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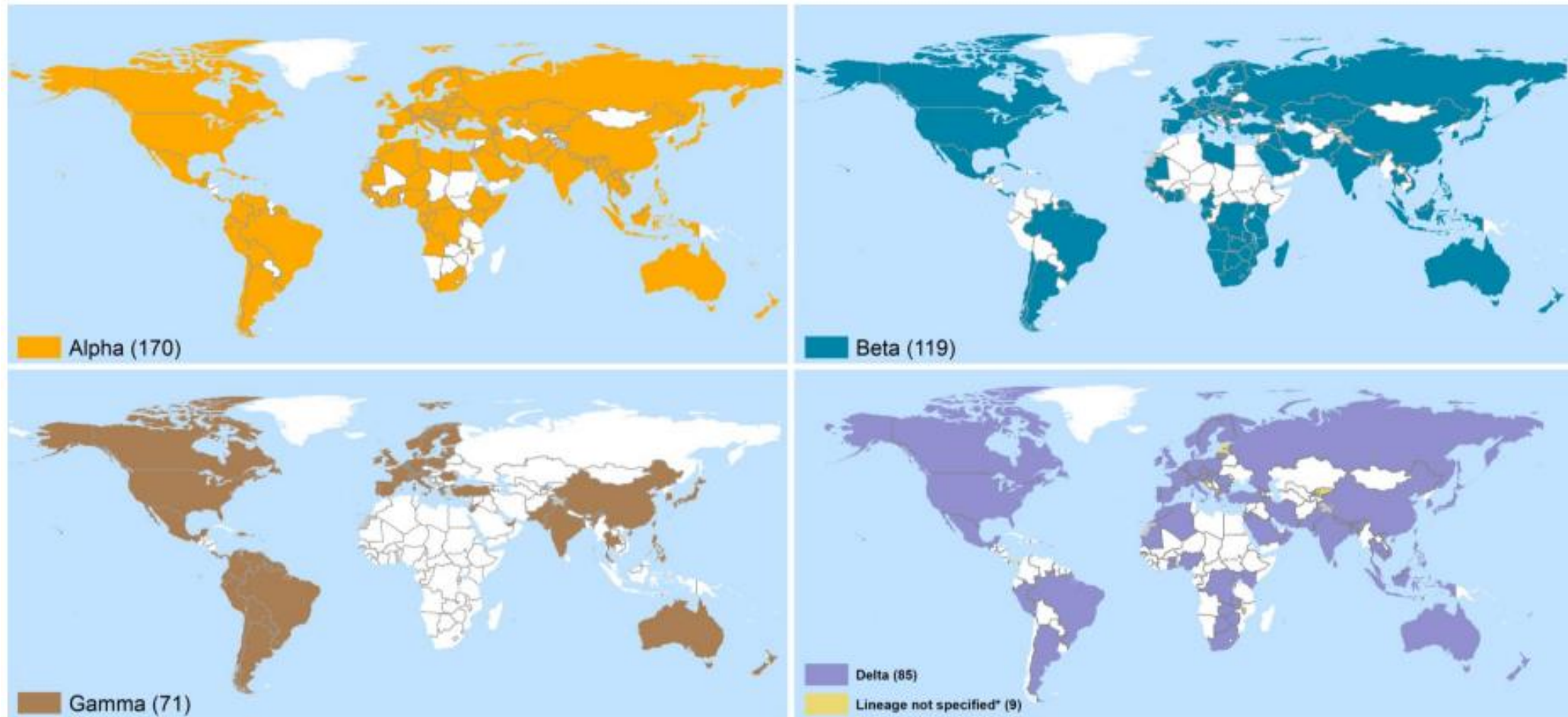
# Summary outcomes of WHO Global Consultation on vaccine development in face of the emergence of SARS-CoV-2 variants

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# Update on Global VOCs

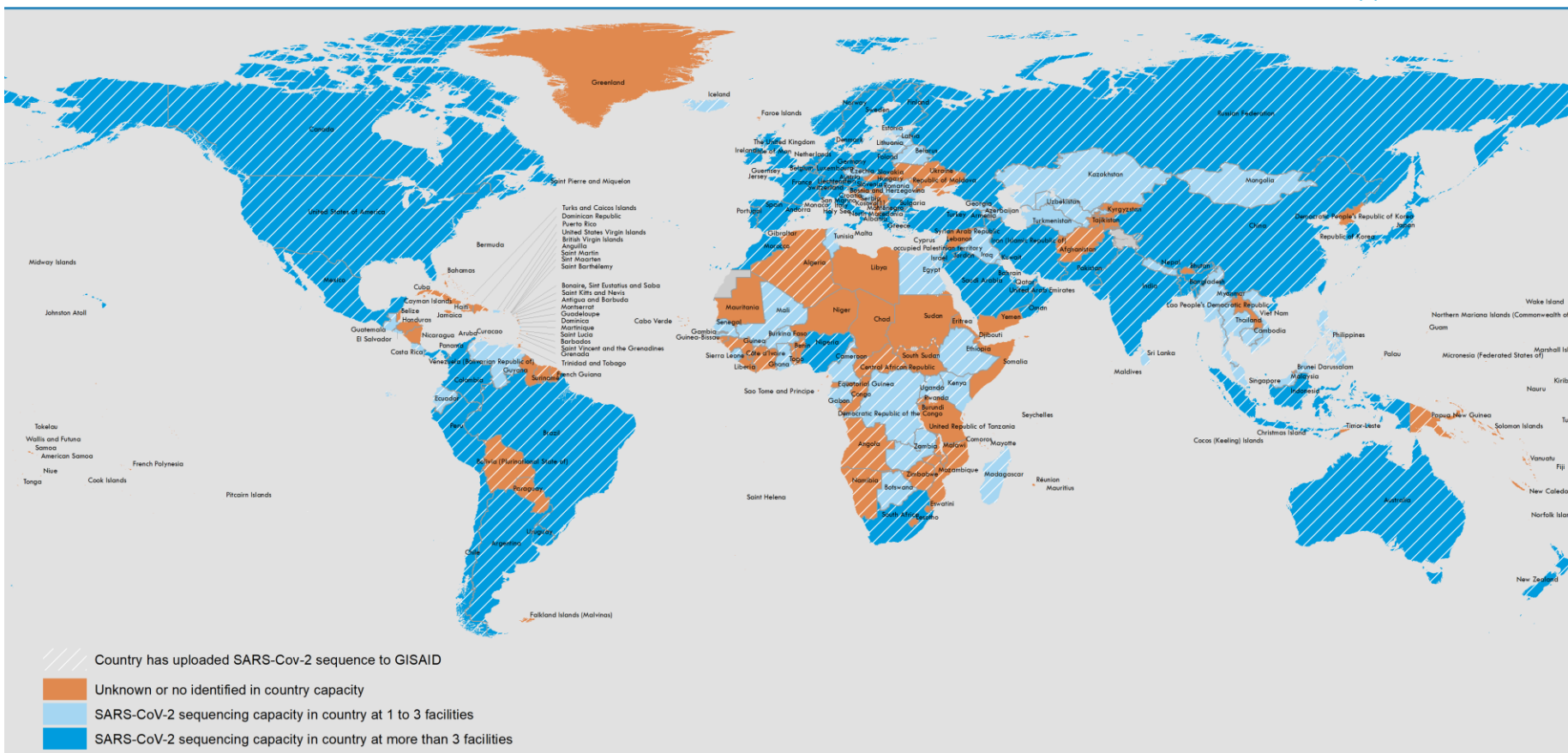
(As of 22 June)

Figure 4. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 22 June 2021\*\*



# Addressing sequencing gaps

## SARS-Cov-2 Sequencing Capacity data as of 24 May 2021

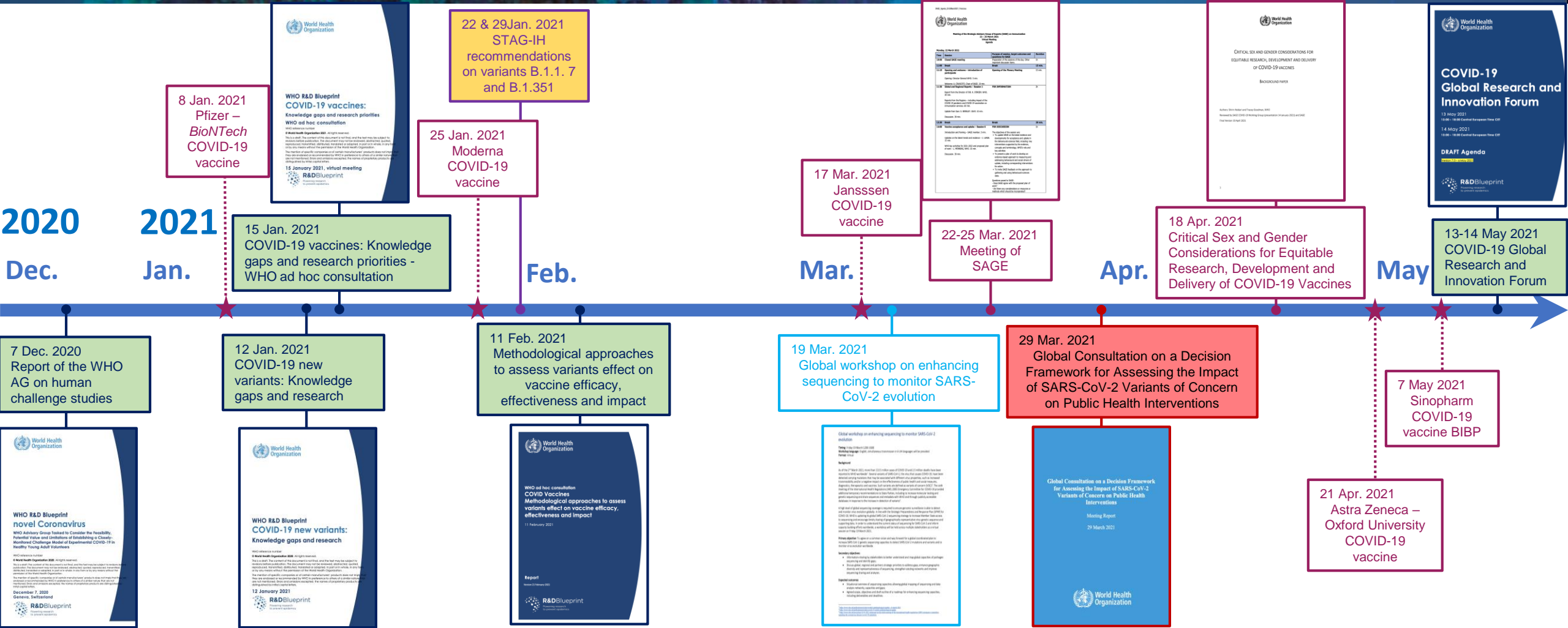


Data Source: World Health Organization.  
 Map Production: WHO Health Emergencies Programme  
 Request ID: COVID19\_45

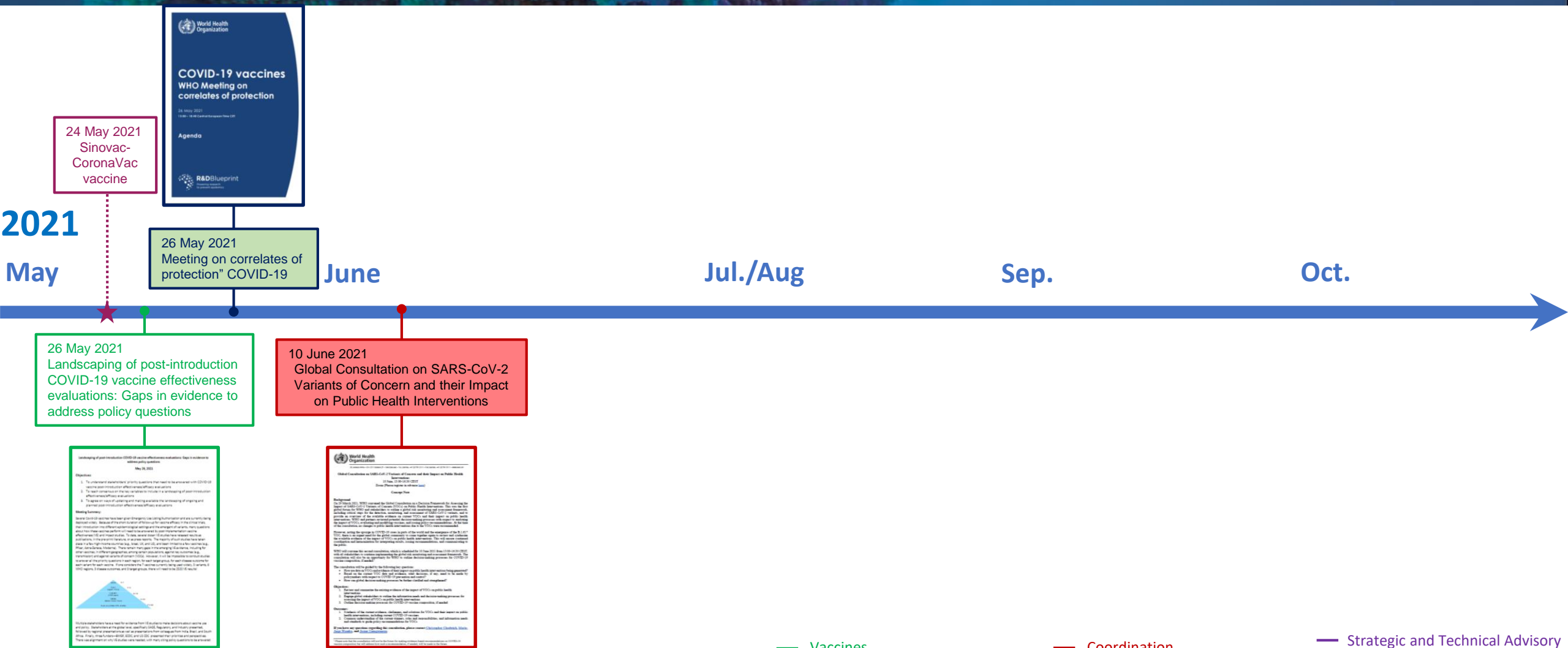
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# Timeline of events - WHO stakeholders



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Vaccines

- Coordination
- Research & Development
- Surveillance
- Strategic Advisory Group of Experts on Immunization (SAGE)
- Strategic and Technical Advisory Group for Infectious Hazards (STAG-IH)
- ★ SAGE product specific recommendations

# VOC's and vaccine: challenges

- **COVID-19 vaccines** available and in development **offer acceptable level of protection against current VOCs** (preliminary results)
  - Reserve in interpretation due to data gaps and quality and bias of observational studies
- **Booster vaccinations:** Are they needed? When? Which vaccine?
- Many potential new vaccines in the making – challenges with the assessment of performance (immuno-bridging discussion in the context of VOCs)
- **Global context:** pandemic still ongoing - inequity of access for vaccine and care
  - Unilateral decision on modification/new vaccine will have repercussions on the global supply and may increase inequity.

# A global & coordinated approach for COVID-19 vaccine assessment

- Studying the impact of VOCs in a post vaccination era is challenging
  - Importance of global **coordination** of efforts for assessing impact of variants on immunity
  - Need global **framework** for decision-making on modifying existing vaccines, new vaccines and/or boosters, it includes many elements: global expert group (TAG CO-VAC), standardized study protocols and assays, rapid data sharing, ...
    - Data needs
      - need stronger epidemiological and genomic surveillance data, especially from LMICs, with information on breakthrough infections
      - Disaggregate data by level of transmission in countries, geographic prevalence of VOCs, population level of immunity, type of vaccine platform, manufacturer, number of doses administered...
    - Need better understanding of protective immunity at the individual and population levels in the context of circulating variants
    - Use of standard protocols for studies - e.g. Lack of individual strain characterization among the cases in VE studies
    - Repository for up-to-date global evidence on variants to inform decision-making

# Recommendations

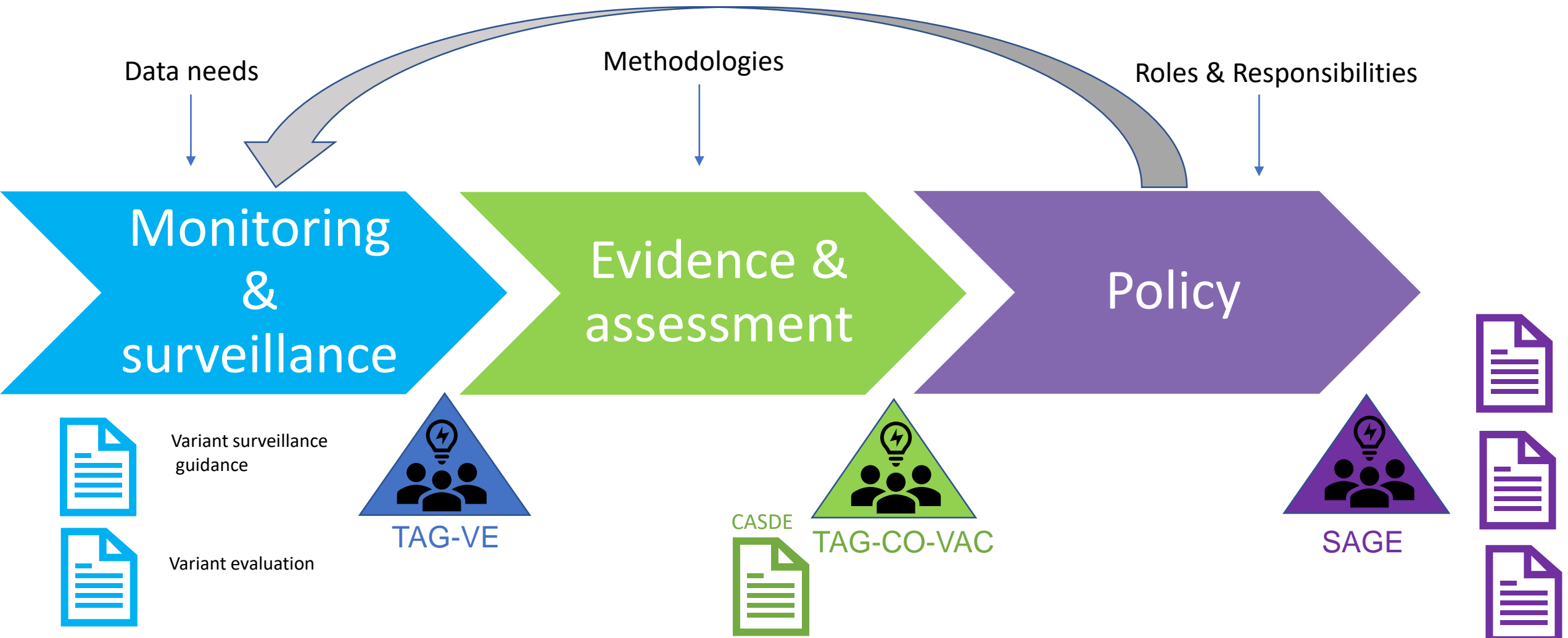
- Policy recommendations should clarify the goal of vaccination (reduce severe disease or transmission) to measure impact of variants
- Global coordination for assessing impact of variants on interventions and deciding on vaccine “composition” and use
  - Unilateral decision may impact the global supply and increase inequity
- Need to be pragmatic – balance between broad antigenic protection against VOCs and unmet vaccination needs on the ground



# Summary

- **SARS-CoV-2 will continue to evolve and variants to emerge, ongoing monitoring is critical**
- As it is a new disease, many assessment processes need to be created (e.g. TAG CO-VAC)
- Current challenges for policy making
  - Obvious data gaps, need for more specific data on variants and rapid sharing of information
  - Study design issues
  - Global context : pandemic situation, inequity in access
- Delta VOC is more transmissible, but
  - Public health strategies (clinical management, IPC, PHSM) still effective to keep VOC spread under control
  - Current vaccines still effective at protecting against severe disease and hospitalization

# Overarching aim: an integrated approach to monitor & assess SARS-CoV-2 variants



# Technical Advisory Group on COVID-19 Vaccine Composition (TAG-CO-VAC)

Evidence  
&  
assessment

## Main functions

Provide advice and guidance for:

- Recommendations on the **methods to assess the impact of VOCs on vaccines**
- **Interpretation of available evidence** on the effect of VOCs on vaccines
- Recommendations, for each COVID-19 vaccine platform, adaptations (if any) needed

## Composition

- 15-20 core members
- Observers

*“There should be a regularly updated consensus document from the WHO that details the mutations to be included in the next generation of vaccines and guidelines on how to use them“*

Gupta, Nature Reviews Immunology, Apr. 2021

# Acknowledgements



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EMA  
FDA  
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**Thank You**