







# Joint UNICEF-UNFPA-WHO Meeting for Manufacturers and Suppliers Session 5.3: WHO Vaccines & Immunization Prequalification Track – 28 November 2023

### WHO vaccines PQ overview

### **Carmen Rodriguez**

Team lead Vaccines & Immunization Devices Assessment Team (VAX)

Prequalification Team Unit (PQT)

Regulation and Prequalification Department (RPQ)

Access to Medicines and Health Products Division (MHP)

World Health Organization

Geneva, Switzerland

E-mail: vaccprequalification@who.int











### WHO Vaccines and immunization equipment PQ Team



Carmen R. **Team Lead** 



Godwin E. Scientist

Clinical assessment



Olivier L. Scientist

Mohammed A. Scientist



Rolando D. Scientist

CMC assessment



Mathias J. Scientist



Scientist



Elisabeth P. Scientist

Emergency & Reg. support



Isaac G.

**Technical** Officer

**Immnunization Devices** 



Paul M.

**Technical** Officer



Changnuan

**Technical** Officer



Emma H.

**Technical** Officer

Post-PQ activities

Zuma M.

**Technical** Officer





Charity I. **Technical** Officer



Angela D. Assistant to Team



Recel S. Office **Assistant** 



Rana G.

Office **Assistant** 

Administrative staff

Vaccines PQT staff for all vaccines and processes









### wно PQ assessment

### **Prequalification (PQ) 1987**

- 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
- Post-PQ monitoring
- Reassessment/requalification

### **Emergency Use Listing (EUL) 2015**

- 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
- Post- deployment monitoring
- Time limited recommendation
- Development should continue for MA/PQ

Risk benefit i.e Monkeypox

Stockpiles

Risk benefit snake antivenoms

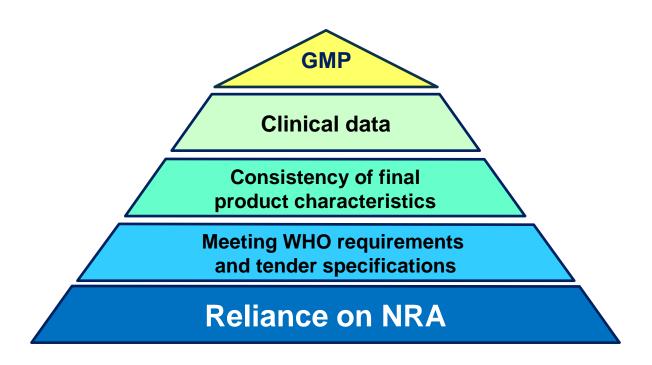








### **Principles**











### **Pre-conditions for PQ evaluation**

Reliance on the National Regulatory Authority (NRA) of the exporting country

- NRA must be assessed as functional or Maturity Level 3 (ML3) as a result of successful evaluation using the WHO NRA assessment tool
- NRA's functional status needs to be sustained over time
- Continued regulatory oversight by NRA is required as well as communication with WHO about potential problems with the vaccine
- Agreements are established with the NRAs for information exchange when a vaccine is about to be prequalified









### Pre- conditions for PQ evaluation

- Vaccine is licensed/registered by the responsible NRA (Scientific opinion by EMA accepted)
- WHO guidelines/recommendations approved by the ECBS are available (published in the WHO Technical Report Series)
- Listed in the vaccine priority list for PQ (low priority vaccines may be postponed depending on workload and no priority vaccines will not be reviewed)

(Prioritization 2024-2025 published)









### **Prequalification process**

- Scientific review of quality dossier
- Scientific review of clinical data
- Testing of samples
- Consultation with responsible NRA
- Site audit to manufacturing facilities







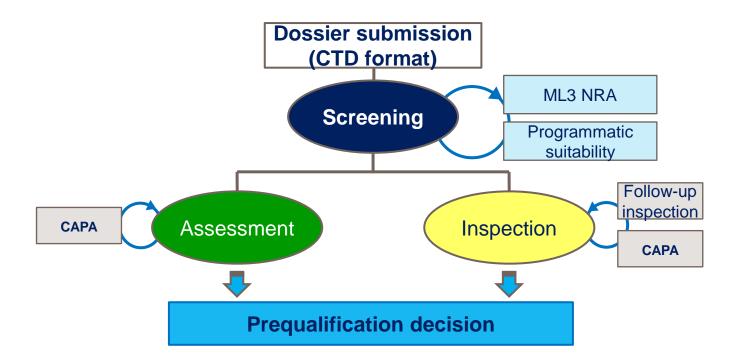








### **Vaccine Prequalification workflow**











### **Programmatic Suitability for PQ (PSPQ)**

Ensure that vaccines used in low and middle income countries can be used safely and effectively, given the constraints and conditions of their immunization systems



Nicaragua, rotavirus delivery, Photo: Gates Foundation



Mali, polio campaign, Photos: WHO/Olivier Ronveaux









### **Programmatic Suitability for PQ (PSPQ)**

### **Objectives of PSPQ:**

✓ Judge the programmatic suitability against defined mandatory, critical and preferred characteristics

#### **Benefits of PSPQ:**

- ✓ Give clear directions to vaccine industry before PQ submission
- ✓ Reduce decision making time

#### PSPQ:

https://apps.who.int/iris/bitstream/handle/10665/148168/WHO\_IVB\_14.10\_eng.pdf

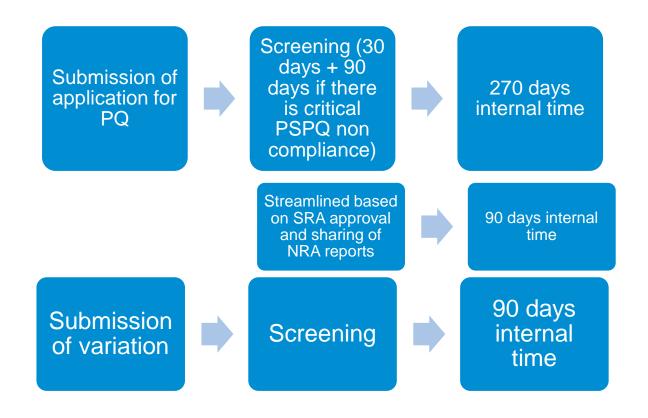








## Prequalification process: timelines (excluding applicant response times)



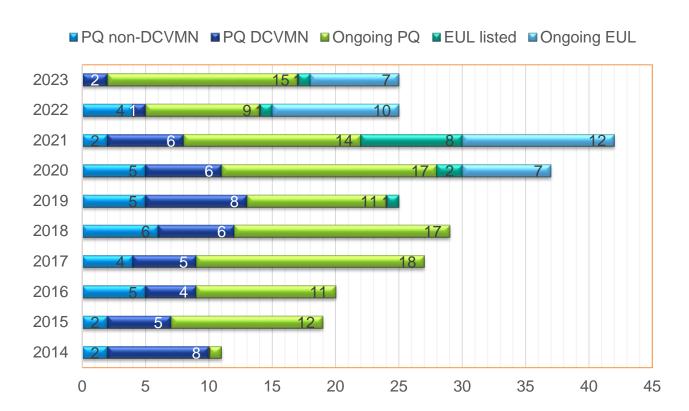








### Number of vaccines PQed and EUL from 2014 to 2023











### Vaccines Post monitoring activities

- Continuous monitoring of the quality, safety, efficacy and programmatic of vaccines under PQ and EUL
- Variations
- Annual Report evaluation
- Reassessment
- Targeted testing program
- Monitoring/Investigation of vaccine quality and cold chain complaints
- Monitoring/investigation of Adverse Events following immunization (AEFI)

#### Other activities.

- Facilitation of National authorization
- Technical Review of tenders for UNICEF
- Technical support to member states

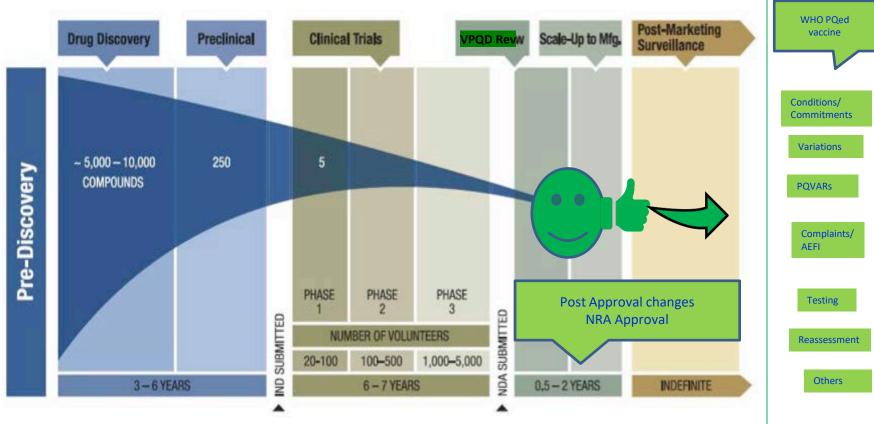








### **Product Lifecycle Management**



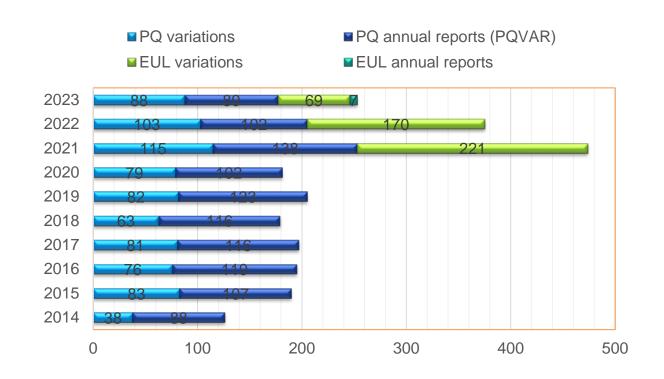








### Post-PQ and Post EUL activities from 2014 to 2023











### Achievements (2020-2023) - Vaccines



- 23 vaccines PQed
- Support UN agencies
- Support member states briefings on malaria and Ebola.
- Support suitability of vaccine applications during tender process.
- Assessment of 385 variations



- 12 vaccines Covid 19 vaccines
- 1 nOPV2 vaccine
- Support member states through reliance
- Briefing workshops
- One on one support (meetings, emails)
- Assessment of changes, 562 Post EUL submissions



- Snake antivenoms risk benefit
- Release of polio vaccines into WHO stockpiles (2022)
- 169 lots of mOPV vaccines 462 MD
- 201 lots of tOPV vaccines, 315 MD
- 181 lots of nOPV2, 749 MD









### Why WHO IMD PQ?

### WHO Immunization Devices (IMD) Prequalification:



WHO/Thomas Moran

- ensures the access, availability and quality
   of prequalifiled products to safeguard vaccines
   & other immunization supplies.
- support WHO's disease elimination & eradication efforts, as well as countries' preparedness & resilience for health emergencies.











### What WHO IMD does

The WHO VAX IMD PQ programme **sets the standards** for equipment and devices that:



PATH/Gabe Bienczycki

- are used for the safe storage, transport, monitoring and administration of life-saving vaccines
- protect the significant investment in resources required to develop, procure and deliver potent vaccines.











### **WHO-IMD** overview





> 100

**PQS STANDARDS** 



Which includes...

PRODUCT SPECIFICATIONS, VERIFICATION PROTOCOLS, MANUFACTURER GUIDES & MORE



425

Δ

10

PRODUCTS PREQUALIFIED **PRODUCT CATEGORIES** 



66

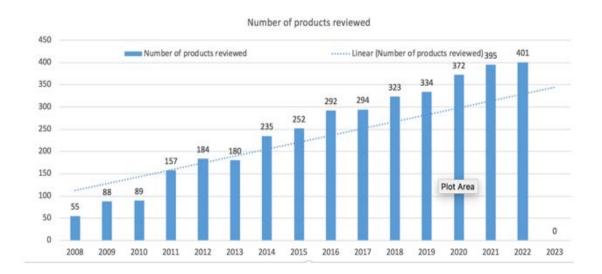
**MANUFACTURERS** 







### **Progression of PQS of products since 2008**











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  disease elimination
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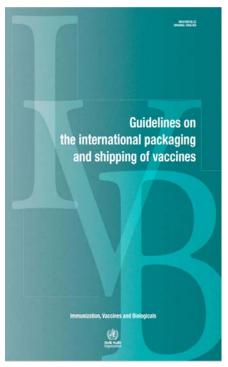




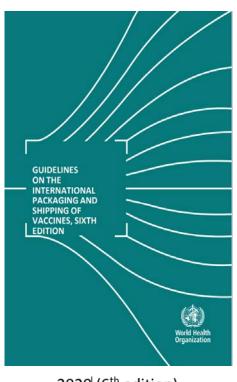




### The WHO Shipping guidelines & Bar codes



2005 (5th edition)



2020 (6th edition)



2023 6th edition rev1 (in process)

First published in 1990. It then went through several revisions, in 1995, 1998, 2001 (WHO/V&B/01.05), and 2005 (5th edition).











Department of Regulation and Prequalification, WHO

