

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Differential aortic aneurysm formation provoked by chemogenetic oxidative stress</a>	Journal of Clinical Investigation		2025	Apabrita Ayan, Das, Markus, Waldeck-Weiermair, Shambhu, Yadav, Fotios, Spyropoulos, Arvind, Pandey, Tanoy, Dutta, Taylor A., Covington, Thomas, Michel	Yes
<a href="#">Imaging Techniques for Aortic Aneurysms and Dissections in Mice: Comparisons of Ex Vivo, In Situ, and Ultrasound Approaches</a>	Biomolecules		2022	Sohei, Ito, Hong S., Lu, Alan, Daugherty, Hisashi, Sawada	Yes
<a href="#">Fast super-resolution ultrasound microvessel imaging using spatiotemporal data with deep fully convolutional neural network</a>	Physics in Medicine and Biology		2021	U. Wai, Lok, Chengwu, Huang, Ping, Gong, Shanshan, Tang, Lulu, Yang, Wei, Zhang, Yohan, Kim, Panagiotis, Korfiatis, Daniel J., Blezek, Fabrice, Lucien, Rongqin, Zheng, Joshua D., Trzasko, Shigao, Chen	Yes
<a href="#">A Protocol for Evaluating Vital Signs and Maternal-Fetal Parameters Using High-Resolution Ultrasound in Pregnant Mice</a>	STAR Protocols	<a href="https://doi.org/10.1016/j.xpro.2020.100134">https://doi.org/10.1016/j.xpro.2020.100134</a>	2020	Jose, Galaz, Roberto, Romero, Marcia, Arenas-Hernandez, Bogdan, Panaitescu, Valeria, Garcia-Flores, Nardhy, Gomez-Lopez	Yes
<a href="#">Scutellarin Prevents Angiogenesis in Diabetic Retinopathy by Downregulating VEGF/ERK/FAK/Src Pathway Signaling</a>	Journal of Diabetes Research	<a href="https://www.hindawi.com/journals/jdr/2019/4875421/">https://www.hindawi.com/journals/jdr/2019/4875421/</a>	2019	Lingli, Long, Yubin, Li, Shuang, Yu, Xiang, Li, Yue, Hu, Tengfei, Long, Liqin, Wang, Wenwen, Li, Xiaoxin, Ye, Zunfu, Ke, Haipeng, Xiao	Yes
<a href="#">Pharmacological inhibition of Notch signaling regresses pre-established abdominal aortic aneurysm</a>	Scientific Reports	<a href="http://dx.doi.org/10.1038/s41598-019-49682-0">http://dx.doi.org/10.1038/s41598-019-49682-0</a>	2019	Neekun, Sharma, Rishabh, Dev, Juan de Dios, Ruiz-Rosado, Santiago, Partida-Sanchez, Mireia, Guerau-de-Arellano, Pramod, Dhakal, Helena, Kuivaniemi, Chetan P., Hans	Yes
<a href="#">Strain Mapping From Four-Dimensional Ultrasound Reveals Complex Remodeling in Dissecting Murine Abdominal Aortic Aneurysms</a>	Journal of Biomechanical Engineering	<a href="http://biomechanical.asmedigitalcollection.asme.org/article.aspx?doi=10.1115/1...">http://biomechanical.asmedigitalcollection.asme.org/article.aspx?doi=10.1115/1...</a>	2019	Hannah L., Cebull, Arvin H., Soepriatna, John J., Boyle, Sean M., Rothenberger, Craig J., Goergen	Yes
<a href="#">Strain mapping from 4D ultrasound reveals complex remodeling in dissecting murine abdominal aortic aneurysms.</a>	Journal of biomechanical engineering		2019	Hannah, Cebull, Arvin, Soepriatna, John, Boyle, Sean, Rothenberger, Craig, Goergen	Yes
<a href="#">Development and growth trends in angiotensin II-induced murine dissecting abdominal aortic aneurysms</a>	Physiological Reports		2018	A.R., Adelsperger, E.H., Phillips, H.S., Ibriga, B.A., Craig, L.A., Green, M.P., Murphy, C.J., Goergen	Yes
<a href="#">Impairment of an Endothelial NAD+ -H<sub>2</sub>S Signaling Network Is a Reversible Cause of Vascular Aging</a>	Cell	<a href="http://linkinghub.elsevier.com/retrieve/pii/S0092867418301521">http://linkinghub.elsevier.com/retrieve/pii/S0092867418301521</a>	2018	Abhirup, Das, George X., Huang, Michael S., Bonkowski, Alban, Longchamp, Catherine, Li, Michael B., Schultz, Lynn-Jee, Kim, Brenna, Osborne, Sanket, Joshi, Yuancheng, Lu, Jose Humberto, Treviño-Villarreal, Myung-jin, Kang, Tzong-tyng, Hung, Brendan, Lee, Eric O., Williams, Masaki, Igarashi, James R., Mitchell, Lindsay E., Wu, Nigel, Turner, Zolt, Arany, Leonard, Guarente, David A., Sinclair	Yes
<a href="#">A critical role for macrophages in neovessel formation and the development of stenosis in tissue-engineered vascular grafts</a>	The FASEB Journal	<a href="http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3236622&amp;tool=pmcentre...">http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3236622&amp;tool=pmcentre...</a>	2011	N., Hibino, T., Yi, D. R., Duncan, A., Rathore, E., Dean, Y., Naito, A., Dardik, T., Kyriakides, J., Madri, J. S., Pober, T., Shinoka, C. K., Breuer	Yes
<a href="#">Far-infrared irradiation attenuates vessel contraction by activating SERCA2 through disruption of SERCA2 and PLN interaction</a>	PLOS ONE		2025	Yun Jin, Hwang, So Young, Park, Jung Hyun, Park, Du Hyong, Cho	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Exercise attenuates perivascular adipose tissue sympathetic innervation and regulates arterial stiffness in obese rats</a>	Sports Medicine and Health Science		2026	Niujin, Shi, Jingbo, Xia, Lianwei, Mu, Chaoge, Wang, Wenhao, Liang, Jie, Zhou, Lidan, Chen, Linyu, Peng, Ran, Cheng, Mengsi, Yan, Linjie, Shu, Junhao, Huang, Min, Hu, Jingwen, Liao	No
<a href="#">Cerebral arteries in mice with sickle cell disease are exposed to larger areas of low wall shear stress</a>	American Journal of Physiology - Heart and Circulatory Physiology		2026	Andre R., Montes, Christian P., Rivera, Samuel X., Zhang, Hannah Song, Lee, Yunlong, Huo, Manu O., Platt	No
<a href="#">BET-induced metabolic reprogramming fuels inflammation at the vascular-fat interface in mice and patients with cardiometabolic disease</a>	Cell Reports		2026	Alessandro, Mengozzi, Sarah, Costantino, Alessia, Mongelli, Emiliano, Duranti, Shafeeq A., Mohammed, Era, Gorica, Federica, Cappelli, Marialucia, Telesca, Silvia, Armenia, Thorsten, Hornemann, Andreas, Hulsmeier, Carolina, de Ciuceis, Claudia, Agabiti-Rosei, Chiara, Ippolito, Rosario, Bellini, Nicola Riccardo, Pugliese, Christian M., Matter, Omer, Dzemali, Stefano, Masi, Stefano, Taddei, Frank, Ruschitzka, Agostino, Virdis, Francesco, Paneni	No
<a href="#">Mechanical loading-induced bone formation is associated with increased blood velocity and vascular canal bone porosity, with localized vascular adaptation</a>	Journal of Bone and Mineral Research	<a href="https://academic.oup.com/jbmr/advance-article/doi/10.1093/jbmr/zjag076/8672022">https://academic.oup.com/jbmr/advance-article/doi/10.1093/jbmr/zjag076/8672022</a>	2026	Taylor, deVet, Mahmoud S, Moussa, Hanna, Gonzalez, Paul, Zaslansky, Lorraine E, Chalifour, Svetlana V, Komarova, Bettina M, Willie	No
<a href="#">Stent treatment improves cerebral microcirculatory disorder and blood-brain barrier function in internal carotid artery stenosis via intercellular adhesion molecule 1 modulation</a>	Journal of Cell Communication and Signaling		2025	Kuo, Li, Chuansuo, Zhang, Li xuan, Wang, Xiaoxuan, Wang, Ruyue, Wang	No
<a href="#">Pharmacological Enhancement of Integrated Stress Response Confers Protection in Calcific Aortic Valve Disease</a>	JACC: Basic to Translational Science		2026	Libo, Wang, Xulei, Duan, Huibing, Liu, Fei, Lin, Chaoyuan, Zhou, Katrin, Schröder, Ajay M., Shah, Guoan, Zhao, Min, Zhang	No
<a href="#">Cardiovascular Effects of Early and Postponed Statin Treatment After Ovariectomy in Prediabetic Rat</a>	Physiological Research	<a href="https://www.biomed.cas.cz/physiolres/pdf/2026/75_245.pdf">https://www.biomed.cas.cz/physiolres/pdf/2026/75_245.pdf</a>	2026	T, Hlinka, M, Huttl, H, Malinska, I, Markova, D, Miklankova, H, Bartuskova, J, Pitha	No
<a href="#">Magnetically-Induced Suppression of Oxidative Stress Prevents Venous Thrombosis</a>	Advanced Science		2025	Nana, Zhang, Yirong, An, Shiran, Tao, Shenao, Qu, Mingge, Wu, Guantong, Fang, Ziqing, Chen, Weilun, Song, Haoze, Leng, Rongqian, Wu, Yi, Lyu, Xiaoli, Liu, Dinghui, Dong	No
<a href="#">Melatonin attenuates atherosclerotic plaque vulnerability through SIRT6-dependent regulation of vascular smooth muscle cells senescence</a>	Redox Biology		2025	Yue, Wang, Wenxin, Zhao, Leli, Zhang, Pengrong, Guo, Yi, Zou, Zhenbai, Qin, Yuan, Wang, Xiaofan, Wu	No
<a href="#">Increased pulmonary blood flow leads to alveolar dysplasia during the early postnatal developmental stage</a>	Cell and Bioscience		2025	He, Zhang, Sixie, Zheng, Zheng, Wang, Yingying, Xiao, Yuqing, Hu, Debao, Li, Qing, Cui, Chenxi, Liu, Yiting, Xue, Junhua, Wu, Sijuan, Sun, Lincal, Ye	No
<a href="#">Mitochondrial Functional Capacity Is Impaired in Angiotensin II-Infused Mice and Not Recovered by Metformin</a>	Biomedicines		2026	Amanda, Balboa Ramilo, Kevin, Mani, Anders, Wanhainen, Malou, Friederich-Persson, Dick, Wågsäter	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Flexible Ultrasound Patch for Noninvasive, Targeted Anti-Angiogenic Therapy of Unstable Carotid Plaques</a>	Annals of Biomedical Engineering		2026	Jie, Hu, Mingke, Jiao, Chenchen, Tang, Ping, Liang, Jingwei, Tang, Li, Wan, Jimei, Chen, Rui, Li	No
<a href="#">Introducing ARONG, A 3D Reconstruction Method for Highly Deformed Histology</a>	Journal of Imaging Informatics in Medicine		2026	Yurim, Lee, Kwangok P., Nickel, Maxwell J., Kiernan, Rashid, Al Mukaddim, Yuming, Liu, Viktor, Mitchell, Tenzin, Ngawang, Shahriar, Salamat, Stephanie M., Wilbrand, Melissa, Graham, Kevin W., Eliceiri, Randall J., Kimple, Robert J., Dempsey, Tomy, Varghese	No
<a href="#">Elevated asprosin in postmenopause is associated with vasculometabolic complications</a>	American journal of physiology. Heart and circulatory physiology		2026	Nefia, Chacko, Mohit, Shah, Reia, Thomas, Christian, Jude-Aspiras, Akinobu, Watanabe, Maria Alicia, Carrillo-Sepulveda	No
<a href="#">Cross-species single-cell transcriptomic analysis unveils conserved myeloid signatures in abdominal aortic aneurysm: implications for therapeutic targeting</a>	International Journal of Surgery	<a href="https://journals.lww.com/10.1097/JS9.0000000000004952">https://journals.lww.com/10.1097/JS9.0000000000004952</a>	2026	Zhaoxuan, Zhang, Xiaoxu, Zhang, Xu, Guo, Zhenyong, Yang, Yun, Li, Jamol, Uzokov, Mario, D'Oría, Yuemeng, Li, Azad, Hussain, Qingsheng, Lu, Jian, Zhang, Yanshuo, Han	No
<a href="#">PHB2 ameliorates ferroptosis and aortic aneurysm/dissection through NEDD4L-dependent ubiquitination of NCOA4</a>	Redox Biology		2026	Shengjun, Xiong, Jie, Lin, Ying, An, Yuxin, Du, Yiran E., Li, Zunhui, Du, Rongjun, Zou, Miyesaier, Abudureyimu, Junbo, Ge, Yingmei, Zhang, Jun, Ren	No
<a href="#">CircEif3c/miR-96-5p/PHF20L1/MEOX2 axis in perivascular preadipocyte exosomes mediates fibroblast dysfunction and vascular remodeling</a>	Non-coding RNA Research		2026	Yixuan, Liu, Peiqing, Tian, Shuaiyong, Zhang, Jiayu, Wang, Ye, Zhang, Shuxin, Ge, Qinghai, Wang, Peng, Wang, Juan, Zhang, Ping, Liu	No
<a href="#">A foam cell-targeted lipophagy restoration strategy stabilizes vulnerable atherosclerotic plaques</a>	Bioactive Materials		2026	Heng, Li, Yusheng, Qin, Jianhong, Zhang, Xinlin, Guo, Xiaolin, Hu, Danlei, Sun, Yue, Zhao, Sergio, Bernardini, Daqian, Xu, Peng, Jiang, Hong, Zhang, Yang, Luo	No
<a href="#">Expanding clones, expanding aneurysms through macrophage-to-osteoclast differentiation</a>	The Journal of clinical investigation		2026	Jessica A., Regan, Svati H., Shah	No
<a href="#">Macrophage-derived CCL20 promotes abdominal aortic aneurysm progression via lymphocytes CCR6</a>	Frontiers in Immunology		2026	Qingnan, Ren, Tianyong, Sun, Song, Shen, Yuanbin, Cao, Li, Wei, Yang, Zhao, Fengxin, Wan, Ping, Sui, Ke, Xiao, Hao, Bai, Dachuan, Guo, Qi, He, Mengfan, Zhi, Jianmin, Yang, Jianjun, Jiang, Wencheng, Zhang, Xiangjiu, Ding	No
<a href="#">Focal adhesion proteins confer smooth muscle anoikis resistance and protection against aortic aneurysm and dissection</a>		<a href="https://doi.org/10.1172/jci.insight.195291">https://doi.org/10.1172/jci.insight.195291</a>	2026	Zhenyuan, Zhu, Mingjun, Liu, Jianxin, Wei, Deepa, Suryanarayan, Parya, Behzadi, Robert, Edgar, Julie A, Phillippi, Cynthia, St Hilaire, Cristina, Espinosa-Diez, Delphine, Gomez	No
<a href="#">High-oxalate diet-induced kidney injury impairs AVF remodeling via hypertension, endothelial damage, and immune activation</a>	Biochimica et Biophysica Acta - Molecular Basis of Disease		2026	E. P., de Winter, N., Kruit, K., van Dijk, M. N., Nicese, H. A.B., Peters, M., Goel, E. J., Snijder, P. H.A., Quax, A. H., Baker, J. I., Rotmans, M. R., de Vries	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Smooth Muscle Cell Specific Activity of SGK-1 Alters Aortic Stiffness and Abdominal Aortic Aneurysm Growth</a>	Journal of Vascular Diseases		2026	Matthew, Anderson, Leilei, Zhang, Mario, Figueroa, Victoria, Mattia, Alexander, Rovner, Vinita, Uppalapati, Ying, Xiong, Rupak, Mukherjee, Jeffrey A., Jones, Jean Marie, Ruddy	No
<a href="#">miR-210 overexpression increases pressure overload-induced cardiac fibrosis</a>	Non-coding RNA Research		2025	G., Zaccagnini, D., Baci, S., Tastsoglou, I., Cozza, A., Madè, C., Voellenkle, M., Nicoletti, C., Ruatti, M., Longo, L., Perani, C., Gaetano, A., Esposito, F., Martelli	No
<a href="#">Amlodipine improves aortic dysfunction in atherosclerotic mice</a>	Biomedicine and Pharmacotherapy		2026	Sophia Marie, Rasch, Benedikt, Fels, Alexandra, Schmalohr, Luis Daniel Hernandez, Torres, Eva, Peschke, Olga Maria, Will, Jan Bernd, Hoever, Leonie, Achner, Tobias, Klersy, Frauke, Spiecker, Marcel, Sauer, Carl, Vahldieck, Tobias, Reinberger, Urte, Matschi, Susanne, Hille, Oliver J., Müller, Zouhair, Aherrahrou, Kristina, Kusche, Walter, Raasch	No
<a href="#">Thrombospondin-4 is upregulated in abdominal aortic aneurysm: A vasoprotective response with potential therapeutic relevance</a>	British Journal of Pharmacology		2026	Laia, Blanco-Casoliva, Lidia, Puertas-Umbert, Judith, Alonso, Rafael, Almendra-Pegueros, Saray, Varona, Mercedes, Camacho, Gemma, Arderiu, Lluís, Asmarats, Marta, Alegret, Jose, Martinez-Gonzalez, Cristina, Rodriguez	No
<a href="#">Comparison of 2D and 3D carotid plaque analysis and longitudinal in vivo ultrasound registration using 3D histology</a>	Journal of Medical Imaging	<a href="https://www.spiedigitallibrary.org/journals/journal-of-medical-imaging/volume-1...">https://www.spiedigitallibrary.org/journals/journal-of-medical-imaging/volume-1...</a>	2026	Yurim, Lee, Maxwell J., Kiernan, Carol C., Mitchell, Shahriar, Salamat, Stephanie M., Wilbrand, Robert J., Dempsey, Tomy, Varghese	No
<a href="#">Lack of endothelial estrogen receptor alpha signaling exacerbates abdominal aortic aneurysm in male mice</a>			2026	Yijin, Huang, Guanghong, Jia, Luis A, Martinez-Lemus, Camila, Manrique-Acevedo	No
<a href="#">Preserved Function of Endothelial Colony-Forming Cells in Female Rats with Intrauterine Growth Restriction: Protection Against Arterial Hypertension and Arterial Stiffness?</a>	Cells		2026	Thea, Chevalley, Floriane, Bertholet, Marion, Dübi, Maria Serena, Merli, Mélanie, Charmoy, Sybil, Bron, Manon, Allouche, Alexandre, Sarre, Nicole, Sekarski, Stéphanie, Simoncini, Patrick, Taffé, Umberto, Simeoni, Catherine, Zydzorczyk	No
<a href="#">Treatment of clonal hematopoiesis associated atherosclerosis via vaccine-based clearance of the mutant cells</a>	Journal of Advanced Research		2026	Shuang, Liang, Wenxin, Tao, Di, Qu, Panpan, Ji, Zhenzhen, Hao, Mengying, Wei, Guodong, Yang, Xueying, Zhou, Chen, Wang, Lijun, Yuan	No
<a href="#">Preparation and in vivo effectiveness evaluation of heparin-loaded PLGA@PCL core-shell fiber small-diameter vascular grafts</a>	PloS one		2026	Yonghao, Xiao, Han, Wang, Yuhao, Jiao, Yuehao, Xing, Lin, Ye, Ai Ying, Zhang, Xue, Geng, Fanshan, Qiu, Zengguo, Feng, Hongbo, Chen, Yongquan, Gu	No
<a href="#">SREBP1-mediated lipogenesis promotes dedifferentiation and senescence of vascular smooth muscle cells through epigenetic remodeling</a>	Nature Communications		2025	Bowen, Li, Kaixiang, Zhou, Anan, Yin, Yonghong, Liu, Xichen, Wang, Yujia, Cui, Fangfang, Liu, Qiurong, Liu, Hongjing, Zheng, Zhiqiang, Mu, Kun, Chen, Yuanming, Wu, Yaoming, Chang, Junxiang, Bao	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Galectin7 attenuates abdominal aortic aneurysm progression by resisting disturbed flow induced endothelial-to-mesenchymal transition</a>	Theranostics		2026	Yanbing, Wang, Yilin, Zhou, Yeshen, Zhang, Danni, Tu, Guojun, Chen, Yuan, Han, Xiaomin, Wei, Yanmei, Chen, Senlin, Huang, Yulin, Liao, Wangjun, Liao, Jiancheng, Xiu, Yuegang, Wang, Jianping, Bin, Xinzhong, Li	No
<a href="#">Colchicine Alleviates Non-Atherosclerotic Vascular Aging by Targeting Endothelial Dysfunction and Inflammatory Status</a>	Journal of Inflammation Research	<a href="https://www.dovepress.com/colchicine-alleviates-non-atherosclerotic-vascular-ag...">https://www.dovepress.com/colchicine-alleviates-non-atherosclerotic-vascular-ag...</a>	2026	Soroush, Mohammadi Jouabadi, Annika, Jüttner, Keivan, Golshiri, Ehsan, Ataei Ataabadi, Martine, de Boer, Rene, De Vries, Richard, Van Veghel, Yoëlle, Goos, Youri, Boon, Usha, Musterd-Bhaggoe, Dirk, Duncker, Antoinette, MaassenVanDenBrink, AH Jan, Danser, Willem, Bax, Jan, Cornel, Anton, Roks	No
<a href="#">Effect of Antihypertensive Losartan on Ca<sup>2+</sup> Mobilization in the Aorta of Middle-Aged Spontaneously Hypertensive Female Rats</a>		<a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>	2025	Swasti, Rastogi, Jessica, Liaw, Yingnan, Zhai, Tatiana, Karpova, Linxia, Gu, Kenia, Nunes	No
<a href="#">Pkg1 activation restores endothelial metabolic homeostasis to alleviate vascular aging and atherosclerosis</a>	Cardiovascular Diabetology		2025	Jinhong, Lu, Jianji, Wang, Yu, Liu, Cuntai, Zhang, Guojun, Zhang, Yipeng, Ge, Lei, Liu	No
<a href="#">Elastase-2 deletion prevents vascular remodeling and abdominal aortic aneurysm development in a mice model induced by angiotensin II</a>	Vascular Pharmacology		2025	Fabiola, Mestriner, Vinicius Flora, Dugaich, Pedro Bruch, Dantas, Henrique Z., Kovacs, Marcela M., Blascke de Mello, Carina A., Pedersoli, Rafael Menezes, da Costa, Maria Cecilia, Jordani, Leandra N.Z., Ramalho, Michele M., de Castro, Júlio A., Silva-Neto, Rita C.A., Tostes Passaglia, Mauricio Serra, Ribeiro, Christiane, Becari	No
<a href="#">Extracellular RNA as a molecular driver and therapeutic target in abdominal aortic aneurysms</a>	Scientific Reports		2025	Nahla, Ibrahim, Hubert, Hayden, Gabriel, Kurzreiter, Johannes, Klopf, Sonja, Bleichert, Tyler, Artner, Alexander, Stiglbauer-Tscholakoff, Wolf, Eilenberg, Christoph, Neumayer, Christine, Brostjan	No
<a href="#">Loss of ADAM17 in smooth muscle cells enhances their transformation to macrophage-like cells leading to more severe atherosclerosis in mice</a>	Atherosclerosis		2025	Ilamaran, Meganathan, Tolga, Kilic, Razoan, Al Rimon, Tushar, Naiya, Vidhya, Krishnan, Nikki, Atanasova, Anthony, Wong, Gavin Y., Oudit, Slava, Epelman, Zamaneh, Kassiri	No
<a href="#">The transcription factor RBPI is required for inflammatory macrophage activation in thoracic aortic dissection by mediating mechanotransduction-induced glycolysis</a>	Cellular and Molecular Life Sciences		2025	Zhi Qiang, Yin, Ting, Wen, Xiu Li, Cao, Zhao Xia, Lv, Yang, Su, Liang, Liang, Pei Ran, Zhang, Zi Yan, Yang, Hua, Han, Xian Chun, Yan, Qi Jun, Zheng	No
<a href="#">Enhanced atherosclerosis molecular imaging and therapy with collagen hybridizing peptide functionalized albumin nanoparticles</a>	Journal of Nanobiotechnology		2025	Jianan, He, Jianxun, Cai, Jingjing, Zhang, Yang, Li, Kunpeng, Wei, Chenshu, Liu, Leye, Yan, Xinyan, Hu, Lin, Huang, Hairun, Gan, Dashuai, Wang, Bing, Li, Huitao, Zhang, Pengfei, Pang	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Ras-related protein 2 limits vascular smooth muscle cell phenotypic switching and abdominal aortic aneurysm development</a>	Nature Communications		2025	Shanshan, Luo, Jiyu, Chen, Ke, Zhong, Xiaoqi, Wu, Rui, Li, Tianyu, Song, Zhongxu, Sun, Shixiu, Sun, Xinlong, Tang, Yan, Zhang, Zhi Ren, Zhang, Bo, Yu, Jinwei, Tian, Li, Li, Aihua, Gu, Feng, Chen, Dongjin, Wang, Jun, Pu, Yi, Han, Liping, Xie, Yong, Ji	No
<a href="#">Turbulence drives arteriovenous remodeling: an experimentally validated multi-scale model of neointimal hyperplasia</a>	Physics in medicine and biology		2025	M. Alyssa, Varsanik, Carly, Thaxton, Duc, Nguyen, Joseph A., Pugar, Sanjeev, Dhara, Willa, Li, Nhung, Nguyen, Alan, Dardik, Luka, Pocivavsek	No
<a href="#">Thiol-polarity dual cascade-triggered two-photon imaging of protein unfolding for early atherosclerosis diagnosis</a>	Sci. Adv	<a href="https://www.science.org">https://www.science.org</a>	2025	Jingjing, Li, Yihui, Miao, Wei, Pan, Na, Li, Bo, Tang	No
<a href="#">Visualization of OPN-Targeted Self-Assembled Micelles Encapsulated With an SIRT6 Activator and Doped Indocyanine Green for Attenuating Vascular Aging</a>	Aging Medicine		2025	Yan, Fang, Wenyue, Li, Cheng, Qin, Mengqi, Xu, Naiyuan, Sun, Tingting, Lu, Zhiyi, Fang, Yan, Ma, Linghuan, Wang, Sulei, Li, Xiaojing, Wan, Hui, Li, Renzheng, Chen, Xiaoying, Shen, Lei, Tian, Jing, Liu, Yi, Hou, Feng, Cao	No
<a href="#">Targeting the PI3K/Akt/NF-κB axis: Cluster of differentiation 5-like-mediated immunometabolic regulation of macrophage polarization in abdominal aortic aneurysm</a>	Journal of Cell Communication and Signaling		2025	Hemoren, Yi, Nan, Liu, Zhengyang, Wu, Lei, Li, Tingting, Li, Qixiang, Liu, Man, Duan, Taihu, Wan	No
<a href="#">Plasminogen Activator Inhibitor-1 promotes aortic aging-1 like pathophysiology in humans and mice</a>				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
<a href="#">Establishment of a Modified Ferric Chloride-Induced Canine Superficial Femoral Artery Thrombosis Model</a>	ACS Omega		2025	Wang, Song, Yingwen, Wang, Shuting, Li, Chunmei, Long, Xiang, Han, Xingqi, Fang, Zhen, Li, Yuwei, Yang, Shihao, Zhu, Xuanyin, Chen, Qi, Wang, Baolai, Zhang, Li, Lu	No
<a href="#">Central Artery Hemodynamics in Angiotensin II-Induced Hypertension and Effects of Anesthesia</a>	Annals of Biomedical Engineering		2024	S. E., Hopper, D., Weiss, N., Mikush, B., Jiang, B., Spronck, C., Cavinato, J. D., Humphrey, C. A., Figueroa	No
<a href="#">Neutrophil extracellular traps induce endothelial damage and exacerbate vasospasm in traumatic brain injury</a>	Theranostics	<a href="https://www.thno.org/v15p9221.htm">https://www.thno.org/v15p9221.htm</a>	2025	Jinchao, Wang, Lei, Li, Jianye, Xu, Dilmurat, Gheyret, Kaiji, Li, Xu, Zhang, Haoran, Jia, Ye, Tian, Xiao, Liu, Shenghui, Li, Guili, Yang, Yalong, Gao, Ruihong, Peng, Huajie, Liu, Bin, Liu, Jianfeng, Zhuang, Cong, Wang, Xin, Chen, Yafan, Liu, Bo, Chen, Chuan, Huang, Yuhan, Li, Xin, Chen, Jianning, Zhang, Shu, Zhang	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Divergent roles of red cell arginase in humans and mice: RBC Arg1 KO mice show preserved systemic L-arginine bioavailability and infarct size in vivo</a>	Redox Biology		2025	Sophia K., Heuser, Junjie, Li, Zhixin, Li, Anthea, LoBue, Kyle, Heard, Julia, Hocks, Tatsiana, Suvorava, Ron Patrick, Cadeddu, Corinna, Strupp, Luke, Dunaway, Zhengbing, Zhuge, Stacy L., Gelhaus, André, Heinen, Ulrich, Gering, Martin, Feelsch, Mattias, Carlström, Brant, Isakson, Malte, Kelm, Jon O., Lundberg, Miriam M., Cortese-Krott	No
<a href="#">Targeting USP21 to inhibit abdominal aortic aneurysm progression by suppressing the phenotypic transition of vascular smooth muscle cells</a>	Cell Reports Medicine	<a href="https://linkinghub.elsevier.com/retrieve/pii/S266637912500401X">https://linkinghub.elsevier.com/retrieve/pii/S266637912500401X</a>	2025	Huidan, Zhang, Hongwei, Yue, Yijun, Sun, Guangqi, Sun, Kehui, Yang, Tangxing, Jiang, Sumei, Cui, Yang, Liu, Yunyun, Guo, Wencheng, Zhang, Cheng, Zhang, Yuguo, Chen, Feng, Xu	No
<a href="#">Region-specific gene expression and sex inform about disease susceptibility in the aorta</a>	Nature Cardiovascular Research		2025	Milagros C., Romay, Feiyang, Ma, Ana, Mompeón, Michele, Silvestro, Gloria E., Hernandez, Jocelynda, Salvador, Andrew L., Wang, Marie, Vandestienne, Nathalie, Bardin, Marcel, Blot-Chabaud, Aurelie S., Leroyer, Hafid, Ait-Oufella, Bham, Ramkhelawon, M. Luisa, Iruela-Arispe	No
<a href="#">M2 macrophage-derived extracellular vesicles protect against abdominal aortic aneurysm by modulating macrophage polarization through miR221-5p</a>	Cellular and Molecular Biology Letters		2025	Yang, Ma, Xiang Jiu, Ding, Si Yu, Lu, Xiao Fang, Huang, Yuan Yuan, Hu, Han, Liu, Bin, Liu, Ke Yin, Liu, Ming Xiang, Zhang, Hao, Wang, Feng, Xu, Wei Dong, Qin	No
<a href="#">Sox17 mediates venous adaptive remodeling after arteriovenous fistula creation</a>	JVS-Vascular Science	<a href="https://linkinghub.elsevier.com/retrieve/pii/S2666350325001130">https://linkinghub.elsevier.com/retrieve/pii/S2666350325001130</a>	2025	Yukihiko, Aoyagi, Andrew W., Schwartz, Zhuo, Li, Hualong, Bai, Bryan, Ho, Cayetana, Lazcano-Etchebarne, Luis, Gonzalez, Yuichi, Ohashi, Masaki, Kano, Bogdan, Yatsula, Cassius Iyad, Ochoa Char, Kathleen, Martin, Roberto, Vazquez-Padron, Guohao, Dai, Alan, Dardik	No
<a href="#">PGC1<math>\alpha</math> regulates the mitochondrial metabolism response to cyclic stretch, which inhibits neointimal hyperplasia</a>	Cellular and Molecular Life Sciences	<a href="https://link.springer.com/10.1007/s00018-025-05790-x">https://link.springer.com/10.1007/s00018-025-05790-x</a>	2025	Minwen, Zou, Kaichuang, Ye, Jing, Yan, Shoumin, Zhang, Han, Bao, Zhiyin, Li, Yuting, Tao, Xing, Zhang, Wenhao, Tian, Yingxin, Qi, Yunlong, Huo, Yue, Han	No
<a href="#">Histone deacetylase 9-mediated phenotypic transformation of vascular smooth muscle cells is a potential target for treating aortic aneurysm/dissection</a>	Biomedicine and Pharmacotherapy		2024	Zhiqiao, Dang, Haijie, Li, Shishan, Xue, Baowei, Shao, Yansong, Ning, Guohai, Su, Fengquan, Zhang, Wenqian, Yu, Shuai, Leng	No
<a href="#">Controllable Thrombolysis Using a Nanobubble-Imaging-Guided rtPA Targeted Delivery Strategy</a>	BME Frontiers		2024	Jian, Tang, Huiting, Xu, Mingxi, Li, Yang, Liu, Fang, Yang	No
<a href="#">Angiotoxic effects of chlorinated polyfluorinated ether sulfonate, a novel perfluorooctane sulfonate substitute, in vivo and in vitro</a>	Journal of Hazardous Materials		2024	Zhenzhen, Tan, Junli, Lv, Haoran, Li, Ziwen, An, Longfei, Li, Yijia, Ke, Yi, Liu, Xuehui, Liu, Lei, Wang, Ang, Li, Hucai, Guo	No
<a href="#">Adaptor protein HIP-55 promotes macrophage M1 polarization through promoting AP-1 complex activation</a>	Cellular Signalling		2024	Jingwei, Bian, Yuzhong, Zhu, Panhui, Tian, Qiqi, Yang, Zijian, Li	No
<a href="#">Allograft Model of Aortic Arch Segment Grafting to Abdominal Aorta Through End-to-Side Anastomosis in Mice</a>	Journal of Cardiovascular Translational Research		2024	Chiyu, Liu, Qi, Chen, Mingyuan, He, Yulin, Liao	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Pro-ferroptotic signaling promotes arterial aging via vascular smooth muscle cell senescence</a>	Nature Communications		2024	Di Yang, Sun, Wen Bin, Wu, Jian Jin, Wu, Yu, Shi, Jia Jun, Xu, Shen Xi, Ouyang, Chen, Chi, Yi, Shi, Qing Xin, Ji, Jin Hao, Miao, Jiang Tao, Fu, Jie, Tong, Ping Ping, Zhang, Jia Bao, Zhang, Zhi Yong, Li, Le Feng, Qu, Fu Ming, Shen, Dong Jie, Li, Pei, Wang	No
<a href="#">Exercise mitigates flow recirculation and activates metabolic transducer SCD1 to catalyze vascular protective metabolites</a>	Sci. Adv	<a href="https://www.science.org">https://www.science.org</a>	2024	Susana, Cavallero, Mehrdad, Roustaei, Sandro, Satta, Jae, Min Cho, Henry, Phan, Kyung, In Baek, Ana M, Blázquez-Medela, Sheila, Gonzalez-Ramos, Khoa, Vu, Seul-Ki, Park, Tomohiro, Yokota, Jennifer, Sumner, Julia J, Mack, Curt D, Sigmund, Srinivasa T, Reddy, Rongsong, Li, Tzung K, Hsiai	No
<a href="#">Distinct cellular microenvironment with cytotypic effects regulates orderly regeneration of vascular tissues</a>	Materials Today Bio		2024	Jian, Wang, Xun, Yang, Miaomiao, Xu, Hui, Liu, Lijun, Liu, Zhikai, Tan	No
<a href="#">Establishment of a hybrid model of atherosclerosis and acute colitis in ApoE-/mice</a>	PLoS ONE		2024	Keke, Chen, Shengwei, Zhang, Guanghui, Cui, Xue, Zhang, Yujian, Song, Jie, Zheng, Yun, Chen, Tingting, Zheng	No
<a href="#">A central arteriovenous fistula reduces systemic hypertension in a mouse model</a>	JVS-Vascular Science		2024	Anand, Brahmandam, Rafael, Alves, Hao, Liu, Luis, Gonzalez, Yukihiko, Aoyagi, Yuichi, Ohashi, John T., Langford, Carly, Thaxton, Ryosuke, Taniguchi, Weichang, Zhang, Hualong, Bai, Bogdan, Yatsula, Alan, Dardik	No
<a href="#">Thermoresponsive polymer encapsulated HT1080 exosomes lyse localized blood clot: A preclinical evaluation in rat carotid artery thrombosis model</a>	Journal of Drug Delivery Science and Technology		2024	Ankita, Das, Aman, Nikhil, Babita, Yadav, Kumaravelu, Jagavelu, Ashok, Kumar	No
<a href="#">Glutamine Protects against Mouse Abdominal Aortic Aneurysm through Modulating VSMC Apoptosis and M1 Macrophage Activation</a>	International Journal of Medical Sciences		2024	Jinxin, Wang, Xingwen, Da, Yifei, Chen, Ancai, Yuan, Jun, Pu	No
<a href="#">Pentamethylquercetin attenuates angiotensin II-induced abdominal aortic aneurysm formation by blocking nuclear translocation of C/EBPβ at Lys253</a>	Biochimica et Biophysica Acta - Molecular Basis of Disease		2024	Hanlin, Wu, Jing, Wang, Yuxin, Bu, Jia, Li, Yiming, Li, Quanmin, Jing, Xiaozeng, Wang, Chenghui, Yan, Dan, Liu, Yaling, Han	No
<a href="#">Exploring the role of myeloperoxidase in the atherosclerotic process in hypoxic mice based on the MAPK signaling pathway</a>	Biochemical Pharmacology		2024	Jingxuan, Zhang, Ying, Han, Ruhun, Jia, Qinfang, Zhu, Xiaozhou, Wang, Meiheng, Liu, Wei, Zhang	No
<a href="#">Neutrophil extracellular traps formation may be involved in the association of propranolol with the development of portal vein thrombosis</a>	Thrombosis Research		2024	Xiangbo, Xu, Shixue, Xu, Yiyang, Zhang, Le, Wang, Chenghui, Yan, Zihua, Xu, Qingchun, Zhao, Xingshun, Qi	No
<a href="#">Transformation of metallo-elastomer grafts in a carotid artery interposition model over a year</a>	Biomaterials		2024	Ying Grace, Chen, Catia, Dombaxe, Anthony Richard, D'Amato, Simon, Van Herck, Halle, Welch, Qin, Fu, Sheng, Zhang, Yadong, Wang	No
<a href="#">Urotensin II receptor deficiency ameliorates ligation-induced carotid intimal hyperplasia partially through the RhoA-YAP1 pathway</a>	Biochimica et Biophysica Acta - Molecular Basis of Disease		2024	Panpan, Wei, Kangli, Tian, Haole, Liu, Kexin, Li, Naqash, Alam, Daxin, Cheng, Meng, Li, Xue, He, Jia, Guo, Rong, Wang, Weirong, Wang, Liang, Bai, Enqi, Liu, Baohui, Xu, Yankui, Li, Sihai, Zhao	No
<a href="#">Reduced fetal cerebral blood flow predicts perinatal mortality in a mouse model of prenatal alcohol and cannabinoid exposure</a>	BMC Pregnancy and Childbirth		2024	Siara Kate, Rouzer, Anirudh, Sreeram, Rajesh C., Miranda	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Mitochondrial targeted catalase improves muscle strength following arteriovenous fistula creation in mice with chronic kidney disease</a>	Scientific Reports		2024	Kyoungrae, Kim, Brian, Fazzino, Tomas A., Cort, Eric M., Kunz, Samuel, Alvarez, Jack, Moerschel, Victoria R., Palzkill, Gengfu, Dong, Erik M., Anderson, Kerri A., O'Malley, Scott A., Berceci, Terence E., Ryan, Salvatore T., Scali	No
<a href="#">Enhancing the therapeutic potential of isoliensinine for hypertension through PEG-PLGA nanoparticle delivery: A comprehensive in vivo and in vitro study</a>	Biomedicine and Pharmacotherapy		2024	Mengying, Yao, Ming, Wu, Meng, Yuan, Meizhu, Wu, Ailing, Shen, Youqin, Chen, Dawei, Lian, Xiaolong, Liu, Jun, Peng	No
<a href="#">Photocurable extracellular matrix sealant for cessation of venous hemorrhage</a>	Journal of Biomedical Materials Research - Part B Applied Biomaterials		2024	Luke E., Schepers, Brooke L., Martindale, Alycia G., Berman, Hannah L., Cebull, William, Van Alstine, Sydney E., Hollingshead, Tyler, Novak, Craig J., Goergen	No
<a href="#">Liraglutide attenuates angiotensin II-induced aortic dissection and aortic aneurysm via inhibiting M1 macrophage polarization in APOE -/- mice</a>	Biochemical Pharmacology		2024	Keyin, Zhang, Ruisha, Li, Yusanjan, Matniyaz, Ronghuang, Yu, Jun, Pan, Wenxue, Liu, Dong Jin, Wang	No
<a href="#">A highly selective mPGES-1 inhibitor to block abdominal aortic aneurysm progression in the angiotensin mouse model</a>	Scientific Reports		2024	Lauren M., Weaver, Madeline J., Stewart, Kai, Ding, Charles D., Loftin, Fang, Zheng, Chang Guo, Zhan	No
<a href="#">Macrophage-Targeted multifunctional nanoparticles for detection and treatment of intraplaque hemorrhage</a>	Chemical Engineering Journal		2024	Haiyang, Wang, Min, Zheng, Yushi, Chen, Long, Cheng, Xiaotong, Qi, Huilin, Yu, Jianming, Sun, Junjie, Liu, Ruoyao, Wang, Yaqin, Hu, Tao, Lin, Ying, Zhang, Wen, Xu, Tingting, Wang, Zhigang, Wang, Jianting, Yao, Pintong, Huang, Haitao, Ran	No
<a href="#">Toll-like receptor 4 mutation mitigates gut microbiota-mediated hypertensive kidney injury</a>	Pharmacological Research		2024	Suravi, Majumder, Sathnur B., Pushpakumar, Hebah, Almarshood, Rosemary, Ouseph, Dibson D., Gondim, Venkatakrishna R., Jala, Utpal, Sen	No
<a href="#">Impaired memory in Sprague-Dawley rats exposed to complex groundwater mixtures of contaminants is associated with reduced cranial blood flow and hippocampal neurotoxicity</a>	NeuroToxicology		2024	B., Boamah, C., Morse, S., Siciliano, N., Hogan, M., Hecker, M., Hanson, P., Campbell, R., Peters, A. N., Al-Dissi, T. D., Olver, L., Weber	No
<a href="#">Site-specific genetic and functional signatures of aortic endothelial cells at aneurysm predilection sites in healthy and AngII ApoE-/- mice</a>	Angiogenesis		2024	Alexander, Brückner, Adrian, Brandtner, Sarah, Rieck, Michaela, Matthey, Caroline, Geisen, Benedikt, Feis, Marta, Stei, Kristina, Kuschewihrog, Bernd K., Fleischmann, Daniela, Wenzel	No
<a href="#">Heterogeneous gene expression during early arteriovenous fistula remodeling suggests that downregulation of metabolism predicts adaptive venous remodeling</a>	Scientific Reports		2024	Yuichi, Ohashi, Clinton D., Protack, Yukihiko, Aoyagi, Luis, Gonzalez, Carly, Thaxton, Weichang, Zhang, Masaki, Kano, Hualong, Bai, Bogdan, Yatsula, Rafael, Alves, Katsuyuki, Hoshina, Eric B., Schneider, Xiaochun, Long, Rachel J., Perry, Alan, Dardik	No
<a href="#">Berberine ameliorates vascular dysfunction by downregulating TMAO-endoplasmic reticulum stress pathway via gut microbiota in hypertension</a>	Microbiological Research		2024	Zhichao, Wang, Yijia, Shao, Fang, Wu, Dangu, Luo, Guoyifan, He, Jianwen, Liang, Xiaoping, Quan, Xiehui, Chen, Wenhao, Xia, Ye, Chen, Yue, Liu, Long, Chen	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Gestational exposure to air pollutants perturbs metabolic and placenta-fetal phenotype</a>	Reproductive Toxicology		2024	Amit, Ganguly, Shubhamoy, Ghosh, Bo Chul, Shin, Marlin, Touma, Madhuri, Wadehra, Sherin U., Devaskar	No
<a href="#">Aging aggravates aortic aneurysm and dissection via miR-1204-MYLK signaling axis in mice</a>	Nature Communications		2024	Ze Long, Liu, Yan, Li, Yi Jun, Lin, Mao Mao, Shi, Meng Xia, Fu, Zhi Qing, Li, Da Sheng, Ning, Xiang Ming, Zeng, Xiang, Liu, Qing Hua, Cui, Yue Ming, Peng, Xin Min, Zhou, Ye Rong, Hu, Jia Sheng, Liu, Yu Jia, Liu, Mian, Wang, Chun Xiang, Zhang, Wei, Kong, Zhi Jun, Ou, Jing Song, Ou	No
<a href="#">Impact of bradykinin type 2 receptor overexpression on cardiovascular function in mice</a>	Biochemical Pharmacology		2025	Sara, Metry, Tatsiana, Suvorava, Jens W., Fischer, Vu Thao Vi, Dao, Georg, Kojda	No
<a href="#">SGLT2 inhibitor downregulated oxidative stress via activating AMPK pathway for cardiorenal (CR) protection in CR syndrome rodent fed with high protein diet</a>	Journal of Molecular Histology		2024	Chih Chao, Yang, Kuan Hung, Chen, Ya, Yue, Ben Chung, Cheng, Tsuen Wei, Hsu, John Y., Chiang, Chih Hung, Chen, Fanna, Liu, Jie, Xiao, Hon Kan, Yip	No
<a href="#">Fluorescence and photoacoustic (FL/PA) dual-modal probe: Responsive to reactive oxygen species (ROS) for atherosclerotic plaque imaging</a>	Biomaterials		2025	Qianqian, Yu, Yi, Duan, Nian, Liu, Zhirong, Zhu, Ying, Sun, Haojian, Yang, Yiqi, Shi, Xiangyu, Li, Wei Hong, Zhu, Lixin, Wang, Qi, Wang	No
<a href="#">Macrophage ILF3 promotes abdominal aortic aneurysm by inducing inflammatory imbalance in male mice</a>	Nature Communications		2024	Zhao-Yang, Wang, Jie, Cheng, Ying, Wang, Hai Tao, Yuan, Shao Jie, Bi, Shuang Xi, Wang, Ya Min, Hou, Xu, Zhang, Bo Han, Xu, Ze Ying, Wang, Yun, Zhang, Wen Jian, Jiang, Yu Guo, Chen, Ming Xiang, Zhang	No
<a href="#">Targeting endothelial KCa channels in vivo restores arterial and endothelial function in type 2 diabetic rats</a>	Metabolism: Clinical and Experimental		2024	Ramesh C., Mishra, Darrell D., Belke, Latika, Singh, Heike, Wulff, Andrew P., Braun	No
<a href="#">IL-6 signaling accelerates iron overload by upregulating DMT1 in endothelial cells to promote aortic dissection</a>	International Journal of Biological Sciences		2024	Qiang, Xie, Jianji, Wang, Runqiao, Li, Hao, Liu, Yongliang, Zhong, Qinfeng, Xu, Yipeng, Ge, Chengnan, Li, Lizhong, Sun, Junming, Zhu	No
<a href="#">Ultrasound imaging for assessing aortic phenotypes: A preclinical tool for measuring cardiac disease model progression and therapeutic effect</a>	WFUMB Ultrasound Open		2024	James, Cao, Alex, Jayyosi, Jennifer, Nietupski, Giulio, Tomassy, Ingeborg M., Langohr, Michelle, Potter, Srinivas, Rao, Dinesh S., Bangari, Xiaoyou, Ying	No
<a href="#">Complement C3a/C3aR inhibition alleviates the formation of aortic aneurysm in Marfan syndrome mice</a>	BMC Cardiovascular Disorders		2024	Fan, Zhang, Kexin, Yao, Yan, Liu, Mei, Zhou, Yanhong, Zhang, Shiyao, Hong, Jian, Wu, Congcong, Zhang	No
<a href="#">Tea polyphenol nanoparticles enable targeted siRNA delivery and multi-bioactive therapy for abdominal aortic aneurysms</a>	Journal of Nanobiotechnology		2024	Zhen Wu, Peng, Zhang, Jie, Yue, Qingshan, Wang, Peipei, Zhuang, Shah, Jehan, Liyuan, Fan, Jiarun, Xue, Wenhui, Zhou, Haiyang, Wang	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">DNA-sensing inflammasomes cause recurrent atherosclerotic stroke</a>	Nature		2024	Jiayu, Cao, Stefan, Roth, Sijia, Zhang, Anna, Kopczak, Samira, Mami, Yaw, Asare, Marios K., Georgakis, Denise, Messerer, Amit, Horn, Ruth, Shemer, Charlene, Jacqmarcq, Audrey, Picot, Jack P., Green, Christina, Schlegl, Xinghai, Li, Lukas, Tomas, Alexander, Dutsch, Thomas G., Liman, Matthias, Endres, Saskia R., Wernsdorf, Christina, Fürle, Olga, Carofoglio, Jie, Zhu, David, Brough, Inga, Zerr, Silke, Wunderlich, Annika, Spottke, Gabor, Petzold, Thomas G., Liman, Marios K., Georgakis, Matthias, Endres, Martin, Dichgans, Veit, Hornung, Martin, Dichgans, Denis, Vivien, Christian, Schulz, Yuval, Dor, Steffen, Tiedt, Hendrik B., Sager, Gerrit M., Grosse, Arthur, Liesz	No
<a href="#">Low-dose radiation promotes high-fat diet-induced atherosclerosis by activating cGAS signal pathway</a>	Biochimica et Biophysica Acta - Molecular Basis of Disease		2024	Xiaochang, Liu, Xin, Huang, Jinhua, Luo, Shuai Ning, Gao, Chenjun, Bai, Dafei, Xie, Shan Shan, Gao, Hua, Guan, Ruixue, Huang, Ping Kun, Zhou	No
<a href="#">Effects of moderate doses of ionizing radiation on experimental abdominal aortic aneurysm</a>	PLoS ONE		2024	Goran, Riazi, Chloe, Brizais, Imene, Garali, Rida, Al-Rifai, Helene, Quelquejay, Virginie, Monceau, Guillaume, Vares, Lea, Ould-Boukhitine, Damien, Aubeleau, Florian, Gilain, Celine, Gloaguen, Morgane Dos, Santos, Hafid, Ait-Oufella, Teni, Ebrahimian	No
<a href="#">New antidepressant mechanism of Yueju Pill: Increasing ghrelin level by inhibiting gastric mTOR/S6K signaling pathway and sensitizing hippocampal GHS-R</a>	Heliyon		2024	Zhentao, Zhang, Dan, Su, Meixizi, Lai, Yonggui, Song, Huizhen, Li, Ming, Yang, Genhua, Zhu, Hong, Liu, Zhifu, Ai	No
<a href="#">Berberine Targets PKM2 to Activate the t-PA-Induced Fibrinolytic System and Improves Thrombolysis</a>	Pharmaceuticals		2024	Zeqi, Sun, Tong, Zhao, Xue, Bai, Huimin, Li, Jin, Gao, Yutong, Hao, Yiyang, Li, Yanli, Xie, Ange, Hu, Qiang, Huang, Xin, Liu, Yong, Zhang	No
<a href="#">Activation of nuclear receptor pregnane-X-receptor protects against abdominal aortic aneurysm by inhibiting oxidative stress</a>	Redox Biology		2024	Zhi, Shen, Jinxi, Wang, Yifei, Chen, Peiliang, Fang, Ancai, Yuan, Alex F., Chen, Xiaoxiang, Yan, Yuyan, Lyu, Jun, Pu	No
<a href="#">A novel role for thioredoxin-related transmembrane protein TMX4 in platelet activation and thrombus formation</a>	Journal of Thrombosis and Haemostasis		2025	Zhenzhen, Zhao, Yucan, Wang, Aizhen, Yang, Yi, Lu, Xiaofeng, Yan, Meinan, Peng, Yue, Han, Chao, Fang, Depel, Wu, Yi, Wu	No
<a href="#">Regional Differences in Vascular Graft Degradation and Regeneration Contribute to Dilation</a>	Tissue Engineering - Part A		2024	Ziyu, Wang, Suzanne M., Mithieux, Kevin M., Blum, Tai, Yi, Yuichi, Matsuzaki, Nguyen T.H., Pham, Brian S., Hawkett, Toshiharu, Shinoka, Christopher K., Breuer, Anthony S., Weiss	No
<a href="#">Physics-Informed Graph Neural Networks to solve 1-D equations of blood flow</a>	Computer Methods and Programs in Biomedicine		2024	Ahmet, Sen, Elnaz, Ghajar-Rahimi, Miquel, Aguirre, Laurent, Navarro, Craig J., Goergen, Stephane, Avril	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Novel Metal-Free Nanozyme for Targeted Imaging and Inhibition of Atherosclerosis via Macrophage Autophagy Activation to Prevent Vulnerable Plaque Formation and Rupture</a>	ACS Applied Materials and Interfaces		2024	Lingjie, Wang, Xiaoqian, Zhang, Hongrong, Zhang, Xiaozhe, Wang, Xiaofeng, Ren, Wei, Bian, Caiyun, Shi, Jingying, Wang, Liping, Li, Ruiping, Zhang, Hua, Zhang	No
<a href="#">Exosomal miR-155-5p promote the occurrence of carotid atherosclerosis</a>	Journal of Cellular and Molecular Medicine		2024	Wen Wen, Yang, Qing Xiang, Li, Fei, Wang, Xin Ran, Zhang, Xian Li, Zhang, Meng, Wang, Dong, Xue, Ying, Zhao, Lu, Tang	No
<a href="#">Protease activated receptor 2 deficiency retards progression of abdominal aortic aneurysms by modulating phenotypic transformation of vascular smooth muscle cells via ERK signaling</a>	Experimental Cell Research		2024	Min, Wang, Zhengde, Tang, Huasu, Zeng, Alian, Zhang, Shuying, Huang, Jiahua, Ke, Lin, Gao, Tiantian, Zhang, Yue, Wang, Alex Chia Yu, Chang, Junfeng, Zhang, Qizhi, Chen, Jun, Gu, Changqian, Wang	No
<a href="#">Hemodynamic disturbance and mTORC1 activation: Unveiling the biomechanical pathogenesis of thoracic aortic aneurysms in Marfan syndrome</a>	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
<a href="#">Deficiency of endothelial TRPV4 cation channels ameliorates experimental abdominal aortic aneurysm</a>	European Journal of Pharmacology		2025	She Hua, Qian, Shuai, Liu, Mi, Wang, Qing, Wang, Chang Ping, Hu, Jun Hao, Huang, Zheng, Zhang	No
<a href="#">Hydrogen sulfide attenuates disturbed flow-induced vascular remodeling by inhibiting LDHB-mediated autophagic flux</a>	Redox Biology		2025	Xia, Wang, Xiyang, Huang, Yongya, Zhang, Huanhuan, Huo, Guo, Zhou, Linghong, Shen, Long, Li, Ben, He	No
<a href="#">Application of subcutaneous extracellular matrix to prepare bilayer heparin-coated polycaprolactone/decellularized small-diameter vascular graft for tissue regeneration</a>	International Journal of Biological Macromolecules		2025	Ze Qin, Xu, Xue, Geng, Lin, Ye, Liqiang, Li, Yuehao, Xing, Jin, Cheng, Cong, Wang, Yongquan, Gu, Zhu, Tong, Lianrui, Guo	No
<a href="#">Combined injection of pristane and Bacillus Calmette-Guerin Vaccine successfully establishes a lupus model with atherosclerosis</a>	Experimental Cell Research		2025	Chunru, Jiang, Zhenduo, Zhu, Yu, Tai, Meiyue, Lu, Huijuan, Cheng, Tiantian, Su, Paipai, Guo, Ruhong, Fang, Feng, He, Mingli, Ge, Qiuyun, Guan, Yongsheng, Han, Shangxue, Yan, Wei, Wei, Qingtong, Wang	No
<a href="#">Localized COUP-TFII pDNA Delivery Modulates Stem/Progenitor Cell Differentiation to Enhance Endothelialization and Inhibit Calcification of Decellularized Allografts</a>	Advanced Science		2025	Mengmeng, Xing, Fei, Wang, Ruowen, Chu, He, Wang, Yuyao, Sun, Meng, Qian, Huan, Jiang, Adam C., Midgley, Guohao, Dai, Qiang, Zhao	No
<a href="#">CircFND3B inhibits vascular smooth muscle cells proliferation in abdominal aortic aneurysms by targeting the miR-1270/PDCD10 axis</a>	Scandinavian Cardiovascular Journal		2025	Baoping, Deng, Jing, Xu, Yue, Wei, Jinfeng, Zhang, Na, Zeng, Yulan, He, Qiaoli, Zeng, Dehua, Zou, Runmin, Guo	No
<a href="#">Identification of the Vulnerability of Atherosclerotic Plaques by a Photoacoustic/Ultrasonic Dual-Modal cRGD Nanomolecular Probe</a>	International Journal of Nanomedicine		2024	CaiGui, Yu, Lu, Zhong, Yanxiang, Zhou, Nan, Jiang, Jinling, Chen, Sheng, Cao	No
<a href="#">Engineering Hyperechogenic Colloids with Clot-Targeting Capabilities from Platelet-Derived Membranes</a>	ACS Applied Materials and Interfaces		2024	Mark Louis P., Vidallon, Mitchell J., Moon, Haikun, Liu, Yuyang, Song, Simon, Crawford, Boon Mian, Teo, James D., McFadyen, Alexis I., Bishop, Rico F., Tabor, Karlheinz, Peter, Xiaowei, Wang	No
<a href="#">Glucose transporter 1 in vascular smooth muscle cells is dispensable for abdominal aortic aneurysm induced by angiotensin II</a>	JVS-Vascular Science		2025	Keiichi, Torimoto, Hymavathi Reddy, Vari, Yuki, Nakayama, Hirotoishi, Utsunomiya, Masatoshi, Takeda, Tomoki, Hashimoto, Victor, Rizzo, Satoru, Eguchi	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Mitochondrial metabolic maturation in postnatal right ventricle restricted by volume overload</a>	Intractable and Rare Diseases Research		2025	Juan, Cao, Yingying, Xiao, Haifa, Hong, Zhongzhong, Chen, Wenjun, Qin	No
<a href="#">Qingre Sanjie Formula alleviates atherosclerosis by promoting LXR-<math>\alpha</math>/ABCG5/G8-mediated reverse cholesterol transport and bile acid synthesis</a>	Phytomedicine		2025	Xiao, Li, Xianglong, Huang, Keyan, Song, Jinjie, Liu, Ya, Jin, Tianxiang, Li, Lishuang, Zhang, Han, Zhang	No
<a href="#">Tranexamic acid-fatty alcohol polyoxyethylene ether conjugation/PVA foam for venous sclerotherapy via vascular damage and inhibiting plasmin system</a>	Acta Pharmaceutica Sinica B		2025	Jizhuang, Ma, Keda, Zhang, Wenhan, Li, Yu, Ding, Yongfeng, Chen, Xiaoyu, Huang, Tong, Yu, Di, Song, Haoran, Niu, Huichao, Xie, Tianzhi, Yang, Xiaoyun, Zhao, Xinggang, Yang, Pingtian, Ding	No
<a href="#">Local characterization of collagen architecture and mechanical properties of tissue engineered atherosclerotic plaque cap analogs</a>	Acta Biomaterialia		2025	Hanneke, Crielaard, Tamar B., Wissing, Su, Guvenir Torun, Gert Jan, Kremers, Pablo, de Miguel, Ranmadusha M., Hengst, Frank J.H., Gijzen, Ali C., Akyildiz, Kim, van der Heiden	No
<a href="#">Inhibition of ATP-citrate lyase by bempedoic acid protects against abdominal aortic aneurysm formation in mice</a>	Biomedicine and Pharmacotherapy		2025	Lidia, Puertas-Umbert, Judith, Alonso, Laia, Blanco-Casoliva, Rafael, Almendra-Pegueros, Mercedes, Camacho, Antonio, Rodríguez-Sinovas, María, Galán, Nuria, Roglans, Juan Carlos, Laguna, José, Martínez-González, Cristina, Rodríguez	No
<a href="#">Protocol for studying the superior mesenteric artery in mice using non-invasive micro-ultrasound imaging and anatomic dissection</a>	STAR Protocols		2025	Haiping, Chen, Yangjing, Jiang, Huanhuan, Huo, Guo, Zhou, Min, Liang, Yijie, Huang, Yunwen, Hu, Ziwei, Zhang, Ben, He, Zhaohua, Cai	No
<a href="#">MARCH5 ameliorates aortic valve calcification via RACGAP1-DRP1 associated mitochondrial quality control</a>	Biochimica et Biophysica Acta - Molecular Cell Research		2025	Jialiang, Zhang, Yaoyu, Zhang, Wenhua, Lei, Jing, Zhou, Yanjian, Xu, Zhou, Hao, Yanbiao, Liao, Fangyang, Huang, Mao, Chen	No
<a href="#">Steatohepatitis-induced vascular niche alterations promote melanoma metastasis</a>	Cancer & Metabolism		2025	Johannes, Hoffmann, Julia, Schüler, Bianca, Dietsch, Sina Wietje, Kürschner-Zacharias, Carsten, Sticht, Felix A., Trogisch, Maren, Schreitmüller, Tinja, Baljkas, Kai, Schledzewski, Manuel, Reinhart, Sebastian A., Wohlfell, Manuel, Winkler, Christian David, Schmid, Joerg, Heineke, Cyrill, Géraud, Sergij, Goerd, Philipp-Sebastian, Reiners-Koch, Victor, Olsavszky	No
<a href="#">Inhibition of vascular smooth muscle cell PERK/ATF4 ER stress signaling protects against abdominal aortic aneurysms</a>	JCI Insight		2025	Brennan, Callow, Xiaobing, He, Nicholas, Juriga, Kevin D., Mangum, Amrita, Joshi, Xianying, Xing, Andrea, Obi, Abhijnan, Chattopadhyay, Dianna M., Milewicz, Mary X., O'Riordan, Johann, Gudjonsson, Katherine, Gallagher, Frank M., Davis	No
<a href="#">Co-exposure to polystyrene nanoplastics and F-53B induces vascular endothelial cell pyroptosis through the NF-<math>\kappa</math>B/NLRP3 pathway</a>	Journal of Hazardous Materials		2025	Junli, Lv, Zhenzhen, Tan, Ziwen, An, Rui, Xu, Huaxing, Zhang, Mingmei, Guo, Fang, Xiao, Mengwei, Zhao, Yi, Guo, Yi, Liu, Xuehui, Liu, Jingtao, Ma, Huicai, Guo	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">Lead-induced actin polymerization aggravates neutrophil extracellular trap formation and contributes to vascular inflammation</a>	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
<a href="#">Ablation of Hepatic Asah1 Gene Disrupts Hepatic Lipid Homeostasis and Promotes Fibrotic Nonalcoholic Steatohepatitis in Mice</a>	American Journal of Pathology		2025	Rui, Zuo, Mi, Wang, Yun Ting, Wang, Yang Ping, ShenTu, Alexandra K., Moura, Ying, Zhou, Kiana, Roudbari, Jenny Z., Hu, Pin Lan, Li, Jiu Kuan, Hao, Xiang, Li, Yang, Zhang	No
<a href="#">Mangiferin Attenuates Ang II-Induced Abdominal Aortic Aneurysm by Blocking Lys591-Mediated Nuclear Translocation of STAT3</a>	Phytomedicine	<a href="https://linkinghub.elsevier.com/retrieve/pii/S0944711325007408">https://linkinghub.elsevier.com/retrieve/pii/S0944711325007408</a>	2025	Shaopeng, Cheng, Yilin, Wang, Tingting, Tong, Chen, Liu, Jintao, Qian, Qiuyan, Zong, Dongjin, Wang, Kai, Li, Xiaoting, Wu, Jie, Yang	No
<a href="#">Engineering biomimetic nanovesicles for PEBP1 mRNA delivery to inhibit ferroptosis in abdominal aortic aneurysm</a>	Bioengineering and Translational Medicine		2025	Lulu, Chen, Bicheng, Chen, Xiang, Su	No
<a href="#">Prolonged Chronic Cerebral Hypoperfusion Does not Exacerbate Tau Pathology in a Tauopathy Mouse Model</a>	Journal of Integrative Neuroscience		2025	Na Kyung, Lee, Duk L., Na, Hee Jin, Kim, Hyemin, Jang, Jason K., Sa, Bae Sung, Ko, Jong Wook, Chang	No
<a href="#">Thiol isomerase ERp18 enhances platelet activation and arterial thrombosis</a>	Research and Practice in Thrombosis and Haemostasis		2025	Chao, He, Aizhen, Yang, Keyu, Lv, Yuxin, Zhang, Zhenzhen, Zhao, Yi, Lu, Chao, Fang, Yue, Han, Depei, Wu, Miao, Jiang, Jingyu, Zhang, Yi, Wu	No
<a href="#">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</a>	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
<a href="#">Pharmacological and genetic inhibition of BTK ameliorates vascular degeneration, dissection, and rupture</a>	Life Sciences		2025	Songwen, Li, Gang, Liu, Shuo, Cheng, Xin, Li, Xinyu, Weng, Jing, Yang	No
<a href="#">Sex-specific characterization of aortic function and inflammation in a new diet-induced mouse model of metabolic syndrome</a>	FASEB Journal		2025	Vivian, Tran, Holly, Brettie, Henry, Diep, Hericka Bruna, Figueiredo Galvao, Kerry V., Fanson, Christopher G., Sobey, Grant R., Drummond, Antony, Vinh, Maria, Jelinic	No
<a href="#">From inflammation to remodelling: A novel BASP1+ monocyte subset as a catalyst for acute aortic dissection</a>	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

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">MLKL activity requires a splicing-regulated, druggable intramolecular interaction</a>	Molecular Cell		2025	Uris, Ros, Veronica, Martinez-Osorio, Pedro A., Valiente, Yasmin, Abdelwahab, Milos, Gojkovic, Raed, Shalaby, Silvia, Zanna, Julia, Saggau, Laurens, Wachsmuth, Harshal N., Nemade, Jonathan, Zoeller, Hannah, Lottemoser, Yu Guang, Chen, Mohamed, Ibrahim, Konstantinos, Kelepouras, Lazaros, Vasilikos, Paula, Bedoya, Rafael A., Espiritu, Stefan, Müller, Veronika, Altmannova, D. Peter, Tieleman, John, Weir, Julian, Langer, Matti, Adam, Henning, Walczak, W. Wei Lynn, Wong, Gianmaria, Liccardi, Martin, Mollenhauer, Manolis, Pasparakis, Nieves, Peltzer, Ana J., García-Sáez	No
<a href="#">Mechanical Biomimetic Nanocomposites for Multidimensional Treatment of Arterial Thrombosis</a>	Advanced Science		2025	Ying, Li, Qi, Xiang, Yan, Zhang, Fuxue, Luo, Yunfang, Wu, Haitao, Ran, Yang, Cao	No
<a href="#">Osteocalcin deficiency attenuates neointima formation after vascular injury in rat</a>	BMC Cardiovascular Disorders	<a href="https://bmccardiovascdisord.biomedcentral.com/articles/10.1186/s12872-025-05000...">https://bmccardiovascdisord.biomedcentral.com/articles/10.1186/s12872-025-05000...</a>	2025	Ming, Yi, Yan, Li, Jinghao, Sun, Jin, Si, Huirong, Liu, Jing, Li	No
<a href="#">Vascular remodeling in arteriovenous fistula treated with PDE5A inhibitors</a>	Physiological Reports		2025	Maheshika, Somarathna, Hannah, Northrup, Kevin, Ingle, Tatyana, Isayeva-Waldrop, Nguyen Thuy Nhu, Nguyen, Bailey, Lose, Yan Ting, Shiu, Timmy, Lee	No
<a href="#">Botulinum toxin (A)-induced bone loss is associated with increased blood velocity and reduced vascular bone porosity</a>	Journal of Bone and Mineral Research		2025	Mahmoud S, Moussa, Taylor, de Vet, Nadine, Lebcir, Paul, Zaslansky, Lorraine E, Chalifour, Bettina M, Willie, Svetlana V, Komarova	No
<a href="#">Sustained tenascin-C expression drives neointimal hyperplasia and promotes aortocaval fistula failure</a>	American Journal of Physiology - Heart and Circulatory Physiology		2025	Luis A., Gonzalez, Weichang, Zhang, Hualong, Bai, Ryosuke, Taniguchi, Abhay B., Ramachandra, Daniel G., Jovin, Yuichi, Ohashi, Mytien, Nguyen, Carly, Thaxton, Bogdan, Yatsula, Roberto I., Vazquez-Padron, Jay D., Humphrey, Kathleen A., Martin, Themis R., Kyriakides, Alan, Dardik	No
<a href="#">Myeloperoxidase impacts vascular function by altering perivascular adipocytes' secretome and phenotype in obesity</a>	Cell Reports Medicine		2025	Alexander, Hof, Max, Landerer, Philipp, Peitsmeyer, Ronja, Herzog, Jens, Alber, Maysam, Ahdab, Felix Sebastian, Nettersheim, Dennis, Mehrkens, Simon, Geißen, Simon, Braumann, Henning, Guthoff, Philipp, von Stein, Harshal, Nemade, Felix Simon Ruben, Picard, Ramona, Braun, Friedrich Felix, Hoyer, Jens Claus, Brüning, Alexander, Pfeifer, Staffan, Hildebrand, Holger, Winkels, Stephan, Baldus, Matti, Adam, Jasper, Schäkel, Martin, Mollenhauer	No
<a href="#">Dysregulated cholesterol uptake and efflux of bone marrow-derived α-SMA+ macrophages contribute to atherosclerotic plaque formation</a>	Cellular and Molecular Life Sciences		2025	Menglu, Li, Lili, Wu, Yuxin, Wen, Anni, Wang, Xiao, Zhou, Lijie, Ren, Qiongyu, Lu, Fengchan, Li, Li, Zhu, Chaojun, Tang	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">C/EBP<math>\beta</math> activation in vascular smooth muscle cells promotes hyperlipidemia-induced phenotypic transition and arterial stiffness</a>	Signal Transduction and Targeted Therapy		2025	Jun, Ma, Xiangyu, Yang, Yanan, Li, Xin, Zhang, Kai, Liu, Yong, Peng, Si, Wang, Rufeng, Shi, Xingwei, Huo, Xueting, Liu, Xinran, Li, Runyu, Ye, Zhipeng, Zhang, Changqiang, Yang, Lu, Liu, Dan, Gao, Shanshan, Jia, Lirong, Sun, Xianghao, Zuo, Qingtao, Meng, Xiaoping, Chen	No
<a href="#">Age-Dependent Correlation of Pulmonary Function Impairment and Aortic Arch Stiffness in Mice</a>	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
<a href="#">Aldosterone-Induced Transformation of Vascular Smooth Muscle Cells into Macrophage-like Cells Participates in Inflammatory Vascular Lesions</a>	International Journal of Molecular Sciences		2025	Boya, Zhang, Ziqian, Liu, Yi, Chang, Ruyan, Lv, Haixia, Guo, Panpan, Qiang, Tatsuo, Shimosawa, Qingyou, Xu, Fan, Yang	No
<a href="#">Novel Humanized Aortic Valve Calcification Model</a>	Circulation Research		2025	Dunpeng, Cai, Lindsey, Saint, John, Markley, Shi You, Chen	No
<a href="#">Sex differences in middle cerebral artery reactivity and hemodynamics independent from changes in systemic arterial stiffness in Sprague-Dawley rats</a>	Physiological Reports		2025	Jonathan W., Ray, Xuming, Sun, Mildris, Cruz-Diaz, Victor M., Pulgar, Liliya M., Yamaleyeva	No
<a href="#">DAPK1 acts as a positive regulator of hypertension via induction of vasoconstriction</a>	Clinical Science		2025	Xiuli, Zhang, Ying, Cheng, Yao, Lu, Nanhui, Xu, Zhi, Guo, Meizhu, Wu, Guosheng, Lin, Mengying, Yao, Yanyan, Yang, Yao, Lin, Jun, Peng, Ailing, Shen	No
<a href="#">Single-cell RNAseq of Angiotensin II-induced abdominal aortic tissue identifies aneurysm-associated cell clusters in C57BL/6J mice</a>	Bioscience Reports		2025	Huimin, Li, Xueyu, Hao, Peng, Zhang, Jun, Guo, Wei, Li	No
<a href="#">Radial artery intima-media thickening is a sensitive marker of atherosclerosis and coronary artery stenosis, a lesson from a 6-year study of a spontaneous monkey model</a>	Molecular and Cellular Biochemistry		2025	Jue, Wang, Wen, Zheng, Haibao, Shang, Lin, Pan, Ye, Yuan, Wenli, Chen, Chunguang, Guo, Shihan, Li, Xueting, Sun, Jing, Guo, Xiuqin, Zhang	No
<a href="#">Proximal aortic aneurysms in mice underexpressing transforming growth factor-<math>\beta</math>1</a>	Journal of Physiological Sciences		2025	Masao, Kakoki, John R., Hagaman, Masahiko, Terajima, Masako, Nagasawa, Katsumi, Uoshima, Mitsuo, Yamauchi, Oliver, Smithies, Kenji, Kansaku	No
<a href="#">Taurolidine inhibits influenza virus infection and prevents influenza-induced cytokine storm, vasoconstriction and lung damage</a>	Cellular and Molecular Life Sciences		2025	Chaoxiang, Lv, Jin, Guo, Rongbo, Luo, Yuanguo, Li, Bingshuo, qian, Xiaopan, Zou, Tiecheng, Wang, Beilei, Shen, Weiyang, Sun, Yuwei, Gao	No
<a href="#">Effects and mechanisms of trifolin on attenuating hypertension-induced vascular smooth muscle cell proliferation and collagen deposition in vivo and in vitro</a>	Scientific Reports		2025	Ailing, Shen, Meizhu, Wu, Zhi, Guo, Farman, Ali, Jinkong, Wu, Hong, Chen, Ying, Cheng, Dawei, Lian, Jun, Peng, Min, Yu, Keji, Chen	No
<a href="#">Circumferentially Aligned Electrospun Vascular Grafts Improves Its Vascular Regeneration and Remodeling in vivo</a>	International Journal of Nanomedicine		2025	Man, Xiong, Lei, Yang, Xinfang, Liu, Sidong, Luo, Yeyang, Wang	No
<a href="#">Ex Vivo Biosensor Strategy Reveals the Vascular Toxic Effects of Volatile Organic Compounds Derived from Indoor Renovation</a>	Environment and Health		2025	Peihao, Yang, Wenting, Cheng, Mengruo, Wang, Mengqi, Wu, Qingping, Liu, Jianzhong, Zhang, Yaxian, Pang, Yujie, Niu, Jinglong, Tang, Rong, Zhang	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">MicroRNA-15a-5p mediates abdominal aortic aneurysm progression and serves as a potential diagnostic and prognostic circulating biomarker</a>	Communications Medicine		2025	Greg, Winski, Ekaterina, Chernogubova, Albert, Busch, Suzanne M., Eken, Hong, Jin, Moritz, Lindquist Liljeqvist, Tooba, Khan, Alexandra, Bäcklund, Valentina, Paloschi, Joy, Roy, Rebecka, Hultgren, Christine, Brostjan, Gert J., de Borst, Joost P.G., Sluijter, Nadja, Sachs, Hans Henning, Eckstein, Reinier A., Boon, Joshua M., Spin, Philip S., Tsao, Folkert W., Asselbergs, Lars, Maegdefessel	No
<a href="#">The angiotensin II type 2 receptor attenuates aging-associated arterial stiffness in female mice</a>	American Journal of Physiology-Heart and Circulatory Physiology	<a href="https://journals.physiology.org/doi/10.1152/ajpheart.00328.2025">https://journals.physiology.org/doi/10.1152/ajpheart.00328.2025</a>	2025	Casey G., Turner, Rachel, Kenney, Jennifer, Vorm, Seung Kyum, Kim, Greg, Martin, Lakshmi, Pulakat, Iris Z., Jaffe, Jennifer J., DuPont	No
<a href="#">Lysosomal zinc nanomodulation blocks macrophage pyroptosis for counteracting atherosclerosis progression</a>	Sci. Adv	<a href="https://www.science.org">https://www.science.org</a>	2025	Ruizhi, Hu, Junchang, Qin, Wei, Feng, Xinran, Song, Hui, Huang, Chen, Dai, Bo, Zhang, Yu, Chen	No
<a href="#">The effect of presence and location of microcalcifications on atherosclerotic plaque rupture: A tissue-engineering approach</a>	Journal of the Mechanical Behavior of Biomedical Materials	<a href="https://linkinghub.elsevier.com/retrieve/pii/S1751616125002553">https://linkinghub.elsevier.com/retrieve/pii/S1751616125002553</a>	2025	Hanneke, Crielaard, Imke, Jansen, Kim, van der Heiden, Gert-Jan, Kremers, Frank J.H., Gijzen, Eric, Farrell, Ali C., Akylidiz	No
<a href="#">Mechanistic insight into plasticizer di-(2-ethylhexyl) phthalate as an environmental hazard for abdominal aortic aneurysm: Evidence from in vitro and in vivo studies</a>	Ecotoxicology and Environmental Safety	<a href="https://linkinghub.elsevier.com/retrieve/pii/S0147651325010346">https://linkinghub.elsevier.com/retrieve/pii/S0147651325010346</a>	2025	Yicheng, Wang, Miaoyun, Qiu, Bixuan, Yue, Mingliang, Wang, Luoxing, Xia, Fengfeng, Li, Chaobo, Yang, Zhigao, Song, Yushan, Liao, Wei, Liu, Zhi, Zeng	No
<a href="#">Dual-Drug Nanomedicine Assembly with Synergistic Anti-Aneurysmal Effects via Inflammation Suppression and Extracellular Matrix Stabilization</a>	Small		2024	Hong Lin, Zu, Pei Pei, Zhuang, Ying, Peng, Chao, Peng, Cheng, Peng, Zi Jia, Zhu, Ye, Yao, Jie, Yue, Qing Shan, Wang, Wen Hu, Zhou, Hai Yang, Wang	No
<a href="#">SLC44A2-mediated phenotypic switch of vascular smooth muscle cells contributes to aortic aneurysm</a>	Journal of Clinical Investigation		2024	Tianyu, Song, Shuang, Zhao, Shanshan, Luo, Chuansheng, Chen, Xingeng, Liu, Xiaoqi, Wu, Zhongxu, Sun, Jiawei, Cao, Ziyu, Wang, Yineng, Wang, Bo, Yu, Zhiren, Zhang, Xiaolong, Du, Xiaoqiang, Li, Zhijian, Han, Hongshan, Chen, Feng, Chen, Liansheng, Wang, Hong, Wang, Kangyun, Sun, Yi, Han, Liping, Xie, Yong, Ji	No
<a href="#">Comparative Analysis of Micro-Computed Tomography and 3D Micro-Ultrasound for Measurement of the Mouse Aorta</a>	Journal of Imaging		2024	Hajar A., Alenezi, Karen E., Hemmings, Parkavi, Kandavelu, Joanna, Koch-Paszkowski, Marc A., Bailey	No
<a href="#">Novel formylpeptide receptor 1/2 agonist limits hypertension-induced cardiovascular damage</a>	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

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">In vitro and in vivo evaluation of biohybrid tissue-engineered vascular grafts with transformative 1H/19F MRI traceable scaffolds</a>	Biomaterials		2024	Elena, Rama, Saurav Ranjan, Mohapatra, Yukiharu, Sugimura, Tomoyuki, Suzuki, Stefan, Siebert, Roman, Barmin, Juliane, Hermann, Jasmin, Baier, Anne, Rix, Teresa, Lemainque, Susanne, Koletnik, Asmaa Said, Elshafei, Roger Molto, Pallares, Seyed Mohammadali, Dadfar, René H., Tolba, Volkmar, Schulz, Joachim, Jankowski, Christian, Apel, Payam, Akhyari, Stefan, Jockenhoewel, Fabian, Kiessling	No
<a href="#">Acute vascular and cardiac effects of lenvatinib in mice</a>	Cardio-Oncology	<a href="https://cardiooncologyjournal.biomedcentral.com/articles/10.1186/s40959-025-003...">https://cardiooncologyjournal.biomedcentral.com/articles/10.1186/s40959-025-003...</a>	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
<a href="#">Dexrazoxane prevents vascular toxicity in doxorubicin-treated mice</a>	Cardio-Oncology		2024	Dustin N., Krüger, Matthias, Bosman, Emeline M., Van Craenenbroeck, Guido R. Y., De Meyer, Constantijn, Franssen, Pieter Jan, Guns	No
<a href="#">UFMylation maintains YAP stability to promote vascular endothelial cell senescence</a>	iScience		2025	Yanan, Liu, Min, Zuo, Aiwei, Wu, Zhaoxiang, Wang, Siting, Wang, Yongping, Bai, Junzhi, Zhou, Hu, Wang	No
<a href="#">Ultrasound Image Velocimetry for High Spatiotemporal Resolution Blood Flow Velocity Field Mapping in Mice</a>	Ultrasound in Medicine and Biology		2025	Mingyi, Tang, Yu Qing, Zhou, Mark C., Blaser, David A., Steinman, Craig A., Simmons	No
<a href="#">Human amnion epithelial cell therapy reduces hypertension-induced vascular stiffening and cognitive impairment</a>	Scientific Reports		2024	Quynh Nhu, Dinh, Cecilia, Lo, David Wong, Zhang, Vivian, Tran, Tayla, Gibson-Hughes, Ashleigh, Sheriff, Henry, Diep, Hyun Ah, Kim, Shenpeng R., Zhang, Liz J., Barreto-Arce, Maria, Jelinic, Antony, Vinh, Thiruma V., Arumugam, Siow Teng, Chan, Rebecca, Lim, Grant R., Drummond, Christopher G., Sobey, T. Michael, De Silva	No
<a href="#">Versican accumulation drives Nos2 induction and aortic disease in Marfan syndrome via Akt activation</a>	EMBO Molecular Medicine		2024	María Jesús, Ruiz-Rodríguez, Jorge, Oller, Sara, Martínez-Martínez, Iván, Alarcón-Ruiz, Marta, Toral, Yilin, Sun, Ángel, Colmenar, María José, Méndez-Olivares, Dolores, López-Maderuelo, Christine B., Kern, J. Francisco, Nistal, Arturo, Evangelista, Gisela, Teixido-Tura, Miguel R., Campanero, Juan Miguel, Redondo	No
<a href="#">Ginkgolide B Blocks Vascular Remodeling after Vascular Injury via Regulating Tgfβ1/Smad Signaling Pathway</a>	Cardiovascular Therapeutics		2023	Quan, Wang, Shuai, Ni, Li, Ling, Siqi, Wang, Hanbin, Xie, Zhanhong, Ren	No
<a href="#">Identification and Validation of PTGS2 Gene as an Oxidative Stress-Related Biomarker for Arteriovenous Fistula Failure</a>	Antioxidants		2024	Ke, Hu, Yi, Guo, Yuxuan, Li, Shunchang, Zhou, Chanjun, Lu, Chuanqi, Cai, Hongjun, Yang, Yiqing, Li, Weici, Wang	No
<a href="#">Establishment and pathophysiological evaluation of a novel model of acute compartment syndrome in rats</a>	BMC Musculoskeletal Disorders		2024	Qi, Dong, Yubin, Long, Lin, Jin, Guanlin, Hou, Guoqiang, Li, Tao, Wang, Huiyang, Jia, Yingchao, Yin, Junfei, Guo, Huijie, Ma, Sujuan, Xu, Yingze, Zhang, Zhiyong, Hou	No

Title	Journal	Link	Publication date	References	Top Paper
<a href="#">A Quantitative Method for the Evaluation of Deep Vein Thrombosis in a Murine Model Using Three-Dimensional Ultrasound Imaging</a>	Biomedicines		2024	YanJun, Xie, Yi, Huang, Hugo C.S., Stevenson, Li, Yin, Kaijie, Zhang, Zain Husain, Islam, William Aaron, Marcum, Campbell, Johnston, Nicholas, Hoyt, Eric William, Kent, Bowen, Wang, John A., Hossack	No
<a href="#">Regnase-1 overexpression as a therapeutic approach of Marfan syndrome</a>	Molecular Therapy Methods and Clinical Development		2024	Marie, Noormalal, Nesrin, Schmedel, Tarik, Bozoglu, Andrea, Matzen, Susanne, Hille, Dima Ibrahim, Basha, Prithviraj Manohar, Vijaya Shetty, Anja, Wolf, Marcin, Zaradzki, Rawa, Arif, Thomas, Pühler, Georg, Lutter, Andreas H., Wagner, Christian, Kupatt, Derk, Frank, Norbert, Frey, Anca, Remes, Oliver J., Müller	No
<a href="#">Pterostilbene alleviates abdominal aortic aneurysm via inhibiting macrophage pyroptosis by activating the miR-146a-5p/TRAF6 axis</a>	Food & Function		2024	Huoying, Cai, Lin, Huang, Mingshan, Wang, Ruiming, Liu, Jiacong, Qiu, Yuansen, Qin, Xi, Yao, Shenming, Wang, Chen, Yao, ZuoJun, Hu, Yu, Zhou	No
<a href="#">Micro-ultrasound based characterization of cerebrovasculature following focal ischemic stroke and upon short-term rehabilitation</a>	Journal of Cerebral Blood Flow and Metabolism		2024	Johnson, Yu, Iilsung L., Joo, Paolo, Bazzigaluppi, Margaret M., Koletar, Emmanuel, Cherin, Andrew G., Stanisz, James W.C., Graham, Christine, Demore, Bojana, Stefanovic	No
<a href="#">Positive Echocardiographic Association between Carotid Artery and Coronary Artery Diameter and Z-Score in a Mouse Model of Kawasaki Disease</a>	Diagnostics		2024	Wen Ling, Shih, Tsung Ming, Yeh, Kuang Den, Chen, Steve, Leu, Ho Chang, Kuo	No
<a href="#">Ultrasound-guided periadventitial administration of rapamycin-fibrin glue attenuates neointimal hyperplasia in the rat carotid artery injury model</a>	European Journal of Pharmaceutical Sciences		2024	Zhentao, Qiao, Fuhang, Wang, Dongjian, Han, Yuansong, Zhuang, Qingjiao, Jiang, Yi, Zhang, Miaomiao, Liu, Quanxu, An, Zhiwei, Wang, Deliang, Shen	No
<a href="#">Near-infrared-II photoacoustic imaging and photo-triggered synergistic treatment of thrombosis via fibrin-specific homopolymer nanoparticles</a>	Nature Communications		2023	Jianwen, Song, Xiaoying, Kang, Lu, Wang, Dan, Ding, Deling, Kong, Wen, Li, Ji, Qi	No
<a href="#">Aortic calcification accelerates cardiac dysfunction via inducing apoptosis of cardiomyocytes</a>	International Journal of Medical Sciences		2024	Nannan, Hao, Hui, Yong, Feifei, Zhang, Chang, Liu, Yulu, Qiu, Yumeng, Shi, Chunjian, Li, Fang, Wang	No
<a href="#">Sonothrombolysis Using Microfluidically Produced Microbubbles in a Murine Model of Deep Vein Thrombosis</a>	Annals of Biomedical Engineering	<a href="https://link.springer.com/10.1007/s10439-024-03609-7">https://link.springer.com/10.1007/s10439-024-03609-7</a>	2024	YanJun, Xie, Yi, Huang, Hugo C. S., Stevenson, Li, Yin, Kaijie, Zhang, Zain Husain, Islam, William Aaron, Marcum, Campbell, Johnston, Nicholas, Hoyt, Eric William, Kent, Bowen, Wang, John A., Hossack	No
<a href="#">Highly sensitive magnetic particle imaging of abdominal aortic aneurysm NETosis with anti-Ly6G iron oxide nanoparticles</a>	Cell Death Discovery		2024	Heng, Wang, Ruijing, Zhang, Xiaohua, Jia, Siqi, Gao, Tingting, Gao, Keyi, Fan, Yaling, Li, Shule, Wang, Maolin, Qiao, Sheng, Yan, Hui, Hui, Honglin, Dong	No