

Title	Journal	Link	Publication date	References	Top Paper
Left atrial reservoir strain as a predictor of cardiac dysfunction in a murine model of pressure overload	Acta Physiologica		2025	John P., Salvas, Thomas, Moore-Morris, Craig J., Goergen, Pierre, Sicard	Yes
Endothelial cells drive organ fibrosis in mice by inducing expression of the transcription factor SOX9	Science Translational Medicine	https://www.science.org/doi/10.1126/scitranslmed.abq4581	2024	Felix A, Trogisch, Aya, Abouissa, Merve, Keles, Anne, Birke, Manuela, Fuhrmann, Gesine M, Dittrich, Nina, Weinzierl, Elvira, Wink, Julio, Cordero, Adel, Elsherbiny, Abel, Martin-Garrido, Steve, Grein, Shruthi, Hemanna, Ellen, Hofmann, Luka, Nicin, Sofia-Iris, Bibli, Rannar, Airik, Andreas, Kispert, Ralf, Kist, Sun, Quanchao, Sina W., Kürschner, Manuel, Winkler, Norbert, Gretz, Carolin, Mogler, Thomas, Korff, Philipp-Sebastian, Koch, Stefanie, Dimmeler, Gergana, Dobрева, Joerg, Heineke	Yes
Standardisation and future of preclinical echocardiography	Mammalian Genome	https://doi.org/10.1007/s00335-023-09981-4	2023	Caroline E., O'Riordan, Philippe, Trochet, Magdalena, Steiner, Dieter, Fuchs	Yes
In-ovo echocardiography for application in cardiovascular research	Basic Research in Cardiology		2023	Niklas, Hegemann, Willem, Bintig, Paul Lennard, Perret, Judith, Rees, Alessandra, Viperino, Britta, Eickholt, Wolfgang M., Kuebler, Michael, Höpfner, Bianca, Nitzsche, Jana, Grune	Yes
Echocardiography protocol: A tool for infrequently used parameters in mice	Frontiers in Cardiovascular Medicine		2022	Emily Ann, Todd, Monique, Williams, Ali, Kamiar, Monica Anne, Rasmussen, Lina A., Shehadeh	Yes
Comparative assessment of coronary physiology using transthoracic pulsed-wave Doppler and myocardial contrast echocardiography in rats	European radiology experimental		2023	Sebastian, Billig, Marc, Hein, Mare, Mechelinck, David, Schumacher, Anna B., Roehl, Dieter, Fuchs, Rafael, Kramann, Moritz, Uhlig	Yes
Embryonic echocardiography for assessment of congenital and functional cardiac defects	STAR Protocols	https://doi.org/10.1016/j.xpro.2021.100980	2021	Ivan, Menendez-Montes, Maria, Villalba-Orero, Beatriz, Escobar, Silvia, Martin-Puig	Yes
P2Y12 Inhibition in Murine Myocarditis Results in Reduced Platelet Infiltration and Preserved Ejection Fraction	Cells	https://www.mdpi.com/2073-4409/10/12/3414	2021	Sarah, Schmidt, Wilfried, Reichardt, Beat, Kaufmann, Carolin, Wadle, Dominik, von Elverfeldt, Peter, Stachon, Ingo, Hilgendorf, Dennis, Wolf, Timo, Heidt, Daniel, Duerschmied, Karlheinz, Peter, Christoph, Bode, Constantin, von zur Mühlen, Alexander, Maier	Yes

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Role of plakophilin-2 expression on exercise-related progression of arrhythmogenic right ventricular cardiomyopathy: a translational study	European Heart Journal	https://academic.oup.com/eurheartj/article/43/12/1251/6431860	2022	Marina, Cerrone, Grecia M, Marrón-Liñares, Chantal J M, van Opbergen, Sarah, Costa, Mimount, Bourfiss, Marta, Pérez-Hernández, Florencia, Schlamp, Fabian, Sanchis-Gomar, Kabir, Malkani, Kamelia, Drenkova, Mingliang, Zhang, Xianming, Lin, Adriana, Heguy, Birgitta K, Velthuis, Niek H J, Prakken, Andre, LaGerche, Hugh, Calkins, Cynthia A, James, Anneline S J M, Te Riele, Mario, Delmar	Yes
Right Heart Failure in Mice Upon Pressure Overload Is Promoted by Mitochondrial Oxidative Stress	JACC: Basic to Translational Science	https://www.sciencedirect.com/science/article/pii/S2452302X22000754	2022	Marion, Muller, Cornelius, Bischof, Torben, Kapries, Sophie, Wollnitzer, Chiara, Liechty, Simon, Beiben, Torben, Schubert, Dragan, Opacic, Muhammad, Gercek, Vera, Fortmeier, Daniel, Dumitrescu, Uwe, Scholmann, Akylbek, Sydykov, Aleksandar, Petrovic, Leoni, Gnatzy-Feik, Hendrik, Milting, Ralph T., Schermuly, Kai, Friedrichs, Volker, Rudolph, Anna, Klinke	Yes
Photoacoustic properties of polypyrrole nanoparticles	Nanomaterials		2021	Peter, Keša, Monika, Paúrová, Michal, Babič, Tomáš, Heizer, Petr, Matouš, Karolína, Turnovcová, Dana, Mareková, Luděk, Šefc, Vit, Herynek	Yes
Quantification of murine myocardial infarct size using 2-D and 4-D high-frequency ultrasound	American Journal of Physiology-Heart and Circulatory Physiology	https://journals.physiology.org/doi/10.1152/ajpheart.00476.2021	2022	Melissa M., Dann, Sydney Q., Clark, Natasha A., Trzaskalski, Conner C., Earl, Luke E., Schepers, Serena M., Pulente, Ebonee N., Lennord, Karthik, Annamalai, Joseph M., Gruber, Abigail D., Cox, Ilka, Lorenzen-Schmidt, Richard, Seymour, Kyoung-Han, Kim, Craig J., Goergen, Erin E., Mulvihill	Yes
Improving characterization of hypertrophy-induced murine cardiac dysfunction using four-dimensional ultrasound derived strain mapping	American Journal of Physiology-Heart and Circulatory Physiology	https://journals.physiology.org/doi/10.1152/ajpheart.00133.2021	2021	Frederick W., Damen, John P., Salvas, Andrea S., Pereyra, Jessica M., Ellis, Craig J., Goergen	Yes
Machine learning driven contouring of high-frequency four-dimensional cardiac ultrasound data	Applied Sciences (Switzerland)		2021	Frederick W., Damen, David T., Newton, Guang, Lin, Craig J., Goergen	Yes
Echocardiographic speckle-tracking based strain imaging for rapid cardiovascular phenotyping in mice	Circulation Research		2011	Michael, Bauer, Susan, Cheng, Mohit, Jain, Soeun, Ngoy, Catherine, Theodoropoulos, Anna, Trujillo, Fen Chiung, Lin, Rongliu, Liao	Yes

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Induced pluripotent stem cell intervention rescues ventricular wall motion disparity, achieving biological cardiac resynchronization post-infarction	Journal of Physiology		2013	Satsuki, Yamada, Timothy J., Nelson, Garvan C., Kane, Almudena, Martinez-Fernandez, Ruben J., Crespo-Diaz, Yasuhiro, Ikeda, Carmen, Perez-Terzic, Andre, Terzic	Yes
Uncoupling DNA damage from chromatin damage to detoxify doxorubicin	Proceedings of the National Academy of Sciences	https://pnas.org/doi/full/10.1073/pnas.1922072117	2020	Xiaohang, Qiao, Sabina Y., van der Zanden, Dennis P. A., Wander, Daniel M., Borràs, Ji-Ying, Song, Xiaoyang, Li, Suzanne, van Duikeren, Noortje, van Gils, Arjo, Rutten, Tessa, van Herwaarden, Olaf, van Tellingen, Elisa, Giacomelli, Milena, Bellin, Valeria, Orlova, Leon G. J., Tertoolen, Sophie, Gerhardt, Jimmy J., Akkermans, Jeroen M., Bakker, Charlotte L., Zuur, Baoxu, Pang, Anke M., Smits, Christine L., Mummery, Linda, Smit, Ramon, Arens, Junmin, Li, Hermen S., Overkleeft, Jacques, Neeffjes	Yes
Novel insights into the genetic landscape of congenital heart disease with systems genetics	Progress in Pediatric Cardiology	https://doi.org/10.1016/j.ppedcard.2019.101128	2019	George C., Gabriel, Cecilia W., Lo	Yes
Toward standardization of echocardiography for the evaluation of left ventricular function in adult rodents: a position paper of the ESC Working Group on Myocardial Function	Cardiovascular Research	https://academic.oup.com/cvres/advance-article/doi/10.1093/cvr/cvaa110/...	2020	Serena, Zacchigna, Alessia, Paldino, Inês, Falcão-Pires, Evangelos P, Daskalopoulos, Matteo, Dal Ferro, Simone, Vodret, Pierluigi, Lesizza, Antonio, Cannatà, Daniela, Miranda-Silva, André P, Lourenço, Bruno, Pinamonti, Gianfranco, Sinagra, Florian, Weinberger, Thomas, Eschenhagen, Lucie, Carrier, Izhak, Kehat, Carlo G, Tocchetti, Michele, Russo, Alessandra, Ghigo, James, Cimino, Emilio, Hirsch, Dana, Dawson, Michele, Ciccarelli, Marco, Olivetti, Wolfgang A, Linke, Ilona, Cuijpers, Stephane, Heymans, Nazha, Hamdani, Martine, de Boer, Dirk, Duncker, Diederik, Kuster, Jolanda, van der Velden, Christophe, Beauloye, Luc, Bertrand, Manuel, Mayr, Mauro, Giacca, Florian, Leuschner, Johannes, Backs, Thomas, Thum	Yes
Left Ventricular Longitudinal Strain as a Marker for Point of No Return in Hypertensive Heart Failure Treatment	Journal of the American Society of Echocardiography	https://doi.org/10.1016/j.echo.2019.08.022	2020	Tomoko, Ishizu, Yoshihiro, Seo, Mikiko, Namekawa, Nobuyuki, Murakoshi, Masaki, Ieda, Yasushi, Kawakami	Yes

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Non-Invasive Photoacoustic Imaging of In Vivo Mice with Erythrocyte Derived Optical Nanoparticles to Detect CAD/MI	Scientific Reports	http://dx.doi.org/10.1038/s41598-020-62868-1	2020	Yonggang, Liu, Taylor, Hanley, Hao, Chen, Steven R., Long, Sanjiv S., Gambhir, Zhen, Cheng, Joseph C., Wu, Georges El, Fakhri, Bahman, Anvari, Raiyan T., Zaman	Yes
EXPRESS: Echocardiographic markers of pulmonary hemodynamics and right ventricular hypertrophy in rat models of pulmonary hypertension	Pulmonary Circulation	http://journals.sagepub.com/doi/10.1177/2045894020910976	2020	Fotios, Spyropoulos, Sally H, Vitali, Marlin, Touma, Chase D., Rose, Carter R., Petty, Philip, Levy, Stella, Kourembanas, Helen, Christou	Yes
Improving the quality of preclinical research echocardiography: observations, training, and guidelines for measurement	American Journal of Physiology-Heart and Circulatory Physiology	https://www.physiology.org/doi/10.1152/ajpheart.00157.2018	2018	Daniel G., Donner, Helen, Kiriazis, Xiao-Jun, Du, Thomas H., Marwick, Julie R., McMullen	Yes
Speckle tracking echocardiography could detect the difference of pressure overload-induced myocardial remodelling between young and adult rats	Journal of The Royal Society Interface	https://royalsocietypublishing.org/doi/10.1098/rsif.2019.0808	2020	Pei, Niu, Li, Li, Zhongjie, Yin, Jie, Du, Wenchang, Tan, Yunlong, Huo	Yes
World Trade Center-Cardiorespiratory and Vascular Dysfunction: Assessing the Phenotype and Metabolome of a Murine Particulate Matter Exposure Model	Scientific Reports	http://dx.doi.org/10.1038/s41598-020-58717-w	2020	Arul, Veerappan, Assad, Oskuei, George, Crowley, Mena, Mikhail, Dean, Ostrofsky, Zakia, Gironda, Sandhya, Vaidyanathan, Youssef Zaim, Wadghiri, Mengling, Liu, Sophia, Kwon, Anna, Nolan	Yes
Commercial 4-dimensional echocardiography for murine heart volumetric evaluation after myocardial infarction	Cardiovascular Ultrasound	https://cardiovascularultrasound.biomedcentral.com/articles/10.1186/s12947-020-...	2020	Cody, Rutledge, George, Cater, Brenda, McMahon, Lanping, Guo, Seyed Mehdi, Nouraie, Yijen, Wu, Flordeliza, Villanueva, Brett A., Kaufman	Yes
Sex differences in the evolution of left ventricle remodeling in rats with severe volume overload	BMC Cardiovascular Disorders	https://bmccardiovascdisord.biomedcentral.com/articles/10.1186/s12872-020-01360...	2020	Elisabeth, Walsh-Wilkinson, Marie-Claude, Drolet, Marie, Arsenaault, Jacques, Couet	Yes
Three-dimensional myocardial strain correlates with murine left ventricular remodelling severity post-infarction	Journal of The Royal Society Interface	https://royalsocietypublishing.org/doi/10.1098/rsif.2019.0570	2019	Arvin H, Soepriatna, A Kevin, Yeh, Abigail D, Clifford, Semih E, Bezci, Grace D., O'Connell, Craig J, Goergen	Yes
Accurate assessment of LV function using the first automated 2D-border detection algorithm for small animals - evaluation and application to models of LV dysfunction	Cardiovascular Ultrasound	https://cardiovascularultrasound.biomedcentral.com/articles/10.1186/s12947-019-...	2019	Jana, Grune, Daniel, Ritter, Kristin, Kräker, Kathleen, Pappritz, Niklas, Beyhoff, Till, Schütte, Christiane, Ott, Cathleen, John, Sophie, van Linthout, Carsten, Tschöpe, Ralf, Dechend, Dominik N., Muller, Nadine, Haase, Tilman, Grune, Ulrich, Kintscher, Wolfgang M., Kuebler	Yes

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Nitrosative stress drives heart failure with preserved ejection fraction	Nature	http://www.nature.com/articles/s41586-019-1100-z	2019	Gabriele G., Schiattarella, Francisco, Altamirano, Dan, Tong, Kristin M., French, Elisa, Villalobos, Soo Young, Kim, Xiang, Luo, Nan, Jiang, Herman I., May, Zhao V., Wang, Theodore M., Hill, Pradeep P. A., Mammen, Jian, Huang, Dong I., Lee, Virginia S., Hahn, Kavita, Sharma, David A., Kass, Sergio, Lavandero, Thomas G., Gillette, Joseph A., Hill	Yes
EXPRESS: Echocardiographic Assessment of Right Ventricular Functions in Experimental Pulmonary Hypertension	Pulmonary Circulation	http://journals.sagepub.com/doi/10.1177/2045894019841987	2019	Zhongkai, Zhu, Dureti, Godana, Ailing, Li, Bianca, Rodriguez, HAIYANG, TANG, Richard, Minshall, Wei, Huang, Jiawang, Chen	Yes
Inactivation of platelet-derived TGF-β1 attenuates aortic stenosis progression in a robust murine model	Blood Advances	http://www.bloodadvances.org/lookup/doi/10.1182/bloodadvances.2018025817	2019	Rohan, Varshney, Brennah, Murphy, Sean, Woolington, Shahrouz, Ghafoory, Sixia, Chen, Tyler, Robison, Jasimuddin, Ahamed	Yes
Gadolinium Doping Enhances the Photoacoustic Signal of Synthetic Melanin Nanoparticles: A Dual Modality Contrast Agent for Stem Cell Imaging	Chemistry of Materials	http://pubs.acs.org/doi/10.1021/acs.chemmater.8b04333	2018	Jeanne E., Lemaster, Zhao, Wang, Ali, Hariri, Fang, Chen, Ziyang, Hu, Yuran, Huang, Christopher V., Barback, Richard, Cochran, Nathan C., Gianneschi, Jesse V, Jokerst	Yes
Lung ultrasound as a translational approach for non-invasive assessment of heart failure with reduced or preserved ejection fraction in mice	Cardiovascular Research	http://academic.oup.com/circovasres/article/113/10/1113/3797838/Lung-ultrasou...	2017	María, Villalba-Orero, Marina M., López-Olañeta, Esther, González-López, Laura, Padrón-Barthe, Jesús M., Gómez-Salineró, Jaime, García-Prieto, Timothy, Wai, Pablo, García-Pavía, Borja, Ibáñez, Luis J., Jiménez-Borreguero, Enrique, Lara-Pezzi	Yes
Accurate and noise insensitive strain mapping enables ultrasound analysis of cardiac function in three dimensions	Journal of Biomechanical Engineering	http://biomechanical.asmedigitalcollection.asme.org/article.aspx?doi=10.1115/1...	2018	John, Boyle, Arvin, Soepriatna, Frederick, Damen, Roger, Rowe, Robert, Pless, Attila, Kovacs, Craig, Goergen, Stavros, Thomopoulos, Guy M., Genin	Yes
A minimally invasive approach to induce myocardial infarction in mice without thoracotomy	Journal of Cellular and Molecular Medicine	http://doi.wiley.com/10.1111/jcmm.13708	2018	Quan, Sun, Kang-Kai, Wang, Miao, Pan, Ji-Peng, Zhou, Xue-Ting, Qiu, Zhen-Yu, Wang, Zhen, Yang, Yan, Chen, Hong, Shen, Qi-Lin, Gu, Long-Hou, Fang, Guo-Gang, Zhang, Yong-Ping, Bai	Yes
4D cardiac magnetic resonance imaging, 4D and 2D transthoracic echocardiography: a comparison of in-vivo assessment of ventricular function in rats	Laboratory Animals	http://journals.sagepub.com/doi/10.1177/0023677218789971	2018	Hedwig, Stegmann, Tobias, Bäuerle, Katharina, Kienle, Sven, Dittrich, Muhannad, Alkassar	Yes
Real-Time in Vivo Photoacoustic Imaging in the Assessment of Myocardial Dynamics in Murine Model of Myocardial Ischemia	Ultrasound in Medicine and Biology		2018	Rashid Al, Mukaddim, Allison, Rodgers, Timothy A., Hacker, Andrew, Heinmiller, Tomy, Varghese	Yes

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Evaluation of a commercial multi-dimensional echocardiography technique for ventricular volumetry in small animals	Cardiovascular Ultrasound	https://cardiovascularultrasound.biomedcentral.com/articles/10.1186/s12947-018-...	2018	Jana, Grune, Annelie, Blumrich, Sarah, Brix, Sarah, Jeuthe, Cathleen, Drescher, Tilman, Grune, Anna, Foryst-Ludwig, Daniel, Messroghli, Wolfgang M., Kuebler, Christiane, Ott, Ulrich, Kintscher	Yes
Inhibition of BK Ca negatively alters cardiovascular function	Physiological Reports	http://doi.wiley.com/10.14814/phy2.13748	2018	Nishi H., Patel, Justin, Johannesen, Kajol, Shah, Sumanta K., Goswami, Neel J., Patel, Devasena, Ponnalagu, Andrew R., Kohut, Harpreet, Singh	Yes
Echocardiographic Strain Analysis for the Early Detection of Left Ventricular Systolic/Diastolic Dysfunction and Dyssynchrony in a Mouse Model of Physiological Aging	The Journals of Gerontology: Series A	https://academic.oup.com/biomedgerontology/advance-article-abstract/doi/10.1093...	2018	Claudio, de Lucia, Markus, Wallner, Deborah M, Eaton, Huaqing, Zhao, Steven R, Houser, Walter J, Koch	Yes
Oxidized phospholipids are proinflammatory and proatherogenic in hypercholesterolaemic mice	Nature	http://www.nature.com/articles/s41586-018-0198-8	2018	Xuchu, Que, Mingyow, Hung, Calvin, Yeang, Ayelet, Gonen, Thomas A, Prohaska, Xiaoli, Sun, Cody, Diehl, Antti, Määttä, Dalia E, Gaddis, Karen, Bowden, Jennifer, Pattison, Jeffrey G., MacDonald, Seppo, Ylä-Herttua, Pamela L, Mellon, Catherine C, Hedrick, Klaus, Ley, Yury I, Miller, Christopher K, Glass, Kirk L, Peterson, Christoph J, Binder, Sotirios, Tsimikas, Joseph L, Witztum	Yes
Echocardiographic Analysis of Cardiac Function After Infarction in Mice: Validation of Single-Plane Long-Axis View Measurements and the Bi-Plane Simpson Method	Ultrasound in Medicine & Biology	https://doi.org/10.1016/j.ultrasmedbio.2018.03.020	2018	Andre, Heinen, Annika, Raupach, Friederike, Behmenburg, Nina, Hölscher, Ulrich, Flögel, Malte, Kelm, Wolfgang, Kaisers, Rianne, Nederlof, Ragnar, Huhn, Axel, Gödecke	Yes
Novel mouse model of left ventricular pressure overload and infarction causing predictable ventricular remodelling and progression to heart failure	Clinical and Experimental Pharmacology and Physiology		2015	Carla J., Weinheimer, Ling, Lai, Daniel P., Kelly, Attila, Kovacs	Yes
GPR68 Senses Flow and Is Essential for Vascular Physiology	Cell		2018	Jie, Xu, Jayanti, Mathur, Emilie, Vessières, Scott, Hammack, Keiko, Nonomura, Julie, Favre, Linda, Grimaud, Matt, Petrus, Allain, Francisco, Jingyuan, Li, Van, Lee, Fu li, Xiang, James K., Mainquist, Stuart M., Cahalan, Anthony P., Orth, John R., Walker, Shang, Ma, Viktor, Lukacs, Laura, Bordone, Michael, Bandell, Bryan, Laffitte, Yan, Xu, Shu, Chien, Daniel, Henrion, Ardem, Patapoutian	Yes

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Electromechanical vortex filaments during cardiac fibrillation	Nature	http://www.nature.com/doi/10.1038/nature26001	2018	J., Christoph, M., Chebbok, C., Richter, J., Schröder-Schetelig, P., Bittihn, S., Stein, I., Uzelac, F. H., Fenton, G., Hasenfuß, R. F., Gilmour, S., Luther	Yes
Guidelines for measuring cardiac physiology in mice	American Journal of Physiology-Heart and Circulatory Physiology	http://www.physiology.org/doi/10.1152/ajpheart.00339.2017	2018	Merry L., Lindsey, Zamaneh, Kassiri, Jitka A. I., Virag, Lisandra E., de Castro Brás, Marielle, Scherrer-Crosbie	Yes
Cardiac and respiratory-gated volumetric murine ultrasound	The International Journal of Cardiovascular Imaging	http://dx.doi.org/10.1007/s10554-017-1283-z	2017	Arvin H., Soepriatna, Frederick W., Damen, Pavlos P., Vlachos, Craig J., Goergen	Yes
Naturally occurring p16 Ink4a -positive cells shorten healthy lifespan	Nature	http://dx.doi.org/10.1038/nature16932	2016	Darren J, Baker, Bennett G, Childs, Matej, Durik, Melinde E, Wijers, Cynthia J, Sieben, Jian, Zhong, Rachel A, Saltness, Karthik B, Jeganathan, Grace, Casaclang Verzosa, Abdulmohammad, Pezeshki, Khashayarsha, Khazaie, Jordan D, Miller, Jan M, Van Deursen	Yes
Echocardiographic speckle-tracking based strain imaging for rapid cardiovascular phenotyping in mice.	Circulation research	http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3376717&tool=pmcentr...	2011	Michael, Bauer, Susan, Cheng, Mohit, Jain, Soeun, Ngoy, Catherine, Theodoropoulos, Anna, Trujillo, Fen-Chiung, Lin, Rongliu, Liao	Yes
High-frequency ultrasound for in vivo measurement of colon wall thickness in mice.	Ultrasound in medicine & biology	http://www.ncbi.nlm.nih.gov/pubmed/22266235	2012	Mostafa a, Abdelrahman, Gemma, Marston, Mark a, Hull, Alexander F, Markham, Pamela F, Jones, J Anthony, Evans, P Louise, Coletta	Yes
Intraluminal gel ultrasound and eco-color doppler: new tools for the study of colorectal cancer in mice.	In vivo (Athens, Greece)	http://www.ncbi.nlm.nih.gov/pubmed/23812213	2013	Antonio, Barbieri, Maria Luisa, Barretta, Domenica, Rea, Carmine, Picone, Olimpia, Fabozzi, Giuseppe, Palma, Luciano, Antonio, Alessandro, Federico, Sabrina, Bimonte, Francesca, Setola, Elisabetta, De Lutio Di Castelguidone, Maria, Castellano, Adolfo Gallipoli, D'Errico, Michele, Caraglia, Claudio, Arra	Yes
Effects of proANP31-67 in a preclinical model of uninephrectomy and cardiac 2 ischemia/reperfusion injury: cardiac remodeling and tissue biochemical profiling			2026	Gustavo, Jose Justo Silva, Sara, Stefani, Reza, Parvan, Michael, Frisk, Xin, Shen, Alunni, Cardinali, Mari E, Strand, Karoline, Bjarnesdatter Rypdal, Mathis, Korseberg, Håvard, Attramadal, Ida G, Lunde, Jan, Magnus Aronsen, Kåre-Olav, Stensløkken, William E, Louch, Paola, Sassi, Alessandro, Cataliotti	No

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Echocardiographic characterization and functional impairment in an ex-vivo perfused rat model of takotsubo syndrome	European Heart Journal	https://academic.oup.com/eurheartj/article/46/Supplement_1/ehaf784.4740/8309726	2025	A, Nejat, E R M I R, Zulfaj, Y A L D A, Kakaei, A H M E D, Elmahdy, A A R O N, Shekka Espinosa, P Y L O V A, Tetiana, S, Valentina, M A N A, Kalani, A, Hamiid, A, Jha, Björn, Redfors, E L M I R, Omerovic	No
He has been a Researcher with the Cardiovascular Imaging Research Laboratory	J. P. Salvas received B.S. and M.S. degrees in biomedical engineering from Purdue University	https://doi.org/10.1113/P289361#support-information-section	2025	John P. Salvas, Thomas, Moore-Morris, Craig J, Goergen, Pierre, Sicard	No
Plasminogen Activator Inhibitor-1 promotes aortic aging-1 like pathophysiology in humans and mice				Alireza, Khoddam, Anthony, Kalousdian, Mesut, Eren, Saul, Soberanes, Andrew, Decker, Elizabeth J, Lux, Benjamin W, Zywicki, Brian, Dinh, Bedirhan, Boztepe, Baljash S, Cheema, Carla M, Cuda, Hiam, Abdala-Valencia, Arun, Sivakumar, Toshio, Miyata, Lisa D, Wilsbacher, Douglas E, Vaughan	No
Integrated response of the zebrafish (Danio rerio) cardiovascular system to hypoxia acclimation			2025	Elizabeth A, Manchester, Todd E, Gillis	No
CALCOCO2 prevents AngII-induced atrial remodeling by regulating the interaction between mitophagy and mitochondrial stress	International Immunopharmacology		2024	Wanyue, Sang, Xiaoji, Yan, Lu, Wang, Huaxin, Sun, Yi, Jian, Feifei, Wang, Baopeng, Tang, Yaodong, Li	No
Nuclear factor of activated T-cells 5 is indispensable for a balanced adaptive transcriptional response of lung endothelial cells to hypoxia	Cardiovascular Research		2024	Hebatullah, Laban, Sophia, Siegmund, Katharina, Schlereth, Felix A., Trogisch, Alia, Abليه, Lennart, Brandenburg, Andreas, Weigert, Carolina, De La Torre, Carolin, Mogler, Markus, Hecker, Wolfgang M., Kuebler, Thomas, Korff	No
Multimodal ultrasound imaging of a rat model with ischemic heart failure and its relationship to histopathology	American Journal of Translational Research		2024	Qiufang, Ouyang	No
Hemodynamic disturbance and mTORC1 activation: Unveiling the biomechanical pathogenesis of thoracic aortic aneurysms in Marfan syndrome	Journal of Pharmaceutical Analysis		2025	Ming Yuan, Liu, Meili, Wang, Junjun, Liu, An Qiang, Sun, Chang Shun, He, Xin, Cong, Wei, Kong, Wei, Li	No
Placental growth factor modulates endothelial NO production and exacerbates experimental hepatopulmonary syndrome	JHEP Reports		2025	Fabien, Robert, Feriel, Benchenouf, My Ngoc, Ha, Alessandra, Cuomo, Mina, Ottaviani, Maxime, Surbier, Raphaël, Thuillet, Corinne, Normand, Florent, Dumont, Céline, Verstuyft, Frederic, Fiore, Frederic, Guinut, Marc, Humbert, Audrey, Coilly, Emmanuel, Gonzales, Olivier, Sitbon, Ly, Tu, Christophe, Guignabert, Laurent, Savale	No
Mitochondrial metabolic maturation in postnatal right ventricle restricted by volume overload	Intractable and Rare Diseases Research		2025	Juan, Cao, Yingying, Xiao, Haifa, Hong, Zhongzhong, Chen, Wenjun, Qin	No

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Macrophage k-opioid receptor inhibits hypoxic pulmonary hypertension progression and right heart dysfunction via an SCD1-dependent anti-inflammatory response	Genes & Diseases		2025	Qiaojuan, Wang, Jiayuan, Liu, Renqi, Li, Sihan, Kong, Yinjie, Wang, Guoyang, Huang, Shumiao, Zhang, Na, Feng, Xiaoming, Gu, Yali, Liu, Ming, Jia, Feng, Fu, Jun, Li, Juan, Li, Jianming, Pei	No
Non-invasive estimation of left ventricular chamber stiffness using cardiovascular magnetic resonance and echocardiography	Journal of Cardiovascular Magnetic Resonance		2025	Ida Marie, Hauge-Iversen, Einar S., Nordén, Arne Olav, Melleby, Linn, Espeland, Lili, Zhang, Ivar, Sjaastad, Emil Knut Stenersen, Espe	No
MARCH5 ameliorates aortic valve calcification via RACGAP1-DRP1 associated mitochondrial quality control	Biochimica et Biophysica Acta - Molecular Cell Research		2025	Jialiang, Zhang, Yaoyu, Zhang, Wenhua, Lei, Jing, Zhou, Yanjiani, Xu, Zhou, Hao, Yanbiao, Liao, Fangyang, Huang, Mao, Chen	No
Ischemic Myocardium Targeting Peptide-Guided Nanobubbles for Multimodal Imaging and Treatment of Coronary Microvascular Dysfunction	Advanced Healthcare Materials		2025	Bo, Yu, Ziwei, Pang, Jing, Zhao, Jingyi, Xue, Hsuan, Lo, Tiancheng, Gu, Ping, Zhang, Jiawei, Tian, Guo Qing, Du	No
Lead-induced actin polymerization aggravates neutrophil extracellular trap formation and contributes to vascular inflammation	Ecotoxicology and Environmental Safety		2025	Qiyong, Nong, Yanjun, Wu, Suhui, Liu, Yinyin, Tang, Jiayun, Wu, Hongmei, Huang, Jiaying, Hong, Yiru, Qin, Ruimei, Xu, Wenxia, Zhao, Baowei, Chen, Zhenlie, Huang, Ligang, Hu, Na, Zhao, Yongshun, Huang	No
Protocol for generating brain metastatic tumor cells through repeated intracardiac injections in mice	STAR Protocols		2025	Li, Wang, Xiaoxia, Chen, Chengtao, Dong, Shengqi, Yin, Li, Liang, Aidong, Zhou	No
FKBP prolyl isomerase 4: a potential target for heart failure and cardioprotective effects via leonurine-pretreated mesenchymal stem cell-derived exosomes	Stem Cell Research and Therapy		2025	Zhaoyi, Li, De Chong, Zheng, Ruixiang, Wang, Qian, Ding, Yi Zhun, Zhu	No
Febuxostat therapy improved the outcomes of cardiorenal syndrome rodent through alleviating xanthine oxidase-induced oxidative stress and mitochondrial dysfunction	International Journal of Biological Sciences		2025	Chih Chao, Yang, Ya, Yue, Yi Ling, Chen, John Y., Chiang, Yi Ting, Wang, Chi Ruei, Huang, Ben Chung, Cheng, Tsuen Wei, Hsu, Hon Kan, Yip	No
Protocol for monitoring intrapulmonary vasodilation in mice using contrast-enhanced echocardiography	STAR Protocols		2025	Nityanand, Bolshette, Hanna, Bueno-Levy, Gad, Asher	No
Activation of AMP-activated Protein Kinase by Metformin Inhibits Dedifferentiation of Platelet-derived Growth Factor-BB-induced Vascular Smooth Muscle Cells to Improve Arterial Remodeling in Cirrhotic Portal Hypertension	CMGH		2025	Guangbo, Wu, Qiang, Fan, Min, Chen, Guqing, Luo, Zhenghao, Wu, Jinbo, Zhao, Jiayun, Lin, Chihao, Zhang, Hongjie, Li, Xiaoliang, Qi, Haizhong, Huo, Lei, Zheng, Meng, Luo	No
From inflammation to remodelling: A novel BASP1+ monocyte subset as a catalyst for acute aortic dissection	Journal of Advanced Research		2025	Wenhui, He, Sanjiu, Yu, Jun, Li, Siyu, Li, Zongtao, Chen, Jingyu, Zhang, Yangwuyue, Liu, Mi, Zhou, Teng, Yang, Wei, Cheng, Shuang Shuang, Dai	No

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Methyleugenol alleviates pulmonary vascular remodeling in rats with high-altitude pulmonary hypertension by improving pulmonary smooth muscle cell function	Biomedicine and Pharmacotherapy		2025	Yang, Yu, Yurong, Wang, Ziqi, Yang, Zhanqiang, Li, Dianxiang, Lu, Xingmei, Nan	No
Multi-omics analysis of two rat models reveals potential role of vesicle transport and autophagy in right ventricular remodeling	Scientific Reports		2025	Yuhan, Qin, Jing, Zhang, Aiwei, Wang, Wei, Sun, Xiaohan, Qin, Feng, Qi, Yufei, Wang, Le, Du, Xiaoyan, Liu, Haidan, Sun, Zhengguang, Guo, Xiaoxiao, Guo	No
Age-Dependent Correlation of Pulmonary Function Impairment and Aortic Arch Stiffness in Mice	Pediatric Discovery		2025	Ayman, Isbatan, Samuel M., Lee, Ali Imran, Sarwar, Yuxing, Yuan, Sunny, Chen, Maricela, Castellon, Dan A., Marian, Richard D., Minshall, Jie, Tian, Irena, Levitan, Jiwang, Chen	No
Novel Humanized Aortic Valve Calcification Model	Circulation Research		2025	Dunpeng, Cai, Lindsey, Saint, John, Markley, Shi You, Chen	No
Generation and characterization of a DYNLT1-knockout mouse model reveals electrophysiological alterations and potential mechanistic contributors to atrial fibrillation	Biology Open		2025	Ting, Chen, Ziyang, Wang, Xinpeng, You, Wenxing, Guo, Yijin, Chua, Qi, Jiang, Yanhong, Gao	No
Atrial electrical alterations with intact cardiac structure and contractile function in a mouse model of an HCM-linked ACTN2 variant	Journal of Molecular and Cellular Cardiology Plus		2025	Maya, Nouredine, Sophie, Broadway-Stringer, Christopher, O'Shea, Bethany A.I., Jones, Abbie, Hayes, Chris, Denning, Siobhan, Loughna, Fiyaz, Mohammed, Davor, Pavlovic, Katja, Gehmlich	No
Enhanced Antitumor Efficacy and Reduced Cardiotoxicity of Ultrasound-Mediated Doxorubicin Delivery by Microbubble-Liposome Complexes	Ultrasound in Medicine and Biology		2025	Mingyu, He, Xucai, Chen, Francois, Yu, Bin, Qin, Huizhu, Wang, Linda, Lavery, Flordeliza S., Villanueva	No
Application of bioactive materials primary cilia as a novel delivery vehicle	Bioactive Materials		2025	Ayan K., Barui, Farideh, Amirrad, Vansh, Goel, Sharareh, Ohadi, Rajasekharreddy, Pala, Ashraf M., Mohieldin, Andromeda M., Nauli, Surya M., Nauli	No
Development of autonomic innervation at the venous pole of the heart: bridging the gap from mice to human	Journal of Translational Medicine		2025	Fleur, Zwanenburg, Thomas A., Bos, Arend D.J., Ten Harkel, Monique C., Haak, Nathan D., Hahurij, Robert E., Poelmann, Conny J., van Munsteren, Lambertus J., Wisse, Nico A., Blom, Marco C., DeRuiter, Monique R.M., Jongbloed	No
Nothobranchius furzeri: a vertebrate model for studying cardiac aging and cellular senescence	npj Aging		2025	Xueling, Ma, Yonghe, Ding, David, Mondaca-Ruff, Xinyue, Zhang, Yu, Lu, Baul, Yoon, Feixiang, Yan, Yanyan, Liang, Maryam, Moossavi, Xiaolei, Xu	No

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BCAA catabolism targeted therapy for heart failure with preserved ejection fraction	Theranostics		2025	Meng, Wang, Zhao, Liu, Shuxun, Ren, Jinyun, Zhu, Norihiko, Morisawa, Geok Lin, Chua, Xuewen, Zhang, Yun Ka, Wong, Liping, Su, Ming Xiang, Wong, Jieping, Yang, Marc Titze, Jens, Zhaoping, Li, Haipeng, Sun, Yibin, Wang, Christoph D., Raul, Sanjiv J., Shah, Chen, Gao, Yunxia, Liu	No
In Vivo Dynamic Coronary Arteries Blood Flow Imaging Based on Multi-Cycle Phase Clustering Ultrafast Ultrasound	Advanced Science		2025	Hao, Yu, Jiabin, Zhang, Feng, Feng, Jinyu, Yang, Yu, Xia, Yunlong, Zhao, Jue, Zhang	No
The chromatin regulator Ankrd11 controls cardiac neural crest cell-mediated outflow tract remodeling and heart function	Nature Communications		2024	Yana, Kibalnyk, Elia, Afanasiev, Ronan M.N., Noble, Adrienne E.S., Watson, Irina, Poverennaya, Nicole L., Dittmann, Maria, Alexiou, Kara, Goodkey, Amanda A., Greenwell, John R., Ussher, Igor, Adameyko, James, Massey, Daniel, Graf, Stephane L., Bourque, Jo Anne, Stratton, Anastasia, Voronova	No
Transient titin-dependent ventricular defects during development lead to adult atrial arrhythmia and impaired contractility	iScience		2024	Xinghang, Jiang, Olivia T., Ly, Hanna, Chen, Ziwei, Zhang, Beatriz A., Ibarra, Mahmud A., Pavel, Grace E., Brown, Arvind, Sridhar, David, Tofovic, Abigail, Swick, Richard, Marszalek, Carlos G., Vanoye, Fritz, Navales, Alfred L., George, Salman R., Khetani, Jalees, Rehman, Yu, Gao, Dawood, Darbar, Ankur, Saxena	No
Hydrogen Gas Inhalation Treatment for Coronary Artery Lesions in a Kawasaki Disease Mouse Model	Life		2024	Wen Ling, Shih, Tsung Ming, Yeh, Kuang Den, Chen, Steve, Leu, Shih Feng, Liu, Ying Hsien, Huang, Ho Chang, Kuo	No
Novel formylpeptide receptor 1/2 agonist limits hypertension-induced cardiovascular damage	Cardiovascular Research		2024	Jaideep, Singh, Kristy L, Jackson, Haoyun, Fang, Audrey, Gumanti, Bethany, Claridge, Feng Shii, Tang, Helen, Kiriazis, Ekaterina, Salimova, Alex M, Parker, Cameron, Nowell, Owen L, Woodman, David W, Greening, Rebecca H, Ritchie, Geoffrey A, Head, Cheng Xue, Qin	No
Post-treatment with Resolvin D1 attenuates pulmonary hypertension by inhibiting endothelial-to-mesenchymal transition	Biomedicine and Pharmacotherapy		2024	Xinyu, Li, Hui, Li, Bo, Feng, Xiaoyan, Chen, Ting, Chen, Jiafei, Lu, Huating, Xie, Nana, Su, Houlin, Chen, Chenghao, Lou, Runxin, Zhuang, Xi, Chen, Shengwei, Jin, Yu, Hao	No
The dimethadione-exposed rat fetus: an animal model for the prenatal ultrasound characterization of ventricular septal defect	BMC Cardiovascular Disorders		2023	Yiru, Yang, Guo Rong, Lyu, Shaozheng, He, Hainan, Yang, Shangqing, Li	No

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4D ultrasound-based strain assessment of cardiac dysfunction in male rats with reperfused and nonreperfused myocardial infarction	Physiological Reports		2024	Ana C.M., Omoto, Conner C., Earl, Alyssa M., Richards, Karthik, Annamalai, Benjamin, Nelson, John E., Hall, Craig J., Goergen, Alexandre A., da Silva	No
L-Arginine-Loaded Gold Nanocages Ameliorate Myocardial Ischemia/Reperfusion Injury by Promoting Nitric Oxide Production and Maintaining Mitochondrial Function	Advanced Science	https://onlinelibrary.wiley.com/doi/10.1002/advs.202302123	2023	Zekun, Wang, Nana, Yang, Yajun, Hou, Yuqing, Li, Chenyang, Yin, Endong, Yang, Huanhuan, Cao, Gaofei, Hu, Jing, Xue, Jialei, Yang, Ziyu, Liao, Weiyun, Wang, Dongdong, Sun, Cundong, Fan, Lemin, Zheng	No
Acute vascular and cardiac effects of lenvatinib in mice	Cardio-Oncology	https://cardiooncologyjournal.biomedcentral.com/articles/10.1186/s40959-025-003...	2025	Dustin N., Krüger, Patrizia, Pannucci, Callan D., Wesley, Cedric H. G., Neutel, Wim, Martinet, Guido R. Y., De Meyer, Stephen J., Hill, Jeanette, Woolard, Constantijn, Franssen, Pieter-Jan, Guns	No
Dexrazoxane prevents vascular toxicity in doxorubicin-treated mice	Cardio-Oncology		2024	Dustin N., Krüger, Matthias, Bosman, Emeline M., Van Craenenbroeck, Guido R.Y., De Meyer, Constantijn, Franssen, Pieter Jan, Guns	No
UFMylation maintains YAP stability to promote vascular endothelial cell senescence	iScience		2025	Yanan, Liu, Min, Zuo, Aiwei, Wu, Zhaoxiang, Wang, Siting, Wang, Yongping, Bai, Junzhi, Zhou, Hu, Wang	No
Ultrasound Image Velocimetry for High Spatiotemporal Resolution Blood Flow Velocity Field Mapping in Mice	Ultrasound in Medicine and Biology		2025	Mingyi, Tang, Yu Qing, Zhou, Mark C., Blaser, David A., Steinman, Craig A., Simmons	No
Atrial cardiomyocyte-restricted cleavage of gasdermin D promotes atrial arrhythmogenesis	European Heart Journal	https://academic.oup.com/eurheartj/advance-article/doi/10.1093/eurheartj/ehaf02...	2025	Yue, Yuan, Pascal, Martsch, Xiaohui, Chen, Enrique, Martinez, Luge, Li, Jia, Song, Theresa, Poppenborg, Florian, Bruns, Jong Hwan, Kim, Markus, Kamler, James F, Martin, Issam, Abu-Taha, Dobromir, Dobrev, Na, Li	No
Development of autonomic innervation at the venous pole of the heart: bridging the gap from mice to human	Journal of Translational Medicine	https://translational-medicine.biomedcentral.com/articles/10.1186/s12967-024-06...	2025	Fleur, Zwanenburg, Thomas A., Bos, Arend D. J., Ten Harkel, Monique C., Haak, Nathan D., Hahurij, Robert E., Poelmann, Conny J., van Munsteren, Lambertus J., Wisse, Nico A., Blom, Marco C., DeRuiter, Monique R. M., Jongbloed	No
The siRNA-mediated knockdown of AP-1 restores the function of the pulmonary artery and the right ventricle by reducing perivascular and interstitial fibrosis and key molecular players in cardiopulmonary disease	Journal of Translational Medicine		2024	Ioana Karla, Comarița, Gabriela, Tanko, Iliuță Laurențiu, Anghelache, Adriana, Georgescu	No

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The protective effect of Bergamot Polyphenolic Fraction on reno-cardiac damage induced by DOCA-salt and unilateral renal artery ligation in rats	Biomedicine and Pharmacotherapy		2024	Cristina, Carresi, Antonio, Cardamone, Anna Rita, Coppoletta, Rosamaria, Caminiti, Roberta, Macrì, Francesca, Lorenzo, Federica, Scarano, Rocco, Mollace, Lorenza, Guarnieri, Stefano, Ruga, Saverio, Nucera, Vincenzo, Musolino, Micaela, Gliozzi, Ernesto, Palma, Carolina, Muscoli, Maurizio, Volterrani, Vincenzo, Mollace	No
Prenatal hormone stress triggers embryonic cardiac hypertrophy outcome by ubiquitin-dependent degradation of mitochondrial mitofusin 2	iScience		2024	Chang Yu, Yan, Yue, Ye, Han Lu, Mu, Tong, Wu, Wen Shan, Huang, Yan Ping, Wu, Wan Yang, Sun, Lei, Liang, Wen Jun, Duan, Shu Hua, Ouyang, Rui Ting, Huang, Rong, Wang, Xin Xin, Sun, Hiroshi, Kurihara, Yi Fang, Li, Rong Rong, He	No
Chronic Inhibition of Nitric Oxide Synthases Impairs Spatiotemporal Learning and Memory to a Similar Extent in C57BL/6 and hAPP23+/- Mice	International Journal of Translational Medicine		2023	Jhana O., Hendrickx, Elke, Calus, Peter Paul, De Deyn, Debby, Van Dam, Guido R. Y., De Meyer	No
Positive Echocardiographic Association between Carotid Artery and Coronary Artery Diameter and Z-Score in a Mouse Model of Kawasaki Disease	Diagnostics		2024	Wen Ling, Shih, Tsung Ming, Yeh, Kuang Den, Chen, Steve, Leu, Ho Chang, Kuo	No
Aortic calcification accelerates cardiac dysfunction via inducing apoptosis of cardiomyocytes	International Journal of Medical Sciences		2024	Nannan, Hao, Hui, Yong, Feifei, Zhang, Chang, Liu, Yulu, Qiu, Yumeng, Shi, Chunjian, Li, Fang, Wang	No
Sex differences in left-ventricular strain in a murine model of coxsackievirus B3 myocarditis	iScience		2023	Damian N., Di Florio, Logan P., Macomb, Presley G., Giresi, Danielle J., Beetler, Natalie E., Bonvie-Hill, Katie A., Shapiro, Abdel Rahman N., Naser, Sami, Khatib, Emily R., Whelan, Gabriel J., Weigel, Brandy H., Edenfield, Varsini, Balamurugan, Sarah K., Burris, Laurie J., Rich, Katelyn A., Bruno, Leslie T., Cooper, Chris J., McLeod, Mohamad H., Yamani, De Lisa, Fairweather	No
Deficient GATA6-CXCR7 signaling leads to bicuspid aortic valve	Disease Models & Mechanisms	https://journals.biologists.com/dmm/article/17/9/dmm050934/361975/Deficient-GAT...	2024	Rebeca, Piñeiro-Sabaris, Donal, MacGrogan, José Luis, de la Pompa	No
Rescue of <i>Scn5a</i> mis-splicing does not improve the structural and functional heart defects of a DM1 heart mouse model	Human Molecular Genetics	https://academic.oup.com/hmg/advance-article/doi/10.1093/hmg/ddae117/7731387	2024	Larissa, Nitschke, Rong-Chi, Hu, Andrew N, Miller, Thomas A, Cooper	No
A pneumonectomy model to study flow-induced pulmonary hypertension and compensatory lung growth	Cell Reports Methods		2023	Savas T., Tsikis, Timothy, Klouda, Thomas I., Hirsch, Scott C., Fligor, Tiffany, Liu, Yunhye, Kim, Amy, Pan, Mikayla, Quigley, Paul D., Mitchell, Mark, Puder, Ke, Yuan	No

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Loss of Sec-1 Family Domain-Containing 1 (scfd1) Causes Severe Cardiac Defects and Endoplasmic Reticulum Stress in Zebrafish	Journal of Cardiovascular Development and Disease		2023	Inken G., Huttner, Celine F., Santiago, Arie, Jacoby, Delfine, Cheng, Gunjan, Trivedi, Stephen, Cull, Jasmina, Cvetkovska, Renee, Chand, Joachim, Berger, Peter D., Currie, Kelly A., Smith, Diane, Fatkin	No
Coronary Microvascular Dysfunction in Acute Cholestasis-Induced Liver Injury	Biomedicines	https://www.mdpi.com/2227-9059/12/4/876	2024	Sebastian, Billig, Marc, Hein, Celine, Kirchner, David, Schumacher, Moriz Aljoscha, Habigt, Mare, Mechelinck, Dieter, Fuchs, Uwe, Klinge, Alexander, Theißen, Christian, Beckers, Christian, Bleilevens, Rafael, Kramann, Moritz, Uhlig	No
A novel noninvasive method for estimating right ventricular systolic pressure in rodents with pulmonary artery banding	Cardiology journal		2023	Baktybek, Kojonazarov, Norbert, Weissmann, Werner, Seeger, Ralph Theo, Schemuly	No
Continuous anesthesia for 60 days in an isosmotic environment does not impair limb or cardiac regeneration in the axolotl	Scientific Reports		2023	Sofie Amalie, Andersson, Anita, Dittrich, Henrik, Lauridsen	No
Establishing a mouse model of lung metastases using ultrasound-guided right heart ventricle injection	STAR Protocols		2023	Amanda, Labora, Amanda, Creech, Hailey, Lee, Erin, Tabornal, Caius, Radu, Timothy, Donahue	No
In Utero dimethadione exposure causes postnatal disruption in cardiac structure and function in the rat	Toxicological Sciences		2014	Kristiina L., Aasa, Elizabeth, Purssell, Michael A., Adams, Terence R.S., Ozolinš	No
Doxorubicin-induced cardiovascular toxicity: a longitudinal evaluation of functional and molecular markers	Cardiovascular Research		2023	Matthias, Bosman, Dustin, Krüger, Charles, Van Assche, Hanne, Boen, Cédric, Neutel, Kasper, Favere, Constantijn, Franssen, Wim, Martinet, Lynn, Roth, Guido R Y, De Meyer, Berta, Cillero-Pastor, Leen, Delrue, Ward, Heggmont, Emeline M, Van Craenenbroeck, Pieter-Jan, Guns	No
Temporal Progression of Aortic Valve Pathogenesis in a Mouse Model of Osteogenesis Imperfecta	Journal of Cardiovascular Development and Disease		2023	Kaitlyn, Thatcher, Carol R., Mattern, Daniel, Chaparro, Veronica, Goveas, Michael R., McDermott, Jessica, Fulton, Joshua D., Hutcheson, Brian R., Hoffmann, Joy, Lincoln	No
Characterization of atrial and ventricular remodeling in an improved minimally invasive mouse model of transverse aortic constriction	Journal of Cardiovascular Aging		2023	Jose Alberto, Navarro-Garcia, Satadru K., Lahiri, Yuriana, Aguilar-Sanchez, Anilkumar K., Reddy, Xander H.T., Wehrens	No

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Speg interactions that regulate the stability of excitation-contraction coupling protein complexes in triads and dyads	Communications Biology		2023	Chang Seok, Lee, Sung Yun, Jung, Rachel Sue Zhen, Yee, Nadia H., Agha, Jin, Hong, Ting, Chang, Lyle W., Babcock, Jorie D., Fleischman, Benjamin, Clayton, Amy D., Hanna, Christopher S., Ward, Denise, Lanza, Ayrea E., Hurley, Pumin, Zhang, Xander H.T., Wehrens, William R., Lagor, George G., Rodney, Susan L., Hamilton	No
Neurovascular hypoxia trajectories assessed by photoacoustic imaging in a murine model of cardiac arrest and resuscitation	IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control		2023	John P., Salvas, Katherine A., Leyba, Luke E., Schepers, Nitchawat, Paiyabhroma, Craig J., Goergen, Pierre, Sicard	No
Natural Extracts Mitigate the Deleterious Effects of Prolonged Intense Physical Exercise on the Cardiovascular and Muscular Systems	Antioxidants		2023	Marc, Yehya, Doria, Boulgobra, Pierre Edouard, Grillet, Pablo R., Fleitas-Paniagua, Patrice, Bideaux, Sandrine, Gayrard, Pierre, Sicard, Jérôme, Thireau, Cyril, Reboul, Olivier, Cazorla	No
The mitochondrially targeted peptide elamipretide (SS-31) improves ADP sensitivity in aged mitochondria by increasing uptake through the adenine nucleotide translocator (ANT)	GeroScience		2023	Gavin, Pharaoh, Varun, Kamat, Sricharan, Kannan, Rudolph S., Stuppard, Jeremy, Whitson, Miguel, Martín-Pérez, Wei Jun, Qian, Michael J., MacCoss, Judit, Villén, Peter, Rabinovitch, Matthew D., Campbell, Ian R., Sweet, David J., Marcinek	No
A rat model of metabolic syndrome-related heart failure with preserved ejection fraction phenotype: pathological alterations and possible molecular mechanisms	Frontiers in Cardiovascular Medicine	https://doi.org/10.3389/fcvm.2023.1208370	2023	Yujiao, Shi, Chunqiu, Liu, Chenguang, Yang, Wenbo, Qiao, Yongcheng, Liu, Siyu, Liu, Guo Ju, Dong	No
Biomechanical remodeling of the murine descending thoracic aorta during late-gestation pregnancy	Current Research in Physiology	https://doi.org/10.1016/j.crphys.2023.100102	2023	Ana I., Vargas, Samar A., Tarraf, Timothy P., Fitzgibbons, Chiara, Bellini, Rouzbeh, Amini	No
Divergent effects of myostatin inhibition on cardiac and skeletal muscles in a mouse model of pressure overload	American Journal of Physiology-Heart and Circulatory Physiology		2023	Canxia, Shi, Sietske N., Zijlstra, Sanne, de Wit, Wouter C., Meijers, Joseph Pierre, Aboumsallem, Herman H. W., Silljé, Rudolf A., de Boer	No
Targeted inhibition of PTPN22 is a novel approach to alleviate osteogenic responses in aortic valve interstitial cells and aortic valve lesions in mice	BMC medicine	https://doi.org/10.1186/s12916-023-02888-6	2023	Shunyi, Li, Zichao, Luo, Shuwen, Su, Liming, Wen, Gaopeng, Xian, Jing, Zhao, Xingbo, Xu, Dingli, Xu, Qingchun, Zeng	No

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Calcineurin signaling promotes takotsubo syndrome	Nature Cardiovascular Research		2023	Bastian, Bruns, Marilena, Antoniou, Irena, Baier, Maximilian, Joos, Meryem, Sevinchan, Marie Christine, Moog, Christoph, Dieterich, Hans Christoph, Friederich, Hilal, Khan, Heather, Wilson, Wolfgang, Herzog, Dana K., Dawson, Norbert, Frey, Jobst Hendrik, Schultz, Johannes, Backs	No
Gamma secretase activating protein promotes end-organ dysfunction after bacterial pneumonia	American Journal of Physiology-Lung Cellular and Molecular Physiology		2023	Meredith S., Gwin, Mikhail F., Alexeyev, Aron M., Geurts, Ji Young, Lee, Chun, Zhou, Xi-Ming, Yang, Michael V., Cohen, James M., Downey, Robert A., Barrington, Domenico, Spadafora, Jonathon P., Audia, Dara W., Frank, Sarah, Voth, Viktoriya, Pastukh, Jessica, Bell, Linn, Ayers, Dhananjay T., Tambe, Amy R., Nelson, Ron, Balczon, Mike T., Lin, Troy, Stevens	No
A novel onco-cardiological mouse model of lung cancer-induced cardiac dysfunction and its application in identifying potential roles of tRNA-derived small RNAs	Biomedicine & Pharmacotherapy	https://linkinghub.elsevier.com/retrieve/pii/S0753332223009083	2023	Qian, Wu, Shiting, Zou, Wanjie, Liu, Miao, Liang, Yuling, Chen, Jishuo, Chang, Yinghua, Liu, Xiyong, Yu	No
A review of standardized high-throughput cardiovascular phenotyping with a link to metabolism in mice	Mammalian Genome		2023	Jiri, Lindovsky, Zuzana, Nichtova, Nathalia R.V., Dragano, David, Pajuelo Reguera, Jan, Prochazka, Helmut, Fuchs, Susan, Marschall, Valerie, Gailus-Durner, Radislav, Sedlacek, Martin, Hrabě de Angelis, Jan, Rozman, Nadine, Spielmann	No
Assessing Cardiac Functions of Zebrafish from Echocardiography Using Deep Learning	Information		2023	Mao-Hsiang, Huang, Amir Mohammad, Naderi, Ping, Zhu, Xiaolei, Xu, Hung, Cao	No
Cardiac remodeling caused by cold acclimation is reversible with rewarming in zebrafish (Danio rerio)	Comparative Biochemistry and Physiology -Part A : Molecular and Integrative Physiology		2023	Jared B., Shaftoe, Elizabeth A., Manchester, Todd E., Gillis	No
Loss of hepatic PPARα in mice causes hypertension and cardiovascular disease	American Journal of Physiology-Regulatory, Integrative and Comparative Physiology		2023	Olufunto O., Badmus, Zachary A., Kipp, Evelyn A., Bates, Alexandre A., da Silva, Lucy C., Taylor, Genesee J., Martinez, Wang-Hsin, Lee, Justin F., Creeden, Terry D., Hinds, David E., Stec	No
Speckle-tracking echocardiography provides sensitive measurements of subtle early alterations associated with cardiac dysfunction in T2DM rats	BMC Cardiovascular Disorders		2023	Yanchao, Qi, Zhiyan, Chen, Bingyan, Guo, Zhe, Liu, Lijie, Wang, Suyun, Liu, Lixiang, Xue, Meifang, Ma, Yajuan, Yin, Yongjun, Li, Gang, Liu	No
Restoration of coronary microvascular function by QGA overexpression in a high-fat diet with low-dose streptozotocin-induced type 2 diabetic mice	Diabetes and Vascular Disease Research		2023	Jody Tori, Cabrera, Rui, Si, Atsumi, Tsuji-Hosokawa, Hua, Cai, Jason X.J., Yuan, Wolfgang H., Dillmann, Ayako, Makino	No

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Long-term dietary n3 fatty acid prevents aging-related cardiac diastolic and vascular dysfunction	Vascular Pharmacology		2023	Seyed Soheil, Saeedi Saravi, Nicole R., Bonetti, Ana, Vukolic, Daria, Vdovenko, Pratinip, Lee, Luca, Liberale, Cristina, Basso, Stefania, Rizzo, Alexander, Akhmedov, Thomas F., Lüscher, Giovanni G., Camici, Jürg H., Beer	No
Targeting mitochondrial stress with Szeto-Schiller 31 prevents experimental abdominal aortic aneurysm: Crosstalk with endoplasmic reticulum stress	British Journal of Pharmacology		2023	Miquel, Navas-Madroñal, Rafael, Almendra-Pegueros, Lidia, Puertas-Umbert, Francesc, Jiménez-Altayó, Josep, Julve, Belén, Pérez, Marta, Consegal-Pérez, Modar, Kassan, José, Martínez-González, Cristina, Rodríguez, María, Galán	No
Machine learning for spatial stratification of progressive cardiovascular dysfunction in a murine model of type 2 diabetes mellitus	PLoS ONE		2023	Andrya J., Durr, Anna S., Korol, Quincy A., Hathaway, Amina, Kunovac, Andrew D., Taylor, Saira, Rizwan, Mark V., Pinti, John M., Hollander	No
Metformin preconditioning protects against myocardial stunning and preserves protein translation in a mouse model of cardiac arrest	Journal of Molecular and Cellular Cardiology Plus	https://linkinghub.elsevier.com/retrieve/pii/S272976123000041	2023	Cody A., Rutledge, Claudia, Lagranha, Takuto, Chiba, Kevin, Redding, Donna B., Stolz, Eric, Goetzman, Sunder, Sims-Lucas, Brett A., Kaufman	No
LCZ696 (sacubitril/valsartan) inhibits pulmonary hypertension induced right ventricular remodeling by targeting pyruvate dehydrogenase kinase 4	Biomedicine and Pharmacotherapy		2023	Mengjia, Shen, Cankun, Zheng, Lu, Chen, Mingjue, Li, Xiaoxia, Huang, Mingyuan, He, Chiyu, Liu, Hairuo, Lin, Wangjun, Liao, Jianping, Bin, Shiping, Cao, Yulin, Liao	No
Exosomes secreted from cardiomyocytes suppress the sensitivity of tumor ferroptosis in ischemic heart failure	Signal transduction and targeted therapy		2023	Ye, Yuan, Zhongting, Mei, Zhezhe, Qu, Guanghui, Li, Shuting, Yu, Yingqi, Liu, Kuiwu, Liu, Zhihua, Shen, Jiaying, Pu, Yanquan, Wang, Changhao, Wang, Zhiyong, Sun, Qian, Liu, Xiaochen, Pang, Ao, Wang, Zijing, Ren, Tong, Wang, Ying, Liu, Jinhuan, Hong, Jiajie, Xie, Xin, Li, Zhonghua, Wang, Weijie, Du, Baofeng, Yang	No
TRIM21 deficiency protects against atrial inflammation and remodeling post myocardial infarction by attenuating oxidative stress	Redox Biology		2023	Xiangdong, Liu, Wenming, Zhang, Jiachen, Luo, Wentao, Shi, Xingxu, Zhang, Zhiqiang, Li, Xiaoming, Qin, Baoxin, Liu, Yidong, Wei	No
Multiple time-dependent pathophysiological changes in a rabbit model of high-fat diet-induced hyperlipidemia	FEBS Open Bio	https://febs.onlinelibrary.wiley.com/doi/10.1002/2211-5463.13597	2023	Gwang-Hoon, Lee, Kyung-Ku, Kang, Hyun Ho, Yun, Woori, Jo, TaeHo, Oh	No
Circ-Ntrk2 acts as a miR-296-5p sponge to activate the TGF-β1/p38 MAPK pathway and promote pulmonary hypertension and vascular remodelling	Respiratory Research		2023	Lihuang, Su, Xiuchun, Li, Xulong, Mao, Tingting, Xu, Yiyang, Zhang, Shini, Li, Xiayan, Zhu, Liangxing, Wang, Dan, Yao, Jian, Wang, Xiaoying, Huang	No

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In vivo microCT-based time-lapse morphometry reveals anatomical site-specific differences in bone (re)modeling serving as baseline parameters to detect early pathological events	Bone	https://doi.org/10.1016/j.bone.2022.116432	2022	Sarah A.E., Young, Maximilian, Rummeler, Hubert M., Taieb, Daniela S., Garske, Agnes, Elinghaus, Georg N., Duda, Bettina M., Willie, Amaia, Cipitria	No
Epicardium-derived cells organize through tight junctions to replenish cardiac muscle in salamanders	Nature Cell Biology		2022	Elif, Eroglu, Christopher Y.T., Yen, Yat Long, Tsoi, Nevin, Witman, Ahmed, Elewa, Alberto, Joven Araus, Heng, Wang, Tamara, Szattler, Chimezie H., Umeano, Jesper, Sohlmér, Alexander, Goedel, András, Simon, Kenneth R., Chien	No
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ICA69 aggravates ferroptosis causing septic cardiac dysfunction via STING trafficking	Cell Death Discovery		2022	Chang, Kong, Xuqing, Ni, Yixiu, Wang, Anqi, Zhang, Yingying, Zhang, Feihong, Lin, Shan, Li, Ya, Lv, Jingwen, Zhu, Xinyu, Yao, Qinxue, Dai, Yunchang, Mo, Junlu, Wang	No
Fibroblast-specific TGF-β-Smad2/3 signaling underlies cardiac fibrosis	Journal of Clinical Investigation	https://www.jci.org/articles/view/94753	2017	Hadi, Khalil, Onur, Kanisicak, Vikram, Prasad, Robert N, Correll, Xing, Fu, Tobias, Schips, Ronald J., Vagnozzi, Ruijie, Liu, Thanh, Huynh, Se-jin, Lee, Jason, Karch, Jeffery D., Molkentin	No
Ameliorative Impact of Liraglutide on Chronic Intermittent Hypoxia-Induced Atrial Remodeling	Journal of Immunology Research		2022	Jun, Wang, Yongzheng, Liu, Changhui, Ma, Yue, Zhang, Meng, Yuan, Guangping, Li	No
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SGLT2 inhibition potentiates the cardiovascular, renal, and metabolic effects of sGC stimulation in hypertensive rats with prolonged exposure to high-fat diet	American Journal of Physiology - Heart and Circulatory Physiology		2022	Virginia, Reverte, Francisca, Rodriguez, Lidia, Oltra, Juan M., Moreno, Maria T., Linas, Courtney M., Shea, Chad D., Schwartzkopf, Emmanuel S., Buys, Jaime L., Masferrer, F., Javier Salazar	No

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Sustained Elevated Circulating Activin A Impairs Global Longitudinal Strain in Pregnant Rats: A Potential Mechanism for Preeclampsia-Related Cardiac Dysfunction	Cells		2022	Bhavisha A., Bakrania, Ana C., Palei, Umesh, Bhattarai, Yingjie, Chen, Joey P., Granger, Sajid, Shahul	No
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Nanoengineered Sprayable Therapy for Treating Myocardial Infarction	ACS Nano		2022	Marcelo, Muñoz, Cagla, Eren Cimenci, Keshav, Goel, Maxime, Comtois-Bona, Mahir, Hossain, Christopher, McTiernan, Matias, Zúñiga-Bustos, Alex, Ross, Brenda, Truong, Darryl R., Davis, Wenbin, Liang, Benjamin, Rotstein, Marc, Ruel, Horacio, Poblete, Erik J., Suuronen, Emilio I., Alarcon	No
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Lyotropic Liquid Crystals: A Biocompatible and Safe Material for Local Cardiac Application	Pharmaceutics		2022	Antonia, Mancuso, Eleonora, Cianflone, Maria Chiara, Cristiano, Nadia, Salerno, Martine, Tarsitano, Fabiola, Marino, Claudia, Molinaro, Massimo, Fresta, Daniele, Torella, Donatella, Paolino	No
Melatonin alleviates myocardial ischemia-reperfusion injury in mice by inhibiting inflammatory response via activating Nrf2 signaling	Journal of Southern Medical University Nan Fang Yi Ke Da Xue Xue Bao		2021	Kong L, Xu C, Sun N, Liang F, Wei M, Su X	No
Nuclear Factor Erythroid 2-Related Factor 2 Activation and Burn-Induced Cardiac Dysfunction	Journal of the American College of Surgeons		2022	Jake J, Wen, Keyan, Mobli, Victoria G, Rontoyanni, Claire B, Cummins, Geetha L, Radhakrishnan, Andrew, Murton, Ravi S, Radhakrishnan	No
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Extracellular Vesicles Regulate Sympatho-Excitation by Nrf2 in Heart Failure	Circulation Research		2022	Changhai, Tian, Lie, Gao, Tara L., Rudebush, Li, Yu, Irving H., Zucker	No
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Mdivi-1 alleviates cardiac fibrosis post myocardial infarction at infarcted border zone, possibly via inhibition of Drp1-Activated mitochondrial fission and oxidative stress	Archives of Biochemistry and Biophysics	https://linkinghub.elsevier.com/retrieve/pii/S0003986122000327	2022	Jie, Ding, Zhihao, Zhang, Sui, Li, Wei, Wang, Tingyi, Du, Qin, Fang, Yan, Wang, Dao Wen, Wang	No
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