

CEPI

Mucosal Immunity

Opening Remarks

Fifth Global Vaccine and Immunization Research Forum (GVIRF)

28 – 30 March 2023; Incheon, Korea

Dr. Melanie Saville, Executive Director – Vaccine Research & Development, CEPI

29th March 2023

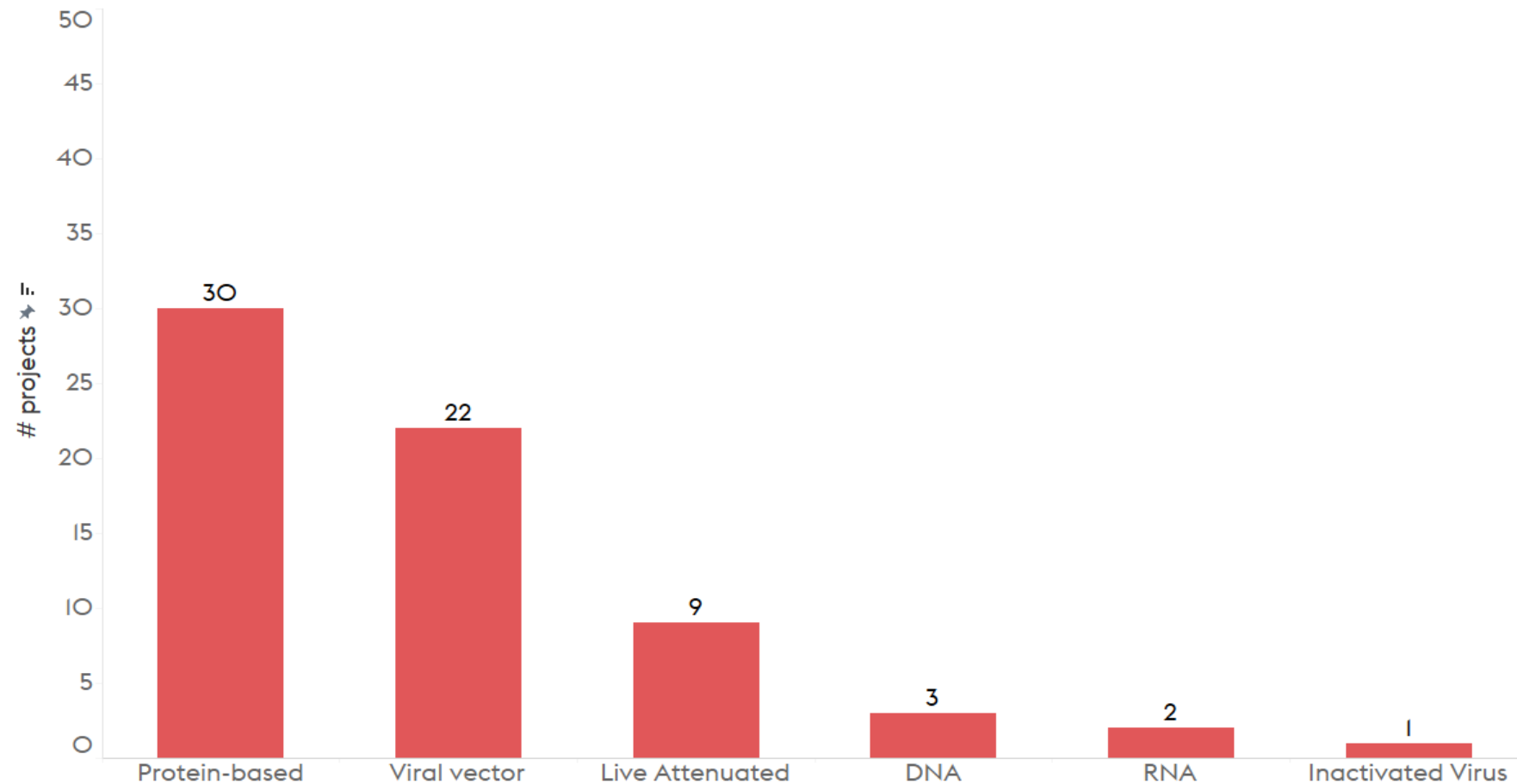
SARS-CoV-2 Mucosal Vaccine Development Landscape

	Preclinical					Phase I	Phase II	Phase III	Registration / introduction
Viral vector	U. Lancaster	Insitut Pasteur	NIAID			CyanVac LLC			Bharat Bio / U. Washington
	IAVI	U. Erlangen-Nuremberg	InvVax	U. McMaster		AstraZeneca / Oxford	Mt Sinai / CastleVax		Gamaleya
	U. Tsinghua	IMCAS	Webond	U. Virginia	Rokote Labs	Tetherex / Moat Bio			Cansino
						iosBio	Vaxart		
RNA	Moderna	Esperovax							
DNA	U. Stanford	AIOVA	MBF Therapeutic						
Protein-based	UNSAM	CUA	MIT	NIAID	U.Sydney	VaxForm			
	AuraVax	Flow Pharma	Intravacc	U. Leiden	U. Maryland	Blue Willow	CIGB		Razi Institute
	Loyal Tech	AlbuVAX	Oragenics	Shionogi	Iconovo	ACM Bio Lab			
	U. Ghent	ConserV	U. Tianjin	Immophron	CCBJIC	Intravacc			
	Vaxine	U. Oxford	WestVac	Mymetics	Wuhan Institute	Yisheng Bio			
	UASLP	Migvax				Oravax			
Inactivated and Live attenuated						Meissa Liv.		Codagenix / SII Liv.	Beijing Wantai Liv.
						Symvivo Liv.			



- Dropper
- Sprayer / Inhaler
- Other / unknown
- Tablet delivery
- Lung target confirmed e.g., use nebulizing device

Mucosal vaccine landscape | Platform technology *



* The 67 active projects analyzed above include mucosal vaccine candidates against all infectious viral diseases (Influenza, RSV, HIV, Polio, SARS CoV2) from preclinical stage through licensure.

Open questions around mucosal vaccines

- What is the preferred route of mucosal delivery? And device?
- What technology has best fit for: safety, immunogenicity, access, speed, scalability, pathogen target?
- What is the best priming/boosting strategy? E.g., IM/IN, heterologous
- What is the expedited longevity of such vaccines?
- What is the importance/need of adjuvants?

CEPI