Validation of the proposed basket of medicines for children (1 month-5 years) through expert consultation

To ensure that the proposed basket of medicines for children aged 1 month to 5 years sufficiently addressed priority health needs in clinical practice, expert validation of the core set of essential medicines has taken place through an online survey.

Procedures
The survey was split in separate categories for each of the eleven priority diseases. Participants were asked whether they agreed with the initial selection, and whether any medicines were redundant or missing (yes/no). If respondents did not agree with the initial selection, or if they indicated that medicines were redundant or missing, they were asked to explain their position in a comment section.

Pilot
The developed survey was piloted with three participants, resulting in minor modifications in the framing of questions. Since no major changes were required, data from the pilot was used in the analysis.

Participants
A total of five experts per age group were initially asked to validate the primary selection of medicines. Practicing pediatricians and pharmacists specialized in pediatric medicines with at least three years’ experience in the field were considered to be an expert. This relatively small number of experts was believed to be sufficient, since the initial selection of active ingredients was based on representative international treatment guidelines. Additionally, with the World Health organization (WHO) Essential Medicines List for Children (EMLc) serving as basis, the number of possible choices was limited. Little variation in responses was therefore expected.

Experts were identified through the researcher’s network, and using snowball sampling techniques. All five respondents were (formerly) practicing pediatricians, with between 7 to 40 years of experience. Three WHO geographical regions were represented (e.g. African region, region of the Americas, European region), as well as all income levels according to the World Bank income classification 2021. Two participants were also part of the WHO 23rd Expert Committee on Selection and Use of Essential Medicines.

Data analysis
Agreement of experts on which active ingredients to in- or exclude was assessed. Experts were regarded as in agreement if ≥80% of the respondents indicate to agree with inclusion of the active ingredient. Similarly, if ≥80% of the respondents indicated that a specific active ingredient was redundant or missing, it was removed from or added to the selection, respectively. If no consensus was reached (<80% agrees), active ingredients indicated as redundant or missing were compared across respondents. Comments provided by participants were analyzed in-depth and discussed by two authors to reach a decision.

Consolidation
The primary validation process resulted in the addition of four active ingredients to the basket, and the removal of two (see table 1 in main text). An additional consolidation round is needed to verify agreement of the experts with these changes.

Ethical approval
The validation of active ingredients through expert consultation was reviewed and approved by the Institutional Review Board of Utrecht University (reference number UPF2101).