# Enpr-EMA off-label working group Update Oct 2022

Saskia de Wildt Prof of Clinical Pharmacology Pediatric-intensivist



- Paper on use of existing data
- Level of evidence of off-label drug use
- Next steps

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#### Paper on use of existing data

Off-label is not always off-evidence:

Proposal to include more paediatric data in the medicine labels, a proposition by the off-label evidence working group of the European Network of Paediatric Research at the European Medicines Agency (Enpr-EMA)

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**Status:** pre-final, ready to submit for publication

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# **Project Dutch Pediatric Formulary**

> Clin Pharmacol Ther. 2022 Sep 7. doi: 10.1002/cpt.2736. Online ahead of print.

#### Off-Label, but on-Evidence? A Review of the Level of Evidence for Pediatric Pharmacotherapy

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Tjitske M van der Zanden <sup>1 2 3</sup>, Nori J L Smeets <sup>1 2</sup>, Marika de Hoop-Sommen <sup>1 3 4</sup>, Michiel F T Schwerzel <sup>1</sup>, Hui Jun Huang <sup>1</sup>, Lieke J C Barten <sup>1</sup>, Joyce E M van der Heijden <sup>1</sup>, Jolien J M Freriksen <sup>1</sup>, Akira A L Horstink <sup>1</sup>, Inge H G Holsappel <sup>4</sup>, Miriam G Mooij <sup>5</sup>, Matthijs de Hoog <sup>5</sup>, Saskia N de Wildt <sup>1 2 3</sup>

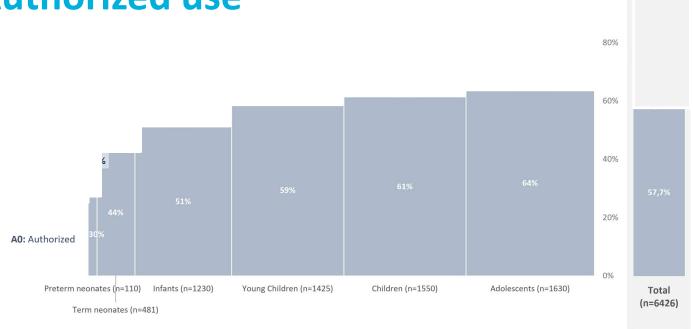
Affiliations + expand

PMID: 36069288 DOI: 10.1002/cpt.2736
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For every drug-indication-age group in the formulary (800 drugs), highest level of evidence assessed

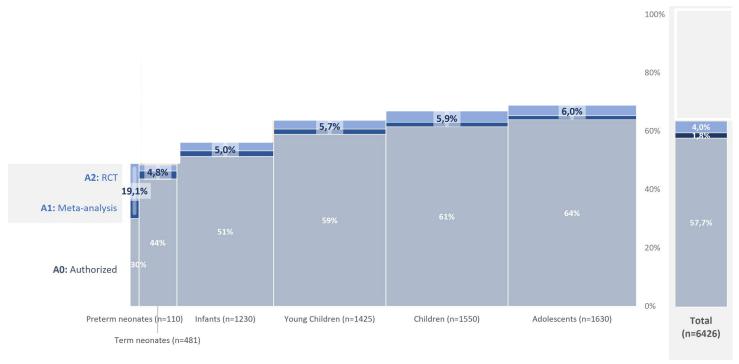
#### Highest level of evidence per drug

**Authorized** use

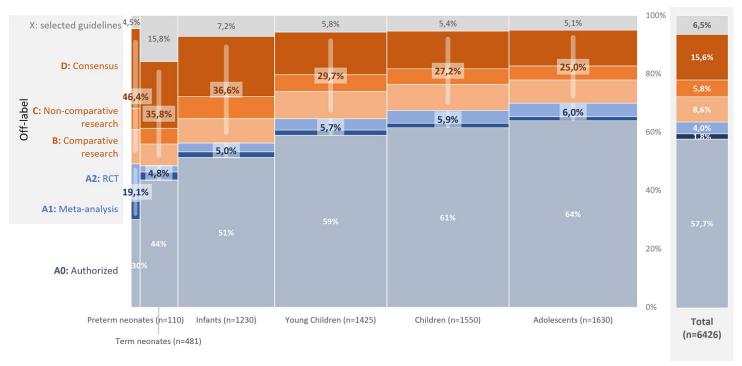


100%

#### Off-label: High quality evidence



#### **Off-label: Low quality evidence**



#### **Conclusions**

- First comprehensive overview of the quality of available evidence supporting off-label drug use in the paediatric population
- Only 14% of off-label records supported by high quality studies.
- This puts children at an increased risk of therapy failure and toxicity.

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#### Next steps?

- 1. Continue efforts to include high level of evidence data in label?
- 2. Prioritize need for evidence

Which off-label, medium-low level of evidence drugs need more research?

based on: Burden of disease, epidemiology, risk of failure, risk of toxicity?

Which studies are needed?

RTCs, other trial designs, RWD studies, extrapolation with modeling and simulation?

Who: International pediatric community with regulators, patients/parents and industry