Melissa K Hallow

List of Publications by Year
in descending order

24	821	758635 12	642321 23
papers	citations	h-index	g-index

25	25	25	1226
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Why do <scp>SGLT2</scp> inhibitors reduce heart failure hospitalization? <scp>A</scp> differential volume regulation hypothesis. Diabetes, Obesity and Metabolism, 2018, 20, 479-487.	2.2	336
2	Primary proximal tubule hyperreabsorption and impaired tubular transport counterregulation determine glomerular hyperfiltration in diabetes: a modeling analysis. American Journal of Physiology - Renal Physiology, 2017, 312, F819-F835.	1.3	74
3	A model-based approach to investigating the pathophysiological mechanisms of hypertension and response to antihypertensive therapies: extending the Guyton model. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 306, R647-R662.	0.9	60
4	A Tutorial on RxODE: Simulating Differential Equation Pharmacometric Models in R. CPT: Pharmacometrics and Systems Pharmacology, 2016, 5, 3-10.	1.3	60
5	Evaluation of renal and cardiovascular protection mechanisms of SGLT2 inhibitors: model-based analysis of clinical data. American Journal of Physiology - Renal Physiology, 2018, 315, F1295-F1306.	1.3	46
6	A Quantitative Systems Physiology Model of Renal Function and Blood Pressure Regulation: Model Description. CPT: Pharmacometrics and Systems Pharmacology, 2017, 6, 383-392.	1.3	36
7	Quantitative Systems Pharmacology: An Exemplar Modelâ€Building Workflow With Applications in Cardiovascular, Metabolic, and Oncology Drug Development. CPT: Pharmacometrics and Systems Pharmacology, 2019, 8, 380-395.	1.3	33
8	Drug-disease modeling in the pharmaceutical industry - where mechanistic systems pharmacology and statistical pharmacometrics meet. European Journal of Pharmaceutical Sciences, 2017, 109, S39-S46.	1.9	25
9	A Quantitative Systems Physiology Model of Renal Function and Blood Pressure Regulation: Application in Salt-Sensitive Hypertension. CPT: Pharmacometrics and Systems Pharmacology, 2017, 6, 393-400.	1.3	20
10	Multiscale Mathematical Model of Drug-Induced Proximal Tubule Injury: Linking Urinary Biomarkers to Epithelial Cell Injury and Renal Dysfunction. Toxicological Sciences, 2018, 162, 200-211.	1.4	20
11	Modelâ€Based Evaluation of Proximal Sodium Reabsorption Through SGLT2 in Health and Diabetes and the Effect of Inhibition With Canagliflozin. Journal of Clinical Pharmacology, 2018, 58, 377-385.	1.0	20
12	Reduction in albuminuria with dapagliflozin cannot be predicted by baseline clinical characteristics or changes in most other risk markers. Diabetes, Obesity and Metabolism, 2019, 21, 720-725.	2.2	15
13	The Adaptive Renal Response for Volume Homeostasis During 2 Weeks of Dapagliflozin Treatment in People WithÂType 2 Diabetes and Preserved Renal Function on a Sodium-Controlled Diet. Kidney International Reports, 2022, 7, 1084-1092.	0.4	12
14	Mathematical model of hemodynamic mechanisms and consequences of glomerular hypertension in diabetic mice. Npj Systems Biology and Applications, 2018, 4, 2.	1.4	11
15	Cardiac and renal function interactions in heart failure with reduced ejection fraction: A mathematical modeling analysis. PLoS Computational Biology, 2020, 16, e1008074.	1.5	11
16	Predicted Cardiac Hemodynamic Consequences of the Renal Actions of SGLT2i in the DAPAâ€HF Study Population: A Mathematical Modeling Analysis. Journal of Clinical Pharmacology, 2021, 61, 636-648.	1.0	9
17	Renal Effects of Dapagliflozin in People with and without Diabetes with Moderate or Severe Renal Dysfunction: Prospective Modeling of an Ongoing Clinical Trial. Journal of Pharmacology and Experimental Therapeutics, 2020, 375, 76-91.	1.3	8
18	Cardiorenal Systems Modeling: Left Ventricular Hypertrophy and Differential Effects of Antihypertensive Therapies on Hypertrophy Regression. Frontiers in Physiology, 2021, 12, 679930.	1.3	6

#	Article	IF	Citations
19	A quantitative systems pharmacology model of plasma potassium regulation by the kidney and aldosterone. Journal of Pharmacokinetics and Pharmacodynamics, 2022, 49, 471-486.	0.8	6
20	Benchmarking renin suppression and blood pressure reduction of direct renin inhibitor imarikiren through quantitative systems pharmacology modeling. Journal of Pharmacokinetics and Pharmacodynamics, 2019, 46, 15-25.	0.8	5
21	Exposure-response modeling of flow-mediated dilation provides an unbiased and informative measure of endothelial function. Journal of Applied Physiology, 2017, 122, 1292-1303.	1.2	4
22	Predicted Cardiac Functional Responses to Renal Actions of SGLT2i in the DAPACARD Trial Population: A Mathematical Modeling Analysis. Journal of Clinical Pharmacology, 2022, 62, 541-554.	1.0	2
23	Mathematical modeling of left ventricle hypertrophy and dilatation in response to volume overload in heart failure: a coupled renalâ€cardiac model. FASEB Journal, 2018, 32, 903.22.	0.2	0
24	Effect of URAT1 inhibition with verinurad on proximal tubule intracellular lactate: A mathematical modeling analysis and hypothesis for antiproteinuric effect. FASEB Journal, 2020, 34, 1-1.	0.2	0