

Regulatory challenges for COVID-19 Vaccine Development

CEPI

Dr. Melanie Saville

5th November 2020



Access to COVID-19 tools (ACT) accelerator

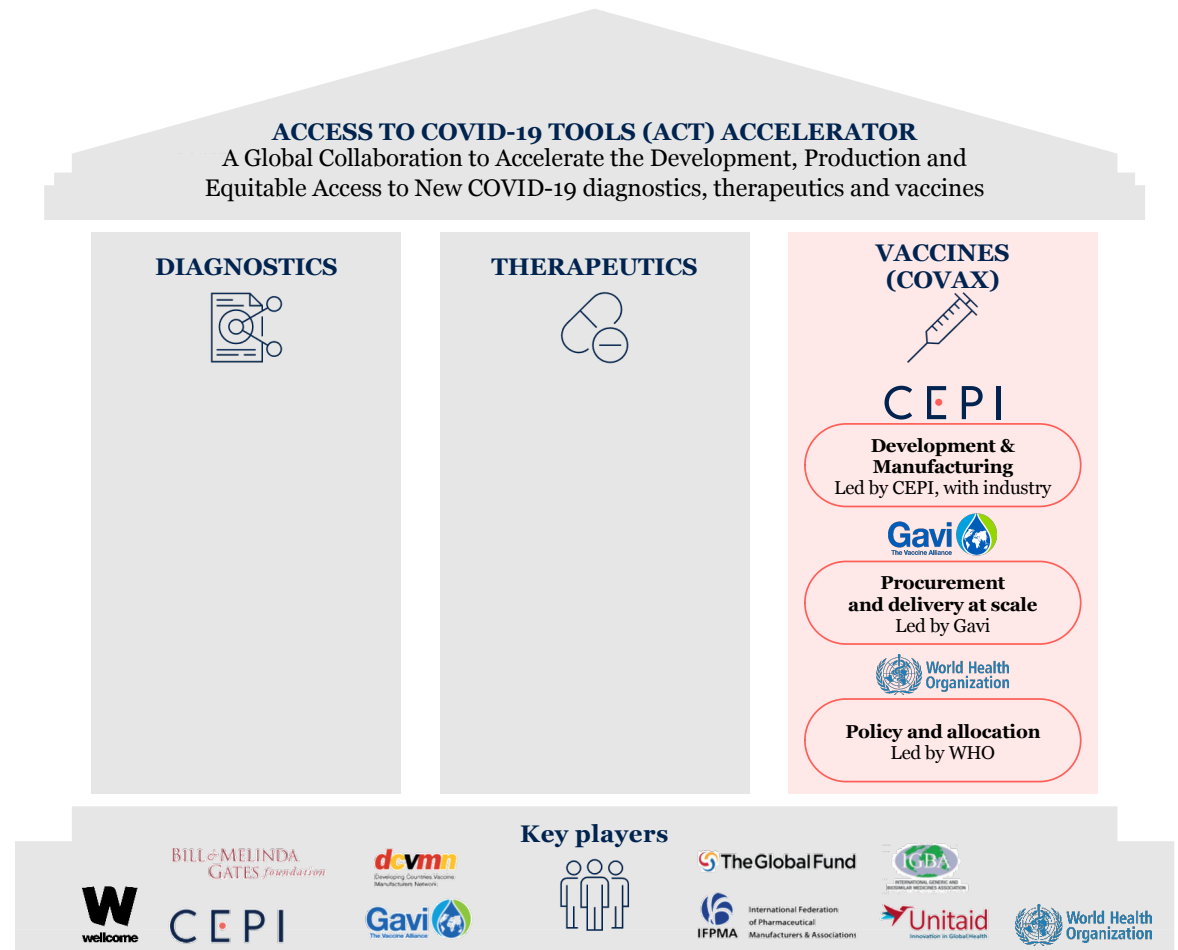


CEPI is pursuing a range of approaches to help overcome these challenges and increase global access to any future COVID-19 vaccine

We are founding partners of the ACT (Access to Covid-19 Tools) accelerator, a global coalition to accelerate the development, production of and equitable access to new Covid-19 diagnostics, therapeutics and vaccines

CEPI

SOURCE: (ACT) ACCELERATOR Commitment and Call to Action 24th April 2020

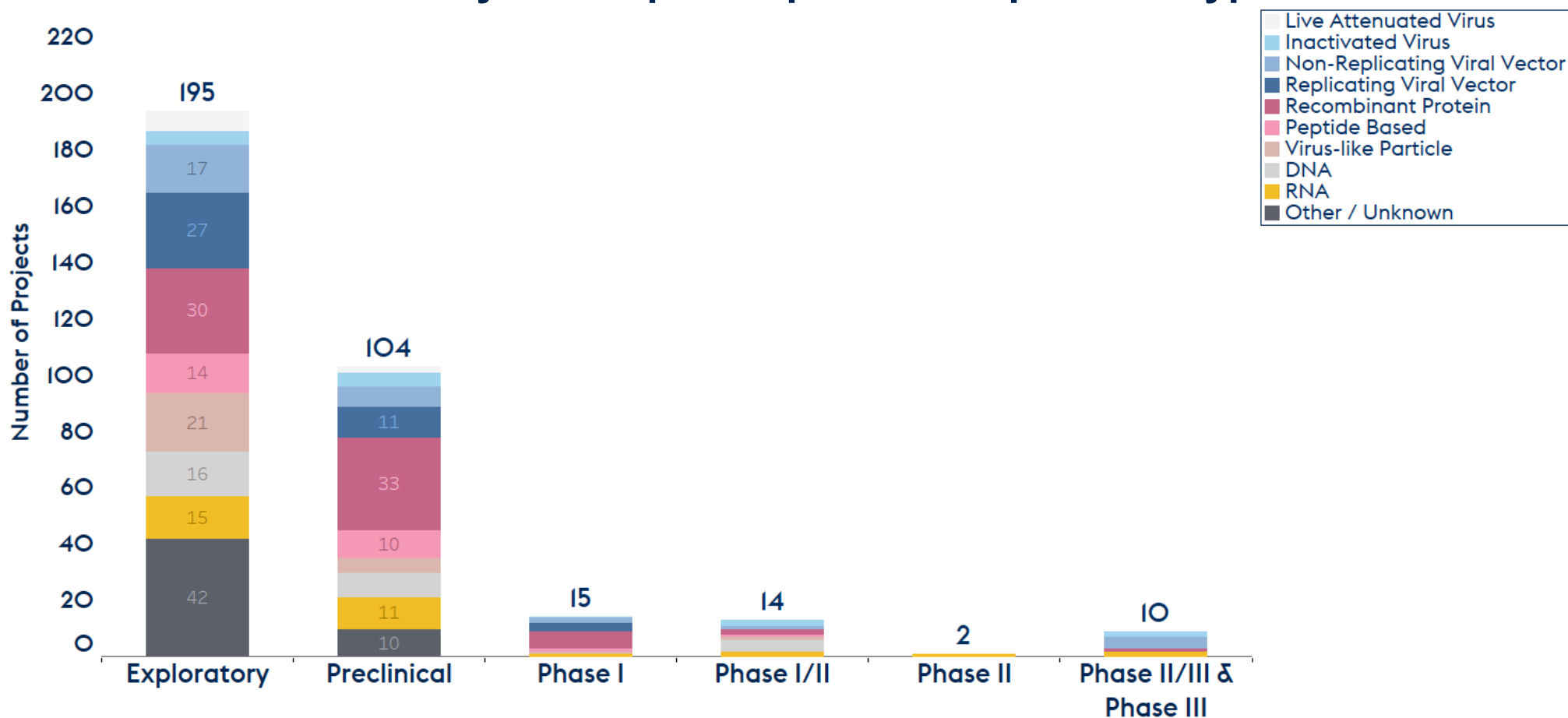


COVAX goals

- To develop the largest and most diverse actively managed portfolio of vaccine candidates so that the best vaccines are made available and the world has access to the best science
- To deliver 2 billion doses by end of 2021
- To guarantee fair and equitable access to COVID-19 vaccines for every country in the world



An ongoing COVID-19 landscape assessment is maintained to keep abreast of vaccine candidates – by development phase and platform type



- **Exploratory:** project has not started with in-vivo testing
- **Preclinical:** project started to test in-vivo / manufacture CTM but not yet started with testing on human
- Start of **clinical phases** is defined as first subject dosed

The COVAX R&D&M portfolio consists of 8 candidates in clinical development



COVAX-funded



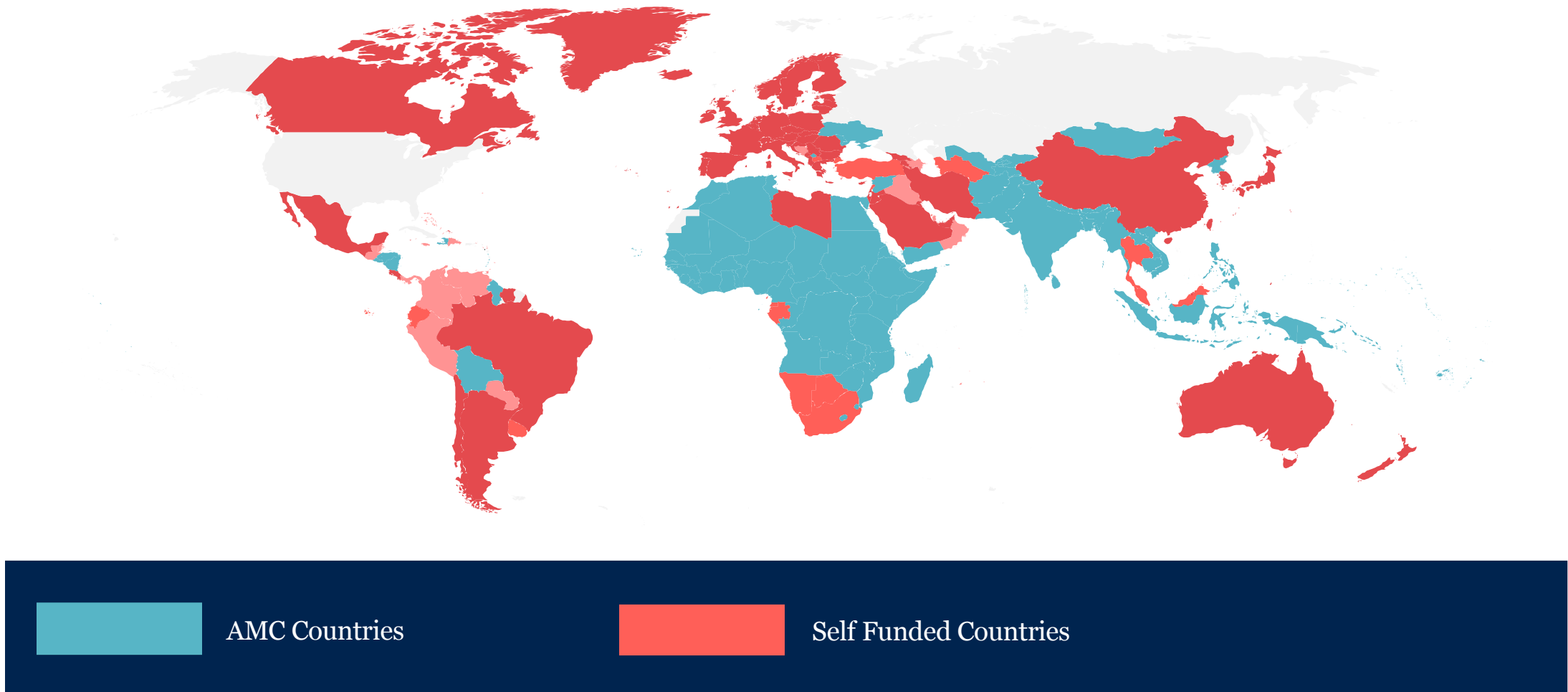
CEPI-funded but outside Covid-19 funding pool

		Phase I			Phase I/II		Phase II	Phase II/III and Phase III	
	Viral vectors	Shenzhen GIMI - aAPC	Merck TMV-083 	Wantai / U.HK LAIV DeINS1 ¹	Shenzhen GIMI - LV			Gamaleya rAd5, rAd26 ³	AstraZeneca AZD1222⁵
		ReiThera Srl - GRAd-COV2	Vaxart VXA-CoV2-1	IDT MVA				Cansino Ad5 ²	Janssen Ad26.COVID-2-S ⁶
	RNA	Walvax Biotech mRNA			Imperial saRNA 		CureVac CVnCoV 	Moderna mRNA-1273 	
					Arcturus ARCT-021			Pfizer BNT162 ⁵	
	DNA				Genexine GX-19	Inovio INO-4800 			
					Osaka / AnGes - AG0301	Cadila ZyCoV-D			
	Protein-based	VLP Medicargo	Sichuan RBD	Vaxine Covax-19	Medigen MVC-CO	FBRI SRC EpiVacCorona ³	SpyBio / SII VLP-Spycatcher	Anhui Zhifei Recombinant	Novavax NVX-CoV2373
		Covaxx UB-612	U.Q SClamp 	Clover SCB-2019 		Finlay Soberana 01	Sanofi / GSK Recombinant		
	Inactivated	Shenzhen Kangtai			Bharat BBV 152	IMB CAMS			CNBG WIBP ⁴
					RIBSP QazCovid-in				CNBG BIBP ⁴

¹ U.HK programme distinct from CEPI-funded programme² Cansino has been approved for military use in China³ Gamaleya (rAd5, rAd26) and FBRI SRC (EpiVacCorona) has been conditionally registered in Russia⁴ Emergency use approval in China and UAE⁵ Under regulatory rolling review⁶ Under study pause

AS OF OCT 19

**94 self-financing economies joined the COVAX Facility and the 92 AMC.
Total of 184 economies**



COVID-19 vaccine development guidance

FDA/CBER

- June: Development and Licensure
 - Primary efficacy endpoint point estimate at least 50% and with the lower bound 30%
- October: Emergency Use Authorization
 - Data from phase 3 should a median follow up duration of at least 2 months after completion of the full vaccination regimen
- October: VRBPAC
 - Guidance for continuation of blinded phase 3 trials if EUA issued
 - What studies following licensure

EMA

- Conditional Marketing authorization the most likely scenario
 - Positive benefit/risk, with post authorization commitments needed
- Compassionate use program – support EU nationals – lower bar and would need a solid benefit/risk per country.

WHO EUL or Pre-Qualification?

EUL

- Risk benefit assessment of essential set of quality, safety and efficacy data for use during PHEs
- Rolling review of data
- Assessment performed by WHO independent experts in collaboration with National Regulatory Authorities (WLA)
- Reliance on WLA -abbreviated process under oversight of mature regulators (evaluation and oversight of programmatic aspects by WHO)
- Pre-submission meetings encouraged
- Post-deployment monitoring
- Time limited recommendation
- Development should continue for MA/PQ

Pre-qualification

- Review of extensive quality, safety and efficacy and PSPQ for international supply
- Assessment performed by WHO independent experts
- Reliance on WHO Listed Authority (WLA) - abbreviated process under oversight of mature regulators (evaluation and oversight of programmatic aspects by WHO)
- Pre-submission meetings encouraged
- Post-PQ monitoring
- Reassessment/requalification

Challenges 1/2



- Long term safety and efficacy data
 - Interim analyses
 - Placebo cross over
 - Need for booster
- Expanded access versus Emergency Use versus licensure?
- PASS/PAES



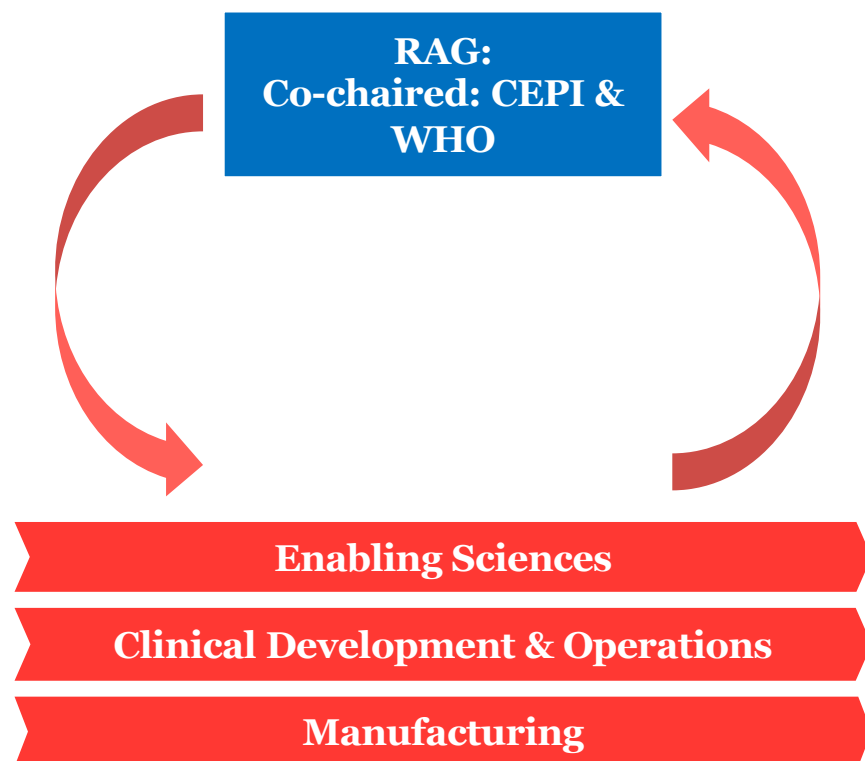
Challenges (2/2)

- Regulatory acceptance for the use of:
 - QR codes
 - Barcodes
 - Simplified label
- Authority batch release testing:
 - Widespread acceptance of batch release certificates/information generated by a limited number of NCLs
 - “Global” agreement on tests to be performed per vaccine type needed.
- GMO regulations
- Post-approval changes
- Stability data

Call for Regulatory pragmatism

- Change/Allow:
 - WHO to rapidly grant prequalification or EUL status based on the approval of a MRA,
 - Establish a standardized vial label without further review and approval by a country/region
 - QR codes for expiry date and package leaflet in multiple languages
- Waive:
 - GMO requirements for COVID-19 vaccines
 - Country-specific regulations that require product developers to submit country-specific dossiers
 - Specific batch release testing requirements for MRA emergency/fully authorized or WHO PQ listed/EUL products.

A Regulatory Advisory Group (RAG) supports SWAT teams



- Monthly meetings
- Questions/issues from SWAT teams
- Publish Q&As on WHO website
- Additional Communication via COVAX newsletter

COVAX Regulatory Advisory Group Members

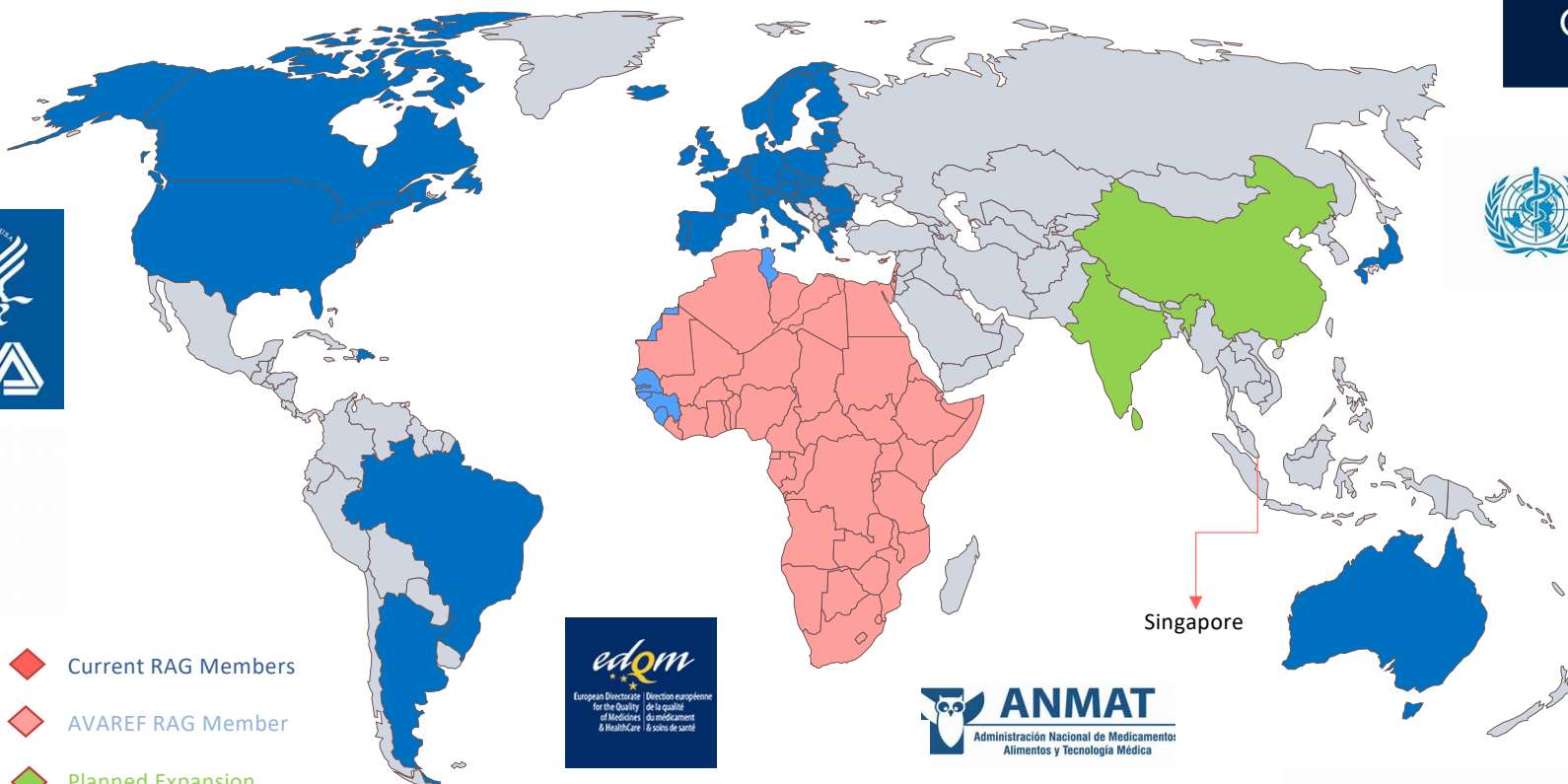


EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

- ◆ Current RAG Members
- ◆ AVAREF RAG Member
- ◆ Planned Expansion



Sensitivity: CEPI Internal



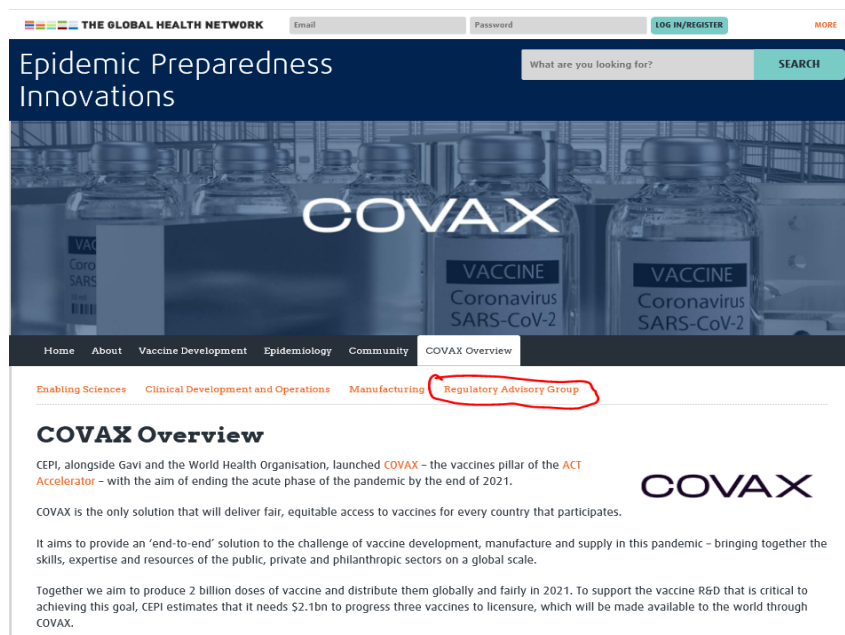
AVAREF



Australian Government
Department of Health
Therapeutic Goods Administration

World map by www.freeworldmaps.net

COVAX Regulatory Advisory Group – external communication



<https://epi.tghn.org/covax-overview/>

CEPI

Sensitivity: CEPI Internal



[Home](#) / [Publications](#) / [Overview](#) / Frequently asked questions on regulation of COVID-19 vaccines

Frequently asked questions on regulation of COVID-19 vaccines

Q&As developed by the COVAX Regulatory Advisory Group (RAG)

22 October 2020 | COVID-19: Laboratory and diagnosis



Overview

The vaccine pillar, COVAX, of the [ACT accelerator](#) has established a Regulatory Advisory Group (RAG) which is co-lead by WHO and CEPI. The RAG has members from Regulatory Agencies covering all WHO regions, including Argentina, Australia, Brazil, Canada, Europe (EMA & EDQM), Ghana, Japan, Singapore and USA.

COVAX also supports vaccine developers on general matters related to vaccine development. Working groups, so called SWAT teams, have been established for manufacturing, clinical development/operations and enabling sciences to support vaccine developers in solving product agnostic challenges in COVID-19 vaccine development. The SWAT teams have members from various stakeholders such as BMGF, WHO, GAVI and industry organizations (IFPMA and DCVMN).

The RAG was set up to give feedback on regulatory science questions of an agnostic nature raised by the COVAX SWAT teams in order to promote regulatory preparedness among COVID-19 vaccine developers. Feedback from the RAG is communicated back to the COVAX SWAT teams in the format of Q&As. It is also presented here for the benefit of all COVID-19 vaccine developers and for the wider community of regulatory authorities.

The RAG applies the Chatham House rules, but divergent views are reported as such without attribution.

<https://www.who.int/publications/m/item/frequently-asked-questions-on-regulation-of-covid-19-vaccines>

COVAX

Newsletter from SWAT teams and RAG

<https://tghn.us2.list-manage.com/subscribe?u=2146a0400e260163a7dfb5b83&id=cc13a5df53>

CEPI