# EnprEMA & ACT EU workshop on paediatric clinical trials

Workshop report

12 May 2026

An agency of the European Union

# Table of Contents

# Opening remarks

Presenters: Ricardo Fernandes *(EnprEMA co-chair and STAND4Kids)*, Gunter Egger *(EnprEMA co-chair and EMA)* and Peter Arlett *(EMA)*

The workshop opened by welcoming and thanking the more than 500 registered participants from across the paediatric clinical trials community, including representatives from regulatory authorities, academia, industry, patient organisations, clinical research networks, healthcare professionals and other stakeholders. The high level of interest reflected the workshop's objective of strengthening dialogue and identifying concrete actions to improve the design, approval and conduct of paediatric clinical trials in the EU.

It was further highlighted that paediatric clinical research sits at the convergence of multiple frontiers in terms of medicines development, including persistent unmet medical needs, off-label medicine use, advanced therapies, rare diseases, drug repurposing and model-informed drug development. Addressing these challenges requires fit-for-purpose and innovative methodologies, a robust research infrastructure, and meaningful involvement of children and their families.

The workshop also built on the ACT EU Methodology workshop held in 2023 and the ACT EU workshop for assessors of paediatric clinical trials held in July 2025, with the aim of contributing to the acceleration of paediatric clinical research in Europe.

# Session 1: Addressing key considerations

Moderators: Anette Solli Karlsen *(NOMA and PDCO)* and Monique Al *(CCMO and MedEthicsEU)*

## Understanding challenges in designing fit for purpose paediatric clinical trials – stakeholder perspectives

Presenters: Jasper van der Lugt *(Princess Maxima Centrum)*, Tim de Smedt *(UCB)*, Maria Sheean *(EMA)*

Jasper van der Lugt presented on a paediatric oncology clinical trial investigating a novel treatment for diffuse midline glioma, a rare and severe condition with very limited therapeutic options. The discussion centred on the regulatory assessment of the study under Article 32 of the Clinical Trials Regulation (CTR), particularly whether sufficient evidence existed to consider that participation in the trial may offer therapeutic benefit for younger children.

Questions were raised regarding the level of evidence required to demonstrate a prospect of direct benefit, the relevance of available safety and preliminary efficacy data, the use of emerging data from ongoing trials in regulatory decision-making and the challenges arising from differing approaches between jurisdictions. The discussion also considered the impact of the severity of the disease, the role of preclinical and mechanistic evidence, and the implications for transatlantic clinical trial collaboration.

The case was based on a regulatory assessment in which the trial was allowed to proceed, while enrolment of participants under 12 years of age was not authorised pending additional evidence. It prompted a broader discussion on regulatory expectations for paediatric early-phase trials in serious and life-threatening conditions.

Tim de Smedt presented a case study on the inclusion of adolescents in a global Phase III clinical trial submitted across several EU Member States (MSs). The trial was authorised under the Clinical Trials Directive and later transitioned to CTR. While most MSs approved the trial, differing national interpretations led to challenges in two countries.

In one of the MSs, the discussion focused on limiting the inclusion of minors only to situations where sufficient data could not be generated in adults. In response, the sponsor emphasised the clear unmet medical need in adolescents, requiring data generation specifically in this population. The sponsor further confirmed prior Committee for Medicinal Products for Human Use (CHMP) and Paediatric Committee (PDCO) alignment on the issue; provided data supporting safety and efficacy for paediatric use of the study drug and offered safeguards in the study design, including for the outpatient setting. The trial was eventually approved in the MS as the potential benefits were considered to outweigh the risks.

In the second MS it was argued that efficacy and safety objectives must first be demonstrated in adults, and that clinical trials should not include patients under 18 years of age if a comparable treatment exists for the indication. Additional concerns were raised regarding the administration of placebo to adolescents for an acute condition. In response, the sponsor highlighted the use of rescue medication, safety precautions and follow up protocols in place for that outpatient setting and referred to other approvals granted in other regions. However, the National Competent Authority (NCA) concerns remained regarding the inclusion of adolescents, resulting in the approval being limited to adult participants only.

This case highlights how local frameworks and inconsistent interpretations can lead to fragmentation of clinical research in Europe, and that the use of placebo in paediatric trials remains a sensitive legal and ethical issue.

The last presentation was delivered by Maria Sheean, who shared lessons from multistakeholder engagements on the selection of control groups for products targeting developmental conditions such as Dravet syndrome, Angelman syndrome and Rett syndrome, and including either adeno-associated virus (AAV)-mediated gene therapies or oligonucleotides administered via intrathecal (IT) or intracerebroventricular (ICV) injection. The challenges faced by the PDCO when assessing global paediatric development programmes, particularly in rare and vulnerable populations characterised by disease heterogeneity, limited patient numbers and a lack of validated predictive biomarkers were highlighted.

The key learnings from stakeholder interactions on the choice and appropriateness of controls, including use of placebo or sham, included:

- Safety concerns were largely already characterised in Phase 1 single-arm studies, while biomarker development remains a largely theoretical objective without robust practical options, as illustrated by the variability of ubiquitin protein ligase E3A (UBE3A) in Angelman syndrome.
- Patient community consultations showed that the disease context matters, and that the level of regulatory knowledge among patient representatives makes an impact.
- Through paediatric clusters, prospective discussions between international regulators are needed to foster harmonised global developments.
- Early dialogue with the Scientific Advice Working Party (SAWP), PDCO and Health Technology Assessment (HTA) bodies is beneficial, while increasing stakeholder awareness and understanding of the application of the EU Clinical Trials Regulation would also be of value.

Overall, early discussions between regulators and other stakeholders are essential to avoid misalignment in global development programmes, particularly in rare paediatric diseases, and to promote greater international harmonisation.

## Panel discussion and Q&A session

Panelists:

- Industry view: Angeliki Siapkara *(AstraZeneca)*
- Regulatory view: Domenica Sorleti *(AIFA)*
- Academic/network view: Pirkko Lepola *(Helsinki University Hospital)*
- Academic view: Marek Migdal *(Children's Memorial Health Institute)*
- Ethics view: Michel Zwaan *(Princess Maxima Centrum)*
- Patient view: Tomasz Grybek *(EURORDIS)*

The panel, composed of a wide variety of stakeholders, was asked to comment on the presentations and to address the main challenges for initiating paediatric clinical trials in the EU. The following topics emerged:

- Successful paediatric medicine development requires coordinated collaboration among all stakeholders to identify the right target diseases and populations and to ensure feasible clinical trial protocols.
- Strengthening alignment between EU level bodies (SAWP for scientific advice, PDCO for Paediatric Investigation Plan (PIP) agreements) and NCAs.
- Need for enhanced transparency on the operational implications arising from complicated trial approvals with regards to meeting regulatory milestones, supported by practical examples illustrating appropriate justification for regulatory requirements, such as adolescent inclusion and placebo use.
- Ensure enough research time for investigators and adequate resources at the clinical trial units to support paediatric research.
- Address the lack of harmonisation of legal requirements across MSs, including inconsistencies in cross-border clinical trials, decentralised elements, consent requirements for participants under 18 years of age, translation and interpreter requirements.
- Explore how decentralised clinical trials can facilitate greater access to cross-border clinical trials, particularly for rare disease patients, by reducing the need for patients and families to travel across borders.
- Support the use of modern technologies in clinical trials, including digital endpoints, novel biomarkers and other innovative assessment methods.
- Foster the assessment of paediatric clinical trials through the prospect of direct benefit not only for the individual child but also for the group of patients, while considering the severity and context of the disease.
- Clinical trial designs should enable earlier inclusion of younger patients when scientifically justified, while minimising unnecessary invasive procedures and the use of control or placebo arms, particularly where alternative evidence sources are available.
- Promote meaningful patient engagement, by moving beyond theoretical involvement towards embedding patients as partners in the research culture. Patients should be engaged from the earliest stages of research, contributing to its conception, ethical considerations, design and planning, as well as to the conduct of clinical trials.

# Session 2: Breakout sessions and Q&A

Moderators: Ricardo Fernandes *(EnprEMA co-chair and STAND4Kids)* and Juan José Abellán *(EMA)*

## Breakout session 1: Paediatric platform trials and academia-industry collaboration

Rapporteur: Pamela Kearns *(University of Birmingham and ITCC)*
Speakers: Julia Bielicki *(University Children's Hospital Basel)* and Pamela Kearns
Other supporters: Beate Wulff *(Roche),* Angeliki Siapkara, Pirkko Lepola, Leona Knox *(Solving Kids Cancer UK)*

The discussion explored the prerequisites that facilitate the effective delivery of academic-industry collaborative platform trials for childhood diseases. Building on a blueprint developed in paediatric oncology, participants considered how this model could be adapted to other disease areas to accelerate paediatric medicines development, while addressing existing operational, regulatory and collaboration challenges.

It was agreed that platform trials have the potential to improve the speed, efficiency and equity of paediatric drug development. Key factors identified include funding, strong governance, efficient contracting arrangements, data-sharing arrangements, alignment among stakeholders and meaningful patient advocacy involvement throughout the trial lifecycle.

## Breakout session 2: Accelerating patient recruitment and retention

Rapporteurs: Marek Migdal and Ricardo Fernandes
Speakers: Cristina De Juan *(UCB)*, Franz Schaefer *(Heidelberg University)*

This second breakout session explored opportunities to improve recruitment and retention of trial participants in paediatric clinical trials and identified practical approaches to better support stakeholders. Participants highlighted that recruitment and retention remain major challenges in paediatric clinical trials due to the limited patient pool, regulatory and ethical requirements, and the burden placed on children and their families.

The importance of strategic recruitment planning from the protocol development stage was emphasised, including the assessment of trial feasibility and site selection, and recruitment communication planning. The discussion further stressed the potential of decentralised elements in clinical trials and cross-border clinical trials to improve access to the trial treatment options and reduce the burden on participants. In addition, the use of the simulation methods during the preparation of the protocol was identified as an effective approach to optimising protocol development. Participants further noted that the success of enrollment ultimately depends on the patients' trust in the medical team.

Finally, it was agreed that meaningful patient involvement should begin as early as possible, as this can improve both recruitment and retention. The need to improve access to information on clinical trials across the EU, with the trial map serving as a key tool to help patients identify available trials, and to strengthen the culture of clinical research among healthcare professionals, patients and families was also identified.

## Breakout session 3: Methodological approaches tailored to paediatric medicine development

Rapporteurs: Dominik Karres *(EMA)*
Speakers: Dominik Karres, Juan José Abellán *(EMA)*

The session explored opportunities associated with quantitative methodologies in paediatric medicine development, focusing on paediatric extrapolation approaches and innovative trial designs, such as platform trials, to support efficient evidence generation and prioritisation of development programmes in areas of unmet medical needs.

Key needs identified included strengthening dissemination of educational and training materials on extrapolation methodologies, improving accessibility of information related to disease similarity assessments between adults and paediatric populations, and further exploring methodological approaches in paediatric platform trials to support R&D prioritisation and address unmet medical needs. The value of sharing successful examples of platform trials to inform and inspire sponsors was also emphasised.

# Summary of key outcomes and closing remarks

Ricardo Fernandes *(EnprEMA co-chair and STAND4Kids)*, Gunter Egger *(EnprEMA co-chair and EMA)* and Laura Pioppo *(EMA)*

The closing remarks emphasised the shared objective of accelerating paediatric clinical trials and medicine development to ultimately deliver better medicines and interventions for children. It was noted that, while the paediatric research ecosystem is complex and involves many stakeholders, a range of initiatives and infrastructures are already in place. The focus should therefore be on leveraging existing resources, strengthening collaboration, and identifying actionable areas rather than creating new structures. The importance of innovation, early engagement of children and families, and continued stakeholder alignment throughout the clinical trial lifecycle was reiterated.

On behalf of ACT EU, it was highlighted that the revised objectives of the ACT EU programme aim to support more inclusive clinical trials for underrepresented populations, including children and women more broadly (beyond pregnant and breastfeeding women). Collaboration is also ongoing with the IHI funded project READI to join forces more broadly in promoting inclusive clinical trials.

The workshop identified the following concrete areas for further action and collaboration between ACT EU and EnprEMA:

- Enhancing patient involvement: through the continued dialogue with the key parties such as the Multi-stakeholder Platform Advisory Group (MSP AG), exploring the possibility of establishing disease specific patient panels in the future that also address paediatric clinical trials, continuing to build trust with the patient communities and monitoring the use of the trial map.
- Innovation: integrate the use of artificial intelligence (AI) to support innovation in clinical trials design and monitor the use of decentralised elements. An ACT EU multi-stakeholder workshop on multiplicity and platform trials is planned for Q4 2026, where a dedicated session on paediatric clinical trials could be envisaged.
- Competitiveness: monitoring progress against the two key performance indicators and associated targets established by the ACT EU governance. Furthermore, the importance of accessing and analysing clinical trials data to generate further insights into paediatric clinical research was also highlighted, including through the review of historical data from the European Union Drug Regulating Authorities Clinical Trials Database (EudraCT).
- Regulatory activities complementing ACT EU: further strengthening interactions between CTCG and the PDCO, as well as between CTCG and MedEthicsEU.

Current and upcoming EnprEMA initiatives were also highlighted, including work on paediatricpediatricpaediatric trial site quality criteria, cross-border clinical trial participation, paediatricpediatricpaediatric research nursing and structured patient and public involvement frameworks.

Overall, the workshop highlighted a number of concrete actions to improve the design, approval and conduct of paediatric clinical trials in the EU. These include strengthening patient and family involvement, promoting innovative trial methodologies such as platform trials and decentralised

elements, making greater use of clinical trial data and evidence, improving regulatory and ethics coordination, and sharing knowledge and good practices on recruitment and patient engagement. These actions build on existing initiatives and infrastructures and provide areas for continued collaboration between ACT EU, EnprEMA and the wider stakeholder community.

# More information

The Accelerating Clinical Trials in the EU (ACT EU) initiative supports smarter clinical trials through regulatory, technological and process innovation. It was launched in January 2022 by the European Commission, the European Medicines Agency (EMA) and Heads of Medicines Agencies (HMA).

ACT EU builds on momentum of the Clinical Trials Regulation (CTR) and the launch of the Clinical Trials Information System (CTIS) on 31 January 2022. Its workplan sets out deliverables and timelines for the programme for 2026-2027.

The European Network of Paediatric Research at the European Medicines Agency (EnprEMA) acts as a platform for sharing good practices as well as a pan-European voice for promoting research into medicines for children. It enables networking and collaboration with members from within and outside the European Union (EU), including academia and the pharmaceutical industry.