appropriate dose of Hydroxyurea, and increase adherence with this critical drug.

Conclusions In summary, FDA approval of the French-originated orphan HU, Siklos in preparations of 50, 100 mg, prevents the risk of inappropriate dosing of the drug in children. This should encourage all involved in pediatric medicine, from health care physicians and pharmacists, to the pharmaceutical industry and regulators to act similarly in other therapeutic areas where inappropriate pediatric dose schedules are endangering the health and wellbeing of children.

Disclosure(s) G Koren has been a consultant for Medunik USA.

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BREAKTHROUGH IN THE TREATMENT OF NAUSEA AND VOMITING OF PREGNANCY; THE FIRST DUAL RELEASE COMBINATION OF DOXYLAMINE-PYRIDOXINE

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Background Nausea and vomiting of pregnancy (NVP) affect almost pregnancies. The only agent approved by the FDA and other countries for the management of NVP symptoms has been the delayed release combination of doxylamine and pyridoxine. This combination, formulated as a 10 mg/10 mg delayed release tablet, was approved by the FDA for the treatment of NVP in 2013 (Diclegis®).

Due to its delayed release properties, Diclegis® begins to exert its antiemetic properties 6–8 hours after ingestion, and hence symptom relief may be delayed and necessitate the use of an immediate release medication.

Methods In 2016 the FDA approved Bonjesta®, a novel, dual-release combination of doxylamine and pyridoxine, whereby a rapid release phase is followed by a delayed release phase, thus overcoming the time delay in action of Diclegis®. Bonjesta®, a multilayer, extended-release tablet consisting of an enteric-coated core containing 10 mg doxylamine succinate and 10 mg pyridoxine hydrochloride, and an immediate-release coating of 10 mg doxylamine succinate and 10 mg pyridoxine hydrochloride, delivering a total of 20 mg doxylamine succinate and 20 mg pyridoxine hydrochloride

Results In a single-and multiple dose study in 48 healthy, premenopausal women, one Bonjesta® (20 mg doxylamine succinate and 20 mg pyridoxine) was bioequivalent to two combination tablets of 10 mg doxylamine succinate and 10 mg pyridoxine hydrochloride

Bonjesta has shown an immediate peak concentrations, followed by a delayed release phase.

Conclusions The combination of the immediate release with a delayed action is unique to Bonjesta® as it allows for the bedtime dose to be effective immediately and also provide with sustained control of NVP symptoms throughout the day.

Disclosure(s) G Koren has been a consultant for Duchesnay Inc.

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FILLING THE GAP FOR CHILDREN WITH HEART FAILURE: THE EU-FUNDED DRUG DEVELOPMENT PROGRAM LENA (LABELING OF ENALAPRIL FROM NEONATES UP TO ADOLESCENTS)

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Background ACE-inhibitors are first choice treatment for adult and paediatric patients with heart failure. Since there are no systematic data on pharmacokinetics and safety in the young heart failure population, the EU funded a drug development program to fill those gaps for the ACE-inhibitor enalapril. An age appropriate paediatric formulation was also required.

Methods A paediatric patient cohort with heart failure was recruited to fulfil the paediatric investigation plan (PIP) requirements. The PIP required a total of 85 evaluable patients from birth to less than 12 years of age with a subset cohort of 25 patients with heart failure due to dilated cardiomyopathy and a subset of 60 heart failure patients of congenital heart disease. Out of these, 54% of patients must be aged below 12 months to provide a substantial amount of young patients.

Results The LENA consortium recruited 102 children from birth to 12 years. Out of those, 89 patients fulfilled relevant protocol criteria and could be regarded as evaluable. Of these, 26 demonstrated heart failure due to cardiomyopathy and 63 due to congenital heart disease. Sixty five patients (73%) were below 12 months of age. Moreover, 22 patients were below 3 months of age, 26 patients from 3 months to less than 6 months and 17 patients from 6 months up to 12 months of age.

Conclusions The LENA consortium had recruited the PDCO required number of paediatric patients for the drug development program LENA. As more than 2/3 of patients belong to the most vulnerable patient population below the age of 12 months, relevant data can be generated to fill gaps for the safe and reliable treatment with ACE-inhibitors of children with heart failure.

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REFERENCES
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