



International Alliance for
Biological Standardization

IABS 3rd Real World Evidence Workshop **“Pragmatic Randomized Controlled Vaccine Trials: Toward Global Alignment on Regulatory Framework and Evidence Standards”**

November 18-19, 2026
Leiden, The Netherlands

Safety Monitoring in Pragmatic Trials – Rachael Williams, Medicines and Healthcare products Regulatory Agency

Pragmatic randomized controlled trials are increasingly being used to generate real-world evidence on vaccine performance in routine clinical practice. By combining the methodological strengths of randomization with the external validity of real-world healthcare settings, pragmatic randomized controlled trials offer an important opportunity to address evidence gaps relevant to regulators, public health decision-makers, and healthcare providers. However, ensuring robust safety monitoring within these trial designs remains a critical challenge.

This presentation will explore key considerations for safety surveillance in pragmatic vaccine trials, drawing on emerging regulatory perspectives and real-world evidence frameworks. Particular attention will be given to the use of routinely collected healthcare data, electronic health records, registries, and digital data capture methods to identify, validate and evaluate adverse events while minimizing participant and site burden. Recent regulatory guidance highlights the importance of risk-proportionate safety oversight, data quality, endpoint validation, and the use of regulatory-grade real-world data when evidence is intended to support regulatory decision-making.

The presentation will discuss practical approaches to balancing operational efficiency with rigorous participant protection, signal detection, and benefit-risk assessment. It will also consider the implications of decentralized and hybrid trial models, where remote participant engagement and digital technologies may expand opportunities for large-scale safety monitoring while introducing new methodological and governance challenges.

As pragmatic vaccine trials become increasingly important in evidence generation across the product lifecycle, achieving international alignment on safety monitoring standards will ensure confidence in the evidence they produce and its use in regulatory and public health decision-making.

