Large Animal Models of Heart Failure

Circulation: Heart Failure

2, 262-271

DOI: 10.1161/circheartfailure.108.814459

Citation Report

#	Article	IF	Citations
1	Regeneration Next: Toward Heart Stem Cell Therapeutics. Cell Stem Cell, 2009, 5, 364-377.	5.2	166
2	Global and regional wall motion abnormalities of pacing-induced heart failure assessed by multi-detector row CT: a patient and canine model study. International Journal of Cardiovascular Imaging, 2010, 26, 223-235.	0.7	4
3	The Role of Phosphoâ€Adenosine Monophosphateâ€Activated Protein Kinase and Vascular Endothelial Growth Factor in a Model of Chronic Heart Failure. Artificial Organs, 2010, 34, 969-979.	1.0	8
4	Letter by Schmitto et al Regarding Article â€œLarge Animal Models of Heart Failure: A Critical Link in the Translation of Basic Science to Clinical Practiceâ€• Circulation: Heart Failure, 2010, 3, e3; author reply e4.	1.6	5
5	Response to Letter Regarding Article â€œLarge Animal Models of Heart Failure: A Critical Link in the Translation of Basic Science to Clinical Practiceâ€• Circulation: Heart Failure, 2010, 3, .	1.6	0
6	Microenvironment and Macroenvironment in Hypertensive Hearts. Hypertension, 2010, 55, 1312-1313.	1.3	0
7	Challenges in Using Stem Cells for Cardiac Repair. Science Translational Medicine, 2010, 2, 27ps17.	5.8	92
8	Tissue Engineering in Regenerative Medicine. , 2011, , .		7
9	Targeted Gene Therapy for the Treatment of Heart Failure. Canadian Journal of Cardiology, 2011, 27, 265-283.	0.8	35
10	Development of porcine model of chronic tachycardia-induced cardiomyopathy. International Journal of Cardiology, 2011, 153, 36-41.	0.8	19
11	S100A1 gene therapy for heart failure: A novel strategy on the verge of clinical trials. Journal of Molecular and Cellular Cardiology, 2011, 50, 777-784.	0.9	30
12	Large animal models for cardiac stem cell therapies. Theriogenology, 2011, 75, 1416-1425.	0.9	48
13	In search of new therapeutic targets and strategies for heart failure: recent advances in basic science. Lancet, The, 2011, 378, 704-712.	6.3	257
14	Intramuscular IL-12 Electrogene Therapy for Treatment of Spontaneous Canine Tumors. , 2011, , .		6
15	Adenosine Receptor mRNA Expression in Normal and Failing Minipig Hearts. Journal of Cardiovascular Pharmacology, 2011, 58, 149-156.	0.8	11
16	Differentiation of Arginine Vasopressin Antagonistic Effects by Selective V2 versus Dual V2/V1a Receptor Blockade in a Preclinical Heart Failure Model. American Journal of Therapeutics, 2011, 18, 31-37.	0.5	16
17	Left ventricular remodeling in swine after myocardial infarction: a transcriptional genomics approach. Basic Research in Cardiology, 2011, 106, 1269-1281.	2.5	23
18	Recent advances in the use of Sus scrofa (pig) as a model system for proteomic studies. Proteomics, 2011, 11, 776-793.	1.3	156

#	Article	IF	Citations
19	Modelâ€specific selection of molecular targets for heart failure gene therapy. Journal of Gene Medicine, 2011, 13, 573-586.	1.4	10
20	Selection of reference genes for normalization of real-time PCR data in minipig heart failure model and evaluation of TNF-Î± mRNA expression. Journal of Biotechnology, 2011, 153, 92-99.	1.9	50
21	Targeted Imaging of the Spatial and Temporal Variation of Matrix Metalloproteinase Activity in a Porcine Model of Postinfarct Remodeling. Circulation: Cardiovascular Imaging, 2011, 4, 381-391.	1.3	92
22	An Ovine Model of Postinfarction Dilated Cardiomyopathy in Animals with Highly Variable Coronary Anatomy. ILAR Journal, 2011, 52, E16-E21.	1.8	16
23	Bovine Model of Doxorubicin-Induced Cardiomyopathy. Journal of Biomedicine and Biotechnology, 2011, 2011, 1-11.	3.0	17
24	Cardiac AAV9-S100A1 Gene Therapy Rescues Post-Ischemic Heart Failure in a Preclinical Large Animal Model. Science Translational Medicine, 2011, 3, 92ra64.	5.8	197
25	Low-intensity interval exercise training attenuates coronary vascular dysfunction and preserves Ca²⁺-sensitive K⁺ current in miniature swine with LV hypertrophy. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H1687-H1694.	1.5	29
26	Development of a preclinical model of ischemic cardiomyopathy in swine. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H530-H537.	1.5	20
27	Animal Models of Heart Failure. Circulation Research, 2012, 111, 131-150.	2.0	378
28	Brain Growth of the Domestic Pig <i>(Sus scrofa)</i> from 2 to 24 Weeks of Age: A Longitudinal MRI Study. Developmental Neuroscience, 2012, 34, 291-298.	1.0	160
29	Magnetic resonance imaging of the neonatal piglet brain. Pediatric Research, 2012, 71, 179-184.	1.1	25
30	Attenuated Ventricular Î²-Adrenergic Response and Reduced Repolarization Reserve in a Rabbit Model of Chronic Heart Failure. Journal of Cardiovascular Pharmacology, 2012, 59, 142-150.	0.8	9
31	Pig proteomics: A review of a species in the crossroad between biomedical and food sciences. Journal of Proteomics, 2012, 75, 4296-4314.	1.2	70
32	Regional evidence of modulation of cardiac adiponectin level in dilated cardiomyopathy: pilot study in a porcine animal model. Cardiovascular Diabetology, 2012, 11, 143.	2.7	10
33	The zebrafish as a novel animal model to study the molecular mechanisms of mechano-electrical feedback in the heart. Progress in Biophysics and Molecular Biology, 2012, 110, 154-165.	1.4	31
34	Isolation, Characterization and Differentiation Potential of Cardiac Progenitor Cells in Adult Pigs. Stem Cell Reviews and Reports, 2012, 8, 706-719.	5.6	4
35	Novel Approaches to Deliver Molecular Therapeutics in Cardiac Disease Using Adeno-Associated Virus Vectors. , 2012, , 391-458.		1
36	Fetal Stem Cells in Farm Animals: Applications in Health and Production. Agricultural Research, 2012, 1, 67-77.	0.9	19

#	Article	IF	Citations
37	Anti-inflammatory mechanisms and therapeutic opportunities in myocardial infarct healing. Journal of Molecular Medicine, 2012, 90, 361-369.	1.7	57
38	Alteration of LV end-diastolic volume by controlling the power of the continuous-flow LVAD, so it is synchronized with cardiac beat: development of a native heart load control system (NHLCS). Journal of Artificial Organs, 2012, 15, 128-133.	0.4	36
40	Change in myocardial oxygen consumption employing continuous-flow LVAD with cardiac beat synchronizing system, in acute ischemic heart failure models. Journal of Artificial Organs, 2013, 16, 119-128.	0.4	20
41	Development of a novel drive mode to prevent aortic insufficiency during continuous-flow LVAD support by synchronizing rotational speed with heartbeat. Journal of Artificial Organs, 2013, 16, 129-137.	0.4	40
42	Right Ventricular Pacing With Mechanical Dyssynchrony Causes Apoptosis Interruptus and Calcium Mishandling. Canadian Journal of Cardiology, 2013, 29, 510-518.	0.8	10
43	Prophylactic and therapeutic effects of garlic extract onNerium oleander-induced arrhythmia: a new approach to antiarrhythmic therapy in an ovine model. Clinical Toxicology, 2013, 51, 737-747.	0.8	8
44	Prophylactic amiodarone and lidocaine improve survival in an ovine model of large size myocardial infarction. Journal of Surgical Research, 2013, 185, 152-158.	0.8	13
45	The Lambeth Conventions (II): Guidelines for the study of animal and human ventricular and supraventricular arrhythmias. , 2013, 139, 213-248.		246
46	Apoptotic transcriptional profile remains activated in late remodeled left ventricle after myocardial infarction in swine infarcted hearts with preserved ejection fraction. Pharmacological Research, 2013, 70, 41-49.	3.1	6
47	A translational approach in using cell sheet fragments of autologous bone marrow-derived mesenchymal stem cells for cellular cardiomyoplasty in a porcine model. Biomaterials, 2013, 34, 4582-4591.	5.7	39
48	Perspective and challenges of mesenchymal stem cells for cardiovascular regeneration. Expert Review of Cardiovascular Therapy, 2013, 11, 505-517.	0.6	47
49	S100A1 Gene Therapy in Small and Large Animals. Methods in Molecular Biology, 2013, 963, 407-420.	0.4	8
50	Efficient plasmid-mediated gene transfection of ovine bone marrow mesenchymal stromal cells. Cytotherapy, 2013, 15, 163-170.	0.3	12
51	Integrating the Myocardial Matrix Into Heart Failure Recognition and Management. Circulation Research, 2013, 113, 725-738.	2.0	67
52	A Nonthoracotomy Myocardial Infarction Model in an Ovine Using Autologous Platelets. BioMed Research International, 2013, 2013, 1-7.	0.9	13
53	Development of a Closed Chest Model of Chronic Myocardial Infarction in Swine: Magnetic Resonance Imaging and Pathological Evaluation. ISRN Cardiology, 2013, 2013, 1-8.	1.6	21
54	In Vitro Comparison of Doppler and Catheter-Measured Pressure Gradients in 3D Models of Mitral Valve Calcification. Journal of Biomechanical Engineering, 2013, 135, 94502.	0.6	6
55	A New Dual-Promoter System for Cardiomyocyte-Specific Conditional Induction of Apoptosis. BioMed Research International, 2013, 2013, 1-9.	0.9	4

#	Article	IF	Citations
56	Benefits of Aggressive Medical Management in a Bovine Model of Chronic Ischemic Heart Failure. ASAIO Journal, 2013, 59, 221-229.	0.9	11
57	Heart Failure Gene Therapy. Circulation Research, 2013, 113, 792-809.	2.0	61
58	Zebrafish Heart Failure Models for the Evaluation of Chemical Probes and Drugs. Assay and Drug Development Technologies, 2013, 11, 561-572.	0.6	36
59	Validation of admittance computed left ventricular volumes against realâ€time threeâ€dimensional echocardiography in the porcine heart. Experimental Physiology, 2013, 98, 1092-1101.	0.9	13
60	Promoting blood vessel growth in ischemic diseases: challenges in translating preclinical potential into clinical success. DMM Disease Models and Mechanisms, 2013, 6, 312-22.	1.2	76
61	Change of Coronary Flow by Continuous-Flow Left Ventricular Assist Device With Cardiac Beat Synchronizing System (Native Heart Load Control System) in Acute Ischemic Heart Failure Model. Circulation Journal, 2013, 77, 995-1000.	0.7	21
62	Endogenous cardiac stem cells for the treatment of heart failure. Stem Cells and Cloning: Advances and Applications, 2013, 6, 1.	2.3	9
63	Disease Models for the Genetic Cardiac Diseases. , 0, , .		0
64	A Needleless Liquid Jet Injection Delivery Method for Cardiac Gene Therapy: a Comparative Evaluation Versus Standard Routes of Delivery Reveals Enhanced Therapeutic Retention and Cardiac Specific Gene Expression. Journal of Cardiovascular Translational Research, 2014, 7, 756-767.	1.1	21
65	A big heart. Science-Business EXchange, 2014, 7, 576-576.	0.0	0
66	Optimal Management of the Critically Ill: Anaesthesia, Monitoring, Data Capture, and Point-of-Care Technological Practices in Ovine Models of Critical Care. BioMed Research International, 2014, 2014, 1-17.	0.9	19
67	Cardiac regeneration using pluripotent stem cellsâ€"Progression to large animal models. Stem Cell Research, 2014, 13, 654-665.	0.3	87
68	Therapeutic safety of high myocardial expression levels of the molecular inotrope S100A1 in a preclinical heart failure model. Gene Therapy, 2014, 21, 131-138.	2.3	36
69	Gene reprogramming in exercise-induced cardiac hypertrophy in swine: A transcriptional genomics approach. Journal of Molecular and Cellular Cardiology, 2014, 77, 168-174.	0.9	10
70	Cyclin A2 Induces Cardiac Regeneration After Myocardial Infarction Through Cytokinesis of Adult Cardiomyocytes. Science Translational Medicine, 2014, 6, 224ra27.	5.8	97
71	Echocardiographic assessment of left ventricular function in mitral regurgitation. Cardiovascular Endocrinology, 2014, 3, 9-14.	0.8	0
72	Pig models for the human heart failure syndrome. Cardiovascular Endocrinology, 2014, 3, 15-18.	0.8	2
73	Mâ€Atrial Natriuretic Peptide and Nitroglycerin in a Canine Model of Experimental Acute Hypertensive Heart Failure: Differential Actions of 2 cGMP Activating Therapeutics. Journal of the American Heart Association, 2014, 3, e000206.	1.6	30

#	Article	IF	Citations
74	Local Hydrogel Release of Recombinant TIMP-3 Attenuates Adverse Left Ventricular Remodeling After Experimental Myocardial Infarction. Science Translational Medicine, 2014, 6, 223ra21.	5.8	94
75	Human embryonic-stem-cell-derived cardiomyocytes regenerate non-human primate hearts. Nature, 2014, 510, 273-277.	13.7	1,194
76	The use of gadolinium-carbon nanostructures to magnetically enhance stem cell retention for cellular cardiomyoplasty. Biomaterials, 2014, 35, 720-726.	5.7	24
77	Small and large animal models in cardiac contraction research: Advantages and disadvantages. , 2014, 141, 235-249.		352
78	Top-down Proteomics Reveals Concerted Reductions in Myofilament and Z-disc Protein Phosphorylation after Acute Myocardial Infarction. Molecular and Cellular Proteomics, 2014, 13, 2752-2764.	2.5	96
79	Dendrimer Brain Uptake and Targeted Therapy for Brain Injury in a Large Animal Model of Hypothermic Circulatory Arrest. ACS Nano, 2014, 8, 2134-2147.	7.3	127
80	Immunohistochemical toolkit for tracking and quantifying xenotransplanted human stem cells. Regenerative Medicine, 2014, 9, 437-452.	0.8	39
81	Construction of a cDNA library for miniature pig mandibular deciduous molars. BMC Developmental Biology, 2014, 14, 16.	2.1	18
82	Injectable Cell Constructs Fabricated via Culture on a Thermoresponsive Methylcellulose Hydrogel System for the Treatment of Ischemic Diseases. Advanced Healthcare Materials, 2014, 3, 1133-1148.	3.9	29
83	Alternation of left ventricular load by a continuous-flow left ventricular assist device with a native heart load control system inÂaÂchronic heart failure model. Journal of Thoracic and Cardiovascular Surgery, 2014, 148, 698-704.	0.4	18
84	Proteomics in heart failure: top-down or bottom-up?. Pflugers Archiv European Journal of Physiology, 2014, 466, 1199-1209.	1.3	46
85	Feasibility of allogeneic stem cells for heart regeneration. , 2014, , 207-235.		0
86	Cardioprotection in ischaemiaâ€“reperfusion injury: novel mechanisms and clinical translation. Journal of Physiology, 2015, 593, 3773-3788.	1.3	35
87	Cardiac stem cell treatment in myocardial infarction: protocol for a systematic review and metaâ€analysis of preclinical studies. Evidence-based Preclinical Medicine, 2015, 2, 10-15.	0.9	3
88	Bedsideâ€“to-Bench Translational Research for Chronic Heart Failure: Creating an Agenda for Clients who do Not Meet Trial Enrollment Criteria. Clinical Medicine Insights: Cardiology, 2015, 9s1, CMC.S18737.	0.6	5
89	Increasing venoarterial extracorporeal membrane oxygenation flow negatively affects left ventricular performance in a porcine model of cardiogenic shock. Journal of Translational Medicine, 2015, 13, 266.	1.8	108
90	Sex differences in porcine left ventricular myocardial remodeling due to right ventricular pacing. Biology of Sex Differences, 2015, 6, 32.	1.8	4
91	Extracellular Matrix Communication and Turnover in Cardiac Physiology and Pathology. , 2015, 5, 687-719.		93

#	Article	IF	Citations
92	Realâ€time cardiac metabolism assessed with hyperpolarized [1â€¹³C]acetate in a largeâ€animal model. Contrast Media and Molecular Imaging, 2015, 10, 194-202.	0.4	44
93	Identification of General and Heart-Specific miRNAs in Sheep (Ovis aries). PLoS ONE, 2015, 10, e0143313.	1.1	13
94	Cardiovascular imaging: what have we learned from animal models?. Frontiers in Pharmacology, 2015, 6, 227.	1.6	20
95	Genetics of Human and Canine Dilated Cardiomyopathy. International Journal of Genomics, 2015, 2015, 1-13.	0.8	33
96	Finding the Rhythm of Sudden Cardiac Death. Circulation Research, 2015, 116, 1989-2004.	2.0	68
97	Ischemia-Induced Model of Diastolic Dysfunction in Sheep. Journal of Investigative Surgery, 2015, 28, 71-76.	0.6	2
98	Allogeneic cardiac stem cell administration for acute myocardial infarction. Expert Review of Cardiovascular Therapy, 2015, 13, 285-299.	0.6	18
99	Animal and in silico models for the study of sarcomeric cardiomyopathies. Cardiovascular Research, 2015, 105, 439-448.	1.8	45
100	Human Induced Pluripotent Stem Cellâ€“Derived Cardiomyocytes. Circulation Research, 2015, 117, 80-88.	2.0	372
101	Intracoronary Cytoprotective Gene Therapy. Journal of the American College of Cardiology, 2015, 66, 139-153.	1.2	58
102	Increased intraventricular pressures are as harmful as the electrophysiological substrate of heart failure in favoring sustained reentry in the swine heart. Heart Rhythm, 2015, 12, 2172-2183.	0.3	17
103	Animal Models of Disease States. , 2015, , 307-343.		0
104	Visualization of Injectable Hydrogels Using Chemical Exchange Saturation Transfer MRI. ACS Biomaterials Science and Engineering, 2015, 1, 227-237.	2.6	19
105	The pathophysiology of pulmonary hypertension in left heart disease. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 309, L924-L941.	1.3	52
106	Cardiac stem cells: translation to human studies. Biophysical Reviews, 2015, 7, 127-139.	1.5	13
107	A role for membrane shape and information processing in cardiac physiology. Pflugers Archiv European Journal of Physiology, 2015, 467, 167-173.	1.3	13
108	Isolated effect of geometry on mitral valve function forin silicomodel development. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 618-627.	0.9	8
109	Insights Into RNA Transcriptome Profiling of Cardiac Tissue in Obesity and Hypertension Conditions. Journal of Cellular Physiology, 2015, 230, 959-968.	2.0	13

#	Article	IF	Citations
110	â€œPacing Bigeminalâ€• International Heart Journal, 2016, 57, 747-752.	0.5	2
111	Patterns of arterial vascularization in swine hearts. Pesquisa Veterinaria Brasileira, 2016, 36, 417-422.	0.5	1
112	Models to Investigate Cardiac Metabolism. , 2016, , 103-122.		2
113	Engineered Swine Models of Cancer. Frontiers in Genetics, 2016, 7, 78.	1.1	56
114	What Is the Optimal Setting for a Continuousâ€Flow Left Ventricular Assist Device in Severe Mitral Regurgitation?. Artificial Organs, 2016, 40, 1039-1045.	1.0	8
115	Injectable Hydrogels for Cardiac Tissue Regeneration Post-Myocardial Infarction. , 2016, , 377-414.		2
116	Biomechanical Properties and Microstructure of Heart Chambers: A Paired Comparison Study in an Ovine Model. Annals of Biomedical Engineering, 2016, 44, 3266-3283.	1.3	17
117	Innovations in Molecular Mechanisms and Tissue Engineering. Pancreatic Islet Biology, 2016, , .	0.1	0
118	Common swine models of cardiovascular disease for research and training. Lab Animal, 2016, 45, 67-74.	0.2	34
119	Translation of Cardiac Myosin Activation With 2-Deoxy-ATP to Treat Heart Failure Via an Experimental Ribonucleotide Reductase-Based Gene Therapy. JACC Basic To Translational Science, 2016, 1, 666-679.	1.9	7
120	Isolation of Pig Bone Marrow-Derived Mesenchymal Stem Cells. Methods in Molecular Biology, 2016, 1416, 225-232.	0.4	11
121	Comparative aspects of rodent and nonrodent animal models for mechanistic and translational diabetes research. Theriogenology, 2016, 86, 406-421.	0.9	53
122	Cardiac Myosin Activation with Gene Therapy Produces Sustained Inotropic Effects and May Treat Heart Failure with Reduced Ejection Fraction. Handbook of Experimental Pharmacology, 2016, 243, 447-464.	0.9	3
124	Large animal models of cardiovascular disease. Cell Biochemistry and Function, 2016, 34, 113-132.	1.4	105
125	Current Status of Genome Editing in Cardiovascular Medicine. , 2016, , 107-126.		1
127	Minimally Invasive Implantation: The Procedure of Choice!. Operative Techniques in Thoracic and Cardiovascular Surgery, 2016, 21, 65-78.	0.2	4
128	Inducible NO synthase is constitutively expressed in porcine myocardium and its level decreases along with tachycardia-induced heart failure. Cardiovascular Pathology, 2016, 25, 3-11.	0.7	8
129	Response to exercise and mechanical efficiency in nonâ€ischaemic stunning, induced by shortâ€term rapid pacing in dogs: a role for calcium?. Acta Physiologica, 2017, 219, 768-780.	1.8	4

#	Article	IF	Citations
130	Optimized method for isolating highly purified and functional porcine aortic endothelial and smooth muscle cells. Journal of Cellular Physiology, 2017, 232, 3139-3145.	2.0	8
131	Myocardial fibrosis: biomedical research from bench to bedside. European Journal of Heart Failure, 2017, 19, 177-191.	2.9	280
132	Multiparametric CMR imaging of infarct remodeling in a percutaneous reperfused Yucatan miniâ€pig model. NMR in Biomedicine, 2017, 30, e3693.	1.6	9
133	Distinct sequences and post-translational modifications in cardiac atrial and ventricular myosin light chains revealed by top-down mass spectrometry. Journal of Molecular and Cellular Cardiology, 2017, 107, 13-21.	0.9	28
135	Neuroanatomy of the Pig Cardiac Ventricles. A Stereomicroscopic, Confocal and Electron Microscope Study. Anatomical Record, 2017, 300, 1756-1780.	0.8	24
136	Cryoinjury-induced acute myocardial infarction model and ameroid constrictor-induced ischemic heart disease model in adult micro-mini pigs for preclinical studies. Translational Medicine Communications, 2017, 2, .	0.5	4
137	Use of Adeno-Associated Virus Vector for Cardiac Gene Delivery in Large-Animal Surgical Models of Heart Failure. Human Gene Therapy Clinical Development, 2017, 28, 157-164.	3.2	27
138	A Hyper-Crosslinked Carbohydrate Polymer Scaffold Facilitates Lineage Commitment and Maintains a Reserve Pool of Proliferating Cardiovascular Progenitors. Transplantation Direct, 2017, 3, e153.	0.8	8
139	Methods To Assess Shear-Thinning Hydrogels for Application As Injectable Biomaterials. ACS Biomaterials Science and Engineering, 2017, 3, 3146-3160.	2.6	261
140	Can dendrimer based nanoparticles fight neurodegenerative diseases? Current situation versus other established approaches. Progress in Polymer Science, 2017, 64, 23-51.	11.8	54
141	Protein Kinase C Inhibition With Ruboxistaurin Increases Contractility and Reduces Heart Size in a Swine Model of HeartÂFailure With Reduced Ejection Fraction. JACC Basic To Translational Science, 2017, 2, 669-683.	1.9	8
142	Large animal model of functional tricuspid regurgitation in pacing induced end-stage heart failure. Interactive Cardiovascular and Thoracic Surgery, 2017, 24, 905-910.	0.5	20
143	Analysis of Serum Cholesterol Efflux Capacity in a Minipig Model of Nonischemic Heart Failure. Journal of Atherosclerosis and Thrombosis, 2017, 24, 853-862.	0.9	2
144	An Interposed Pad in Openâ€Chest Echocardiographic Porcine Scans for Mimicking Ultrasound Signal Attenuation in a Human Chest. Journal of Ultrasound in Medicine, 2018, 37, 501-509.	0.8	5
145	Genome Editing and Induced Pluripotent Stem Cell Technologies for Personalized Study of Cardiovascular Diseases. Current Cardiology Reports, 2018, 20, 38.	1.3	1
146	Comprehensive Characterization of Swine Cardiac Troponin T Proteoforms by Top-Down Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 1284-1294.	1.2	15
147	Preclinical Studies of Stem Cell Therapy for Heart Disease. Circulation Research, 2018, 122, 1006-1020.	2.0	104
148	Tachycardia-Induced Cardiomyopathy As a Chronic Heart Failure Model in Swine. Journal of Visualized Experiments, 2018, , .	0.2	8

#	Article	IF	Citations
149	Size-Dependent Ability of Liposomes to Accumulate in the Ischemic Myocardium and Protect the Heart. Journal of Cardiovascular Pharmacology, 2018, 72, 143-152.	0.8	12
150	Measurement Technologies for Heart Valve Function. , 2018, , 115-149.		1
151	Clinical overview of the HVAD: a centrifugal continuous-flow ventricular assist device with magnetic and hydrodynamic bearings including lateral implantation strategies. Journal of Thoracic Disease, 2018, 10, S1785-S1789.	0.6	13
152	How to do it: tips and tricks of minimal-invasive HVADÂ® implantationâ€"the lateral approach. Journal of Thoracic Disease, 2018, 10, S1829-S1833.	0.6	7
153	Electrocardiographic dynamic development and heart rate variability in lambs during the neonatal period. Journal of Applied Animal Research, 2018, 46, 1137-1143.	0.4	2
154	Agricultural Animals as Biomedical Models: Occupational Health and Safety Considerations. ILAR Journal, 2018, 59, 161-167.	1.8	6
155	Scar Size and Other Parameters for Tracking Left Ventricular Dysfunction after Induction of Myocardial Infarcts in Sheep (Ovis aries). Comparative Medicine, 2018, 68, 215-220.	0.4	1
156	Cardiosphere-derived cells suppress allogeneic lymphocytes by production of PGE2 acting via the EP4 receptor. Scientific Reports, 2018, 8, 13351.	1.6	11
158	Animal Models and Cardiac Extracellular Matrix Research. Advances in Experimental Medicine and Biology, 2018, 1098, 45-58.	0.8	4
159	A Miniaturized, Programmable Pacemaker for Long-Term Studies in the Mouse. Circulation Research, 2018, 123, 1208-1219.	2.0	18
160	Epigenetic Treatment Approaches to Cardiovascular Disease. , 2018, , 607-641.		1
161	Canine Model of Pacing-Induced Heart Failure. Methods in Molecular Biology, 2018, 1816, 309-325.	0.4	6
163	Zebrafish heart failure models: opportunities and challenges. Amino Acids, 2018, 50, 787-798.	1.2	28
164	Remote Left Ventricular Hemodynamic Monitoring Using a Novel Intracardiac Sensor. Circulation: Cardiovascular Interventions, 2018, 11, e006258.	1.4	7
165	Decreased contractility and altered responses to inotropic agents in myocytes from tachypacing-induced heart failure canines. Journal of Pharmacological and Toxicological Methods, 2018, 93, 98-107.	0.3	16
166	Large Animal Models for the Clinical Application of Human Induced Pluripotent Stem Cells. Stem Cells and Development, 2019, 28, 1288-1298.	1.1	15
168	Injectable Hydrogels to Treat Myocardial Infarction. , 2019, , 185-206.		3
169	ETV2/ER71 Transcription Factor as a Therapeutic Vehicle for Cardiovascular Disease. Theranostics, 2019, 9, 5694-5705.	4.6	14

#	Article	IF	Citations
170	Large Animal Models of Heart Failure With Reduced Ejection Fraction (HFrEF). Frontiers in Cardiovascular Medicine, 2019, 6, 117.	1.1	35
171	Translational Models of Arrhythmia Mechanisms and Susceptibility: Success and Challenges of Modeling Human Disease. Frontiers in Cardiovascular Medicine, 2019, 6, 135.	1.1	13
172	Two-Dimensional Culture Systems to Enable Mechanics-Based Assays for Stem Cell-Derived Cardiomyocytes. Experimental Mechanics, 2019, 59, 1235-1248.	1.1	10
173	Comprehensive cardiac phenotyping in large animals: comparison of pressureâ€“volume analysis and cardiac magnetic resonance imaging in pig post-myocardial infarction systolic heart failure. International Journal of Cardiovascular Imaging, 2019, 35, 1691-1699.	0.7	5
174	Modeling heart failure in animal models for novel drug discovery and development. Expert Opinion on Drug Discovery, 2019, 14, 355-363.	2.5	5
175	A mouse model of heart failure exhibiting pulmonary edema and pleural effusion: Useful for testing new drugs. Journal of Pharmacological and Toxicological Methods, 2019, 96, 78-86.	0.3	4
176	A Large Animal Model of Right Ventricular Failure due to Chronic Thromboembolic Pulmonary Hypertension: A Focus on Function. Frontiers in Cardiovascular Medicine, 2019, 5, 189.	1.1	9
177	Impaired Baroreflex Function in an Ovine Model of Chronic Heart Failure Induced by Multiple Coronary Microembolizations. Frontiers in Physiology, 2019, 10, 1420.	1.3	3
178	Engineering hiPSC cardiomyocyte inÂvitro model systems for functional and structural assessment. Progress in Biophysics and Molecular Biology, 2019, 144, 3-15.	1.4	19
179	[¹⁸F]FDG cardiac PET imaging in a canine model of radiation-induced cardiovascular disease associated with breast cancer radiotherapy. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H586-H595.	1.5	12
180	Cardiovascular disease models: A game changing paradigm in drug discovery and screening. Biomaterials, 2019, 198, 3-26.	5.7	149
181	Unlocking Personalized Biomedicine and Drug Discovery with Human Induced Pluripotent Stem Cellâ€“Derived Cardiomyocytes: Fit for Purpose or Forever Elusive?. Annual Review of Pharmacology and Toxicology, 2020, 60, 529-551.	4.2	28
182	Ventricular Flow Field Visualization During Mechanical Circulatory Support in the Assisted Isolated Beating Heart. Annals of Biomedical Engineering, 2020, 48, 794-804.	1.3	13
183	Establishment of adult right ventricle failure in ovine using a graded, animalâ€specific pulmonary artery constriction model. Animal Models and Experimental Medicine, 2020, 3, 182-192.	1.3	9
184	Animal Surgery and Care of Animals. , 2020, , 899-915.		0
185	How curricular changes influence medical studentsâ€™ perceptions of basic science: A pilot study. PLoS ONE, 2020, 15, e0236365.	1.1	7
186	Chronic stable heart failure model in ovine species. Artificial Organs, 2020, 44, 947-954.	1.0	1
187	Searching for Preclinical Models of Acute Decompensated Heart Failure: a Concise Narrative Overview and a Novel Swine Model. Cardiovascular Drugs and Therapy, 2022, 36, 727-738.	1.3	2

#	Article	IF	Citations
188	Species differences in cardiovascular physiology that affect pharmacology and toxicology. Current Opinion in Toxicology, 2020, 23-24, 106-113.	2.6	4
189	Optimizing the Use of iPSC-CMs for Cardiac Regeneration in Animal Models. Animals, 2020, 10, 1561.	1.0	8
190	Cardiac output improvement by pecavaptan: a novel dualâ€acting vasopressin V1a/V2 receptor antagonist in experimental heart failure. European Journal of Heart Failure, 2020, 23, 743-750.	2.9	16
191	Development of a pro-arrhythmic ex vivo intact human and porcine model: cardiac electrophysiological changes associated with cellular uncoupling. Pflugers Archiv European Journal of Physiology, 2020, 472, 1435-1446.	1.3	5
192	Dysregulation of Calcium Handling in Duchenne Muscular Dystrophy-Associated Dilated Cardiomyopathy: Mechanisms and Experimental Therapeutic Strategies. Journal of Clinical Medicine, 2020, 9, 520.	1.0	43
193	Distinct hemodynamic responses to (pyr)apelin-13 in large animal models. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H747-H755.	1.5	3
194	Human Induced Pluripotent Stem Cells Derived from a Cardiac Somatic Source: Insights for an In-Vitro Cardiomyocyte Platform. International Journal of Molecular Sciences, 2020, 21, 507.	1.8	12
195	Quantitative proteomic and phosphoproteomic profiling of ischemic myocardial stunning in swine. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 318, H1256-H1271.	1.5	4
196	Tricuspid Chordae Tendineae Mechanics: Insertion Site, Leaflet, and Size-Specific Analysis and Constitutive Modelling. Experimental Mechanics, 2021, 61, 19-29.	1.1	11
197	Highly specific, quantitative polymerase chain reaction probe for the quantification of human cells in cynomolgus monkeys. Drug Metabolism and Pharmacokinetics, 2021, 36, 100359.	1.1	3
198	CDR132L improves systolic and diastolic function in a large animal model of chronic heart failure. European Heart Journal, 2021, 42, 192-201.	1.0	70
199	Porcine Model of the Arterial Switch Operation: Implications for Unique Strategies in the Management of Hypoplastic Left Ventricles. Pediatric Cardiology, 2021, 42, 501-509.	0.6	3
200	Investigating cardiac stimulation limits of MRI gradient coils using electromagnetic and electrophysiological simulations in human and canine body models. Magnetic Resonance in Medicine, 2021, 85, 1047-1061.	1.9	13
201	Animal models of disease states. , 2021, , 371-420.		0
202	Diffuse myocardial fibrosis: mechanisms, diagnosis and therapeutic approaches. Nature Reviews Cardiology, 2021, 18, 479-498.	6.1	128
203	Current Status and Limitations of Myocardial Infarction Large Animal Models in Cardiovascular Translational Research. Frontiers in Bioengineering and Biotechnology, 2021, 9, 673683.	2.0	23
204	Regulatory Role of Sex Hormones in Cardiovascular Calcification. International Journal of Molecular Sciences, 2021, 22, 4620.	1.8	18
205	Considerations to Model Heart Disease in Women with Preeclampsia and Cardiovascular Disease. Cells, 2021, 10, 899.	1.8	7

#	Article	IF	Citations
206	Preconditioning or Postconditioning with 8-Br-cAMP-AM Protects the Heart against Regional Ischemia and Reperfusion: A Role for Mitochondrial Permeability Transition. Cells, 2021, 10, 1223.	1.8	12
207	A kinematic modelâ€based analysis framework for 3D Cineâ€DENSEâ€”validation with an axially compressed gel phantom and application in sheep before and after anteroâ€apical myocardial infarction. Magnetic Resonance in Medicine, 2021, 86, 2105-2121.	1.9	0
208	Inflammatory Responses with Left Ventricular Compromise after Induction of Myocardial Infarcts in Sheep (Ovis aries). Comparative Medicine, 2021, 71, 240-246.	0.4	0
209	Catabolic/Anabolic Imbalance Is Accompanied by Changes of Left Ventricular Steroid Nuclear Receptor Expression in Tachycardia-Induced Systolic Heart Failure in Male Pigs. Journal of Cardiac Failure, 2021, 27, 682-692.	0.7	3
210	A Porcine Model of Heart Failure With Preserved Ejection Fraction Induced by Chronic Pressure Overload Characterized by Cardiac Fibrosis and Remodeling. Frontiers in Cardiovascular Medicine, 2021, 8, 677727.	1.1	12
211	The sheep as a pre-clinical model for testing intra-aortic percutaneous mechanical circulatory support devices. International Journal of Artificial Organs, 2021, 44, 703-710.	0.7	3
212	Epigenetic clock and DNA methylation analysis of porcine models of aging and obesity. GeroScience, 2021, 43, 2467-2483.	2.1	27
213	Pharmacological inhibition of arachidonate 12-lipoxygenase ameliorates myocardial ischemia-reperfusion injury in multiple species. Cell Metabolism, 2021, 33, 2059-2075.e10.	7.2	35
214	Different Passive Viscoelastic Properties Between the Left and Right Ventricles in Healthy Adult Ovine. Journal of Biomechanical Engineering, 2021, 143, .	0.6	10
215	Therapeutic Angiogenesis: Translational and Clinical Experience. Reference Series in Biomedical Engineering, 2021, , 101-144.	0.1	0
216	Use of Large Animal Models for Regenerative Medicine. SpringerBriefs in Stem Cells, 2013, , 29-42.	0.1	1
218	Targeted Injection of a Truncated Form of Tissue Inhibitor of Metalloproteinase 3 Alters Postâ€“Myocardial Infarction Remodeling. Journal of Pharmacology and Experimental Therapeutics, 2020, 375, 296-307.	1.3	7
219	The failing heart utilizes 3-hydroxybutyrate as a metabolic stress defense. JCI Insight, 2019, 4, .	2.3	218
220	Transplantation in Miniature Swine. , 2011, , 357-372.		22
221	The cardiac enigma: current conundrums in heart failure research. F1000Research, 2016, 5, 72.	0.8	9
222	A Protocol for Collecting Human Cardiac Tissue for Research. The VAD Journal: the Journal of Mechanical Assisted Circulation and Heart Failure, 2016, 2, .	2.0	19
223	Porcine Adipose Tissue-Derived Mesenchymal Stem Cells Retain Their Proliferative Characteristics, Senescence, Karyotype and Plasticity after Long-Term Cryopreservation. PLoS ONE, 2013, 8, e67939.	1.1	30
224	Novel Porcine Model of Acute Severe Cardiogenic Shock Developed by Upper-Body Hypoxia. Physiological Research, 2016, 65, 711-715.	0.4	12

#	Article	IF	Citations
225	Activity of the Enzyme Gamma-Glutamyl Transferase (GGT) as a Prognostic Tool for Heart Failures. Advances in Bioscience and Biotechnology (Print), 2017, 08, 324-341.	0.3	1
226	The cardiac molecular setting of metabolic syndrome in pigs reveals disease susceptibility and suggests mechanisms that exacerbate COVID-19 outcomes in patients. Scientific Reports, 2021, 11, 19752.	1.6	1
227	Use of Large Animal and Nonhuman Primate Models for Cell Therapy and Tissue Engineering. , 2011, , 393-413.		0
228	Isolation, Characterization, and Spatial Distribution of Cardiac Progenitor Cells in the Sheep Heart. Journal of Clinical & Experimental Cardiology, 0, , .	0.0	16
230	Cellular Approaches to Adult Mammalian Heart Regeneration. Pancreatic Islet Biology, 2016, , 101-119.	0.1	0
231	AvaliaÃ§Ã£o cardiovascular do neonato ovino. Veterinaria E Zootecnia, 2018, 25, 67-78.	0.0	0
232	Main histological parameters to be evaluated in an experimental model of myocardial infarct treated by stem cells on pigs. PeerJ, 2019, 7, e7160.	0.9	1
233	Heart failure supported by veno-arterial extracorporeal membrane oxygenation (ECMO): a systematic review of pre-clinical models. Intensive Care Medicine Experimental, 2020, 8, 16.	0.9	7
234	Therapeutic Angiogenesis: Translational and Clinical Experience. , 2021, , 1-45.		1
235	Animal Models in Toxicologic Research: Dog. , 2022, , 721-750.		1
236	Hemodynamic Adaptation of Heart Failure to Percutaneous Venoarterial Extracorporeal Circulatory Supports. Physiological Research, 2020, 69, 739-757.	0.4	4
237	An overview on development and application of an experimental platform for quantitative cardiac imaging research in rabbit models of myocardial infarction. Quantitative Imaging in Medicine and Surgery, 2014, 4, 358-75.	1.1	8
238	Reference values for echocardiographic parameters and indexes of left ventricular function in healthy, young adult sheep used in translational research: comparison with standardized values in humans. International Journal of Clinical and Experimental Medicine, 2011, 4, 258-64.	1.3	20
239	Isolation, Characterization, and Spatial Distribution of Cardiac Progenitor Cells in the Sheep Heart. Journal of Clinical & Experimental Cardiology, 2012, S6, .	0.0	21
240	Benefits of standardizing the treatment of arrhythmias in the sheep (Ovis aries) model of chronic heart failure after myocardial infarction. Journal of the American Association for Laboratory Animal Science, 2013, 52, 290-4.	0.6	10
241	Models for preclinical studies in aging-related disorders: One is not for all. Translational Medicine @ UniSa, 2015, 13, 4-12.	0.8	15
242	Investigation of MMP-2 and MMP-9 activities in canine sera with dilated cardiomyopathy. Iranian Journal of Veterinary Research, 2015, 16, 182-7.	0.4	2
243	Translation of Methodology Used In Human Myocardial Imaging to a Sheep Model of Acute Myocardial Infarction. Asia Oceania Journal of Nuclear Medicine and Biology, 2013, 1, 10-21.	0.1	0

#	Article	IF	Citations
245	Anesthesia Protocols used to Create Ischemia Reperfusion Myocardial Infarcts in Swine. Journal of the American Association for Laboratory Animal Science, 2020, 59, 478-487.	0.6	0
246	Proteome Dynamics and Bioinformatics Reveal Major Alterations in the Turnover Rate of Functionally Related Cardiac and Plasma Proteins in a Dog Model of Congestive Heart Failure. Journal of Cardiac Failure, 2022, 28, 588-600.	0.7	4
247	Anesthesia Protocols used to Create Ischemia Reperfusion Myocardial Infarcts in Swine. Journal of the American Association for Laboratory Animal Science, 2020, 59, 478-487.	0.6	4
248	Experimental models for investigating the pathogenesis of heart failure. , 2022, , 103-122.		1
249	Targeting mAKAPÎ² expression as a therapeutic approach for ischemic cardiomyopathy. Gene Therapy, 2023, 30, 543-551.	2.3	4
250	Free-breathing gradient recalled echo-based CMR in a swine heart failure model. Scientific Reports, 2022, 12, 3698.	1.6	1
251	Translational potential of <scp>hiPSCs</scp> in predictive modeling of heart development and disease. Birth Defects Research, 2022, 114, 926-947.	0.8	2
252	Measurement of magnetostimulation thresholds inÂtheÂporcine heart. Magnetic Resonance in Medicine, 2022, 88, 2242-2258.	1.9	2
253	Preclinical models of congestive heart failure, advantages, and limitations for application in clinical practice. Frontiers in Physiology, 0, 13, .	1.3	2
254	Frequency-dependent signaling in cardiac myocytes. Frontiers in Physiology, 0, 13, .	1.3	0
255	Protective Effect of CXCR4 Antagonist DBPR807 against Ischemia-Reperfusion Injury in a Rat and Porcine Model of Myocardial Infarction: Potential Adjunctive Therapy for Percutaneous Coronary Intervention. International Journal of Molecular Sciences, 2022, 23, 11730.	1.8	0
257	Animal Models and Methods of Myocardial Infarction Induction and the Role of Tissue Engineering in the Regeneration of Damaged Myocardium. Current Stem Cell Research and Therapy, 2023, 18, 676-689.	0.6	0
258	Chronic high-rate pacing induces heart failure with preserved ejection fraction-like phenotype in Ossabaw swine. Basic Research in Cardiology, 2022, 117, .	2.5	0
259	Screening Methods for the Evaluation of Cardiotonic Drugs. , 2022, , 323-331.		0
260	Intrapericardial cardiosphere-derived cells hinder epicardial dense scar expansion and promote electrical homogeneity in a porcine post-infarction model. Frontiers in Physiology, 0, 13, .	1.3	1
261	Enhancing iPSCâ€CM Maturation Using a Matrigelâ€Coated Micropatterned PDMS Substrate. Current Protocols, 2022, 2, .	1.3	4
262	Experimental heart failure models in small animals. Heart Failure Reviews, 0, , .	1.7	0
263	Effects of Sex on the Susceptibility for Atrial Fibrillation in Pigs with Ischemic Heart Failure. Cells, 2023, 12, 973.	1.8	0

#	Article	IF	Citations
264	A canine model of chronic ischemic heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2023, 324, H751-H761.	1.5	3
265	Translational Echocardiography: The Dog as a Clinical Research Model of Cardiac Dysfunction. Applied Sciences (Switzerland), 2023, 13, 4437.	1.3	0