Richard R Almon

List of Publications by Citations

119 papers	2,918 citations	31 h-index	47 g-index
119 ext. papers	3,184 ext. citations	4.4 avg, IF	4.84 L-index

#	Paper	IF	Citations
119	Acetylcholine receptor antibodies in myasthenia gravis. *New England Journal of Medicine*, **1975**, 293, 760-1	59.2	169
118	Fifth-generation model for corticosteroid pharmacodynamics: application to steady-state receptor down-regulation and enzyme induction patterns during seven-day continuous infusion of methylprednisolone in rats. *Journal of Pharmacokinetics and Pharmacodynamics*, **2002**, 29, 1-24	2.7	100
117	A possible role for glucocorticoids in denervation atrophy. *Muscle and Nerve*, **1981**, 4, 370-3	3.4	99
116	Modeling of corticosteroid pharmacogenomics in rat liver using gene microarrays. *Journal of Pharmacology and Experimental Therapeutics*, **2003**, 307, 93-109	4.7	96
115	Circadian rhythms in gene expression: Relationship to physiology, disease, drug disposition and drug action. *Advanced Drug Delivery Reviews*, **2010**, 62, 904-17	18.5	94
114	Interaction of myasthenic serum globulin with the acetylcholine receptor. *Biochimica Et Biophysica Acta (BBA) - Protein Structure*, **1975**, 393, 66-77		76
113	Disuse atrophy of skeletal muscle is associated with an increase in number of glucocorticoid receptors. *Endocrinology*, **1980**, 107, 1649-51	4.8	64
112	Modeling corticosteroid effects in a rat model of rheumatoid arthritis I: mechanistic disease progression model for the time course of collagen-induced arthritis in Lewis rats. *Journal of Pharmacology and Experimental Therapeutics*, **2008**, 326, 532-45	4.7	60
111	Fourth-generation model for corticosteroid pharmacodynamics: a model for methylprednisolone effects on receptor/gene-mediated glucocorticoid receptor down-regulation and tyrosine aminotransferase induction in rat liver. *Journal of Pharmacokinetics and Pharmacodynamics*, **1998**,	2.7	59
110	Relationships between circadian rhythms and modulation of gene expression by glucocorticoids in skeletal muscle. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 295, R1031-47	3.2	54
109	Acetylcholine receptor in normal and denervated slow and fast muscle. *Biochemistry*, **1974**, 13, 5522-8	3.2	53
108	Light-dark oscillations in the lung transcriptome: implications for lung homeostasis, repair, metabolism, disease, and drug action. *Journal of Applied Physiology*, **2011**, 110, 1732-47	3.7	51
107	Circadian variations in rat liver gene expression: relationships to drug actions. *Journal of Pharmacology and Experimental Therapeutics*, **2008**, 326, 700-16	4.7	51
106	Microarray analysis of the temporal response of skeletal muscle to methylprednisolone: comparative analysis of two dosing regimens. *Physiological Genomics*, **2007**, 30, 282-99	3.6	49
105	Gene expression analysis of hepatic roles in cause and development of diabetes in Goto-Kakizaki rats. *Journal of Endocrinology*, **2009**, 200, 331-46	4.7	48
104	Cholinergic sites in skeletal muscle. I. Denervation effects. *Biochemistry*, **1976**, 15, 3662-7	3.2	47
103	Receptor/gene-mediated pharmacodynamic effects of methylprednisolone on phosphoenolpyruvate carboxykinase regulation in rat liver. *Journal of Pharmacology and Experimental Therapeutics*, **2004**, 309, 328-39	4.7	46

102	Pharmacodynamics and pharmacogenomics of methylprednisolone during 7-day infusions in rats. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 300, 245-56	4.7	45
101	Modeling circadian rhythms of glucocorticoid receptor and glutamine synthetase expression in rat skeletal muscle. *Pharmaceutical Research*, **2006**, 23, 670-9	4.5	44
100	Temporal profiling of the transcriptional basis for the development of corticosteroid-induced insulin resistance in rat muscle. *Journal of Endocrinology*, **2005**, 184, 219-32	4.7	44
99	Dose-dependence and repeated-dose studies for receptor/gene-mediated pharmacodynamics of methylprednisolone on glucocorticoid receptor down-regulation and tyrosine aminotransferase induction in rat liver. *Journal of Pharmacokinetics and Pharmacodynamics*, **1998**, 26, 619-48		43
98	Circadian variations in gene expression in rat abdominal adipose tissue and relationship to physiology. *Physiological Genomics*, **2010**, 42A, 141-52	3.6	42
97	The PEPR GeneChip data warehouse, and implementation of a dynamic time series query tool (SGQT) with graphical interface. *Nucleic Acids Research*, **2004**, 32, D578-81	20.1	40
96	Corticosteroid-regulated genes in rat kidney: mining time series array data. *American Journal of Physiology - Endocrinology and Metabolism*, **2005**, 289, E870-82	6	40
95	Modeling corticosteroid effects in a rat model of rheumatoid arthritis II: mechanistic pharmacodynamic model for dexamethasone effects in Lewis rats with collagen-induced arthritis. *Journal of Pharmacology and Experimental Therapeutics*, **2008**, 326, 546-54	4.7	38
94	Adipose tissue deficiency and chronic inflammation in diabetic Goto-Kakizaki rats. *PLoS ONE*, **2011**, 6, e17386	3.7	38
93	A microarray analysis of the temporal response of liver to methylprednisolone: a comparative analysis of two dosing regimens. *Endocrinology*, **2007**, 148, 2209-25	4.8	35
92	Pharmacogenomic responses of rat liver to methylprednisolone: an approach to mining a rich microarray time series. *AAPS Journal*, **2005**, 7, E156-94	3.7	33
91	Differential dynamics of receptor down-regulation and tyrosine aminotransferase induction following glucocorticoid treatment. *Journal of Steroid Biochemistry and Molecular Biology*, **1995**, 54, 237-43	5.1	33
90	Highly multiplexed and reproducible ion-current-based strategy for large-scale quantitative proteomics and the application to protein expression dynamics induced by methylprednisolone in 60 rats. *Analytical Chemistry*, **2014**, 86, 8149-57	7.8	32
89	Assessment of pharmacologic area under the curve when baselines are variable. *Pharmaceutical Research*, **2011**, 28, 1081-9	4.5	32
88	Pharmacokinetic-pharmacodynamic disease progression model for effect of etanercept in Lewis rats with collagen-induced arthritis. *Pharmaceutical Research*, **2011**, 28, 1622-30	4.5	31
87	Third-generation model for corticosteroid pharmacodynamics: roles of glucocorticoid receptor mRNA and tyrosine aminotransferase mRNA in rat liver. *Journal of Pharmacokinetics and Pharmacodynamics*, **1995**, 23, 163-81		31
86	Differential muscle gene expression as a function of disease progression in Goto-Kakizaki diabetic rats. *Molecular and Cellular Endocrinology*, **2011**, 338, 10-7	4.4	29
85	Modeling of corticosteroid effects on hepatic low-density lipoprotein receptors and plasma lipid dynamics in rats. *Pharmaceutical Research*, **2008**, 25, 769-80	4.5	28

84	Serum acetylcholine-receptor antibodies in myasthenia gravis. *Annals of the New York Academy of Sciences*, **1976**, 274, 235-43	6.5	28
83	Evidence for a glucocorticoid receptor beta splice variant in the rat and its physiological regulation in liver. *Steroids*, **2013**, 78, 312-20	2.8	27
82	Glucocorticoid effects on adiponectin expression. *Vitamins and Hormones*, **2012**, 90, 163-86	2.5	27
81	Modeling receptor/gene-mediated effects of corticosteroids on hepatic tyrosine aminotransferase dynamics in rats: dual regulation by endogenous and exogenous corticosteroids. *Journal of Pharmacokinetics and Pharmacodynamics*, **2007**, 34, 643-67	2.7	27
80	Pharmacokinetic/pharmacodynamic modeling of corticosterone suppression and lymphocytopenia by methylprednisolone in rats. *Journal of Pharmaceutical Sciences*, **2008**, 97, 2820-32	3.9	25
79	Pharmacodynamics and pharmacogenomics of diverse receptor-mediated effects of methylprednisolone in rats using microarray analysis. *Journal of Pharmacokinetics and Pharmacodynamics*, **2002**, 29, 103-29	2.7	25
78	Fiber-type discrimination in disuse and glucocorticoid-induced atrophy. *Medicine and Science in Sports and Exercise*, **1990**, 22, 304???311	1.2	25
77	Mechanistic modeling of the effects of glucocorticoids and circadian rhythms on adipokine expression. *Journal of Pharmacology and Experimental Therapeutics*, **2011**, 337, 734-46	4.7	24
76	Modeling glucocorticoid-mediated fetal lung maturation: I. Temporal patterns of corticosteroids in rat pregnancy. *Journal of Pharmacology and Experimental Therapeutics*, **2006**, 317, 117-26	4.7	24
75	The genomic response of skeletal muscle to methylprednisolone using microarrays: tailoring data mining to the structure of the pharmacogenomic time series. *Pharmacogenomics*, **2004**, 5, 525-52	2.6	24
74	Gene arrays and temporal patterns of drug response: corticosteroid effects on rat liver. *Functional and Integrative Genomics*, **2003**, 3, 171-9	3.8	23
73	Quantitative dynamic models of arthritis progression in the rat. *Pharmaceutical Research*, **2009**, 26, 196-203	4.3	22
72	Pharmacokinetics of methylprednisolone after intravenous and intramuscular administration in rats. *Biopharmaceutics and Drug Disposition*, **2007**, 28, 263-73	1.7	22
71	In vivo multi-tissue corticosteroid microarray time series available online at Public Expression Profile Resource (PEPR). *Pharmacogenomics*, **2003**, 4, 791-9	2.6	22
70	Quantitative tissue-specific dynamics of in vivo GILZ mRNA expression and regulation by endogenous and exogenous glucocorticoids. *Physiological Reports*, **2015**, 3, e12382	2.6	21
69	Modeling diabetes disease progression and salsalate intervention in Goto-Kakizaki rats. *Journal of Pharmacology and Experimental Therapeutics*, **2011**, 339, 896-904	4.7	21
68	Corticosteroid effects in skeletal muscle: gene induction/receptor autoregulation. *Muscle and Nerve*, **1997**, 20, 1318-20	3.4	20
67	Mathematical modeling of corticosteroid pharmacogenomics in rat muscle following acute and chronic methylprednisolone dosing. *Molecular Pharmaceutics*, **2008**, 5, 328-39	5.6	20

66	Macromolecular Characterization of Muscle Membranes. *Journal of Biological Chemistry*, **1974**, 249, 6163-6165	5.4	20
65	Mechanism-based disease progression modeling of type 2 diabetes in Goto-Kakizaki rats. *Journal of Pharmacokinetics and Pharmacodynamics*, **2011**, 38, 143-62	2.7	19
64	Population pharmacokinetic-pharmacodynamic-disease progression model for effects of anakinra in Lewis rats with collagen-induced arthritis. *Journal of Pharmacokinetics and Pharmacodynamics*, **2011**, 38, 769-86	2.7	19
63	Circadian signatures in rat liver: from gene expression to pathways. *BMC Bioinformatics*, **2010**, 11, 540	3.6	19
62	Associations of [3H]dihydroalprenolol with biological membranes. *General Pharmacology*, **1979**, 10, 31-40		19
61	Associations of beta nerve growth factor with bovine serum albumin as well as with the alpha and gamma subunits of the 7S macromolecule. *Journal of Neurochemistry*, **1978**, 30, 1459-67	6	19
60	Daily variation of gene expression in diverse rat tissues. *PLoS ONE*, **2018**, 13, e0197258	3.7	19
59	Pharmacokinetics, pharmacodynamics and toxicities of methotrexate in healthy and collagen-induced arthritic rats. *Biopharmaceutics and Drug Disposition*, **2013**, 34, 203-14	1.7	18
58	Cholinergic sites in skeletal muscle. II. Interaction of an agonist and two antagonists with the acetylcholine site. *Biochemistry*, **1976**, 15, 3667-71	3.2	17
57	Pharmacodynamic modeling of acute and chronic effects of methylprednisolone on hepatic urea cycle genes in rats. *Gene Regulation and Systems Biology*, **2008**, 2, 1-19	2	17
56	Modeling Combined Immunosuppressive and Anti-inflammatory Effects of Dexamethasone and Naproxen in Rats Predicts the Steroid-Sparing Potential of Naproxen. *Drug Metabolism and Disposition*, **2017**, 45, 834-845	4	16
55	Functional proteomic analysis of corticosteroid pharmacodynamics in rat liver: Relationship to hepatic stress, signaling, energy regulation, and drug metabolism. *Journal of Proteomics*, **2017**, 160, 84-103	3.9	16
54	Tandem analysis of transcriptome and proteome changes after a single dose of corticosteroid: a systems approach to liver function in pharmacogenomics. *OMICS A Journal of Integrative Biology*, **2015**, 19, 80-91	3.8	16
53	The effect of nerve growth factor (NGF) upon axoplasmic transport in sympathetic neurons of the mouse. *Brain Research*, **1974**, 74, 255-67	3.7	16
52	Identification of global transcriptional dynamics. *PLoS ONE*, **2009**, 4, e5992	3.7	16
51	Interrelationships between Infliximab and Recombinant Tumor Necrosis Factor- in Plasma Using Minimal Physiologically Based Pharmacokinetic Models. *Drug Metabolism and Disposition*, **2017**, 45, 790-797	4	15
50	Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part II: Sex Differences in Methylprednisolone Pharmacokinetics and Corticosterone Suppression. *Journal of Pharmacology and Experimental Therapeutics*, **2019**, 370, 327-336	4.7	15
49	Modeling glucocorticoid-mediated fetal lung maturation: II. Temporal patterns of gene expression in fetal rat lung. *Journal of Pharmacology and Experimental Therapeutics*, **2006**, 317, 127-38	4.7	14

48	Biodistribution of etanercept to tissues and sites of inflammation in arthritic rats. *Drug Metabolism and Disposition*, **2015**, 43, 898-907	4	13
47	Importance of replication in analyzing time-series gene expression data: corticosteroid dynamics and circadian patterns in rat liver. *BMC Bioinformatics*, **2010**, 11, 279	3.6	13
46	Comparative analysis of acute and chronic corticosteroid pharmacogenomic effects in rat liver: transcriptional dynamics and regulatory structures. *BMC Bioinformatics*, **2010**, 11, 515	3.6	13
45	Assessing the dynamics of nuclear glucocorticoid-receptor complex: adding flexibility to gene expression modeling. *Journal of Pharmacokinetics and Pharmacodynamics*, **2007**, 34, 333-54	2.7	13
44	Modeling Sex Differences in Anti-inflammatory Effects of Dexamethasone in Arthritic Rats. *Pharmaceutical Research*, **2018**, 35, 203	4.5	13
43	Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part I: Determination and Prediction of Dexamethasone and Methylprednisolone Tissue Binding in the Rat. *Journal of Pharmacology and Experimental Therapeutics*, **2019**, 370, 318-326	4.7	11
42	Mechanistic Multi-Tissue Modeling of Glucocorticoid-Induced Leucine Zipper Regulation: Integrating Circadian Gene Expression with Receptor-Mediated Corticosteroid Pharmacodynamics. *Journal of Pharmacology and Experimental Therapeutics*, **2017**, 363, 45-57	4.7	11
41	Understanding Physiology in the Continuum: Integration of Information from Multiple - Levels. *Frontiers in Pharmacology*, **2017**, 8, 91	5.6	11
40	Modeling pharmacokinetics/pharmacodynamics of abatacept and disease progression in collagen-induced arthritic rats: a population approach. *Journal of Pharmacokinetics and Pharmacodynamics*, **2013**, 40, 701-12	2.7	10
39	Effects of High Fat Feeding on Adipose Tissue Gene Expression in Diabetic Goto-Kakizaki Rats. *Gene Regulation and Systems Biology*, **2015**, 9, 15-26	2	10
38	Physiologically Based Pharmacokinetics of Dexamethasone in Rats. *Drug Metabolism and Disposition*, **2020**, 48, 811-818	4	9
37	Modeling Corticosteroid Pharmacokinetics and Pharmacodynamics, Part III: Estrous Cycle and Estrogen Receptor-Dependent Antagonism of Glucocorticoid-Induced Leucine Zipper (GILZ) Enhancement by Corticosteroids. *Journal of Pharmacology and Experimental Therapeutics*, **2019**, 370, 337-349	4.7	9
36	Diabetes disease progression in Goto-Kakizaki rats: effects of salsalate treatment. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, **2014**, 7, 381-9	3.4	9
35	Tissue-specific gene expression and regulation in liver and muscle following chronic corticosteroid administration. *Gene Regulation and Systems Biology*, **2014**, 8, 75-87	2	9
34	Pharmacokinetic/pharmacodynamic modeling of methylprednisolone effects on iNOS mRNA expression and nitric oxide during LPS-induced inflammation in rats. *Pharmaceutical Research*, **2012**, 29, 2060-9	4.5	9
33	Mechanism-based modeling of nutritional and leptin influences on growth in normal and type 2 diabetic rats. *Journal of Pharmacology and Experimental Therapeutics*, **2009**, 328, 644-51	4.7	9
32	Effect of corticosteroid binding globulin on the pharmacokinetics of prednisolone in rats. *Pharmaceutical Research*, **1995**, 12, 902-4	4.5	9
31	Modeling circadian variability of core-clock and clock-controlled genes in four tissues of the rat. *PLoS ONE*, **2018**, 13, e0197534	3.7	8

30	Meta-modeling of methylprednisolone effects on glucose regulation in rats. *PLoS ONE*, **2013**, 8, e81679	3.7	8
29	Dynamic modeling of methylprednisolone effects on body weight and glucose regulation in rats. *Journal of Pharmacokinetics and Pharmacodynamics*, **2011**, 38, 293-316	2.7	8
28	Effects of high fat feeding on liver gene expression in diabetic goto-kakizaki rats. *Gene Regulation and Systems Biology*, **2012**, 6, 151-68	2	8
27	Quantification of iNOS mRNA with reverse transcription polymerase chain reaction directly from cell lysates. *Nitric Oxide - Biology and Chemistry*, **1999**, 3, 281-91	5	8
26	Modeling Sex Differences in Pharmacokinetics, Pharmacodynamics, and Disease Progression Effects of Naproxen in Rats with Collagen-Induced Arthritis. *Drug Metabolism and Disposition*, **2017**, 45, 484-491	4	7
25	Variability in Zucker diabetic fatty rats: differences in disease progression in hyperglycemic and normoglycemic animals. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, **2014**, 7, 531-41	3.4	7
24	Pharmacokinetics of salsalate and salicylic acid in normal and diabetic rats. *Biopharmaceutics and Drug Disposition*, **2012**, 33, 285-91	1.7	7
23	Characterization and Interspecies Scaling of rhTNF- Pharmacokinetics with Minimal Physiologically Based Pharmacokinetic Models. *Drug Metabolism and Disposition*, **2017**, 45, 798-806	4	6
22	Pathway-Based Analysis of the Liver Response to Intravenous Methylprednisolone Administration in Rats: Acute Versus Chronic Dosing. *Gene Regulation and Systems Biology*, **2019**, 13, 1177625019840282	2	6
21	Receptor/gene/protein-mediated signaling connects methylprednisolone exposure to metabolic and immune-related pharmacodynamic actions in liver. *Journal of Pharmacokinetics and Pharmacodynamics*, **2018**, 45, 557-575	2.7	5
20	Modeling effects of dexamethasone on disease progression of bone mineral density in collagen-induced arthritic rats. *Pharmacology Research and Perspectives*, **2015**, 3, e00169	3.1	5
19	Context specific transcription factor prediction. *Annals of Biomedical Engineering*, **2007**, 35, 1053-67	4.7	5
18	Effect of Disease-Related Changes in Plasma Albumin on the Pharmacokinetics of Naproxen in Male and Female Arthritic Rats. *Drug Metabolism and Disposition*, **2017**, 45, 476-483	4	4
17	Modeling Corticosteroid Pharmacogenomics and Proteomics in Rat Liver. *Journal of Pharmacology and Experimental Therapeutics*, **2018**, 367, 168-183	4.7	4
16	A new symbolic representation for the identification of informative genes in replicated microarray experiments. *OMICS A Journal of Integrative Biology*, **2010**, 14, 239-48	3.8	4
15	Pharmacodynamic Modeling of Acute and Chronic Effects of Methylprednisolone on Hepatic Urea Cycle Genes in Rats. *Gene Regulation and Systems Biology*, **2008**, 2, 117762500800200	2	4
14	Application of scaling factors in simultaneous modeling of microarray data from diverse chips. *Pharmaceutical Research*, **2007**, 24, 643-9	4.5	4
13	Modeling Combined Anti-Inflammatory Effects of Dexamethasone and Tofacitinib in Arthritic Rats. *AAPS Journal*, **2019**, 21, 93	3.7	3

12	Pharmacodynamic/pharmacogenomic modeling of insulin resistance genes in rat muscle after methylprednisolone treatment: exploring regulatory signaling cascades. *Gene Regulation and Systems Biology*, **2008**, 2, 141-61	2	3
11	Effects of High-Fat Feeding on Skeletal Muscle Gene Expression in Diabetic Goto-Kakizaki Rats. *Gene Regulation and Systems Biology*, **2017**, 11, 1177625017710009	2	2
10	Mechanistic population modeling of diabetes disease progression in Goto-Kakizaki rat muscle. *Biopharmaceutics and Drug Disposition*, **2011**, 32, 50-63	1.7	2
9	Comparison of filtration and equilibrium dialysis methods for [3H]imipramine binding to human platelets. *Analytical Biochemistry*, **1984**, 139, 42-57	3.1	2
8	Physiologically Based Pharmacokinetic Modeling Involving Nonlinear Plasma and Tissue Binding: Application to Prednisolone and Prednisone in Rats. *Journal of Pharmacology and Experimental Therapeutics*, **2020**, 375, 385-396	4.7	2
7	Interactions of Tofacitinib and Dexamethasone on Lymphocyte Proliferation. *Pharmaceutical Research*, **2020**, 37, 105	4.5	1
6	Pharmacodynamics and Pharmacogenomics of Corticosteroids: Microarray Studies **2004**, 85-103		1
5	Biochemical analysis of cholinergic mechanisms in skeletal muscle. *International Journal of Biochemistry & Cell Biology*, **1978**, 9, 553-7		1
4	Modeling Pathway Dynamics of the Skeletal Muscle Response to Intravenous Methylprednisolone (MPL) Administration in Rats: Dosing and Tissue Effects. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 759	5.8	1
3	Pathway-level analysis of genome-wide circadian dynamics in diverse tissues in rat and mouse. *Journal of Pharmacokinetics and Pharmacodynamics*, **2021**, 48, 361-374	2.7	0
2	Quantitation of expressed message for inducible nitric oxide synthase. *Methods in Enzymology*, **2002**, 359, 445-52	1.7	
1	Definition of a beta-adrenergic receptor population in skeletal muscle: [125I]hydroxybenzylpindolol binding. *General Pharmacology*, **1980**, 11, 161-164		