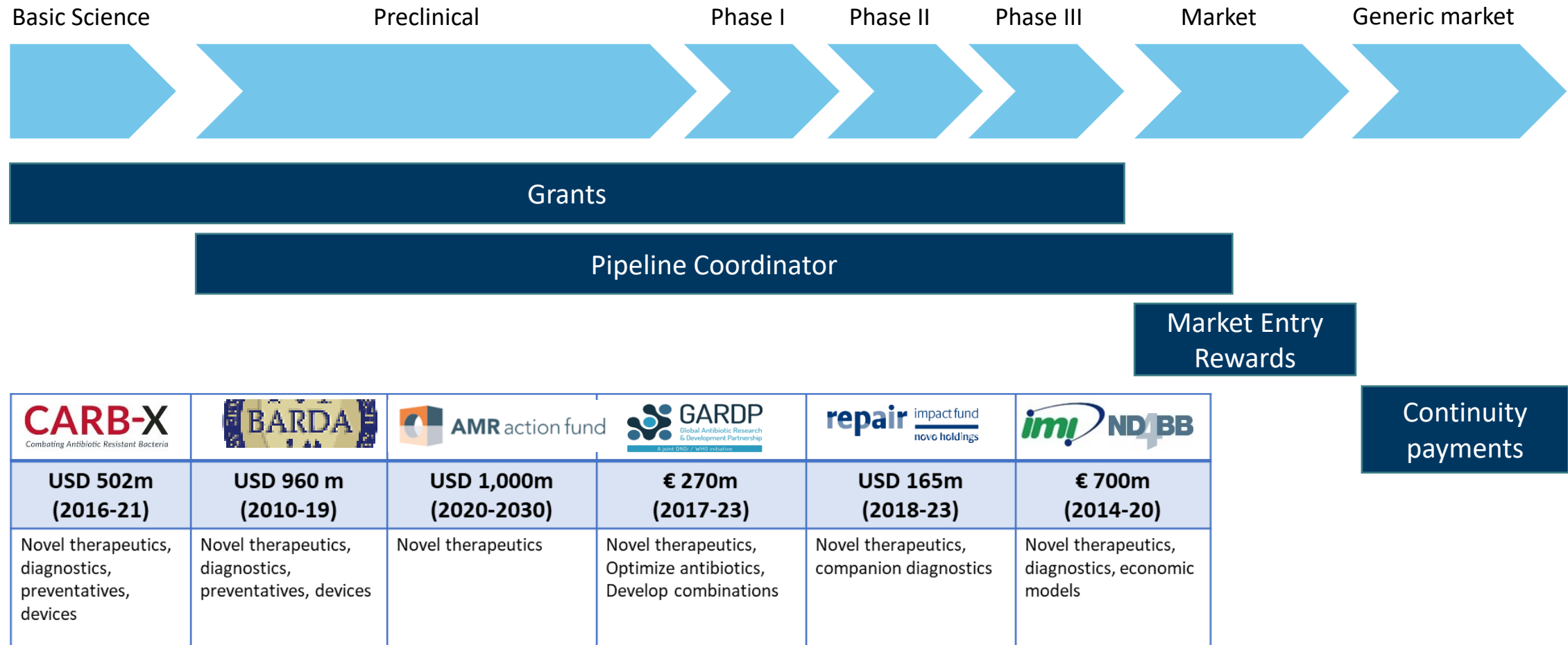
– a common pool resource



Convergence of recommendations



DRIVE-AB's recommended models

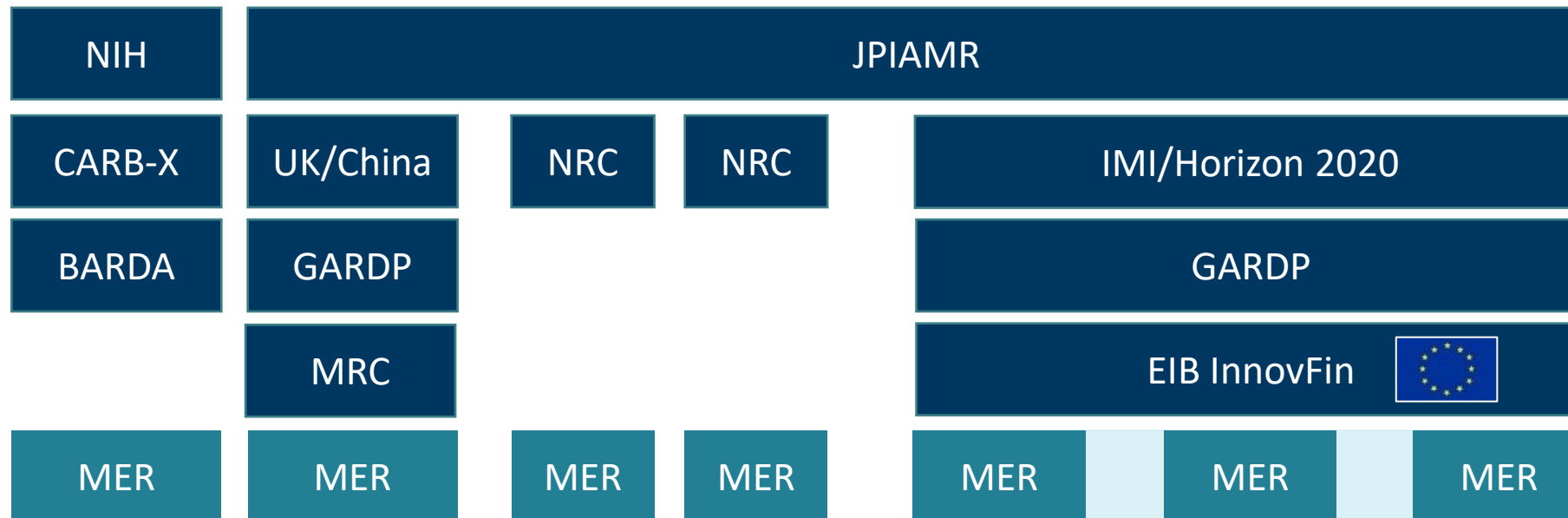


Collaboration/coordination mechanisms

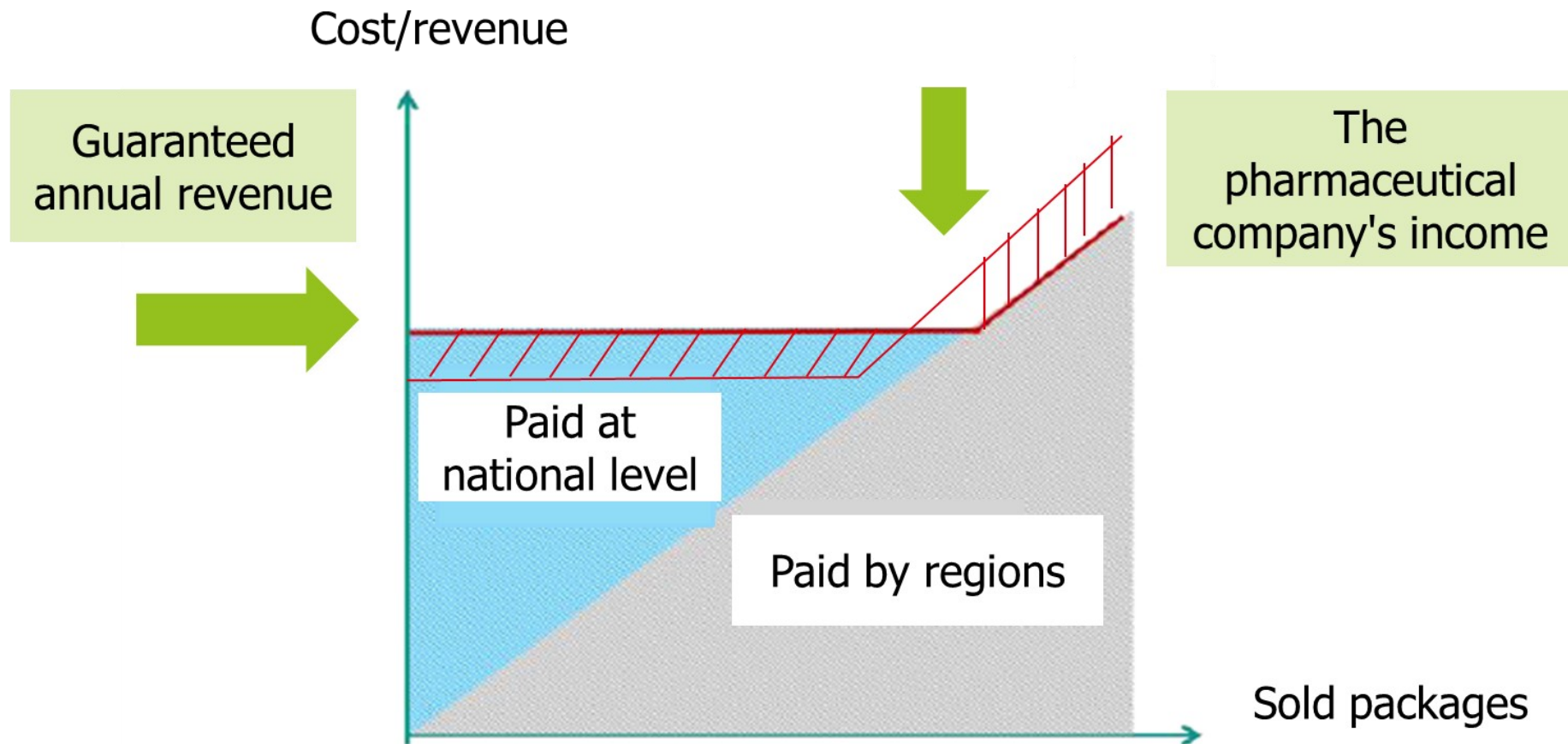


Coordination Alliance of like-minded nations willing to commit to same principles

G20 AMR R&D Collaboration Hub



UK and Sweden testing «pull»-incentives

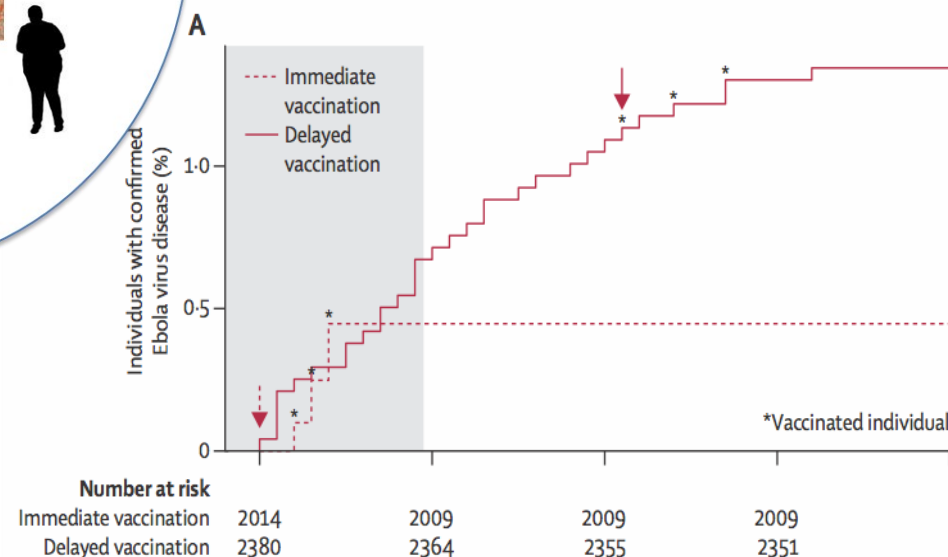
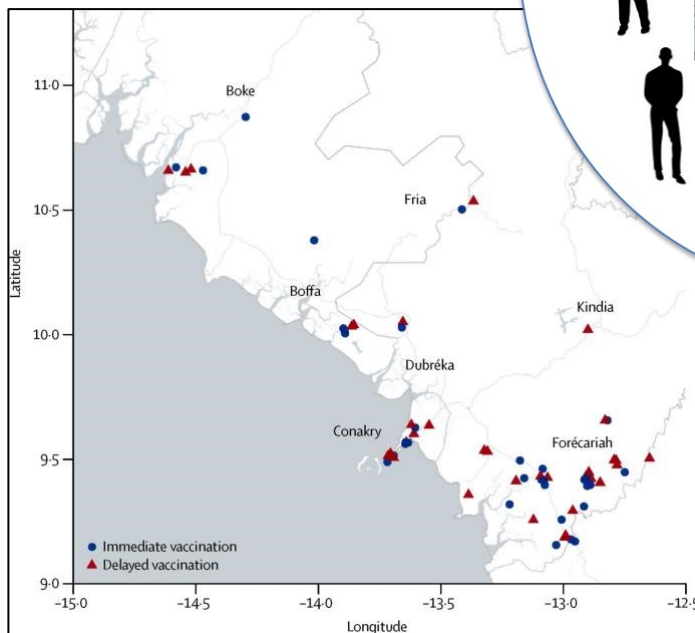


Kilde: Questions and answers about procurement in pilot study for new remuneration model. Public Health Agency of Sweden:
<https://www.folkhalsomyndigheten.se/contentassets/92ec9ceb2f2f428cb683add24b4f785b/faq-upphandling-pilotstudie.pdf> (Accessed July/August 2020)



Foto: Daniel Berehulak, The New York Times

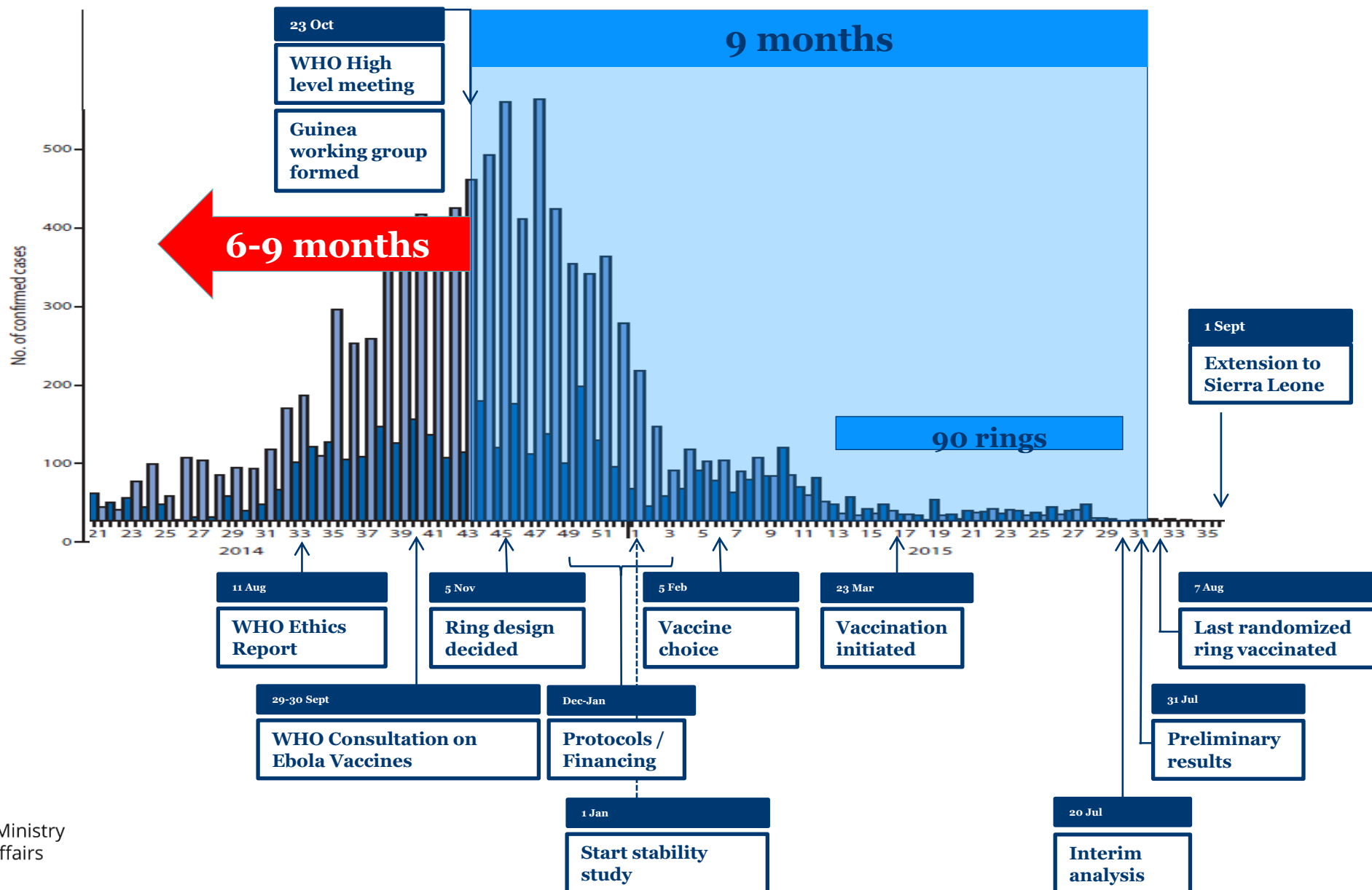
Guinea Ebola ring vaccination trial 2014-16



Henao-Restrepo et al. Lancet July 31st 2015



Testing of Ebola vaccines during the West African epidemic





NORWEGIAN
GOVERNMENT



The
Federal Government



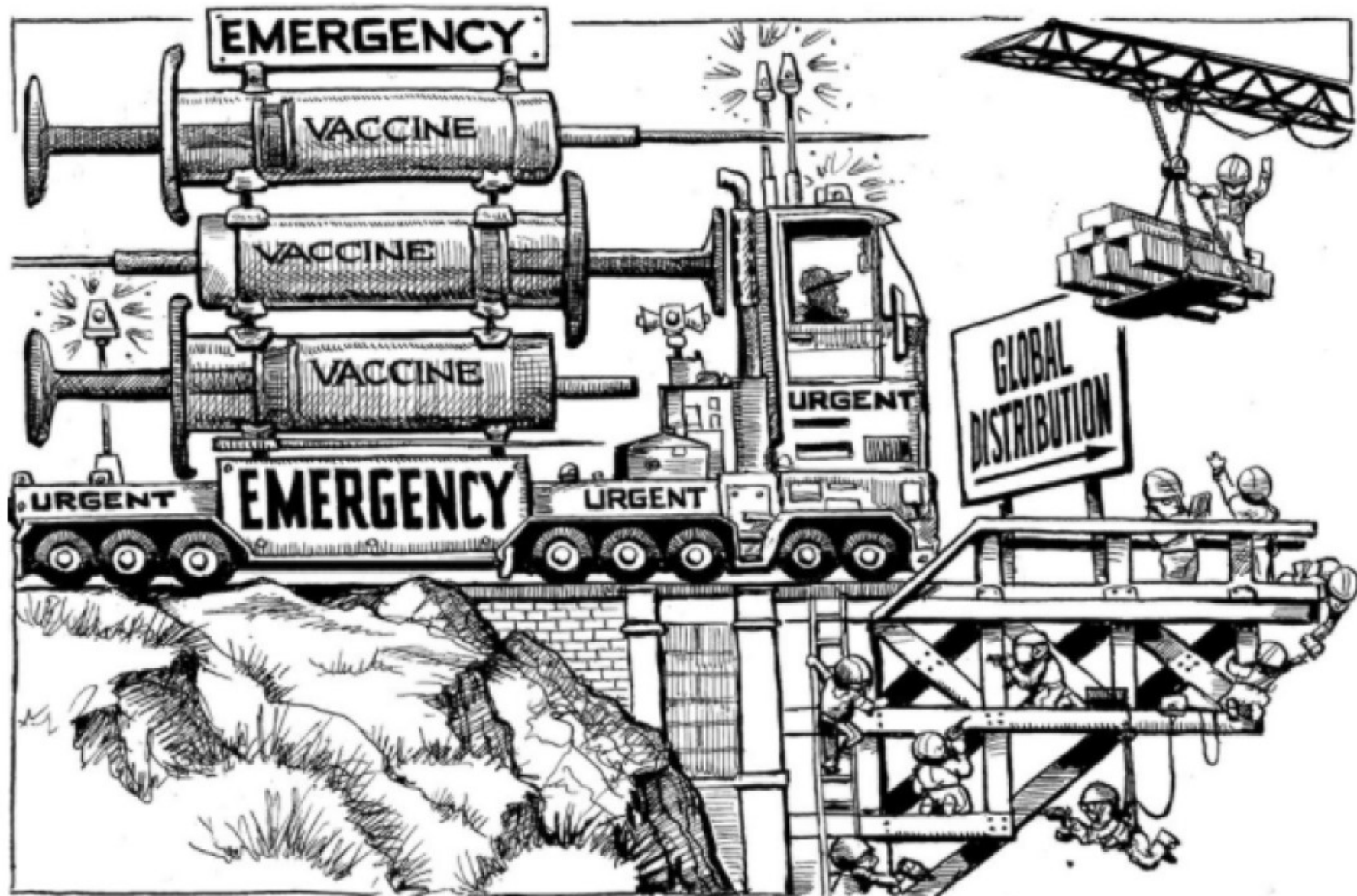
JAPAN GOV
THE GOVERNMENT OF JAPAN



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology

BILL & MELINDA
GATES foundation





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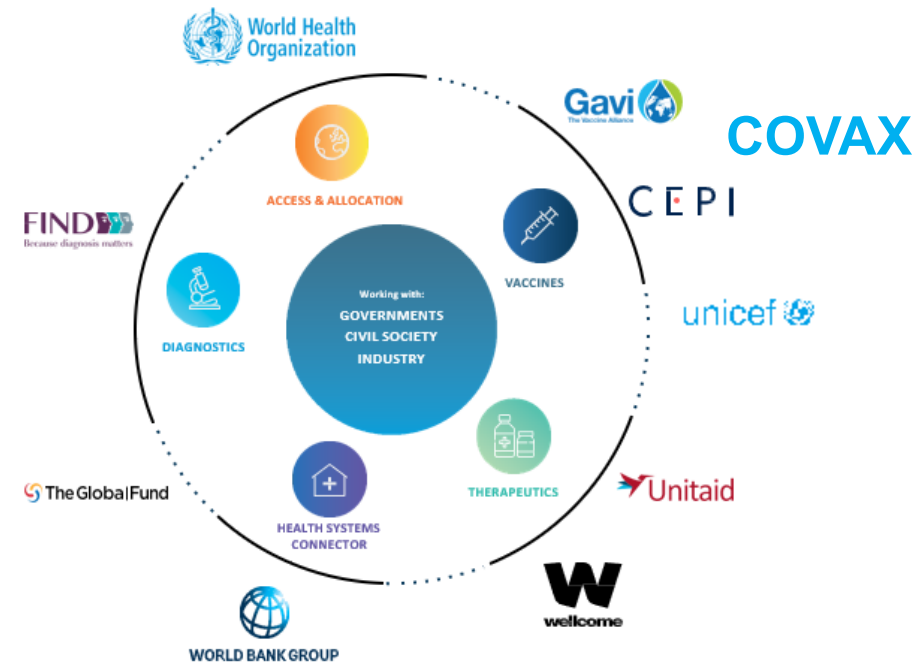


Norwegian Ministry
of Foreign Affairs

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Global collaboration – The Access to COVID-19 Tools (ACT) Accelerator

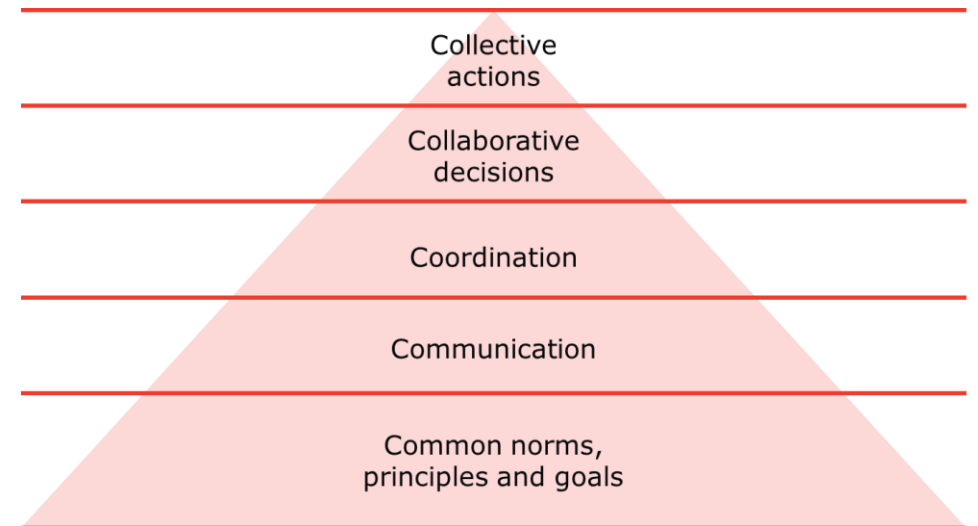
- **accelerate development** of tests, treatments & vaccines
- ensure **equitable access** to COVID-19 tools globally



Working with Governments, Civil Society and
Industry for impact

Post Covid-19 reforms: Global governance for health R&D

- Global Health Threats Council
- Financing Facility
- Pandemic Preparedness Partnership (G7)
- ACT-A 2.0 – platform for medical countermeasures
- Pandemic treaty – Framework convention



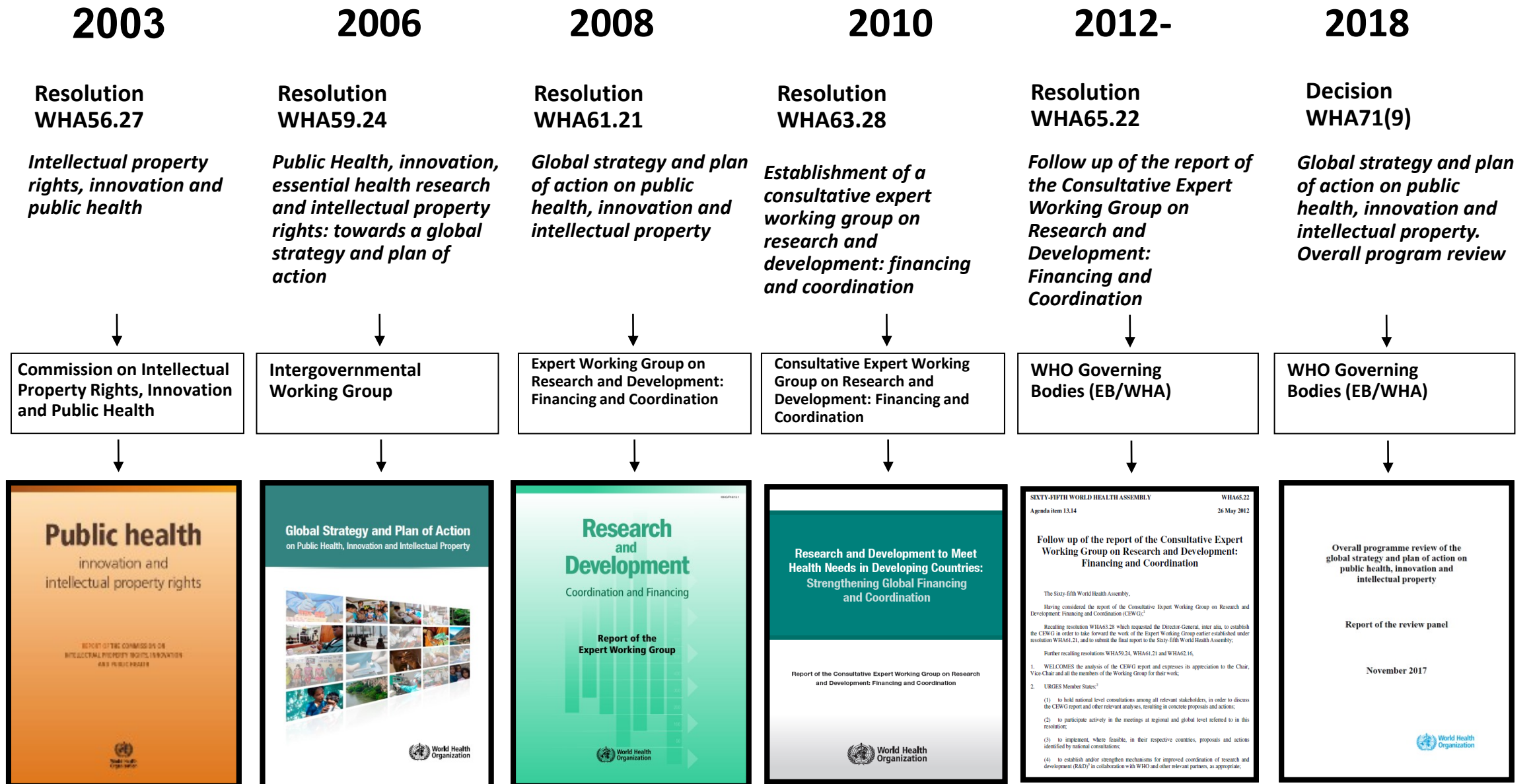
Most countries are small





Source: Hoffman (2007)

15 year long process - 2003-2018 at WHO





THANK
YOU
SCIENCE!"



Norwegian Ministry
of Foreign Affairs