

June 18, 2018	Echocardiographic Strain Analysis for the Early Detection of Left Ventricular Systolic/Diastolic Dysfunction and Dyssynchrony in a Mouse Model of Physiological Aging	Heart disease is the leading cause of hospitalization and death worldwide, severely affecting health care costs.
November 29, 2021	Involvement of Endoplasmic Reticulum Stress-Mediated Activation of C/EBP Homologous Protein in Aortic Regurgitation-Induced Cardiac Remodeling in Mice	Aortic regurgitation (AR) is a volume overload disease causing eccentric left ventricular (LV) hypertrophy and eventually heart failure.
November 29, 2021	Preclinical model of type 1 diabetes and myocardial ischemia/reperfusion injury in conscious rabbits—demonstration of cardioprotection with rapamycin	
November 29, 2021	Deletion of AT1a (Angiotensin II Type 1a) Receptor or Inhibition of Angiotensinogen Synthesis Attenuates Thoracic Aortopathies in Fibrillin1C1041G/+Mice	Objective: A cardinal feature of Marfan syndrome is thoracic aortic aneurysm.
November 02, 2021	Cardioprotective effects of early intervention with sacubitril/valsartan on pressure overloaded rat hearts	Left ventricular remodeling due to pressure overload is associated with poor prognosis.
November 02, 2021	Protection of the enhanced Nrf2 deacetylation and its downstream transcriptional activity by SIRT1 in myocardial ischemia/reperfusion injury	Nrf2, the master gene transcription factor of antioxidant proteins, and SIRT1, the unique Class III histone deacetylase of sirtuins, have been involved in pro
November 02, 2021	Muscle-specific sirtuin 3 overexpression does not attenuate the pathological effects of high-fat/high-sucrose feeding but does enhance cardiac SERCA2a activity	Obesity, type 2 diabetes, and heart disease are linked to an unhealthy diet.
October 19, 2021	Massively parallel in vivo CRISPR screening identifies RNF20/40 as epigenetic regulators of cardiomyocyte maturation	The forward genetic screen is a powerful, unbiased method to gain insights into biological processes, yet this approach has infrequently been used in
October 19, 2021	Liquiritigenin attenuates isoprenaline-induced myocardial fibrosis in mice through the $\text{tgf-}\beta\text{1}/\text{smad2}$ and akt/erk signaling pathways	Myocardial fibrosis is a pathological process characterized by excessive accumulation of extracellular matrix in myocardial interstitial spaces.
October 19, 2021	Ghrelin ameliorates cardiac fibrosis after myocardial infarction by regulating the Nrf2/NADPH/ROS pathway	To evaluate the role of ghrelin in cardiac fibrosis after myocardial infarction (MI) and to investigate the underlying mechanisms of ghrelin-regulated
October 19, 2021	The Egr-1/miR-15a-5p/GPX4 axis regulates ferroptosis in acute myocardial infarction	Acute myocardial infarction (AMI) is a type of cardiovascular diseases that severely threatens human being, but the mechanisms have not been thoroughl
October 19, 2021	Deficiency of tenascin-C attenuated cardiac injury by inactivating TLR4/NLRP3/caspase-1 pathway after myocardial infarction	Inflammation and pyroptosis play a deleterious role in cardiac dysfunction after myocardial infarction (MI).
October 19, 2021	Potential for inhibition of checkpoint kinases 1/2 in pulmonary fibrosis and secondary pulmonary hypertension	Background: Idiopathic pulmonary fibrosis (IPF) is a chronic lung disease characterised by exuberant tissue remodelling and associated with high unmet
October 19, 2021	Inhibition of HSP90 S nitrosylation Alleviates Cardiac Fibrosis via TGFβ/SMAD3 Signaling Pathway	Background and Purpose: Effective anti-fibrotic therapeutic solutions are unavailable so far.
October 19, 2021	Redox environment metabolomic evaluation (REME) of the heart after myocardial ischemia/reperfusion injury	Myocardial ischemia/reperfusion injury (MIRI) is closely related to oxidative stress.
October 19, 2021	Forsythiaside B inhibits myocardial fibrosis via down regulating TGF-β1/Smad signaling pathway	Forsythiaside B is the major ingredient of Callicarpa kwangtungensis Chun, and has been proven to protect myocardium from ischemia-reperfusion injury

October 19, 2021	Mitochondria damage in ambient particulate matter induced cardiotoxicity: Roles of PPAR alpha/PGC-1 alpha signaling	Particulate matter (PM) had been associated with cardiotoxicity, while the mechanism of toxicity has yet to be elucidated, with mitochondria dysfunction
October 18, 2021	Inhibition of Long Noncoding RNA SNHG20 Improves Angiotensin II-Induced Cardiac Fibrosis and Hypertrophy by Regulating the MicroRNA 335/ Galectin-3 Axis	Cardiac fibrosis is a hallmark of various heart diseases and ultimately leads to heart failure.
October 18, 2021	FNDC5/Irisin attenuates diabetic cardiomyopathy in a type 2 diabetes mouse model by activation of integrin αV/β5-AKT signaling and reduction of oxidative/nitrosative stress	Irisin, the cleaved form of the fibronectin type III domain containing 5 (FNDC5) protein, is involved in metabolism and inflammation.
August 24, 2021	Adaptive versus maladaptive cardiac remodelling in response to sustained β-adrenergic stimulation in a new 'ISO on/off model'	On the one hand, sustained β -adrenergic stress is a hallmark of heart failure (HF) and exerts maladaptive cardiac remodelling.
August 24, 2021	Dapagliflozin alleviates cardiac fibrosis through suppressing EndMT and fibroblast activation via AMPKα/TGF-β/Smad signalling in type 2 diabetic rats	Diabetic cardiomyopathy (DCM) is one of the leading causes of heart failure in patients with diabetes mellitus, with limited effective treatments.
August 24, 2021	Signs of diastolic dysfunction are graded by serum testosterone levels in aging C57BL/6 male mice	We investigated whether maladaptive, age-associated changes in heart structure and function were linked to circulating testosterone levels.
August 09, 2021	αB-crystallin/HSPB2 is critical for hyperactive mTOR-induced cardiomyopathy	Even though aberrant mechanistic target of rapamycin (mTOR) signaling is known to cause cardiomyopathy, its underlying mechanism remains poorly understood
August 09, 2021	The sympathetic/beta-adrenergic pathway mediates irisin regulation of cardiac functions in zebrafish	Irisin is a 23 kDa myokine encoded in its precursor, fibronectin type III domain containing 5 (FNDC5).
August 09, 2021	iPLA2β Contributes to ER Stress-Induced Apoptosis during Myocardial Ischemia/Reperfusion Injury	Both calcium-independent phospholipase A2 beta (iPLA2 β) and endoplasmic reticulum (ER) stress regulate important pathophysiological processes including
July 07, 2021	Baoyuan decoction (BYD) attenuates cardiac hypertrophy through ANKRD1-ERK/GATA4 pathway in heart failure after acute myocardial infarction	Background: The pathological cardiac functions of ankyrin repeat domain 1 (ANKRD1) in left ventricle can directly aggravate cardiac hypertrophy (CH) a
July 07, 2021	Loss of PKA regulatory subunit 1α aggravates cardiomyocyte necrosis and myocardial ischemia/reperfusion injury	Reperfusion therapy, the standard treatment for acute myocardial infarction, can trigger necrotic death of cardiomyocytes and provoke ischemia/reperfusion
July 07, 2021	Guan Xin Dan Shen formulation protects db/db mice against diabetic cardiomyopathy via activation of Nrf2 signaling	Guan Xin Dan Shen formulation (GXDSF) is a widely used treatment for the management of coronary heart disease in China and is composed of three primary
July 07, 2021	LncRNA H19 governs mitophagy and restores mitochondrial respiration in the heart through Pink1/Parkin signaling during obesity	Maintaining proper mitochondrial respiratory function is crucial for alleviating cardiac metabolic disorders during obesity, and mitophagy is critical
July 07, 2021	Melatonin Attenuates Diabetic Myocardial Microvascular Injury through Activating the AMPK/SIRT1 Signaling Pathway	Cardiac microvascular endothelial cell (CMEC) dysfunction is considered as a major contributor to the cardiovascular complications in diabetes mellitus
June 25, 2021	Schisandra chinensis polysaccharides prevent cardiac hypertrophy by dissociating thioredoxin-interacting protein/thioredoxin-1 complex and inhibiting oxidative stress	Cardiac hypertrophy is a current, major, global health challenge.

June 25, 2021	microRNA-454-mediated NEDD4-2/TrkA/cAMP axis in heart failure: Mechanisms and cardioprotective implications	The current study aimed to investigate the mechanism by which miR-454 influences the progression of heart failure (HF) in relation to the neural precu
June 21, 2021	Qindan Capsule Attenuates Myocardial Hypertrophy and Fibrosis in Pressure Overload-Induced Mice Involving mTOR and TGF-β 1/Smad Signaling Pathway Inhibition	Qindan capsule (QC), a traditional Chinese medicine compound, has been used to treat hypertension in the clinic for over 30 years.
June 09, 2021	Bortezomib alleviates myocardial ischemia reperfusion injury via enhancing of Nrf2/HO-1 signaling pathway	Bortezomib is a classical proteasome inhibitor and previous researches have reported its roles of anti-oxidation and anti-inflammatory functions in va
June 09, 2021	Knockdown of lncRNA PVT1 attenuated macrophage M1 polarization and relieved sepsis induced myocardial injury via miR-29a/HMGB1 axis	Background: LncRNA PVT1 was reported to be elevated in septic myocardial tissue.
June 09, 2021	Constitutive activation of ERK1/2 signaling protects against myocardial ischemia via inhibition of mitochondrial fragmentation in the aging heart	Background: Studies have shown that the ability of the myocardium to tolerate ischemia becomes significantly compromised with age.
June 07, 2021	Carvedilol and exercise combination therapy improves systolic but not diastolic function and reduces plasma osteopontin in Col4a3^{-/-} Alport mice	There are currently no Food and Drug Administration-approved treatments for heart failure with preserved ejection fraction (HFpEF).
June 07, 2021	Higenamine attenuates cardiac fibroblast abstract and fibrosis via inhibition of TGF-β1/Smad signaling	Rationale: Higenamine (HG), is one of the main active components in many widely used Chinese herbs, and a common ingredient of health products in Euro
June 07, 2021	Hypertrophic preconditioning cardioprotection after myocardial ischaemia/reperfusion injury involves ALDH2-dependent metabolism modulation	Brief episodes of ischaemia and reperfusion render the heart resistant to subsequent prolonged ischaemic insult, termed ischaemic preconditioning.
June 07, 2021	Alleviation of inflammation and oxidative stress in pressure overload-induced cardiac remodeling and heart failure via IL-6/STAT3 inhibition by raloxifene	Background. Inflammation and oxidative stress are involved in the initiation and progress of heart failure (HF).
June 07, 2021	Protection against doxorubicin-induced cardiotoxicity through modulating iNOS/Arg 2 balance by electroacupuncture at PC6	Background. Doxorubicin (DOX) is a commonly used chemotherapeutic drug but is limited in clinical applications by its cardiotoxicity.
June 07, 2021	Cooperative Binding of ETS2 and NFAT Link Erk1/2 and Calcineurin Signaling in the Pathogenesis of Cardiac Hypertrophy	Background: Cardiac hypertrophy is an independent risk factor for heart failure, a leading cause of morbidity and mortality globally.
June 04, 2021	Macrophage p47phox regulates pressure overload-induced left ventricular remodeling by modulating IL-4/STAT6/PPARγ signaling	NADPH oxidase (Nox) mediates ROS production and contributes to cardiac remodeling.
June 04, 2021	Regulatory role of the TLR4/JNK signaling pathway in sepsis induced myocardial dysfunction	Sepsis is a life threatening organ dysfunction caused by a dysregulated host response to infection, and is a leading cause of mortality worldwide.
June 04, 2021	Pinocembrin inhibited cardiomyocyte pyroptosis against doxorubicin-induced cardiac dysfunction via regulating Nrf2/Sirt3 signaling pathway	Doxorubicin (DOX) is a potent chemotherapeutic drug but the clinical use was limited by its dose-dependent cardiotoxicity.

May 28, 2021	Dapagliflozin attenuates hypoxia/reoxygenation-caused cardiac dysfunction and oxidative damage through modulation of AMPK	Background: Emerging evidence demonstrated dapagliflozin (DAPA), a sodium-glucose cotransporter 2 inhibitor, prevented various cardiovascular events.
May 28, 2021	Prostaglandin E receptor subtype 4 protects against diabetic cardiomyopathy by modulating cardiac fatty acid metabolism via FOXO1/CD36 signalling	Background: Cardiac fatty acid metabolism is essential for maintaining normal cardiac function at baseline and in response to various disease stress,
March 25, 2021	Angiotensin II receptor 1 controls profibrotic Wnt/β-catenin signalling in experimental autoimmune myocarditis	Aims Angiotensin (Ang) II signalling has been suggested to promote cardiac fibrosis in inflammatory heart diseases; however, the underlying mechanism
March 25, 2021	Yixin-Shu Capsules Ameliorated Ischemia-Induced Heart Failure by Restoring Trx2 and Inhibiting JNK/p38 Activation.	Traditional Chinese medicine has shown great safety and efficacy in the treatment of heart failure (HF), whereas the mechanism remains unclear.
March 25, 2021	Long noncoding rna sox2-ot aggravates doxorubicin-induced apoptosis of cardiomyocyte by targeting mir-942-5p/dp5	Background: Long non-coding RNAs (LncRNAs) play important roles in doxorubicin (DOX)-induced apoptosis of cardiomyocytes.
March 25, 2021	Cardioprotective effect of rosmarinic acid against myocardial ischaemia/reperfusion injury via suppression of the NF-κB inflammatory signalling pathway and ROS production in mice	Context: Rosmarinic acid (RosA), a natural poly-phenolic compound isolated from a variety of Labiatae herbs, has been reported to have a range of biological effects.
March 12, 2021	DBA/1 mice displays equivalent cardiac function to C57BL/6J mice	NEW FINDINGS: What is the central question of this study?
March 08, 2021	Qingda granule attenuates cardiac fibrosis via suppression of the TGF-β1/Smad2/3 signaling pathway in vitro and in vivo	Cardiac fibrosis plays an important role in hypertension-related contractile dysfunction and heart failure.
March 01, 2021	Kanglexin protects against cardiac fibrosis and dysfunction in mice by TGF-β1/ERK1/2 noncanonical pathway	Cardiac fibrosis is a common pathological manifestation accompanied by various heart diseases, and antifibrotic therapy is an effective strategy to prevent
March 01, 2021	SH2 domain-containing protein tyrosine phosphatase-2 (SHP-2) prevents cardiac remodeling after myocardial infarction through ERK/SMAD signaling pathway	In this study, we aimed to investigate the role of SH2 domain-containing protein tyrosine phosphatase-2 (SHP-2) in cardiac remodeling after myocardial
March 01, 2021	Allisartan isoproxil attenuates oxidative stress and inflammation through the SIRT1/Nrf2/NF κB signalling pathway in diabetic cardiomyopathy rats	Allisartan isoproxil is a new nonpeptide angiotensin II receptor blocker (ARB) precursor drug that is used to treat hypertension and reduce the risk of
March 01, 2021	Shengxian decoction decreases doxorubicin induced cardiac apoptosis by regulating the TREM1/NF κB signaling pathway	Shengxian decoction (SXT) is a traditional Chinese medicine that is clinically used for treating cardiovascular diseases.
March 01, 2021	LKB1IP promotes pathological cardiac hypertrophy by targeting PTEN/Akt signalling pathway	Pathological cardiac hypertrophy represents a leading cause of morbidity and mortality worldwide.
February 23, 2021	Cardioprotective effects of short-term empagliflozin treatment in db/db mice	Sodium glucose transporter (SGLT)-2 inhibitors have consistently shown cardioprotective effects independent of the glycemic status of treated patients
February 23, 2021	DUSP5 expression in left ventricular cardiomyocytes of young hearts regulates thyroid hormone (T3)-induced proliferative ERK1/2 signaling	Cardiomyocytes of newborn mice proliferate after injury or exposure to growth factors.

February 23, 2021	Wnt/β-catenin signaling mediates both heart and kidney injury in type 2 cardiorenal syndrome	In type 2 cardiorenal syndrome, chronic heart failure is thought to cause or promote chronic kidney disease; however, the underlying mechanisms remain
February 23, 2021	Ryanodine receptor remodeling in cardiomyopathy and muscular dystrophy caused by lamin A/C gene mutation	Mutations in the lamin A/C gene (LMNA), which encodes A-type lamins, cause several diseases called laminopathies, the most common of which is dilated
February 23, 2021	Novel PGC-1 α /ATF5 Axis Partly Activates UPRmt and Mediates Cardioprotective Role of Tetrahydrocurcumin in Pathological Cardiac Hypertrophy	Mitochondrial unfolding protein response (UPRmt) effectively resists the pathological cardiac hypertrophy and improves the mitochondrial function.
February 23, 2021	MiR-1929-3p Overexpression Alleviates Murine Cytomegalovirus-Induced Hypertensive Myocardial Remodeling by Suppressing Ednra/NLRP3 Inflammasome Activation	MicroRNAs (miRNAs) play crucial roles in the development of essential hypertension (EH).
February 23, 2021	Effects of myocardial ischemia/reperfusion injury on plasma metabolomic profile during aging	Background: Heart disease is a frequent cause of hospitalization and mortality for elderly patients.
February 23, 2021	Helium Protects against Lipopolysaccharide-Induced Cardiac Dysfunction in Mice via Suppressing Toll-Like Receptor 4-Nuclear Factor κB-Tumor Necrosis Factor-Alpha/ Interleukin-18 Signaling	The nonanesthetic noble gas helium (He) can protect many organs against ischemia and reperfusion injury, such as liver and heart.
January 18, 2021	Ncor2/PPARα-dependent upregulation of MCUb in the type 2 diabetic heart impacts cardiac metabolic flexibility and function. Cardiac Function Running Title: MCUb regulation and function in type 2 diabetes	The contribution of altered mitochondrial Ca ²⁺ handling to metabolic and functional defects in type 2 diabetic (T2D) mouse hearts is not well understood
January 18, 2021	Beneficial Effects of Echinacoside on Diabetic Cardiomyopathy in Diabetic Db/Db Mice	Purpose: In this study, we investigated the protective effects and mechanism of action of echinacoside (ECH) from <i>cistanche tubulosa</i> extract in cardio
January 14, 2021	In vivo selection of the MDA-MB-231br/eGFP cancer cell line to obtain a clinically relevant rat model for triple negative breast cancer brain metastasis	Young triple negative breast cancer (TNBC) patients are at high risk for developing very aggressive brain metastases associated with a poor prognosis
January 14, 2021	Type 2 MI induced by a single high dose of isoproterenol in C57BL/6J mice triggers a persistent adaptive immune response against the heart	Heart failure is the common final pathway of several cardiovascular conditions and a major cause of morbidity and mortality worldwide.
January 14, 2021	Qingda granule attenuates angiotensin II-induced cardiac hypertrophy and apoptosis and modulates the PI3K/AKT pathway	Qingda granule (QDG), simplified from Qingxuan Jiangya Decoction, is a well-known traditional Chinese medicine formula that has been used for decades
January 14, 2021	Adipolin/C1q/Tnf-related protein 12 prevents adverse cardiac remodeling after myocardial infarction	Background Myocardial infarction (MI) is a leading cause of death worldwide.
January 04, 2021	CRISPR/Cas9-edited triple-fusion reporter gene imaging of dynamics and function of transplanted human urinary-induced pluripotent stem cell-derived cardiomyocytes	Purpose: To investigate the post-transplantation behaviour and therapeutic efficacy of human urinary-induced pluripotent stem cell-derived cardiomyocytes
January 04, 2021	PDIA1 acts as master organizer of NOX1/NOX4 balance and phenotype response in vascular smooth muscle	Changes in vascular smooth muscle cell (VSMC) phenotype underlie disease pathophysiology and are strongly regulated by NOX NADPH oxidases, with NOX1 f
January 04, 2021	Ghrelin inhibited pressure overload-induced cardiac hypertrophy by promoting autophagy via CaMKK/AMPK signaling pathway	Ghrelin, a novel gut hormone, has been shown to exert protective effects on cardiac dysfunction and remodeling.

January 04, 2021	Experimental model of congestive heart failure induced by transverse aortic constriction in BALB/c mice	Introduction: Murine transverse aortic constriction (TAC) is a frequently used model of pressure overload-induced left ventricular (LV) remodeling.
January 04, 2021	Crude Radix Aconiti Lateralis Preparata (Fuzi) with Glycyrrhiza Reduces Inflammation and Ventricular Remodeling in Mice through the TLR4/NF-κB Pathway	Radix Aconiti Lateralis Preparata (Fuzi) is a traditional Chinese medicine.
January 04, 2021	Tongmai formula improves cardiac function via regulating mitochondrial quality control in the myocardium with ischemia/reperfusion injury	Background: Mitochondrial quality control, regulated by mitochondrial dynamics and mitophagy, has been regarded as pivotal process to induce segregati
January 04, 2021	Calenduloside E suppresses calcium overload by promoting the interaction between L-type calcium channels and Bcl2-associated athanogene 3 to alleviate myocardial ischemia/reperfusion injury	Introduction: Intracellular calcium overload is an important contributor to myocardial ischemia/reperfusion (MI/R) injury.
January 04, 2021	Xanthohumol attenuates isoprenaline-induced cardiac hypertrophy and fibrosis through regulating PTEN/AKT/mTOR pathway	Emerging evidence suggests the cardiovascular protective effects of Xanthohumol (Xn), a prenylated flavonoid isolated from the hops (<i>Humulus lupulus</i> L.
January 04, 2021	Interleukin-1α dependent survival of cardiac fibroblasts is associated with StAR/STARD1 expression and improved cardiac remodeling and function after myocardial infarction	Aims: One unaddressed aspect of healing after myocardial infarction (MI) is how non-myocyte cells that survived the ischemic injury, keep withstanding
January 04, 2021	Neuropeptide Y mediates cardiac hypertrophy through microRNA-216b/FoxO4 signaling pathway	Cardiac hypertrophy (CH) is a major risk factor for heart failure accompanied by maladaptive cardiac remodeling.
January 04, 2021	PKCβ/NF-κB pathway in diabetic atrial remodeling	Atrial remodeling in diabetes is partially attributed to NF-κB/TGF-β signal transduction pathway activation.
November 03, 2020	Bakuchiol Alleviates Hyperglycemia-Induced Diabetic Cardiomyopathy by Reducing Myocardial Oxidative Stress via Activating the SIRT1/Nrf2 Signaling Pathway	Bakuchiol (BAK), a monoterpene phenol reported to have exerted a variety of pharmacological effects, has been related to multiple diseases, including
November 03, 2020	Neuraminidase-1 promotes heart failure after ischemia/reperfusion injury by affecting cardiomyocytes and invading monocytes/macrophages	Neuraminidase (NEU)1 forms a multienzyme complex with beta-galactosidase (β-GAL) and protective-protein/cathepsin (PPC) A, which cleaves sialic-acids
November 03, 2020	Calpain activation mediates microgravity-induced myocardial abnormalities in mice via p38 and ERK1/2 MAPK pathways	The human cardiovascular system has adapted to function optimally in Earth's 1G gravity, and microgravity conditions cause myocardial abnormalities in
November 03, 2020	Reverse electromechanical modelling of diastolic dysfunction in spontaneous hypertensive rat after sacubitril/valsartan therapy	Aims: Hypertension is a significant risk for the development of left ventricular hypertrophy, diastolic dysfunction, followed by heart failure and sud
October 20, 2020	Deletion of cardiac polycystin 2/PC2 results in increased SR calcium release and blunted adrenergic reserve.	Transient receptor potential proteins (TRPs) act as non-selective cation channels.
October 20, 2020	Activated PKB/GSK-3β synergizes with PKC-δ signaling in attenuating myocardial ischemia/reperfusion injury via potentiation of NRF2 activity: therapeutic efficacy of dihydrotanshinone-I	Disrupted redox status primarily contributes to myocardial ischemia/reperfusion injury (MIRI).
October 20, 2020	BRG1 protects the heart from acute myocardial infarction by reducing oxidative damage through the activation of the NRF2/HO1 signaling pathway	Brahma-related gene 1 (BRG1) regulates the chromatin structure and expression of cardiac genes.

October 20, 2020	LCZ696 Ameliorates Oxidative Stress and Pressure Overload-Induced Pathological Cardiac Remodeling by Regulating the Sirt3/MnSOD Pathway	Aims . We aimed to investigate whether LCZ696 protects against pathological cardiac hypertrophy by regulating the Sirt3/MnSOD pathway. Methods .
October 19, 2020	Maladaptive Changes Associated With Cardiac Aging Are Sex-Specific and Graded by Frailty and Inflammation in C57BL/6 Mice	We investigated whether late-life changes in cardiac structure and function were related to high levels of frailty and inflammation in male and female
October 19, 2020	Doxorubicin cardiomyopathy is ameliorated by acacetin via Sirt1-mediated activation of AMPK/Nrf2 signal molecules	Doxorubicin cardiotoxicity is frequently reported in patients undergoing chemotherapy.
October 19, 2020	Silencing circ_0062389 alleviates cardiomyocyte apoptosis in heart failure rats via modulating TGF-β1/Smad3 signaling pathway	CircRNA serves a crucial role in the development of heart failure (HF). Nevertheless, the regulatory mechanisms of circ_0062389 in HF are unknown.
October 19, 2020	Differential Effects of Sacubitril/Valsartan on Diastolic Function in Mice With Obesity-Related Metabolic Heart Disease	Mice with obesity and metabolic heart disease (MHD) due to a high-fat, high-sucrose diet were treated with placebo, a clinically relevant dose of sacu
October 19, 2020	Irisin attenuates myocardial ischemia/reperfusion induced cardiac dysfunction by regulating ER mitochondria interaction through a mitochondrial ubiquitin ligase dependent mechanism	Background: Myocardial ischemia/reperfusion (MI/R) injury imposes devastating cardiovascular sequelae in particular cardiac dysfunction as a result
October 19, 2020	Deletion of obscurin immunoglobulin domains Ig58/59 leads to age-dependent cardiac remodeling and arrhythmia	Obscurin comprises a family of giant modular proteins that play key structural and regulatory roles in striated muscles.
October 19, 2020	Effect and mechanism of asiatic acid on autophagy in myocardial ischemia reperfusion injury in vivo and in vitro	Myocardial ischemia reperfusion injury (MIRI) is a major cause of heart failure in patients with coronary heart disease.
October 16, 2020	Huoxin pill attenuates myocardial infarction-induced apoptosis and fibrosis via suppression of p53 and TGF-β1/Smad2/3 pathways	Huoxin Pill (HXP), a Traditional Chinese Medicine, is used widely to treat patients with coronary heart disease and angina pectoris in China.
October 16, 2020	Melatonin promotes cardiomyocyte proliferation and heart repair in mice with myocardial infarction via miR-143-3p/Yap/Cttnnd1 signaling pathway	The neonatal heart possesses the ability to proliferate and the capacity to regenerate after injury; however, the mechanisms underlying these processes
October 16, 2020	NFκB promotes oxidative stress-induced necrosis and ischemia/reperfusion injury by inhibiting Nrf2-ARE pathway	In this study, we identified an unexpected pro-cell death role for NFκB in mediating oxidative stress-induced necrosis, and provide new mechanistic ev
October 16, 2020	Inner mitochondrial membrane protein MPV17 mutant mice display increased myocardial injury after ischemia/reperfusion	MPV17 is an inner mitochondrial membrane protein whose mutation results in mitochondrial DNA (mtDNA) depletion diseases such as neurohepatopathy.
October 16, 2020	Inhibition of the ROS-EGFR Pathway Mediates the Protective Action of Nox1/4 Inhibitor GKT137831 against Hypertensive Cardiac Hypertrophy via Suppressing Cardiac Inflammation and Activation of Akt and ERK1/2	Oxidative stress, inflammation, and hypertension constitute a self-perpetuating vicious circle to exacerbate hypertension and subsequent hypertensive
September 09, 2020	Targeting the eCIRP/TREM-1 Interaction with a Small Molecule Inhibitor Improves Cardiac Dysfunction in Neonatal Sepsis	Background: Neonatal sepsis and the associated myocardial dysfunction remain a leading cause of infant mortality.

September 09, 2020	EXPRESS: TMEM16A/ANO1 Inhibitor T16Ainh-A01 Reversed Monocrotaline-induced Rat Pulmonary Arterial Hypertension	Experimental proof that TMEM16A was involved in the development of the monocrotaline (MCT) -induced pulmonary arterial hypertension (PAH) model through
September 09, 2020	Immune checkpoint inhibitor induces cardiac injury through polarizing macrophages via modulating microRNA-34a/Kruppel-like factor 4 signaling	Cancer immunotherapy has become a well-established treatment option for some cancers; however, its use is hampered by its cardiovascular adverse effect
September 09, 2020	Stachydrine hydrochloride suppresses phenylephrine-induced pathological cardiac hypertrophy by inhibiting the calcineurin/nuclear factor of activated T-cell signalling pathway	The calcineurin (CaN)/nuclear factor of activated T-cell (NFAT) signalling pathway plays an important role in pathological cardiac hypertrophy.
September 09, 2020	Sevoflurane up-regulates microRNA-204 to ameliorate myocardial ischemia/reperfusion injury in mice by suppressing Cofilin	Objective: The inhaled sevoflurane (sevo) is known to protect against myocardial ischemia/reperfusion (I/R) injury (MIRI), in which the functions of m
September 09, 2020	A Novel Molecular Mechanism of IKK ϵ -Mediated Akt/mTOR Inhibition in the Cardiomyocyte Autophagy after Myocardial Infarction	Autophagy of cardiomyocytes after myocardial infarction (MI) is an important factor affecting the prognosis of MI.
August 01, 2020	Mst1 knockdown alleviates cardiac lipotoxicity and inhibits the development of diabetic cardiomyopathy in db/db mice	Diabetic cardiomyopathy (DCM) accounts for increasing deaths of diabetic patients, and effective therapeutic targets are urgently needed.
August 01, 2020	Phenylethanoid glycosides of Callicarpa kwangtungensis Chun exert cardioprotective effect by weakening Na⁺-K⁺-ATPase/Src/ERK1/2 pathway and inhibiting apoptosis mediated by oxidative stress and inflammation	Ethnopharmacological relevance: Callicarpa kwangtungensis Chun (C.
June 01, 2020	TANK-binding kinase 1 alleviates myocardial ischemia/reperfusion injury through regulating apoptotic pathway	Myocardial ischemia/reperfusion (MI/R) injury, a complicated pathophysiological process, is regulated by lots of signaling pathways.
June 01, 2020	Monocyte mimics improve mesenchymal stem cell-derived extracellular vesicle homing in a mouse MI/RI model	Stem cell-derived extracellular vesicles (EVs) have been demonstrated to be effective in heart repair and regeneration post infarction.
June 01, 2020	Modified citrus pectin ameliorates myocardial fibrosis and inflammation via suppressing galectin-3 and TLR4/MyD88/NF-κB signaling pathway	Myocardial fibrosis (MF) plays a key role in the development and progression of heart failure (HF) with limited effective therapies.
June 01, 2020	Combined exposure of fine particulate matter and high-fat diet aggravate the cardiac fibrosis in C57BL/6J mice	Cardiac fibrosis is associated with fine particulate matter (PM2.5) exposure.
May 14, 2020	MSTN Attenuates Cardiac Hypertrophy through Inhibition of Excessive Cardiac Autophagy by Blocking AMPK /mTOR and miR-128/PPARγ/NF-κB	Cardiac hypertrophy, a response of the heart to increased workload, is a major risk factor for heart failure.
May 01, 2020	Induction of caveolin-3/eNOS complex by nitroxyl (HNO) ameliorates diabetic cardiomyopathy	Nitroxyl (HNO), one-electron reduced and protonated sibling of nitric oxide (NO), is a potential regulator of cardiovascular functions.
May 01, 2020	Down-regulated microRNA-195-5p and up-regulated CXCR4 attenuates the heart function injury of heart failure mice via inactivating JAK/STAT pathway	Objective: Little is known regarding the functional role of microRNA-195-5p (miR-195-5p) in heart failure (HF).
May 01, 2020	LncRNA Oprm1 overexpression attenuates myocardial ischemia/reperfusion injury by increasing endogenous hydrogen sulfide via Oprm1/miR-30b-5p/CSE axis	Aims Ischemia/reperfusion (I/R) injury largely limits the efficacy of revascularization in acute myocardial infarction.

May 01, 2020	Songling Xuemaikang Capsule inhibits isoproterenol-induced cardiac hypertrophy via CaMKIIδ and ERK1/2 pathways	Ethnopharmacological relevance: Cardiac hypertrophy is a key pathologic process in heart failure.
May 01, 2020	MiR-135b protects cardiomyocytes from infarction through restraining the NLRP3/caspase-1/IL-1β pathway	Background: Myocardial infarction (MI) is the most common cause of cardiovascular morbidity and mortality worldwide.
May 01, 2020	Arachidonic acid inhibits inflammatory responses by binding to myeloid differentiation factor-2 (MD2) and preventing MD2/toll-like receptor 4 signaling activation	Arachidonic acid (AA) plays a fundamental role in the function of all cells.
May 01, 2020	The protective effect of polyphyllin I on myocardial ischemia/reperfusion injury in rats	Background: Myocardial ischemia/reperfusion (I/R) injury has become a global public health concern.
May 01, 2020	MicroRNA-184 alleviates insulin resistance in cardiac myocytes and high fat diet-induced cardiac dysfunction in mice through the LPP3/DAG pathway	Aim: Cardiovascular complication is a major cause of mortality and morbidity in patients with diabetes.
May 01, 2020	Melatonin ameliorates pressure overload-induced cardiac hypertrophy by attenuating Atg5-dependent autophagy and activating the Akt/mTOR pathway	Cardiac hypertrophy, including hypertension and valvular dysfunction, is a pathological feature of many cardiac diseases that ultimately leads to hear
April 01, 2020	Melatonin fine-tunes intracellular calcium signals and eliminates myocardial damage through the IP3R/MCU pathways in cardiorenal syndrome type 3	Cardiorenal syndrome type-3 (CRS-3) is characterized by acute cardiac injury induced by acute kidney injury.
April 01, 2020	MicroRNA-208-5p regulates myocardial injury of sepsis mice via targeting SOCS2-mediated NF-κB/HIF-1α pathway	Background: Accumulating evidence has revealed the roles of microRNAs (miRs) in sepsis, hence, the aim of the present study was to investigate whether
March 27, 2020	Heat shock transcription factor 1 regulates exercise induced myocardial angiogenesis after pressure overload via HIF-1α/VEGF pathway	Exercise training is believed to have a positive effect on cardiac hypertrophy after hypertension.
March 01, 2020	Formononetin ameliorates myocardial ischemia/reperfusion injury in rats by suppressing the ROS-TXNIP-NLRP3 pathway	Formononetin (FN), a methoxy isoflavone abundant in many plants and herbs, has been evidently proven to possess multiple medicinal properties.
March 01, 2020	Fendrr involves in the pathogenesis of cardiac fibrosis via regulating miR-106b/SMAD3 axis	Cardiovascular diseases (CVDs) is the first cause of death worldwide, generally exhibiting a high morbidity, high disability rate and high mortality e
March 01, 2020	Inhibition of Dectin-1 in mice ameliorates cardiac remodeling by suppressing NF-κB/NLRP3 signaling after myocardial infarction	The myocardial inflammatory response is a consequence of myocardial infarction (MI), which may deteriorate cardiac remodeling and lead to dysfunction
February 01, 2020	Bnip3 mediates doxorubicin-induced cardiomyocyte pyroptosis via caspase-3/GSDME	Aims: This study was aimed to investigate the role of GSDME-mediated pyroptosis in cardiac injury induced by Doxorubicin (DOX), and to evaluate the ro
February 01, 2020	Empagliflozin attenuates ischemia and reperfusion injury through LKB1/AMPK signaling pathway	The beneficial effects of empagliflozin (EMPA) on cardiac functions during ischemia and reperfusion were characterized.
January 31, 2020	Pentamethylquercetin Attenuates Cardiac Remodeling via Activation of the Sestrins/Keap1/Nrf2 Pathway in MSG-Induced Obese Mice	Objective .
January 01, 2020	Carbachol alleviates myocardial injury in septic rats through PI3K/AKT signaling pathway	OBJECTIVE: To explore the effect of carbachol on myocardial injury in septic rats, and to further study its influence on the phosphatidylinositol 3-ki

January 01, 2020	Disruption of histamine/H1R signaling pathway represses cardiac differentiation and maturation of human induced pluripotent stem cells	Background: The efficiency and quality of human induced pluripotent stem cell-derived cardiomyocytes (hiPSC-CMs) are crucial for regenerative medicine
January 01, 2020	Effect of miR-195-5p on cardiomyocyte apoptosis in rats with heart failure by regulating TGF-β1/Smad3 signaling pathway	Purpose: This study set out to investigate the effect of miR-195-5p on cardiomyocyte apoptosis in rats with heart failure (HF) and its mechanism.
January 01, 2020	Non-Invasive Photoacoustic Imaging of In Vivo Mice with Erythrocyte Derived Optical Nanoparticles to Detect CAD/MI	Coronary artery disease (CAD) causes mortality and morbidity worldwide.
January 01, 2020	miR-19a/19b improves the therapeutic potential of mesenchymal stem cells in a mouse model of myocardial infarction	Myocardial infarction (MI) is the cardiac emergency that may leads to myocardial necrosis.
January 01, 2020	Puerarin ameliorated pressure overload-induced cardiac hypertrophy in ovariectomized rats through activation of the PPARα/PGC-1 pathway	Estrogen deficiency induces cardiac dysfunction and increases the risk of cardiovascular disease in postmenopausal women and in those who underwent bi
January 01, 2020	Ca²⁺/calmodulin-dependent protein kinase II is essential in hyperacute pressure overload	Background: Activation of Ca ²⁺ /calmodulin-dependent protein kinase II (CaMKII) is established as a central intracellular trigger for various cardiac p
January 01, 2020	Inhibition of Interleukin 6/glycoprotein 130 signalling by Bazedoxifene ameliorates cardiac remodelling in pressure overload mice	The role of IL-6 signalling in hypertensive heart disease and its sequelae is controversial.
January 01, 2020	Cardiac-specific LRP6 knockout induces lipid accumulation through Drp1/CPT1b pathway in adult mice	We recently reported low-density lipoprotein receptor-related protein 6 (LRP6) decreased in dilated cardiomyopathy hearts, and cardiac-specific knocko
January 01, 2020	Nonadherent culture method promotes MSC-mediated vascularization in myocardial infarction via miR-519d/VEGFA pathway	Background: Mesenchymal stem cells (MSCs) can provide therapeutic benefits for myocardial infarction (MI) recovery; however, the molecular mechanism b
January 01, 2020	Qi Dan Li Xin pill improves chronic heart failure by regulating mTOR/p70S6k-mediated autophagy and inhibiting apoptosis	Myocardial remodeling represents a key factor in chronic heart failure (CHF) development, and is characterized by chronic death of cardiomyocytes.
January 01, 2020	The Role of Endothelial Autocrine NRG1/ERBB4 Signaling in Cardiac Remodeling	Neuregulin-1 (NRG1) is a paracrine growth fac- tor, secreted by cardiac endothelial cells (ECs) in conditions of cardiac overload/injury.
January 01, 2020	Cardiac remodeling secondary to chronic volume overload is attenuated by a novel MMP9/2 blocking antibody	Objective Monoclonal antibody derivatives are promising drugs for the treatment of various diseases due to their high matrix metalloproteinases (MMP)
January 01, 2020	Arctigenin alleviates myocardial infarction injury through inhibition of the NFAT5-related inflammatory phenotype of cardiac macrophages/monocytes in mice	In this study, we screened potential natural compounds for the treatment of myocardial infarction (MI) and explored the underlying mechanisms.
January 01, 2020	Inhibition of the LncRNA Gpr19 attenuates ischemia reperfusion injury after acute myocardial infarction by inhibiting apoptosis and oxidative stress via the miR 324 5p/Mtfr1 axis	Reperfusion therapy after acute myocardial infarction (AMI) can effectively restore the blood supply and nutritional support of ischemic myocardium an

January 01, 2020	MiR-214-3p Attenuates Sepsis-Induced Myocardial Dysfunction in Mice by Inhibiting Autophagy through PTEN/AKT/mTOR Pathway	Aims. More than half of the patients with sepsis would develop cardiac dysfunction, which is termed as sepsis-induced myocardial dysfunction (SIMD).
January 01, 2020	CCL3/Macrophage Inflammatory Protein-1α Is Dually Involved in Parasite Persistence and Induction of a TNF- and IFNγ-Enriched Inflammatory Milieu in Trypanosoma cruzi-Induced Chronic Cardiomyopathy	CCL3, a member of the CC-chemokine family, has been associated with macrophage recruitment to heart tissue and parasite control in the acute infection
January 01, 2020	Interference with ERK-dimerization at the nucleocytoplasmic interface targets pathological ERK1/2 signaling without cardiotoxic side-effects	Dysregulation of extracellular signal-regulated kinases (ERK1/2) is linked to several diseases including heart failure, genetic syndromes and cancer.
January 01, 2020	ACTRIIA-Fc rebalances activin/GDF versus BMP signaling in pulmonary hypertension	Human genetics, biomarker, and animal studies implicate loss of function in bone morphogenetic protein (BMP) signaling and maladaptive transforming gr
January 01, 2020	A 6-month systems toxicology inhalation study in ApoE $-/-$ mice demonstrates reduced cardiovascular effects of E-vapor aerosols compared with cigarette smoke	Smoking cigarettes is harmful to the cardiovascular system.
January 01, 2020	Huoxin Pill Attenuates Cardiac Inflammation by Suppression of TLR4/NF-κB in Acute Myocardial Ischemia Injury Rats	Huoxin Pill (HXP), a traditional Chinese medicine, has been prescribed widely in the treatment of coronary heart disease, angina pectoris, and other di
January 01, 2020	Tumor Microenvironment Adaptable Nanoplatform for O₂ Self-Sufficient Chemo/Photodynamic Combination Therapy	Malignant proliferation of tumor cells induces abnormal tissue microenvironments, leading to therapeutic resistance and poor therapeutic outcome.
January 01, 2020	Recombinant Extracellular Domain (p75ECD) of the Neurotrophin Receptor p75 Attenuates Myocardial Ischemia-Reperfusion Injury by Inhibiting the p-JNK/Caspase-3 Signaling Pathway in Rat Microvascular Pericytes	Background Pro-NTs (precursor of neurotrophins) and their receptor p75 are potential targets for preventing microvascular dysfunction induced by myoca
January 01, 2020	Transfer of a human gene variant associated with exceptional longevity improves cardiac function in obese type 2 diabetic mice through induction of the SDF 1/CXCR4 signalling pathway	Aims Homozygosity for a four-missense single-nucleotide polymorphism haplotype of the human BPIFB4 gene is enriched in long-living individuals.
January 01, 2020	Salvianolic acid B regulates macrophage polarization in ischemic/reperfused hearts by inhibiting mTORC1-induced glycolysis	Macrophages play important roles in the healing and remodeling of cardiac tissues after myocardial ischemia/reperfusion (MI/R) injury.
January 01, 2020	NLRX1 knockout aggravates lipopolysaccharide (LPS)-induced heart injury and attenuates the anti-LPS cardioprotective effect of CYP2J2/11,12-EET by enhancing activation of NF-κB and NLRP3 inflammasome	NLRX1 weakens lipopolysaccharide (LPS)-induced NF- κ B activation on immune cells.
January 01, 2020	LncRNA TUG1 alleviates cardiac hypertrophy by targeting miR-34a/DKK1/Wnt β catenin signalling	The current study was designed to explore the role and underlying mechanism of lncRNA taurine up-regulated gene 1 (TUG1) in cardiac hypertrophy.
January 01, 2020	LncRNA FAF inhibits fibrosis induced by angiotensinogen II via the TGFβ1-P-Smad2/3 signalling by targeting FGF9 in cardiac fibroblasts	The dysregulation of Long noncoding RNAs (lncRNAs) has been implicated in many cardiovascular diseases, including cardiac fibrosis.
January 01, 2020	LncRNA 2810403D21Rik/Mirf promotes ischemic myocardial injury by regulating autophagy through targeting Mir26a	More evidence is emerging of the roles long non-coding RNAs (lncRNAs) play as regulatory factors in a variety of biological processes, but the mechani

January 01, 2020	Branched chain amino acids exacerbate myocardial ischemia/reperfusion vulnerability via enhancing GCN2/ATF6/PPAR-α pathway-dependent fatty acid oxidation	Rationale: Myocardial vulnerability to ischemia/reperfusion (I/R) injury is strictly regulated by energy substrate metabolism.
January 01, 2020	Melatonin Ameliorates MI-Induced Cardiac Remodeling and Apoptosis through a JNK/p53-Dependent Mechanism in Diabetes Mellitus	Diabetes mellitus, a worldwide health threat, is considered an independent risk factor for cardiovascular diseases.
January 01, 2020	Tongmai Yangxin pill reduces myocardial no-reflow by regulating apoptosis and activating PI3K/Akt/eNOS pathway	Ethnopharmacological relevance: Tongmai Yangxin pill (TMYX) is derived from the Zhigancao decoction recorded in Shang han lun by Zhang Zhongjing during
January 01, 2020	Bisoprolol, a β 1 antagonist, protects myocardial cells from ischemia reperfusion injury via PI3K/AKT/GSK3β pathway	The aim of this work was to explore whether bisoprolol plays a protective role in cardiomyocytes against ischemia reperfusion injury via PI3K/AKT/ GSK
January 01, 2020	Ginsenoside Rg1 attenuates cardiomyocyte apoptosis and inflammation via the TLR4/NF κB/NLRP3 pathway	Sepsis-induced myocardial dysfunction (SIMD) causes high mortality in seriously ill patients.
January 01, 2020	Inhibition of TGFβ activated protein kinase 1 ameliorates myocardial ischaemia/reperfusion injury via endoplasmic reticulum stress suppression	Transforming growth factor β -activated protein kinase 1 (TAK1) involves in various biological responses and is a key regulator of cell death.
January 01, 2020	Herba houttuyniae Extract Benefits Hyperlipidemic Mice via Activation of the AMPK/PGC-1α/Nrf2 Cascade	Hyperlipidemia is associated with metabolic disorders, but the detailed mechanisms and related interventions remain largely unclear.
January 01, 2020	Oxypaeoniflorin improves myocardial ischemia/reperfusion injury by activating the Sirt1/Foxo1 signaling pathway	Myocardial ischemia/reperfusion (MI/R) injury is a leading cause of damage to cardiac tissues and is associated with high mortality and disability rat
January 01, 2020	Functional Nanocomplexes with Vascular Endothelial Growth Factor A/C Isoforms Improve Collateral Circulation and Cardiac Function	Protein-based therapies are potential treatments for cancer, immunological, and cardiovascular diseases.
January 01, 2020	Structural, functional, and molecular impact on the cardiovascular system in ApoE$^{-/-}$ mice exposed to aerosol from candidate modified risk tobacco products, Carbon Heated Tobacco Product 1.2 and Tobacco Heating System 2.2, compared with cigarette smoke	Aim: To investigate the molecular, structural, and functional impact of aerosols from candidate modified risk tobacco products (cMRTP), the Carbon Hea
January 01, 2020	Repurposing Kir6/SUR2 Channel Activator Minoxidil to Arrests Growth of Gynecologic Cancers	Gynecologic cancers are among the most lethal cancers found in women, and, advanced stage cancers are still a treatment challenge.
January 01, 2020	CTRP9 knockout exaggerates lipotoxicity in cardiac myocytes and high fat diet induced cardiac hypertrophy through inhibiting the LKB1/AMPK pathway	CTRP9 has been reported to regulate lipid metabolism and exert cardioprotective effects, yet its role in high-fat diet (HFD)-induced cardiac lipotoxic
January 01, 2020	Long non-coding NEAT1 weakens the protective role of sevoflurane on myocardial ischemia/reperfusion injury by mediating the microRNA-140/RhoA axis	Background: The inhaled Sevoflurane (Sev) has been implicated to protect myocardial tissues against ischemia/reperfusion (I/R)-evoked injury.
January 01, 2020	CD74 knockout protects against LPS induced myocardial contractile dysfunction through AMPK Skp2 SUV39H1 mediated demethylation of BCLB	Background and Purpose: Lipopolysaccharides (LPS), an outer membrane component of Gram-negative bacteria, triggers myocardial anomalies in sepsis.

January 01, 2020	Epoxyeicosatrienoic acid prevents maladaptive remodeling in pressure overload by targeting calcineurin/NFAT and Smad-7	Background: Emerging evidence demonstrates that epoxyeicosatrienoic acids (EETs) as important active eicosanoids that regulate cardiovascular homeosta
January 01, 2020	Exosomes derived from umbilical cord mesenchymal stem cells alleviate viral myocarditis through activating AMPK/mTOR-mediated autophagy flux pathway	Human umbilical cord mesenchymal stem cell derived exosomes (hucMSC exosomes) have been implicated as a novel therapeutic approach for tissue injury r
January 01, 2020	Sevoflurane Pre-conditioning Ameliorates Diabetic Myocardial Ischemia/Reperfusion Injury Via Differential Regulation of p38 and ERK	Diabetes mellitus (DM) significantly increases myocardial ischemia/reperfusion (MI/R) injury.
January 01, 2020	Soluble receptor for advanced glycation end-products promotes angiogenesis through activation of STAT3 in myocardial ischemia/reperfusion injury	Soluble receptor for advanced glycation end-products (sRAGE), which exerts cardioprotective effect through inhibiting cardiomyocyte apoptosis and auto
January 01, 2020	PP2Cm overexpression alleviates MI/R injury mediated by a BCAA catabolism defect and oxidative stress in diabetic mice	Diabetic patients are sensitive to myocardial ischemia-reperfusion (MI/R) injury.
January 01, 2020	Tripartite motif 10 regulates cardiac hypertrophy by targeting the PTEN/AKT pathway	The pathogenesis of cardiac hypertrophy is tightly associated with activation of intracellular hypertrophic signalling pathways, which leads to the
December 01, 2019	Dexmedetomidine prevents septic myocardial dysfunction in rats via activation of α7nAChR and PI3K/Akt-mediated autophagy	Background and purpose: Dexmedetomidine (Dex) has been shown to elicit cardio-protective effects in sepsis.
December 01, 2019	Neutrophil-derived advanced glycation end products-Nϵ-(carboxymethyl) lysine promotes RIP3-mediated myocardial necroptosis via RAGE and exacerbates myocardial ischemia/reperfusion injury	N ϵ -(carboxymethyl) lysine (CML), the major member of advanced glycation end products, was widely studied in diabetic complications and aging-associate
November 30, 2019	Resveratrol pretreatment alleviates myocardial ischemia/reperfusion injury by inhibiting STIM1-mediated intracellular calcium accumulation	Previous studies have shown that stromal interaction molecule1 (STIM1)-mediated store-operated Ca ²⁺ entry (SOCE) contributes to intracellular Ca ²⁺ acc
November 01, 2019	Cardioprotective effects of galectin-3 inhibition against ischemia/reperfusion injury	Myocardial ischemia/reperfusion (IR) injury is caused by the restoration of the coronary blood flow following an ischemic episode.
October 01, 2019	Up-regulation of microRNA-203 inhibits myocardial fibrosis and oxidative stress in mice with diabetic cardiomyopathy through the inhibition of PI3K/Akt signaling pathway via PIK3CA	Diabetic cardiomyopathy (DCM) refers to the myocardial dysfunction in the absence of coronary artery disease and hypertension.
October 01, 2019	Cardioprotection of (\pm)-sodium 5-bromo-2-(α-hydroxypentyl) benzoate (BZP) on mouse myocardium I/R injury through inhibiting 12/15-LOX-2 activity	(\pm)-Sodium5-bromo-2-(α -hydroxypentyl) benzoate (brand name: brozopine, BZP, 1a), derived from L-3-n-butylphthalide (L-NBP), has been reported to prote
October 01, 2019	N-Acetylcysteine prevents the decreases in cardiac collagen I/III ratio and systolic function in neonatal mice with prenatal alcohol exposure	Prenatal alcohol exposure (PAE) is often associated with congenital heart defects, most commonly septal, valvular, and great vessel defects.
September 01, 2019	Resveratrol prevents chronic intermittent hypoxia-induced cardiac hypertrophy by targeting the PI3K/AKT/mTOR pathway	Aims: Resveratrol is a polyphenolic compound that has received much attention for its use in ameliorating various systemic pathological conditions.

September 01, 2019	The Different Roles of miRNA-92a-2-5p and let-7b-5p in Mitochondrial Translation in db/db Mice	Excessive reactive oxygen species (ROS) generated in mitochondria is known to be a causal event in diabetic cardiomyopathy.
September 01, 2019	The cardioprotective effects of icariin on the isoprenaline-induced takotsubo-like rat model: Involvement of reactive oxygen species and the TLR4/NF-κB signaling pathway	Introduction: Takotsubo syndrome (TS) is an acute cardiac syndrome that mimics acute coronary syndrome (ACS) but lacks coronary obstruction and is associated with
September 01, 2019	Valproic acid attenuates sepsis-induced myocardial dysfunction in rats by accelerating autophagy through the PTEN/AKT/mTOR pathway	Aims: Sepsis is a leading cause of death and disability worldwide.
April 25, 2019	PM2.5-induced ADRB2 hypermethylation contributed to cardiac dysfunction through cardiomyocytes apoptosis via PI3K/Akt pathway	Background: Long-term exposure to fine particulate matter (PM2.5) can causally contribute to progression of atherosclerosis, risk of ischemic heart disease
January 01, 2019	Salvianolic acid B protects against myocardial ischaemia-reperfusion injury in rats via inhibiting high mobility group box 1 protein expression through the PI3K/Akt signalling pathway	Salvianolic acid B (Sal B) has a significant protective effect on myocardial ischaemia-reperfusion (I/R) injury.
January 01, 2019	Dual PPARα/γ activation inhibits SIRT1-PGC1α axis and causes cardiac dysfunction	Dual PPARα/γ agonists that were developed to target hyperlipidemia and hyperglycemia in patients with type 2 diabetes caused cardiac dysfunction or other
January 01, 2019	Theacrine attenuates myocardial fibrosis after myocardial infarction via the SIRT3/β-catenin/PPARγ pathway in estrogen-deficient mice	OBJECTIVE: To investigate the role of theacrine in the protection of ventricular remodeling and chronic heart failure after myocardial infarction in
January 01, 2019	Cardiac hypertrophy with obesity is augmented after pregnancy in C57BL/6 mice	Background: Over a third of reproductive-age women in the USA are obese, and the prevalence of cardiovascular disease (CVD) is rising in premenopausal
January 01, 2019	The POU4F2/Brn-3b transcription factor is required for the hypertrophic response to angiotensin II in the heart	Adult hearts respond to increased workload such as prolonged stress or injury, by undergoing hypertrophic growth.
January 01, 2019	Interaction of tumor cells and astrocytes promotes breast cancer brain metastases through TGF-β2/ANGPTL4 axes	Metastatic outcomes depend on the interactions of metastatic cells with a specific organ microenvironment.
January 01, 2019	Perindopril inhibits myocardial apoptosis in mice with acute myocardial infarction through TLR4/NF-κB pathway	OBJECTIVE: To explore the anti-apoptotic effect of perindopril on myocardial cells in mice with acute myocardial infarction (AMI).
January 01, 2019	DPP-4 inhibition by linagliptin prevents cardiac dysfunction and inflammation by targeting the Nlrp3/ASC inflammasome	We compared the effects of linagliptin (Lina, a DPP4 inhibitor) and GLP-1 receptor activation by exenatide followed by exendin-4 in an infusion pump (
January 01, 2019	The homozygous variant c.245G > A/p.G82D in PNPLA2 is associated with arrhythmogenic cardiomyopathy phenotypic manifestations	Arrhythmogenic cardiomyopathy (ACM) is a familial cardiomyopathy featured by fibrofatty replacement of cardiomyocytes.
January 01, 2019	Poly (ADP ribose) polymerase inhibition protects against myocardial ischaemia/reperfusion injury via suppressing mitophagy	Myocardial ischaemia/reperfusion (I/R) injury attenuates the beneficial effects of reperfusion therapy.
January 01, 2019	Systems Network Genomic Analysis Reveals Cardioprotective Effect of MURC/Cavin 4 Deletion Against Ischemia/Reperfusion Injury	Background: Ischemia/reperfusion (I/R) injury is a critical issue in the development of treatment strategies for ischemic heart disease.
January 01, 2019	Resveratrol Attenuates Pressure Overload Induced Cardiac Fibrosis and Diastolic Dysfunction via PTEN/AKT/Smad2/3 and NF κB Signaling Pathways	Scope: Cardiac fibrosis is a key feature of cardiac remodeling.

January 01, 2019	Empagliflozin, a sodium glucose co-transporter-2 inhibitor, alleviates atrial remodeling and improves mitochondrial function in high-fat diet/streptozotocin-induced diabetic rats	Background: Diabetes mellitus is an important risk factor for atrial fibrillation (AF) development.
January 01, 2019	T Cell-Derived IL-17A Induces Vascular Dysfunction via Perivascular Fibrosis Formation and Dysregulation of · NO/cGMP Signaling	Aims . The neutrophil recruiting cytokine Interleukin-17A (IL-17A) is a key component in vascular dysfunction and arterial hypertension.
January 01, 2019	miR-146a attenuates apoptosis and modulates autophagy by targeting TAF9b/P53 pathway in doxorubicin-induced cardiotoxicity	Clinical therapy of doxorubicin (DOX) is limited due to its cardiotoxicity.
January 01, 2019	C1q-TNF-related protein-3 attenuates pressure overload-induced cardiac hypertrophy by suppressing the p38/CREB pathway and p38-induced ER stress	C1q-tumor necrosis factor-related protein-3 (CTRP3) is an adipokine, which exerts protective function in ischemic or diabetic heart injury.
January 01, 2019	Effect of HIF 1α/miR 10b 5p/PTEN on Hypoxia Induced Cardiomyocyte Apoptosis	Background Few reports have addressed the mechanism by which microRNA miR-10b-5p regulates post-myocardial infarction (post-MI) cardiomyocyte apoptosis
January 01, 2019	C1q/tumor necrosis factor-related protein-3-engineered mesenchymal stromal cells attenuate cardiac impairment in mice with myocardial infarction	Mesenchymal stromal cells (MSCs) transplantation offers an attractive alternative in myocardial infarctive therapy.
January 01, 2019	Proteinase activated receptor 2 deficiency is a protective factor against cardiomyocyte apoptosis during myocardial ischemia/reperfusion injury	Previous studies have established that proteinase- activated receptor 2 (Par2) activation protects against myocardial ischemia/reperfusion injury (Mi/
January 01, 2019	Inducible cardiac-specific overexpression of cyclooxygenase-2 (COX-2) confers resistance to ischemia/reperfusion injury	The role of cyclooxygenase-2 (COX-2) in cardiovascular biology remains controversial.
January 01, 2019	Transplantation of Human Umbilical Cord Blood–Derived Cellular Fraction Improves Left Ventricular Function and Remodeling After Myocardial Ischemia/Reperfusion	RATIONALE: Human umbilical cord blood (hUCB) contains diverse populations of stem/progenitor cells.
January 01, 2019	Tanshinone IIA Restores Dynamic Balance of Autophagosome/Autolysosome in Doxorubicin-Induced Cardiotoxicity via Targeting Beclin1/LAMP1	Clinical use of the anti-cancer drug doxorubicin (DOX) is largely limited due to its severe cardiotoxicity.
December 12, 2018	An essential role for Wnt/β-catenin signaling in mediating hypertensive heart disease	Activation of the renin-angiotensin system (RAS) is associated with hypertension and heart disease.
September 03, 2018	FuZi and Banxia Combination, Eighteen Antagonisms in Chinese Medicine, Aggravates Adriamycin-Induced Cardiomyopathy Associated with PKA/ β 2AR-Gs Signaling	Aconite Lateralis Radix Praeparata (FuZi) and Pinelliae Rhizoma (Banxia) are a combination often used to treat cardiovascular diseases in ancient and
August 08, 2018	Interferon-γ mediates the protective effects of soluble receptor for advanced glycation end-product in myocardial ischemia/reperfusion	The ubiquitin–proteasome system (UPS) is essential for protein degradation and plays critical roles in myocardial ischemia/ reperfusion (MI/R) injurie
August 03, 2018	Peroxisome proliferator-activated receptor-gamma targeting nanomedicine promotes cardiac healing after acute myocardial infarction by skewing monocyte/macrophage polarization in preclinical animal models	Aims: Monocyte-mediated inflammation is a major mechanism underlying myocardial ischaemia–reperfusion (IR) injury and the healing process after acute
August 01, 2018	MMP-2 and MMP-9 contribute to the angiogenic effect produced by hypoxia/15-HETE in pulmonary endothelial cells	Matrix metalloproteinase-2 (MMP-2) and matrix metalloproteinase-9 (MMP-9) are the predominant gelatinases in the developing lung.

July 31, 2018	Phosphodiesterase 2 inhibition preferentially promotes NO/guanylyl cyclase/cGMP signaling to reverse the development of heart failure	Heart failure (HF) is a shared manifestation of several cardiovascular pathologies, including hypertension and myocardial infarction, and a limited
July 20, 2018	Cardiac-derived CTRP9 protects against myocardial ischemia/reperfusion injury via calreticulin-dependent inhibition of apoptosis	Cardiokines play an essential role in maintaining normal cardiac functions and responding to acute myocardial injury.
July 12, 2018	Radioiodinated Pentixather for SPECT Imaging of the Chemokine Receptor CXCR4 Expression in Rat Myocardial Infarction/Reperfusion Models	The purpose of this study is to develop a specific CXCR4-targeting radioiodinated agent (125I/131I-pentixather) for single-photon emission computed tomography
July 11, 2018	Heat-shock transcription factor 1 is critically involved in the ischaemia-induced cardiac hypertrophy via JAK2/STAT3 pathway	Cardiac hypertrophy after myocardial infarction (MI) is an independent risk factor for heart failure.
May 16, 2018	The serine/threonine-protein kinase/endoribonuclease IRE1α protects the heart against pressure overload-induced heart failure	Heart failure is associated with induction of endoplasmic reticulum (ER) stress and the unfolded protein response (UPR).
May 16, 2018	PIMT/NCOA6IP Deletion in the Mouse Heart Causes Delayed Cardiomyopathy Attributable to Perturbation in Energy Metabolism	PIMT/NCOA6IP, a transcriptional coactivator PRIP/NCOA6 binding protein, enhances nuclear receptor transcriptional activity.
April 19, 2018	Requisite endothelial reactivation and effective siRNA nanoparticle targeting of Etv2/Er71 in tumor angiogenesis	Angiogenesis, new blood vessel formation from preexisting vessels, is critical for solid tumor growth.
April 18, 2018	ER Chaperone GRP78 Protects Heart from Ischemia/Reperfusion Injury Through Akt Activation	Rationale: Restoration of coronary artery blood flow is the most effective means of ameliorating myocardial damage triggered by ischemic heart disease
April 12, 2018	(-) Epicatechin protects against myocardial ischemia induced cardiac injury via activation of the PTEN/PI3K/AKT pathway	Flavonol (-)-epicatechin (EPI) is primarily contained in green tea (<i>Camellia sinensis</i>) and cocoa beans (<i>Theobroma cacao</i>), and has been demonstrated to
April 01, 2018	Suppression of lncR-30245 alleviates myocardial infarction induced cardiac fibrosis via the PPAR-γ/CTGF pathway	Background Long noncoding RNAs (lncRNAs) are emerging as important mediators of cardiac pathophysiology.
March 25, 2018	Ginsenoside Rb1 inhibits autophagy through regulation of Rho/ROCK and PI3K/mTOR pathways in a pressure-overload heart failure rat model	Objective This study was designed to explore the relationship between ginsenoside Rb1 (Grb1) and high-load heart failure (HF) in rats.
February 23, 2018	Na⁺/H⁺ Exchanger Isoform 1-Induced Osteopontin Expression Facilitates Cardiac Hypertrophy Through p90 Ribosomal S6 Kinase	Cardiovascular diseases are the leading cause of death worldwide. One in three cases of heart failure is due to dilated cardiomyopathy.
January 13, 2018	Adenosine Production by Biomaterial Supported Mesenchymal Stromal Cells Reduces the Innate Inflammatory Response in Myocardial Ischemia/Reperfusion Injury	Background—During myocardial ischemia/reperfusion (MI/R) injury, there is extensive release of immunogenic metabolites that activate cells of the innate
January 01, 2018	Salvianolate reduces atrial fibrillation through suppressing atrial interstitial fibrosis by inhibiting TGF-β1/Smad2/3 and TXNIP/NLRP3 inflammasome signaling pathways in post-MI rats	Background: Salvianolate is the main water-soluble bioactive compound of <i>Salvia Miltiorrhiza Bunge</i> and is now clinically used in the treatment of cardiac
January 01, 2018	PAFR-deficiency alleviates myocardial ischemia/reperfusion injury in mice via suppressing inflammation, oxidative stress and apoptosis	Myocardial ischemia/reperfusion (I/R) still have high morbidity and mortality worldwide.
January 01, 2018	ALDH2 protects against alcoholic cardiomyopathy through a mechanism involving the p38 MAPK/CREB pathway and local renin-angiotensin system inhibition in cardiomyocytes	Background: Angiotensin II (Ang II) in the local cardiac renin-angiotensin system (RAS) is closely associated with alcoholic cardiomyopathy (ACM).

January 01, 2018	Notoginsenoside R1, a unique constituent of Panax notoginseng, blinds proinflammatory monocytes to protect against cardiac hypertrophy in ApoE^{-/-} mice	Notoginsenoside R1, a unique constituent from the root of Panax notoginseng, exerts anti-inflammatory, anti-oxidative and anti-apoptotic properties.
January 01, 2018	Ultrasonographic Characterization of the db / db Mouse : An Animal Model of Metabolic Abnormalities	The availability of an animal model able to reliably mirror organ damage occurring in metabolic diseases is an urgent need.
January 01, 2018	Honokiol Ameliorates Myocardial Ischemia/Reperfusion Injury in Type 1 Diabetic Rats by Reducing Oxidative Stress and Apoptosis through Activating the SIRT1-Nrf2 Signaling Pathway	Reducing oxidative stress is a crucial therapeutic strategy for ameliorating diabetic myocardial ischemia/reperfusion (MI/R) injury.
January 01, 2018	Genetic deletion of 12/15 lipoxygenase promotes effective resolution of inflammation following myocardial infarction	12/15 lipoxygenase (LOX) directs inflammation and lipid remodeling.
January 01, 2018	Paeonol regulates hypoxia-induced proliferation of pulmonary artery smooth muscle cells via EKR 1/2 signalling	Pulmonary hypertension (PH) is a disease with a developmental origin characterized by obstructive vascular remodelling that is partially due to excess
January 01, 2018	Plasma exosomes induced by remote ischaemic preconditioning attenuate myocardial ischaemia/reperfusion injury by transferring MIR-24 article	Remote ischaemic preconditioning (RIPC) is well known to protect the myocardium against ischaemia/reperfusion injury (IRI).
January 01, 2018	Selective improvement of pulmonary arterial hypertension with a dual ETA/ETb receptors antagonist in the apolipoprotein E^{-/-} model of PAH and atherosclerosis	Idiopathic pulmonary arterial hypertension (IPAH) is increasingly diagnosed in elderly patients who also have an increased risk of co-morbid atheroscl
January 01, 2018	Icariside II attenuates myocardial fibrosis by inhibiting nuclear factor-κB and the TGF-β1/Smad2 signalling pathway in spontaneously hypertensive rats	Studies have demonstrated that icariin plays important roles in preventing hypertension and improving myocardial hypertrophy, inflammatory and infiltr
January 01, 2018	Increased Calcific Aortic Valve Disease in response to a diabetogenic, procalcific diet in the LDLr^{-/-}-ApoB100/100mouse model	Objective: Calcific aortic valve disease (CAVD) is a major cause of aortic stenosis (AS) and cardiac insufficiency.
January 01, 2018	miR-424 promotes cardiac ischemia / reperfusion injury by direct targeting of CRISPLD2 and regulating cardiomyocyte pyroptosis	As a complex pathophysiological event, myocardial ischemia/reperfusion injury (IRI) can cause heart failure, which has been associated with pyroptosis
January 01, 2018	Sestrin2 prevents age-related intolerance to post myocardial infarction via AMPK/PGC-1α pathway	We have revealed that a novel stress-inducible protein, Sestrin2, declines in the heart with aging.
January 01, 2018	Qiliqiangxin ameliorates cardiac dysfunction in heart failure rats post myocardial infarction via activation of HIF / VEGF pathway	Abstract: Objective: To evaluate the effects of superfine Qiliqiangxin powder (QL) on cardiac function and microangiogenesis in heart failure (HF) r
January 01, 2018	Icarisidell improves left ventricular remodeling in spontaneously hypertensive rats by inhibiting the ASK1-JNK/p38 signaling pathway	Inhibition or removal of excess reactive oxygen species can effectively protect cellular function or reduce cell death because oxidative stress is the
January 01, 2018	Long noncoding RNA MALAT1 downregulates cardiac transient outward potassium current by regulating miR-200c/HMGB1 pathway	The dysregulation of long noncoding RNAs (lncRNAs) and microRNAs (miRNAs) participates in the remodeling of electrophysiological/ion channel in cardio
January 01, 2018	mTOR drives cerebral blood flow and memory deficits in LDLR^{-/-} mice modeling atherosclerosis and vascular cognitive impairment	We recently showed that mTOR attenuation blocks progression and abrogates established cognitive deficits in Alzheimer's disease (AD) mouse models.

January 01, 2018	Dioscin ameliorates cardiac hypertrophy through inhibition of the MAPK and Akt/GSK3β/mTOR pathways	Cardiac hypertrophy occurs in response to multiple stimuli and develops into congestive heart failure with morbidity and mortality.
January 01, 2018	Sulforaphane prevents angiotensin II-induced cardiomyopathy by activation of Nrf2 via stimulating the Akt/GSK-3ss/Fyn pathway.	AIMS: Activation of nuclear factor erythroid 2-related factor 2 (Nrf2) by sulforaphane (SFN) protects from, and deletion of the Nrf2 gene exaggerates,
January 01, 2018	Chitosan/silk fibroin modified nanofibrous patches with mesenchymal stem cells prevent heart remodeling post-myocardial infarction in rats	Poor functional survival of the engrafted stem cells limits the therapeutic efficacy of stem-cell-based therapy for myocardial infarction (MI).
December 13, 2017	EphrinA1-Fc attenuates myocardial ischemia/reperfusion injury in mice	EphrinA1, a membrane-bound receptor tyrosine kinase ligand expressed in healthy car- diomyocytes, is lost in injured cells following myocardial infarc
December 07, 2017	Sex-dependent alteration of cardiac cytochrome P450 gene expression by doxorubicin in C57Bl/6 mice	Background: There is inconclusive evidence about the role of sex as a risk factor for doxorubicin (DOX)-induced cardiotoxicity.
August 01, 2017	Knockout of immunoproteasome subunit β2i ameliorates cardiac fibrosis and inflammation in DOCA/Salt hypertensive mice	The immunoproteasome is a multicatalytic protease complex in all eukaryotic cells, which plays a key role in regulating essential cellular processes.
June 01, 2017	HO-1/EBP interaction alleviates cholesterol-induced hypoxia through the activation of the AKT and Nrf2/mTOR pathways and inhibition of carbohydrate metabolism in cardiomyocytes	Heme oxygenase-1 (HO-1) is an inducible and cytoprotective enzyme that provides a defense against oxidant damage.
May 09, 2017	Calcium/Calmodulin-Dependent Protein Kinase II Activity Persists During Chronic β-Adrenoceptor Blockade in Experimental and Human Heart FailureCLINICAL PERSPECTIVE	Original Article Calcium/Calmodulin-Dependent Protein Kinase II Activity Persists During Chronic β-Adrenoceptor Blockade in Experimental and Human Hea
April 26, 2017	The mitochondrial Na⁺/Ca²⁺ exchanger is essential for Ca²⁺ homeostasis and viability	Mitochondrial calcium (mCa(2+)) has a central role in both metabolic regulation and cell death signalling, however its role in homeostatic function an
April 26, 2017	SGLT-2 Inhibition with Dapagliflozin Reduces the Activation of the Nlrp3/ASC Inflammasome and Attenuates the Development of Diabetic Cardiomyopathy in Mice with Type 2 Diabetes. Further Augmentation of the Effects with Saxagliptin, a DPP4 Inhibitor	PURPOSE We assessed whether (1) dapagliflozin (Dapa, an SGLT2-inhibitor) attenuates the deterioration of heart function Nlrp3 and inflammasome activat
April 12, 2017	IL-21 promotes myocardial ischaemia/reperfusion injury through the modulation of neutrophil infiltration	BACKGROUND AND PURPOSE The immune system plays an important role in driving the acute inflammatory response following myocardial ischaemia/reperfusion
March 23, 2017	2,3,5,4'-Tetrahydroxystilbene-2-O-β-D-glucoside protects murine hearts against ischemia/reperfusion injury by activating Notch1/Hes1 signaling and attenuating endoplasmic reticulum stress	2,3,5,4'-Tetrahydroxystilbene-2-O-beta-D-glucoside (TSG) is a water-soluble active component extracted from Polygonum multiflorum Thunb.
March 20, 2017	Targeting chronic cardiac remodeling with cardiac progenitor cells in a murine model of ischemia/reperfusion injury	BACKGROUND Translational failure for cardiovascular disease is a substantial problem involving both high research costs and an ongoing lack of novel t
March 07, 2017	ZYZ-168 alleviates cardiac fibrosis after myocardial infarction through inhibition of ERK1/2-dependent ROCK1 activation	Selective treatments for myocardial infarction (MI) induced cardiac fibrosis are lacking.

March 01, 2017	Systemic autoimmunity induced by the TLR7/8 agonist Resiquimod causes myocarditis and dilated cardiomyopathy in a new mouse model of autoimmune heart disease	Systemic autoimmune diseases such as systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA) show significant heart involvement and cardiovas
March 01, 2017	A new flavonoid glycoside (APG) isolated from Clematis tangutica attenuates myocardial ischemia/reperfusion injury via activating PKCε signaling	Clematis tangutica has been shown to be beneficial for the heart; however, the mechanism of this effect remains unknown.
March 01, 2017	Decreased WNT/β-catenin signalling contributes to the pathogenesis of dilated cardiomyopathy caused by mutations in the lamin a/C gene	Cardiomyopathy caused by lamin A/C gene (LMNA) mutations (hereafter referred as LMNA cardiomyopathy) is characterized by cardiac conduction abnormalit
February 21, 2017	Cdon deficiency causes cardiac remodeling through hyperactivation of WNT/β-catenin signaling	On pathological stress, Wnt signaling is reactivated and induces genes associated with cardiac remodeling and fibrosis.
February 20, 2017	Plin5 alleviates myocardial ischaemia/reperfusion injury by reducing oxidative stress through inhibiting the lipolysis of lipid droplets	Myocardial ischaemia-reperfusion (I/R) injury is a complex pathophysiological process.
February 16, 2017	Blockage of transient receptor potential vanilloid 4 alleviates myocardial ischemia/reperfusion injury in mice	Transient receptor potential vanilloid 4 (TRPV4) is a Ca ²⁺ -permeable nonselective cation channel and can be activated during ischemia/reperfusion (I/R
February 06, 2017	Epicardial YAP/TAZ orchestrate an immunosuppressive response following myocardial infarction	Ischemic heart disease resulting from myocardial infarction (MI) is the most prevalent form of heart disease in the United States.
February 01, 2017	CaMKIIδ subtypes differentially regulate infarct formation following ex vivo myocardial ischemia/reperfusion through NF-κB and TNF-α	Deletion of Ca ²⁺ /calmodulin-dependent protein kinase II delta (CaMKIIδ) has been shown to protect against in vivo ischemia/reperfusion (I/R) injury.
January 10, 2017	Reperfusion therapy with recombinant human relaxin-2 (Serelaxin) attenuates myocardial infarct size and NLRP3 inflammasome following ischemia/reperfusion injury via eNOS-dependent mechanism	Aims The preconditioning-like infarct-sparing and anti-inflammatory effects of the peptide hormone relaxin following ischemic injury have been studied
January 01, 2016	Exosomes Derived from Mesenchymal Stem Cells Rescue Myocardial Ischaemia/Reperfusion Injury by Inducing Cardiomyocyte Autophagy Via AMPK and Akt Pathways	BACKGROUND/AIMS Reperfusion after an ischaemic insult might cause infarct extension.
January 01, 2016	The Formin, DIAPH1, is a Key Modulator of Myocardial Ischemia/Reperfusion Injury	The biochemical, ionic, and signaling changes that occur within cardiomyocytes subjected to ischemia are exacerbated by reperfusion; however, the prec
January 01, 2016	Exacerbation of diabetic cardiac hypertrophy in OVE26 mice by angiotensin II is associated with JNK/c-Jun/miR-221-mediated autophagy inhibition	Both diabetes and angiotensin II (Ang II) excess trigger cardiac remodeling and dysfunction, and diabetic cardiomyopathy.
January 01, 2016	trans-Polydatin protects the mouse heart against ischemia/reperfusion injury via inhibition of the renin-angiotensin system (RAS) and Rho kinase (ROCK) activity	Background: Recent studies highlighted the protective benefits of a Chinese herb extract from poly- gonum cuspidatum, trans-polydatin, on cardiac dise
January 01, 2016	Activation of nuclear β-catenin/c-Myc axis promotes oxidative stress injury in streptozotocin-induced diabetic cardiomyopathy	Myocardial oxidative stress injury plays a crucial role in the pathogenesis of diabetic cardiomyopathy (DCM).
January 01, 2016	Beta-adrenergic regulation of the heart expressing the Ser1700A/Thr1704A mutated Cav1.2 channel	Beta-adrenergic stimulation of the heart increases ICa.

January 01, 2016	Bisoprolol protects myocardium cells against ischemia/reperfusion injury by attenuating unfolded protein response in rats	Bisoprolol (B) exerts potential cardioprotective effects against myocardial ischemia/reperfusion (I/R) injury.
January 01, 2016	Nonmyocyte ERK1/2 signaling contributes to load-induced cardiomyopathy in Marfan mice.	Among children with the most severe presentation of Marfan syndrome (MFS), an inherited disorder of connective tissue caused by a deficiency of extrac
January 01, 2016	Hypertrophied myocardium is vulnerable to ischemia reperfusion injury and refractory to rapamycin-induced protection due to increased oxidative/nitrative stress	Left ventricular hypertrophy (LVH) is causally related to increased morbidity and mortality following acute myocardial infarction (AMI) via still unk
January 01, 2016	PKD knockdown inhibits pressure overload-induced cardiac hypertrophy by promoting autophagy via AKT/mTOR pathway	Growing evidence shows that protein kinase D (PKD) plays an important role in the development of pressure overload-induced cardiac hypertrophy.
January 01, 2016	Recovery following Thyroxine Treatment Withdrawal, but Not Propylthiouracil, Averts In Vivo and Ex Vivo Thyroxine-Provoked Cardiac Complications in Adult FVB/N Mice	Persistent cardiovascular pathology has been described in hyperthyroid patients even with effective antithyroid treatment.
January 01, 2016	The IL-2/Anti-IL-2 Complex Attenuates Cardiac Ischaemia-Reperfusion Injury Through Expansion of Regulatory T Cells	Background/Aims: Regulatory T cells (Tregs) can suppress immunologic damage in myocardial ischaemia/reperfusion injury (MIRI), however, the isolation
January 01, 2016	Fibroblast-specific TGF-β-Smad2/3 signaling underlies cardiac fibrosis	The master cytokine TGF- β mediates tissue fibrosis associated with inflammation and tissue injury.
January 01, 2016	Cardioprotection against Heart Failure by Shenfu Injection via TGF-β/Smads Signaling Pathway	Objective .
January 01, 2016	Overexpression of TIMP3 Protects Against Cardiac Ischemia/Reperfusion Injury by Inhibiting Myocardial Apoptosis Through ROS/Mapks Pathway	Background/Aims: Myocardial ischemia/reperfusion (I/R) injury remains a great challenge in clinical therapy.
January 01, 2016	EphrinB2 Regulates Cardiac Fibrosis Through Modulating the Interaction of Stat3 and TGF-β/Smad3 Signaling	Rationale: Cardiac fibrosis is a common feature in left ventricular remodeling that leads to heart failure, regardless of the cause.
January 01, 2016	QRS/T-wave and calcium alternans in a type I diabetic mouse model for spontaneous postmyocardial infarction ventricular tachycardia: A mechanism for the antiarrhythmic effect of statins	Background The incidence of sudden arrhythmic death is markedly increased in diabetics.
January 01, 2016	Postconditioning with Intralipid emulsion protects against reperfusion injury in post-infarct remodeled rat hearts by activation of ROS-Akt/Erk signaling	The clinically used lipid emulsion Intralipid (ILE) reduces ischemia reperfusion injury in healthy rodent hearts.
January 01, 2016	CYP2J2 metabolites, epoxyeicosatrienoic acids, attenuate Ang II-induced cardiac fibrotic response by targeting Gα 12/13	The arachidonic acid-cytochrome P450 2J2-epoxyeicosatrienoic acid (AA-CYP2J2-EET) metabolic pathway has been identified to be protective in the card
January 01, 2016	Melatonin protects against diabetic cardiomyopathy through Mst1/Sirt3 signaling	This study investigated the effects of melatonin on diabetic cardiomyopathy (DCM) and determined the underlying mechanisms.
January 01, 2016	Activation of transient receptor potential vanilloid 4 involves in hypoxia/reoxygenation injury in cardiomyocytes	Transient receptor potential vanilloid 4 (TRPV4) is highly expressed in heart and vessels and can be activated during myocardial ischemia/reperfusion

January 01, 2016	From the Cover: Lifelong Exposure of C57bl/6n Male Mice to Bisphenol A or Bisphenol S Reduces Recovery From a Myocardial Infarction	Bisphenol A (BPA) leaches from plastics to contaminate foodstuffs. Analogs, such as bisphenol S (BPS), are now used increasingly in manufacturing.
January 01, 2016	Inhibition of dipeptidyl peptidase-4 ameliorates cardiac ischemia and systolic dysfunction by up-regulating the FGF-2/EGR-1 pathway	Dipeptidyl peptidase 4 inhibitors are used worldwide in the management of diabetes, but their role in the prevention or treatment of cardiovascular di
January 01, 2016	Doxorubicin upregulates CXCR4 via miR-200c/ZEB1-dependent mechanism in human cardiac mesenchymal progenitor cells	Doxorubicin (DOXO) treatment is limited by its cardiotoxicity, since it causes cardiac-progenitor-cell depletion.
January 01, 2016	Naoxintong inhibits myocardial infarction injury by VEGF/eNOS signaling-mediated neovascularization	Ethnopharmacological relevance Naoxintong capsules (NXT), a traditional Chinese Medical preparation, are widely used for treatment of cardiovascular d
January 01, 2016	Fortunellin protects against high fructose-induced diabetic heart injury in mice by suppressing inflammation and oxidative stress via AMPK/Nrf-2 pathway regulation	Inflammation and oxidative stress contribute to the progression of diabetic cardiomyopathy (DCM).
January 01, 2016	Inhibition of HDAC3 prevents diabetic cardiomyopathy in OVE26 mice via epigenetic regulation of DUSP5-ERK1/2 pathway	Inhibition of total histone deacetylases (HDACs) was phenomenally associated with the prevention of diabetic cardiomyopathy (DCM).
January 01, 2016	The alleviation of myocardial ischemia / reperfusion injury by lycopene.	Myocardial Ischemia/Reperfusion (MI/R) injury is a clinical phenomenon including myocardial structural damage, dysfunction and disorders of metabolism
January 01, 2016	Azilsartan ameliorates diabetic cardiomyopathy in young db/db mice through the modulation of ACE-2/ANG 1-7/Mas receptor cascade	Hyperglycemia up-regulates intracellular angiotensin II (ANG-II) production in cardiac myocytes.
January 01, 2016	Major contribution of the 3/6/7 class of TRPC channels to myocardial ischemia/reperfusion and cellular hypoxia/reoxygenation injuries	The injury phase after myocardial infarcts occurs during reperfusion and is a consequence of calcium release from internal stores combined with calciu
January 01, 2016	Restoring diabetes-induced autophagic flux arrest in ischemic/reperfused heart by ADIPOR (adiponectin receptor) activation involves both AMPK-dependent and AMPK-independent signaling	Macroautophagy/autophagy is increasingly recognized as an important regulator of myocardial ischemia-reperfusion (MI-R) injury.
December 01, 2016	Shockwaves prevent from heart failure after acute myocardial ischaemia via RNA/protein complexes	Shock wave treatment (SWT) was shown to induce regeneration of ischaemic myocardium via Toll-like receptor 3 (TLR3).
November 21, 2016	Cardioprotection by combination of three compounds from ShengMai preparations in mice with myocardial ischemia/reperfusion injury through AMPK activation-mediated mitochondrial fission	GRS is a drug combination of three active components including ginsenoside Rb1, ruscogenin and schisandrin.
November 01, 2016	Aldehyde dehydrogenase 2 deficiency negates chronic low-to-moderate alcohol consumption-induced cardioprotecion possibly via ROS-dependent apoptosis and RIP1/RIP3/MLKL-mediated necroptosis	Previous studies evidenced the beneficial effects of low-to-moderate alcohol consumption on cardiovascular system by activation of mitochondrial alde
November 01, 2016	Melatonin rescues cardiac thioredoxin system during ischemia-reperfusion injury in acute hyperglycemic state by restoring Notch1/Hes1/Akt signaling in a membrane receptor-dependent manner	Stress hyperglycemia is commonly observed in patients suffering from ischemic heart disease.
November 01, 2016	CREG protects from myocardial ischemia/reperfusion injury by regulating myocardial autophagy and apoptosis	Aims: Human cellular repressor of E1A-stimulated genes (CREG) is a secreted glycoprotein that regulates tissue and cell homeostasis and has been shown

October 31, 2016	A practical approach to remote ischemic preconditioning and ischemic preconditioning against myocardial ischemia/reperfusion injury	Although urgently needed in clinical practice, a cardioprotective therapeutic approach against myocardial ischemia/reperfusion injury remains to be e
October 04, 2016	Attenuation of Na/K-ATPase Mediated Oxidant Amplification with pNaKtide Ameliorates Experimental Uremic Cardiomyopathy	We have previously reported that the sodium potassium adenosine triphosphatase (Na/K-ATPase) can effect the amplification of reactive oxygen species.
September 09, 2016	PTRF/Cavin-1 Deficiency Causes Cardiac Dysfunction Accompanied by Cardiomyocyte Hypertrophy and Cardiac Fibrosis	Mutations in the PTRF/Cavin-1 gene cause congenital generalized lipodystrophy type 4 (CGL4) associated with myopathy.
September 01, 2016	Myocardial Ischemia/Reperfusion impairs neurogenesis and hippocampal-dependent learning and memory	The incidence of cognitive impairment in cardiovascular disease (CVD) patients has increased, adversely impacting quality of life and imposing a signi
August 01, 2016	Ginkgolide K protects the heart against endoplasmic reticulum stress injury by activating the inositol-requiring enzyme 1α/X box-binding protein-1 pathway	BACKGROUND AND PURPOSE Endoplasmic reticulum (ER) stress is increasingly recognized as an important causal factor of many diseases.
March 01, 2016	Fibrotic Aortic Valve Stenosis in Hypercholesterolemic/Hypertensive MiceSignificance	Objective—Hypercholesterolemia and hypertension are associated with aortic valve stenosis (AVS) in humans.
February 01, 2016	Aspirin Attenuates Angiotensin II-induced Cardiomyocyte Hypertrophy by Inhibiting the Ca²⁺/Calcineurin-NFAT Signaling Pathway	In this study, we examined whether aspirin could inhibit cardiac hypertrophy.
January 15, 2016	Accelerated cardiac remodeling in desmoplakin transgenic mice in response to endurance exercise is associated with perturbed Wnt/β-catenin signaling	BACKGROUND: Arrhythmogenic ventricular cardiomyopathy (AVC) is a frequent underlying cause for arrhythmias and sudden cardiac death especially during
January 01, 2015	Bcl-2-associated athanogene 3 protects the heart from ischemia/reperfusion injury	Introduction Bcl-2-associated athanogene 3 (BAG3) is a 575–amino acid protein that is highly conserved in nature (1).
January 01, 2015	The Heparan Sulfate Proteoglycan Glypican-6 Is Upregulated in the Failing Heart, and Regulates Cardiomyocyte Growth through ERK1/2 Signaling	Pressure overload is a frequent cause of heart failure.
January 01, 2015	N-acetylcysteine attenuates myocardial dysfunction and postischemic injury by restoring caveolin-3/eNOS signaling in diabetic rats	Background: Patients with diabetes are prone to develop cardiac hypertrophy and more susceptible to myocardial ischemia–reperfusion (I/R) injury, whic
January 01, 2015	Increased aldosterone-dependent Kv1.5 recycling predisposes to pacing-induced atrial fibrillation in Kcne3^{-/-} mice	Hyperaldosteronism is associated with an increased prevalence of atrial fibrillation (AF).Mutations in KCNE3 have been associated with AF, and Kcne32/
January 01, 2015	Polydatin post-treatment alleviates myocardial ischaemia/reperfusion injury by promoting autophagic flux	Polydatin (PD), a resveratrol (RES) glycoside, has a stronger antioxidative effect than RES.
January 01, 2015	Oncostatin M-induced cardiomyocyte dedifferentiation regulates the progression of diabetic cardiomyopathy through B-Raf/Mek/Erk signaling pathway	It has been reported that oncostatin M (OSM) could initiate cardiomyocyte dedifferentiation both in vivo and in vitro.
January 01, 2015	Fenofibrate increases cardiac autophagy via FGF21/SIRT1 and prevents fibrosis and inflammation in the hearts of Type 1 diabetic mice	Fenofibrate (FF), as a peroxisome-proliferator-activated receptor α (PPAR α) agonist, has been used clinically for decades to lower lipid levels.

December 01, 2015	Inhibition of MEF2A prevents hyperglycemia-induced extracellular matrix accumulation by blocking Akt and TGF-β1/Smad activation in cardiac fibroblasts	Myocyte enhancer factor 2A (MEF2A) functions in muscle-specific and/or growth factor-related transcription and is involved in cell growth, survival,
September 01, 2015	A background Ca²⁺ entry pathway mediated by TRPC1/TRPC4 is critical for development of pathological cardiac remodelling	Aims: Pathological cardiac hypertrophy is a major predictor for the development of cardiac diseases.
August 17, 2015	A soluble receptor for advanced glycation end-products inhibits myocardial apoptosis induced by ischemia/reperfusion via the JAK2/STAT3 pathway	sRAGE can protect cardiomyocytes from apoptosis induced by ischemia/reperfusion (I/R).
July 01, 2015	Chronic Exposure to Bisphenol A Reduces Successful Cardiac Remodeling After an Experimental Myocardial Infarction in Male C57bl/6n Mice	Estrogenic compounds such as bisphenol A (BPA) leach from plastics into food and beverage containers.
June 14, 2015	MicroRNA-221 inhibits autophagy and promotes heart failure by modulating the p27/CDK2/mTOR axis	MicroRNAs have emerged as crucial regulators of cardiac homeostasis and remodeling in various cardiovascular diseases.
January 01, 2015	Protective Effect of Sevoflurane Postconditioning against Cardiac Ischemia/Reperfusion Injury via Ameliorating Mitochondrial Impairment, Oxidative Stress and Rescuing Autophagic Clearance	BACKGROUND AND PURPOSE: Myocardial infarction leads to heart failure.
January 01, 2015	PI3Kα is essential for the recovery from Cre/tamoxifen cardiotoxicity and in myocardial insulin signalling but is not required for normal myocardial contractility in the adult heart.	AIMS: Genetic mouse models have yielded conflicting conclusions about the role of PI3Kα in heart physiology: specifically, the question of whether PI3
March 01, 2014	Angiotensin 1-7 Ameliorates Diabetic Cardiomyopathy and Diastolic Dysfunction in db/db Mice by Reducing Lipotoxicity and Inflammation.	Background- The angiotensin-converting enzyme 2 and angiotensin-(1-7) (Ang 1-7)/MasR (Mas receptor) axis are emerging as a key pathway that can modula
August 01, 2013	Substrain specific response to cardiac pressure overload in C57BL/6 mice.	The C57BL/6 mouse strain is one of the most commonly used in experimental research.
January 01, 2013	Injection of Vessel-Derived Stem Cells Prevents Dilated Cardiomyopathy and Promotes Angiogenesis and Endogenous Cardiac Stem Cell Proliferation in mdx/utrn^{-/-} but Not Aged mdx Mouse Models for Duchenne Muscular Dystrophy	Duchenne muscular dystrophy (DMD) is the most common form of muscular dystrophy.
September 01, 2012	Anti-interleukin-12/23p40 antibody attenuates chronic rejection of cardiac allografts partly via inhibition γδT cells.	In our previous study, we showed that treatment with an anti-interleukin (IL)-12/23p40 antibody inhibits acute cardiac allograft rejection via inhibit
June 08, 2012	MMP-2 Regulates Erk1/2 Phosphorylation and Aortic Dilatation in Marfan Syndrome	RATIONALE: Aneurysm and dissection of the ascending thoracic aorta are the main cardiovascular complications of Marfan syndrome (MFS) resulting in pre
February 01, 2012	Treatment with selumetinib preserves cardiac function and improves survival in cardiomyopathy caused by mutation in the lamin A/C gene.	AIMS: Mutations in A-type nuclear lamins gene, LMNA, lead to a dilated cardiomyopathy.
January 01, 2011	FTY720 protects cardiac microvessels of diabetes: a critical role of S1P1/3 in diabetic heart disease.	BACKGROUND: Diabetes is associated with an increased risk of cardiac microvascular disease. The mechanisms by which this damage occurs are unknown.
June 01, 2011	Mitigation of the progression of heart failure with sildenafil involves inhibition of RhoA/Rho-kinase pathway.	Chronic inhibition of phosphodiesterase-5 with sildenafil immediately after permanent occlusion of the left anterior descending coronary artery was sh

October 23, 2009	Myeloid differentiation factor-88/interleukin-1 signaling controls cardiac fibrosis and heart failure progression in inflammatory dilated cardiomyopathy.	RATIONALE: The myeloid differentiation factor (MyD)88/interleukin (IL)-1 axis activates self-antigen-presenting cells and promotes autoreactive CD4(+)
May 01, 2007	Cardiac response to pressure overload in 129S1/SvImJ and C57BL/6J mice: temporal- and background-dependent development of concentric left ventricular hypertrophy	Left ventricular hypertrophy (LVH), a risk factor for cardiovascular morbidity and mortality, is commonly caused by essential hypertension.