



Covid-19 Vaccine Safety Ecosystem workshop

Synergies and unmet needs for Covid-19 vaccine safety

Sept. 9th, 15:00-18:00 CET

Task

Design of a master plan for the establishment of a coordinated global safety surveillance system, preparing for the introduction of Covid-19 vaccines

Synergies and unmet needs for Covid-19 vaccine safety – Results of the Survey

- **The following pages present the consolidation of the results of a survey** sent to key organizations of the Covid-19 vaccine safety ecosystem
- **11 organizations replied to this survey:** Brighton, Butantan (Brazil), CIOMS, CDC, EMA, HPRA (Ireland), Path, Swissmedic, TGA (Australia), UMC, WHO
- Therefore, **the analysis** presented in the following pages **is not exhaustive**

Planning for the pharmacovigilance of Covid-19 vaccines (1/8)

Global (Lead (L) or Support (S)) Regional (Lead (L) or Support (S)) National (Lead (L) or Support (S))

PHASE: prior to licencing

Clinical trials protocol, critical safety endpoints, registry

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| <ul style="list-style-type: none"> • Brighton Collab (L) • CIOMS WG VI 2005, WG VII (DSUR) 2006 (S) • WHO (Solidarity Trials, ECBS guidance) (L) • PATH (L) | <ul style="list-style-type: none"> • WHO (S) (AVAREF) • HPRA (L) scientific advice/protocol assistance/assessment of centralised EU applications | <ul style="list-style-type: none"> • Butantan On-going (BRA) (L) • TGA (Therapeutic Goods Administration, Australia) (L) • HPRA (L) • HC (CAN) (L) |
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Risk Management Plans

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|---|---|---|
| <ul style="list-style-type: none"> • CDC • CIOMS WG IX (2014) (S) • WHO PQ (L) • PATH (S) | <ul style="list-style-type: none"> • CDC • EMA (EU) Regulatory approval of RMPs of vaccines centrally authorized in the EU (L) • HPRA (S) • WHO (S) (AVAREF)/RO | <ul style="list-style-type: none"> • Butantan On-going (BRA) (L) • CDC (USA) • TGA (AUS) (L) • HPRA (S) • Swissmedic (S) • HC (CAN) (L) |
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Identify AESI, priority criteria and background rate

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| <ul style="list-style-type: none"> • Brighton Collab (L) • CIOMS/WHO Working Group on vaccine PV (2012) (S) • UMC (MIS-C case definition) (S) • WHO (S) (GACVS) • PATH (S) | <ul style="list-style-type: none"> • EMA Provision of AESI list (continuously updated), background rates provided by EMA funded project ACCESS (EU) (L) • HPRA (S) • WHO (S) thru RO to adopt/background rates | <ul style="list-style-type: none"> • Butantan On-going (BRA) (L) • CDC (USA) • TGA (AUS) (L) • HPRA (S) • WHO/CO (S) to adopt • HC (CAN) (S) |
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Planning for the pharmacovigilance of Covid-19 vaccines (1/4)

■ >2 organizations involved
 ■ 1-2 organizations involved
 ■ No organization involved (=potential gap)

PHASE: prior to licensing	Global	Regional	National
Clinical trials protocol, critical safety endpoints, registry	>2 organizations involved	1-2 organizations involved	>2 organizations involved
Risk Management Plans	>2 organizations involved	>2 organizations involved	>2 organizations involved
Identify AESI, priority criteria and background rate	>2 organizations involved	>2 organizations involved	>2 organizations involved
Templates for Benefit – risk evaluation per vaccine product (e.g. using BRAVATO)	>2 organizations involved	1-2 organizations involved	>2 organizations involved
Data sources and networks to study background AESI rates	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
PV Requirements for pandemic preparedness (e.g., checklists, guidance)	>2 organizations involved	>2 organizations involved	>2 organizations involved
Contributions to Strategies on injury- compensation policies	>2 organizations involved	1-2 organizations involved	1-2 organizations involved
PHASE: licensing			
Safety specification per vaccine product	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Pharmacovigilance plan per vaccine product	1-2 organizations involved	>2 organizations involved	>2 organizations involved
Risk minimization plan per product with annex by country	1-2 organizations involved	>2 organizations involved	>2 organizations involved

Planning for the pharmacovigilance of Covid-19 vaccines (2/4)

■ >2 organizations involved
 ■ 1-2 organizations involved
 ■ No organization involved (=potential gap)

PHASE: Early post-licensing/general use:

1. Active Vaccine Safety Surveillance (AVSS)

	Global	Regional	National
Establishment of preferred design and standard study protocol	>2 organizations involved	>2 organizations involved	>2 organizations involved
Decision on number, size, location and responsible investigator of AVSS	>2 organizations involved	1-2 organizations involved	>2 organizations involved
Establishment of a global office to coordinate operations of local safety follow-up studies and data streams	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Ethical clearance for collecting personal and clinical information in countries	>2 organizations involved	No organization involved (=potential gap)	1-2 organizations involved
Develop information material for vaccine recipients taking part in AVSS	1-2 organizations involved	No organization involved (=potential gap)	>2 organizations involved
Software for recording of vaccine details and contact details of recipient	1-2 organizations involved	No organization involved (=potential gap)	>2 organizations involved
Training of staff to carry out follow-up interviews	1-2 organizations involved	No organization involved (=potential gap)	>2 organizations involved
Software (E2b) for recording of AEFIs by investigator	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Communication facilities for transmission of collected data to national, regional and global data analysis center	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Statistical package for near real-time screening for AESI reports	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Establishment of safety data review committees with Standard Operating Procedures for their activities	1-2 organizations involved	1-2 organizations involved	>2 organizations involved
Establishment of communications policy and plan for interaction with regulatory authorities, the scientific community, media and the public	>2 organizations involved	>2 organizations involved	>2 organizations involved

Planning for the pharmacovigilance of Covid-19 vaccines (3/4)

■ >2 organizations involved
 ■ 1-2 organizations involved
 ■ No organization involved (=potential gap)

PHASE: Early post-licensing/general use:

2. System for spontaneous reporting of individual case safety reports.

	Global	Regional	National
Establishing Centres for management of the safe introduction of Covid-19 vaccines with relevant competencies and resources			
Information material developed for target groups, explaining the different routes for AEFI reporting and what to report			
AEFI Reporting tools developed / made available (paper based, phone, e-mail, web, reporting-apps)			
Systems for confirmation/ acknowledgement of receipt of AEFI reports			
Pooling of data through the different reporting routes			
Reconciling data from AVSS and the spontaneous reporting systems			
Vaccine safety expert panels for continuous review of safety data			
Collating distribution statistics by product and geographic region with batch numbers			
Communications policy and plan			

Planning for the pharmacovigilance of Covid-19 vaccines (4/4)

■ >2 organizations involved
 ■ 1-2 organizations involved
 ■ No organization involved (=potential gap)

PHASE: Later stage activities following general use

	Global	Regional	National
Verification and characterization of identified new safety signals/clusters			
Additional Verification/signal characterization studies			
Publication of results (scientific journal, general media)			
Updating of Summary of Product Characteristics (product labelling) based on outcome of study.			

PHASE: Periodic reporting by MAH

Periodic Benefit Risk Evaluation Report (PBRER) Legislations, Guidelines, Records etc			
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Most critical phases

Early phase of market introduction

- Rapid increase in number of recipients
- Establishing safety profile from CT in real-world settings
- Spontaneous reporting inadequate
- Active Vaccine Safety Surveillance
 - Incidence rate calculations
 - Needs implementation in many diverse populations
 - Same methodology → pooling of data → better sensitivity
 - Requires coordinated implementation

Most critical phases

Country implementation requires close collaboration between **National Immunization Programme** and **National Medicines Regulatory Agency** with their PV-centre

- History of close collaboration often lacking
- Combination of critical data from both parties needed
- Combined expertise required for analysis and response

Most critical phases

Common platform for information sharing

All key stakeholders need access to the same data from the global safety surveillance

- inconsistent information causes confusion/rumours
- reconciliation of global/regional/national databases
- reconciliation of data from active surveillance and spontaneous reporting systems

Most critical phases

A comprehensive/coordinated communication strategy

- Inform media and the public of who is responsible for what
 - Early and repeatedly
- Explain carefully concept of coincidental effect
 - Temporal association \neq causality
- Stakeholder coordination of public statements to avoid confusion

Thank you for your attention