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Simcyp Publications and Independent Applications List 2021

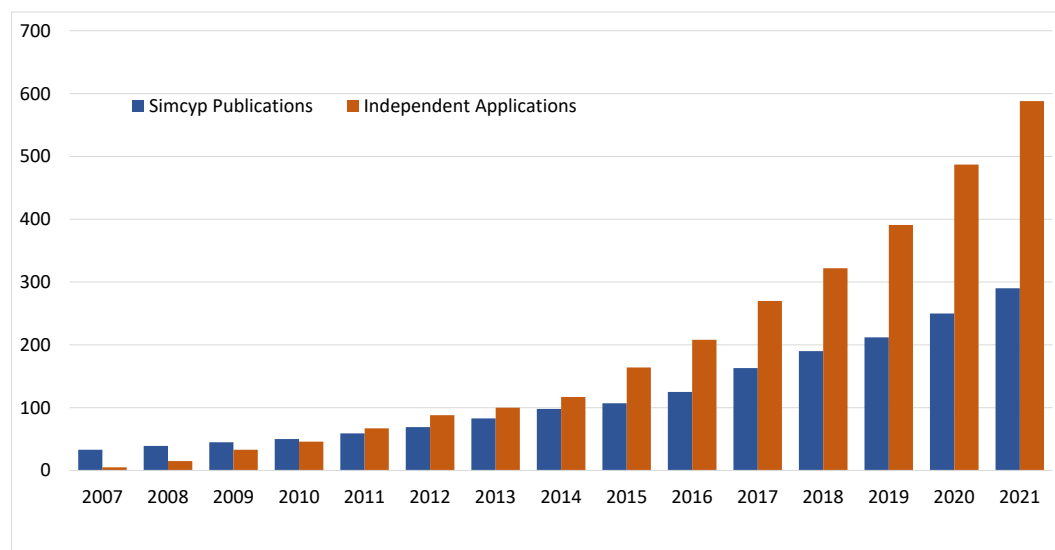


Simcyp Publications and Independent Applications List 2021

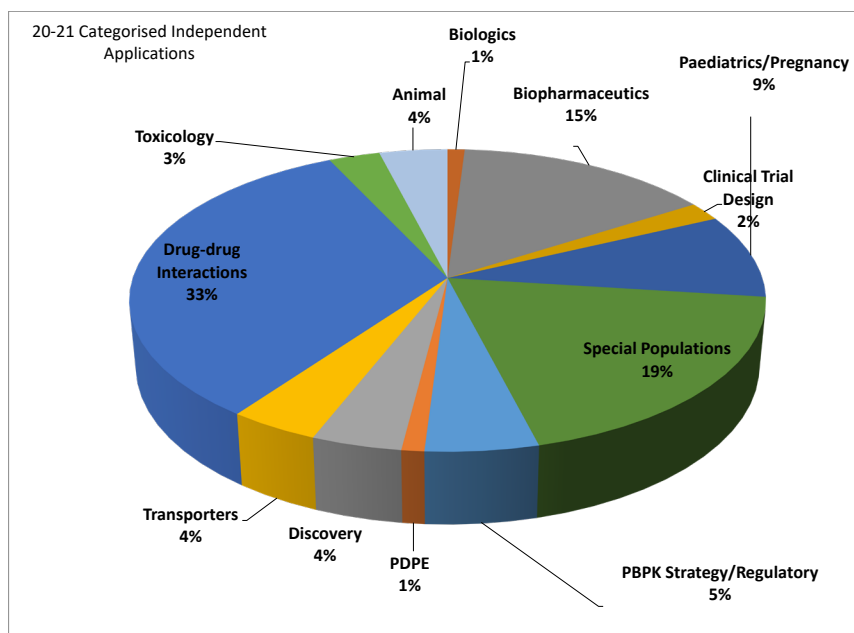
Publications by Simcyp R&D Team (1997 – Present) and Independent Applications of Simcyp by Industry, Academia, and Regulatory Organizations (2007 – Present)

SIMCYP PUBLICATION STATISTICS

Simcyp have over 290 published peer reviewed papers, and since 2007 there have been over 580 Independent Publications applying Simcyp.



Overall Simcyp publications (including articles, meeting abstracts, reviews, letters, and book chapters) have been cited 12,065 times (excluding self-citations). The citations are spread over 7,168 citing articles. The chart below shows the areas in which the Independent Applications have focused since 2020.



SIMCYP 2021 PUBLICATIONS

Bonner J., et al.

Development and verification of an endogenous PBPK model to inform hydrocortisone replacement dosing in children and adults with cortisol deficiency. *European Journal of Pharmaceutical Sciences* 165, 105913, October 2021.

Thanh VH, et al.

Cotranscriptional Kinetic Folding of RNA Secondary Structures Including Pseudoknots. *Journal of Computational Biology* 28 (9), 892-908, September 2021

El-Khateeb E, et al.

Review article: time to revisit Child-Pugh score as the basis for predicting drug clearance in hepatic impairment. *Alimentary Pharmacology and Therapeutics* 54 (4), 388-401, August 2021.

Al-Majdoub ZM, et al.

Quantitative Proteomic Map of Enzymes and Transporters in the Human Kidney: Stepping Closer to Mechanistic Kidney Models to Define Local Kinetics. *Clinical Pharmacology and Therapeutics* Epub Ahead of Print, August 2021.

Abduljalil K, et al.

Prediction of drug concentrations in milk during breastfeeding, integrating predictive algorithms within a physiologically-based pharmacokinetic model. *CPT Pharmacometrics and Systems Pharmacology* Epub Ahead of Print, July 2021.

Chirumamilla SK, et al.

Mechanistic PBPK Modelling to Predict the Advantage of the Salt Form of a Drug When Dosed with Acid Reducing Agents. *Pharmaceutics* 13 (8), 1169, July 2021.

Areti-Maria V, et al.

Hepatic Scaling Factors for In vitro-In vivo Extrapolation of Metabolic Drug Clearance in Patients with Colorectal Cancer with Liver Metastasis. *Drug Metabolism and Disposition* 49 (7), 563-571, May 2021.

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Application of quantitative systems pharmacology to guide the optimal dosing of COVID-19 vaccines. *CPT Pharmacometrics and Systems Pharmacology* Epub Ahead of Print, July 2021.

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A best practice framework for applying physiologically-based pharmacokinetic modeling to pediatric drug development. *CPT Pharmacometrics and Systems Pharmacology* Epub Ahead of Print, July 2021.

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Effective exposure of chemicals in in vitro cell systems: A review of chemical distribution models. *Toxicology in Vitro* 73, 105133, June 2021

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Fetal Physiologically Based Pharmacokinetic Models: Systems Information on Fetal Cardiac Output and Its Distribution to

Different Organs during Development. *Clinical Pharmacokinetics* 60 (6), 741-757, June 2021.

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Evaluating the impact of acid-reducing agents on drug absorption using biorelevant *in vitro* tools and PBPK modeling-case example dipyrindamole. *European Journal of Pharmaceutical Sciences* 160, 105750, May 2021.

Rostami-Hodjegan A and Bois F

Opening a debate on open-source modeling tools: Pouring fuel on fire versus extinguishing the flare of a healthy debate. *CPT Pharmacometrics and Systems Pharmacology* 10 (5), 420-427, May 2021.

Rowland Yeo K and Berglund E

An Integrated Approach for Assessing the Impact of Renal Impairment on Pharmacokinetics of Drugs in Development: Pivotal Role of PBPK Modelling. *Clinical Pharmacology and Therapeutics* Epub Ahead of Print, May 2021.

Delaunois A, et al.

Applying the CiPA approach to evaluate cardiac proarrhythmia risk of some antimalarials used off label in the first wave of COVID-19. *Clinical and Translational Science* 14 (3), 1133-1146, May 2021.

Ahmad A, et al.

Population pharmacokinetic modeling and simulation to support qualification of pyridoxic acid as endogenous biomarker of OAT1/3 renal transporters. *CPT Pharmacometrics and Systems Pharmacology* 10 (5), 467-477, May 2021.

Martinez M, et al.

Comparison of Canine and Human Physiological Factors: Understanding Interspecies Differences that Impact Drug Pharmacokinetics. *The AAPS Journal* 23 (3), 59, April 2021.

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Scientific considerations to move towards biowaiver for biopharmaceutical classification system class III drugs: How modeling and simulation can help *Biopharmaceutics and Drug Disposition* 42 (4), 118-127, April 2021.

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Food constituent- and herb-drug interactions in oncology: Influence of quantitative modelling on Drug labelling. *British Journal of Clinical Pharmacology* Epub Ahead of Print, March 2021.

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Evaluation of Drug-Drug Interaction Liability for Buprenorphine Extended-Release Monthly Injection Administered by Subcutaneous Route. *Clinical Pharmacology in Drug Development* Epub Ahead of Print, March 2021.

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Liquid Biopsy Enables Quantification of the Abundance and Interindividual Variability of Hepatic Enzymes and Transporters. *Clinical Pharmacology and Therapeutics* 109 (1), 222-232, January 2021.

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Physiological-based pharmacokinetic modeling trends in pharmaceutical drug development over the last 20-years; in-depth analysis of applications, organizations, and platforms. *Biopharmaceutics and Drug Disposition* 42 (4), 107-117, December 2020.

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Model-Informed Precision Dosing: Background, Requirements, Validation, Implementation, and Forward Trajectory of Individualizing Drug Therapy. *Annual Review of Pharmacology and Toxicology* 61, 225-245, January 2021.

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Products: Academic, Industrial and Regulatory Perspectives. *Pharmaceutical Research* 37 (6), 95, May 2020.

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Precision medicine technology hype or reality? The example of computer-guided dosing. *F1000Res* 8, 1709, December 2019.

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Placental transfer of xenobiotics in pregnancy physiologically based pharmacokinetic models: Structure and data. *Computational Toxicology* 12, November 2019.

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The Regional-Specific Relative and Absolute Expression of Gut Transporters in Adult Caucasians: A Meta-Analysis. *Drug Metabolism & Disposition* 47(8), 854-864, August 2019.

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Evaluation of Maternal Drug Exposure Following the Administration of Antenatal Corticosteroids During Late Pregnancy Using Physiologically-Based Pharmacokinetic Modeling. *Clinical Pharmacology & Therapeutics* 106(1), 164-173, July 2019.

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Venkatakrishnan K, et al.

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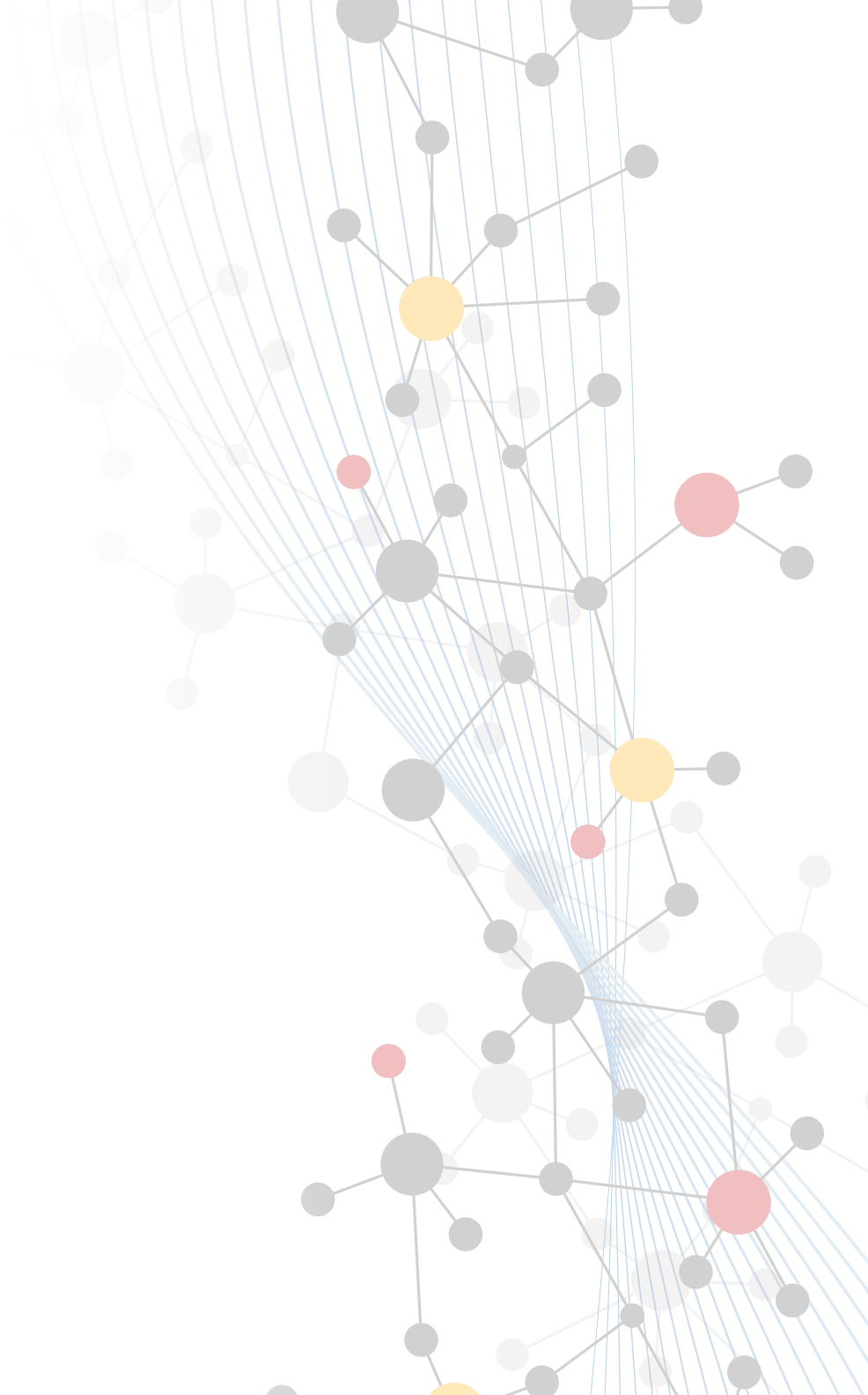
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