



ACCP

AMERICAN COLLEGE OF CLINICAL PHARMACOLOGY®
Advancing Clinical Care through Pharmacology®

Symposia

MONDAY, SEPTEMBER 21, 2020 | Symposium 4 | 2:00 – 3:30 PM

Pediatric Renal Function: Why We Still Need to Explore Renal Maturation & Its Impact on Drug Therapies

THERAPEUTIC AREAS OF APPLIED CLINICAL PHARMACOLOGY TRACK

Offers both CME & CPE Credit

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ACPE – 1.5 CONTACT HOURS/KNOWLEDGE-BASED

CO-CHAIRS:

Jian Wang, PhD, Associate Director, Drug Evaluation IV, CDER, US Food & Drug Administration

Catherine MT Sherwin, PhD, Professor & Vice Chair for Research, Director, Pediatric Clinical Pharmacology, Pediatrics, Wright State Univ Boonshoft School of Medicine, Dayton Children's Hosp

TARGET AUDIENCE:

This Symposium will be helpful for clinical pharmacologists from pharmaceutical/biotechnology companies and regulatory agencies, pharmacometricians, clinical researchers and drug development scientists. The target audience would include clinical and research faculty from schools and colleges of medicine, pharmacy and nursing, plus pharmacologists, pharmacists, clinicians or graduate/postgraduate trainees wishing to better understand the development of precision medicine in pediatric patients.

GOALS & OBJECTIVES:

Following the completion of this activity, the learner will be able to:

1. Explore the utilization of equations used to define pediatric renal function and how this relates to individualized drug exposure;
2. Demonstrate several examples related to optimization of those models that incorporate renal function and utility of individual predictions using population pharmacokinetic models;
3. Provide an understanding of the complexity of dealing with varying renal function that is impacted by disease processes, such as Cystic Fibrosis;
4. Explore the impact of specific physiological factors such as age (e.g. neonatal) and weight (e.g. obesity) when estimating varying renal function and the impact on pharmacokinetic parameters such as clearance.

Introduction: Why We Still Need to Explore Renal Maturation & Its Impact on Drug Therapies

Jian Wang, PhD, Associate Director, Drug Evaluation IV, CDER, US Food & Drug Administration

Commonly-used Equations to Define Renal Function & Estimate Pharmacokinetic Parameters

Yifei Zhang, PhD, ORISE Fellow, US Food & Drug Administration

The Influence of Cystic Fibrosis on the Maturation of Renal Function

Hesham Al-Sallami, PharmD, PhD, Senior Lecturer, Univ of Otago

What Do We Know About Renal Maturation in Patients With Childhood Obesity?

Catherijne AJ Knibbe, PharmD, PhD, Professor, Individualized Drug Treatment, St Antonius Hosp/Leiden Univ

Are We Close to Consensus on Renal Maturation, Neonates & Determining Pharmacokinetics?

Catherine MT Sherwin, PhD, Professor & Vice Chair for Research, Director, Pediatric Clinical Pharmacology, Pediatrics, Wright State Univ Boonshoft School of Medicine, Dayton Children's Hosp

Faculty Panel Discussion, Questions & Answers, Learner Feedback & Evaluation