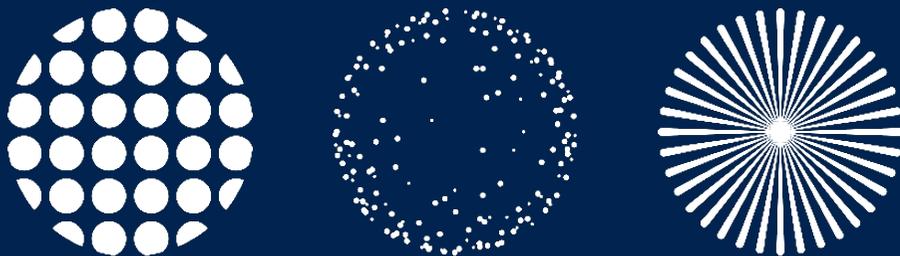


# EXPECT THE UNEXPECTED

Frederik Kristensen, Deputy CEO

DCVMN, Rio de Janeiro, 22 October 2019





**First vaccination site  
for trial of second  
Ebola vaccine in DRC**

# A WORLD AT RISK

Annual report on global preparedness  
for health emergencies

Global Preparedness Monitoring Board

CEPI

# CEPI: a global coalition

OUR MISSION

OUR APPROACH

To accelerate development of vaccines against emerging infectious diseases and enable equitable access to these vaccines for affected populations during outbreaks

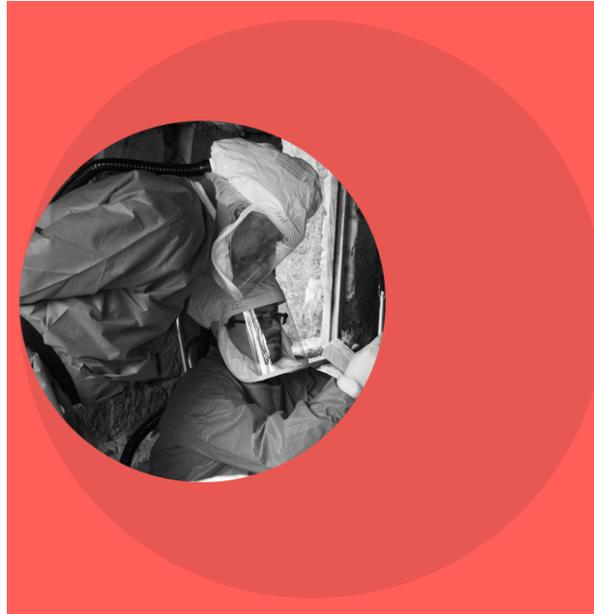
CEPI

# Our Strategic Objectives



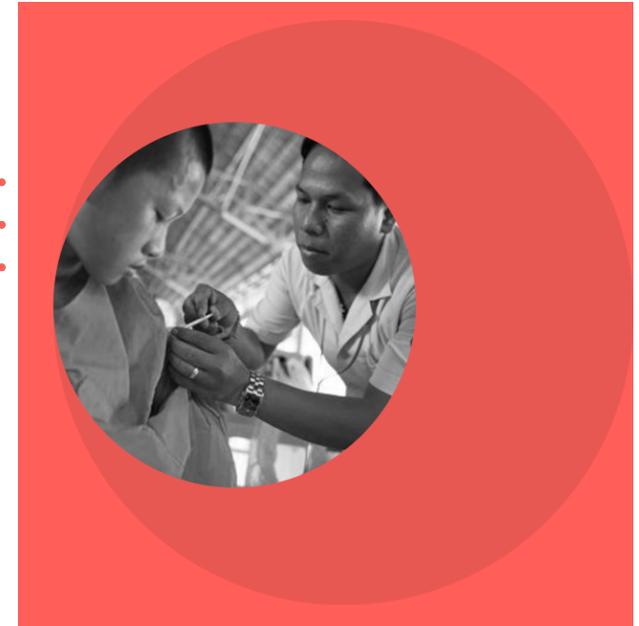
## Preparedness

Advance access to safe and effective vaccines against emerging infectious diseases



## Response

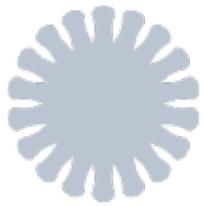
Accelerate the research, development and use of vaccines during outbreaks



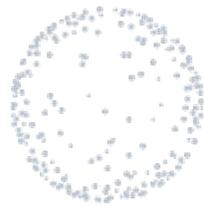
## Sustainability

Create durable and equitable solutions for outbreak response capacity

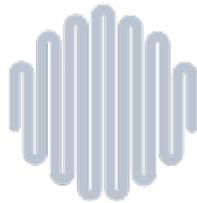
# CEPI's initial priority pathogens



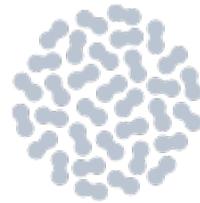
MERS



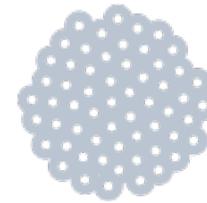
Lassa



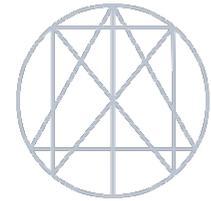
Nipah



Chikungunya



Rift Valley fever



Disease X

# CEPI as funder and facilitator

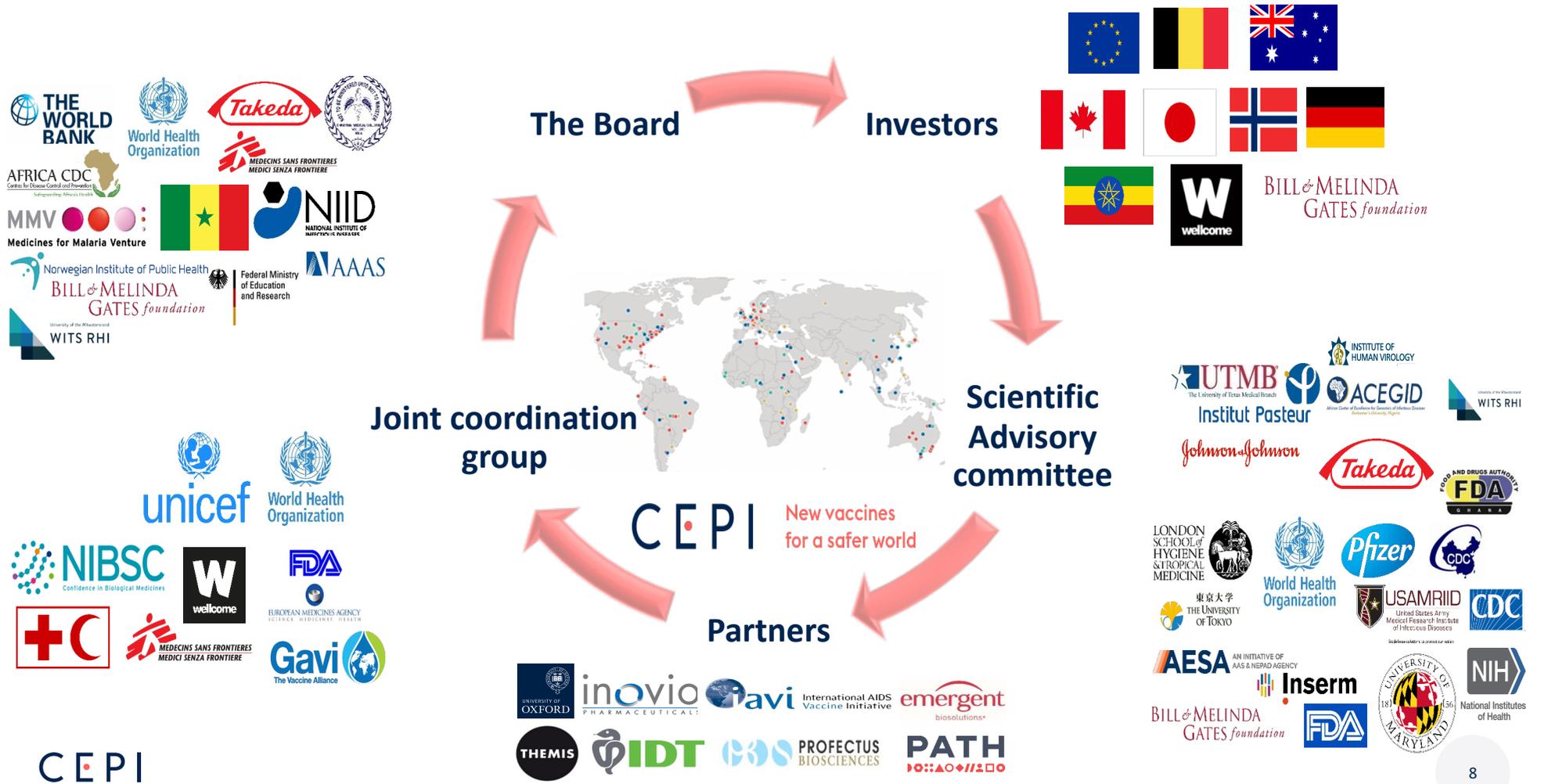
CEPI's role as a facilitator



CEPI's role as a funder



# A global partnership



# 16 partnership agreements signed

<b>Themis Bioscience</b>	Lassa & MERS vaccines
<b>Inovio Pharmaceuticals</b>	Lassa & MERS vaccines
<b>International AIDS Vaccine Initiative</b>	Lassa vaccine
<b>Emergent Biosolutions &amp; PATH</b>	Lassa vaccine
<b>Profectus Biosciences, Emergent Biosolutions &amp; PATH</b>	Nipah vaccine
<b>IDT Biologika</b>	MERS vaccine
<b>Janssen Vaccines &amp; University of Oxford</b>	MERS, Lassa and Nipah vaccines
<b>University of Tokyo</b>	Nipah vaccine

# 16 partnership agreements signed

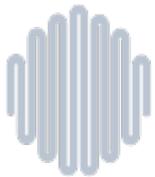
<b>Imperial College London</b>	saRNA platform (Rabies, Marburg, 'Flu)
<b>University of Queensland</b>	Molecular clamp platform (MERS, RSV, 'Flu)
<b>CureVac</b>	RNA platform (Rabies, Yellow Fever, Lassa)
<b>Themis Bioscience</b>	Chikungunya vaccine
<b>Wageningen Bioveterinary Research</b>	Rift Valley fever vaccine
<b>Colorado State University</b>	Rift Valley fever vaccine
<b>Valneva SE</b>	Chikungunya vaccine
<b>Public Health Vaccines</b>	Nipah vaccine

# Open call for multipurpose platform technologies

- **Rapid response platforms to quickly advance vaccines and other immunomodulating technologies**
- **Goal is to better prepare for outbreaks of Disease X**
- **Open to all organisations, all year round**
- **Apply on CEPI website**



# Sustainable Manufacturing Vision



Nipah



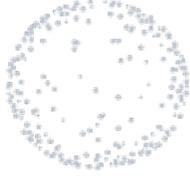
Chikungunya



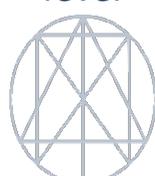
Rift Valley  
fever



MERS



Lassa



Disease X

## Stockpiles

- Investigational
- Licensed product



## Industry Capacity

- Produce large quantities of vaccines

## Rapid Response Platforms

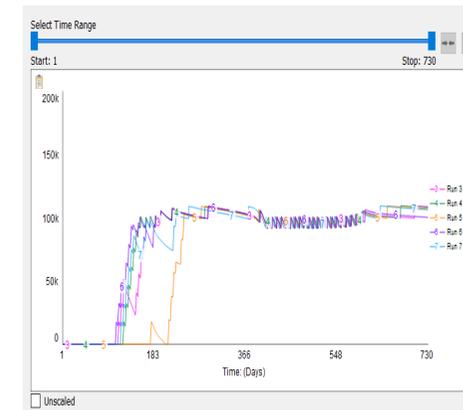
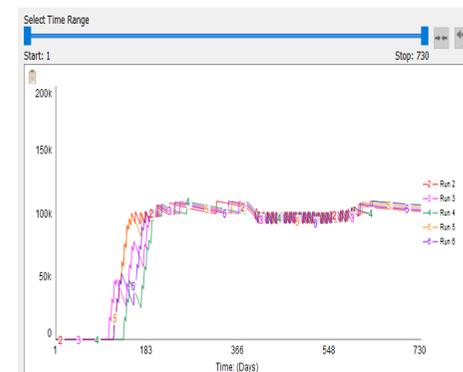
- Unknown pathogen response

# Project is modelling epidemiology and supply chains

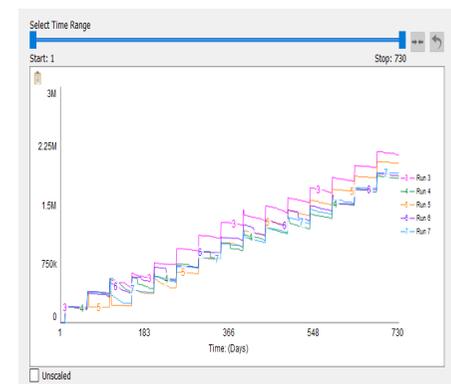
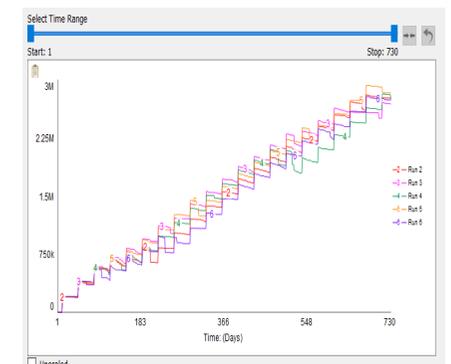
**Table 2. Number of regimens required to address outbreak response needs when only hospitals (n = 2,327) are considered as possible foci of Lassa outbreaks. Because each of the 1,000 replicate simulations required a different number of regimens, we report moments of the distribution of regimens required across those 1,000 replicates.**

	Population being vaccinated		
	Total population	Treatment-seeking population	Healthcare workers
Min	0	0	0
25%	0	0	0
Median	0	0	0
Mean	194,967	89,667	117
75%	167,948	77,256	101
95%	1,083,618	498,464	652
Max	3,888,040	1,788,498	2,338

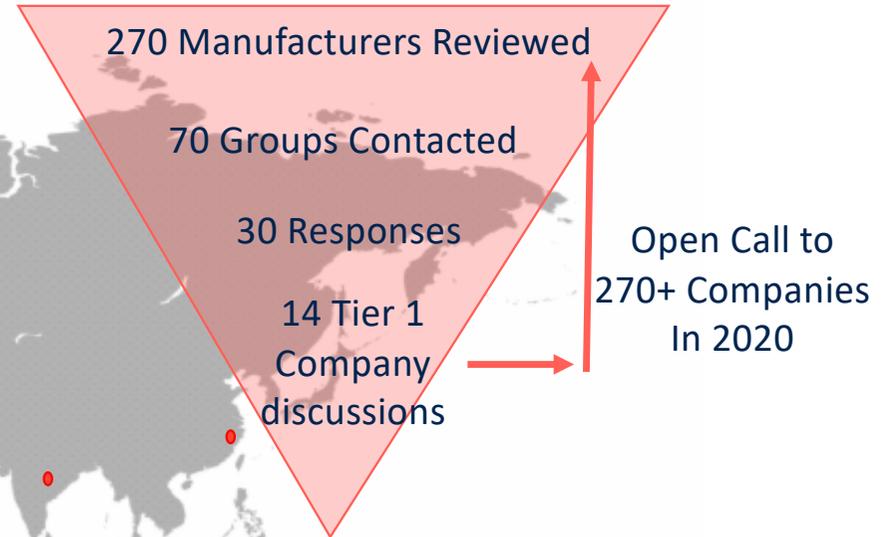
### Stockpile



### Pipeline inventories



# Capacity Scouting – Planning an open call



- We are seeking global diversity and redundancy of supply
- Capacity exists for CEPI's 5-year planning horizon
- Breakthrough technologies may support distributed (local) supply

# Strategic Interests for Sustainable Manufacturing



- Maximize capacity utilization
- Predictable orders
- Profitability
- Innovation
- Support public health

- Quickly respond to outbreaks
- Ensure equitable access
- Maximize funder contributions

# Thank You

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