

Patients Expert Group (PEG) Meeting Report 18 April 2025

Minutes

Warming up and welcome

The meeting began with cheerful greetings and a lighthearted moment when someone's cat strolled across the webcam, sparking a short conversation about mischievous pets and making the group relax .

Main talk – “Medicine Development Goes Virtual”

With screens shared under the title “**Digital Detectives**”, the lead scientist explained three big ideas:

- **Model** – a “mini-version” of something real, built with maths and data (for example a computer heart)
- **Simulation** – running the model over time to explore *what-if* questions (like a flight-sim for trainee pilots)
- **In-silico trial** – stitching many simulations together so virtual patients can test a medicine before real children are exposed

The presenter used everyday examples – COVID-spread maps, road-navigation apps – to show that powerful simulations already guide decisions in many fields .

Special emphasis was placed on why these tools matter for rare paediatric diseases:

- real-world trials are slow, expensive, and sometimes unsafe, whereas virtual trials can trim the number of hospital visits, predict safer starting doses, and even convince regulators to accept smaller real studies

Questions from the PEG

1. “How can we trust computer maths with children’s health?”

The scientists described a strict step-by-step process: each model must answer a clearly defined question, be verified against real data, and pass independent checks before regulators allow it to influence drug development and approval .

2. “Is a simulation the same as an in-silico trial?”

The difference was clarified: *one* simulation equals a single run of *one* model, whereas an in-silico trial bundles many simulations (different ages, weights, symptom levels) into a virtual clinical study.

3. “Will virtual trials replace real trials soon?”

Not yet. Computer evidence adds safety and speed, but final approval still needs some human data. However, the group heard that the trend is toward fewer invasive tests thanks to digital twins – computer copies of organs or diseases that mirror real-life behaviour

Hands-on quiz

To lock in the concepts, everyone took a quick matching quiz in the chat. All answers were correct on the first try, earning virtual applause from the presenters

Feedback round

The teenagers said they enjoyed “seeing the hidden steps” behind a pharmacy box and looked forward to sharing the slides at school.

Next session:

30 May 2025 from 17:00 to 18:30 CET

The group will explore **how patient opinions (“what matters to you?”) are transformed into numbers that guide regulators**. A prototype *Patient-Experience Tool* will be shown then.

Take-home in one breath

Your stories plus smart computer models = faster, safer medicines for kids like you. Keep asking questions—your voice drives the science forward!