# Enpr-EMA off-label working group Final update Oct 2023

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## **Update**

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

### Working group members

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Radboudumc

### Paper on use of existing data

### Off-label is not always off-evidence: authorising paediatric indications for old medicines



Approximately half of all paediatric medicine prescriptions in the EU are off-label, yet evidence to support the efficacy and safety of these prescriptions is not adequate.¹ Legislation now mandates, where relevant, paediatric clinical trials for new medicines and for medicines still under patent protection.² By contrast, for financial and practical reasons, older medicines are unlikely to be investigated to the same extent.³

hormone replacement therapy for menopausal women,  $17\beta$  estradiol matrix patches are cut into smaller pieces before application.<sup>5</sup> Investigator-initiated studies have shown that estradiol is evenly distributed across these matrix patches, such that cutting the patch does not impair its stability.<sup>6</sup> Finally, medicines authorised for one indication in children can be prescribed off-label for another indication. For example, tocilizumab is



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#### Lancet Child Adolesc Health 2023

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#### Include more existing data in the label

- Off-label evidence working group
  - Academics and regulators
- Proposal to include more paediatric data in the medicine label:
  - Consistent guideline and benefitrisk assessment procedure by the regulators
  - Financial incentives for academic groups to prepare data packages
  - Support by all stakeholders



European Network of Paediatric Research at the European Medicines Agency (Enpr-EMA)

#### Include more existing data in the label

- Off-label evidence working group
- Scientific opinion on data submitted from not-for-profit entities for repurposing of authorised medicinal products

Support by all stakeholders

Radboudumc

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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

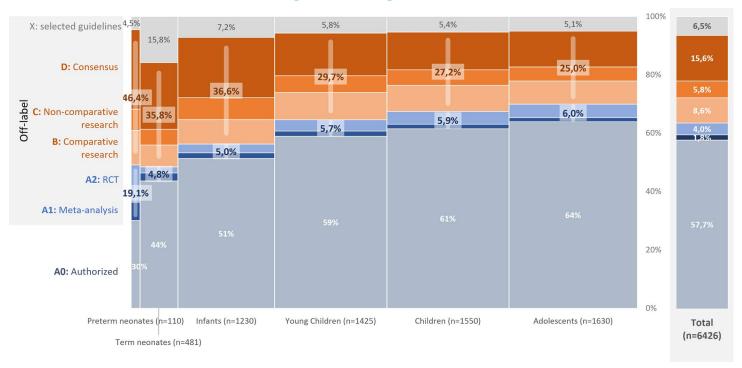
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Tjitske M van der Zanden <sup>1 2 3</sup>, Nori J L Smeets <sup>1 2</sup>, Marika de Hoop-Sommen <sup>1 3 4</sup>, Michiel F T Schwerzel <sup>1</sup>, Hui Jun Huang <sup>1</sup>, Lieke J C Barten <sup>1</sup>, Joyce E M van der Heijden <sup>1</sup>, 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

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



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#### From off-label to effective and safe therapies



Dutch government sponsored project Develop solutions for future affordable sustainable therapies

#### Off-label: from problem to solution

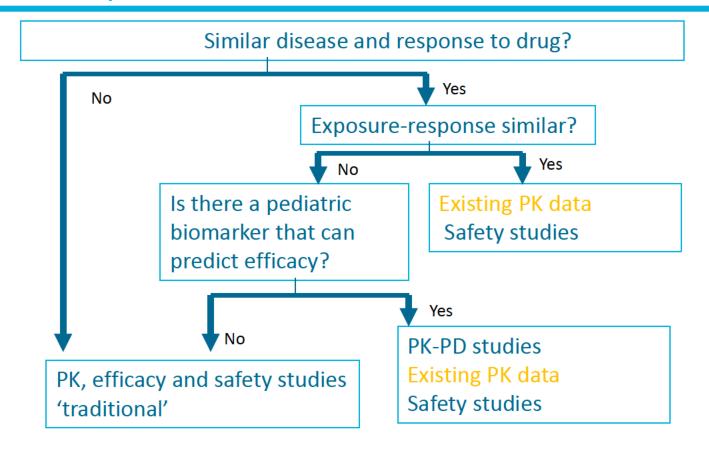
- Step 1: A decision model for evidence generation
- Step 2: How to prioritize international consensus

• Step 3: Research agenda by subspecialty

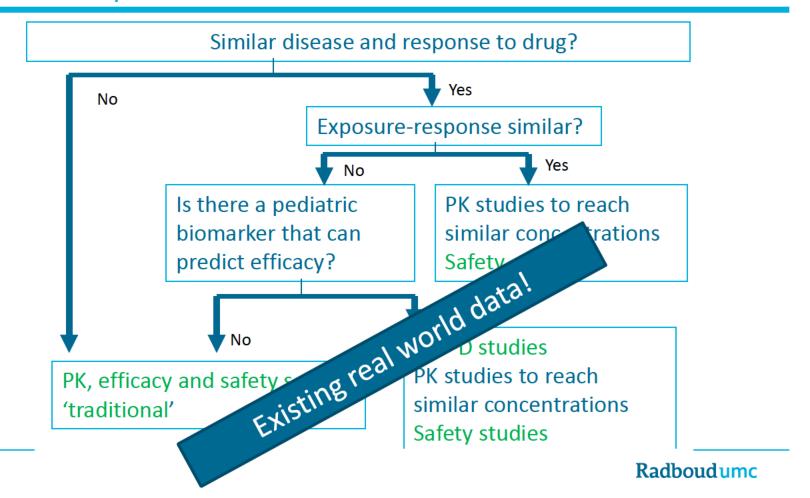


- Step 4: Generate the evidence
- Step 5: Implement in practice
- Step 6: Market authorization?

#### Extrapolation from adults to kids- decision tree



#### Extrapolation from adults to kids- decision tree



#### **Questions?**

