Title	Journal	Link	Publication date	References	Top Paper
Photoacoustic Imaging of Muscle Tissue Oxygenation as a Noninvasive Biomarker in Mouse Models of Sickle Cell Disease	Molecular Imaging and Biology	https://doi.org/10.1007/s11307-026-02095-8	2026	Jeffrey, Morin, Megan, Brophy, John, Stansfield, Debra, Pittman, Dinesh, Hirenallur-Shanthappa	Yes
In vivo quantification of collagen-induced arthritis mouse model by three-dimensional volumetric ultrasound and color Doppler	PLoS ONE	https://doi.org/10.1371/journal.pone.0321124	2025	Qingyun, Jia, Hao, Xu, Tengteng, Wang, Qianqian, Liang, Lisheng, Wu	Yes
In vivo imaging in experimental spinal cord injury – Techniques and trends	Brain and Spine	https://doi.org/10.1016/j.bas.2021.100859	2022	Vanessa, Hubertus, Lea, Meyer, Laurens, Roolfs, Lilly, Waldmann, Melina, Nieminen-Kelhä, Michael G., Fehlings, Peter, Vajkoczy	Yes
Modulation of vascular response after injury in the rat Achilles tendon alters healing capacity	Journal of Orthopaedic Research	https://doi.org/10.1002/jor.24861	2020	Corinne N., Riggin, Ashley B., Rodriguez, Stephanie N., Weiss, Harina A., Raja, Mengcun, Chen, Susan M., Schultz, Chandra M., Sehgal, Louis J., Soslowsky	Yes
Clinically-applicable perfluorocarbon-loaded nanoparticles for in vivo photoacoustic,19f magnetic resonance and fluorescent imaging	Nanotheranostics	https://doi.org/10.7150/ntno.26208	2018	Edyta, Swider, Khalid, Daoudi, Alexander H.J., Staal, Olga, Koshkina, N., Koen van Riessen, Eric, van Dinther, I. Jolanda M., de Vries, Chris L., de Korte, Mangala, Srinivas	Yes
Tetrazine-Derived Near-Infrared Dye as a Facile Reagent for Developing Targeted Photoacoustic Imaging Agents	Molecular Pharmaceutics	https://doi.org/10.1021/acs.molpharmaceut.0c00441	2020	Samantha, Slikboer, Zoya, Naperstkow, Nancy, Janzen, Amber, Faraday, Yohannes, Soenjaya, Johann, Le Floc'h, Salma, Al-Karmi, Rowan, Swann, Kevin, Wyszatko, Christine E. M., Demore, Stuart, Foster, John F., Valliant	Yes
Accuracy of Ultrasound-Guided versus Landmark-Guided Intra-articular Injection for Rat Knee Joints	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562919306684	2019	Amparo, Ruiz, Dalibel, Bravo, Alejandra, Duarte, Ronald S., Adler, José G., Raya	Yes
Ultrasound as a New Imaging Tool to Assess Pathological Change of Joints in Preclinical Mouse Models of Osteoarthritis	Journal of Orthopaedics and Physiotherapy		2018	X, Lin, L, Xing	Yes
Dexmedetomidine enhances ultrasound-guided sciatic nerve block in rats by reducing perineural capillary permeability via RhoA/ROCK-MLC signaling	Scientific Reports	https://doi.org/10.1038/s41598-026-45478-1	2026	Yiling, Lin, Youmei, Wu, Qianqian, Ye, Yun, Xia, Thomas J., Papadimos, Quanguang, Wang, Linmin, Pan	No
A Time-Efficient and Reproducible Rat Model of Myofascial Pain Syndrome–Like Phenotypes Induced by Repeated Mechanical Impact and Eccentric Exercise	Journal of Pain Research	https://doi.org/10.2147/JPR.S601716	2026	Zixu, Lv, Wenlong, Yang, Yingying, Liu, Fangming, Liu, Miaomiao, Tang, Xueqi, Li, Guanxi, Jiang, Linlin, Wang, Zike, Dong	No
Realistic Ultrasound Simulations of Healthy and Osteoarthritic Cartilage	Journal of Imaging	https://doi.org/10.3390/jimaging12080379	2026	Roby, Weeteling, Yuexin, Qi, Rob P.A., Janssen, Keita, Ito, Corrinus C., van Donkelaar, Richard G.P., Lopata, Min, Wu	No

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Noninvasive Photoacoustic Imaging of Microscale Material Degradation in a Poly(4-hydroxybutyrate) Resorbable Hernia Mesh	ACS Applied Polymer Materials	https://pubs.acs.org/doi/10.1021/acsapm.6c01839	2026	Marie Z., Cilliers, Daolong, Chen, Joseph C., Bear, Emily J., Deniszczyc, Lawrence, Nip, Siyu, Qian, Hanieh, Taghani, Mark F., Lythgoe, Daniel J., Stuckey, P. Stephen, Patrick	No
Rejuvenation of corticospinal neurons enhances rehabilitation-associated corticospinal tract axon sprouting and functional recovery post photothrombotic ischemic stroke in mice	Genes & Diseases	https://doi.org/10.1016/j.gendis.2025.102000	2025	Bin, Sun, Li, Sun, Lixiang, Zhang, Xinyu, Xue, Qiuyan, Tian, Lei, Wu, Mei, Li, Jian, Huang, Hong, Ni, Lixiao, Xu, Chenxi, Feng, Jing, Ren, Hongliang, Huo, Xia, Zhang, Xing, Feng, Wenhao, Zhou, Wanliang, Guo, Yaobo, Liu, Rong, Ju, Zhenlang, Lin, Xiaofeng, Yang, Xin, Ding	No
Mechanical loading-induced bone formation is associated with increased blood velocity and vascular canal bone porosity, with localized vascular adaptation	Journal of Bone and Mineral Research	https://academic.oup.com/jbmr/advance-article/doi/10.1093/jbmr/zjag076/8672022	2026	Taylor, deVet, Mahmoud S, Moussa, Hanna, Gonzalez, Paul, Zaslansky, Lorraine E, Chalifour, Svetlana V, Komarova, Bettina M, Willie	No
Potential biomarkers and preventative interventions for muscle wasting in adolescent and young adults with cancer: A translational study	Scientific Reports	https://www.nature.com/articles/s41598-026-45296-5	2026	Savannah V., Rauschendorfer, Fei, Wang, Guanshu, Liu, Prince, Jeyabal, Corwin, Zigler, You, Zhou, J. Andrew, Livingston, Michael E., Roth, Behrang, Amini, Eugenie S., Kleinerman	No
Necroptosis Inhibition Preserves Diaphragm Function in Experimental Sepsis	The American Journal of Pathology	http://creativecommons.org/licenses/by/4.0	2025	Xin Fu, Lie-Tao Wang, Qian Xu, Hua Yao, Xiao-Xiao Xia, Yucong Wang, Tong-Ling Li, Zhi-Wei Yao, Ji Luo, Guo-Peng Liang, Jing Yang, Qin Wu	No
Diaphragm-specific effects of L-citrulline in mdx mice highlight its potential as adjuvant of standard therapy in Duchenne muscular dystrophy	British Journal of Pharmacology	https://doi.org/10.1111/bph.70437	2026	Lisamaura, Tulimiero, Brigida, Boccanegra, Paola, Mantuano, Antonietta, Mele, Michela, De Bellis, Roberta, Lenti, Francesca, Sanarica, Santa, Cirmi, Elena, Conte, Ornella, Cappellari, Amber E., Sherrard, Ardawna, Green, Mira, Srinivasa, Marta L., Fiorotto, Annamaria, De Luca	No
Novel insights into the effects of JMV2894, a growth hormone secretagogue, in Duchenne muscular dystrophy: A preclinical study in the D2-mdx mouse model	Biomedicine and Pharmacotherapy	https://doi.org/10.1016/j.biopha.2025.118767	2025	Paola, Mantuano, Brigida, Boccanegra, Manuel, Marinelli, Enrica, Cristiano, Roberta, Lenti, Lisamaura, Tulimiero, Michela, De Bellis, Jean Alain, Fehrentz, Séverine, Denoyelle, Elena, Bresciani, Antonio, Torsello, Antonietta, Mele, Antonella, Liantonio, Ornella, Cappellari, Annamaria, De Luca	No
The Regulatory Effects of Low-Intensity Pulsed Ultrasound Combined With Stretching on Muscle Tension Relief: Focusing on the Microstructural Mechanism	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562925003734	2025	Shipeng, Wu, Xuebing, Yang, Jun, Wang, Jianzhong, Guo	No

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Ganlu formula ethyl acetate extract (GLEE) blocked the development of experimental arthritis by inhibiting NLRP3 activation and reducing M1 type macrophage polarization	Journal of Ethnopharmacology	https://doi.org/10.1016/j.jep.2024.118377	2024	Shijie, Zhang, Bao, Hou, Anjing, Xu, Yuanyuan, Wen, Xuexue, Zhu, Weiwei, Cai, Zhijun, Han, Jing, Chen, Tsedien, Nhamdriel, Ma, Mi, Liying, Qiu, Haijian, Sun	No
Dynamic injectable tissue adhesives with strong adhesion and rapid self-healing for regeneration of large muscle injury	Biomaterials	https://doi.org/10.1016/j.biomaterials.2024.122597	2024	Sungmin, Nam, Junzhe, Lou, Sangmin, Lee, Jan Marc, Kartenbender, David J., Mooney	No
Macrophage membrane-reversibly camouflaged nanotherapeutics accelerate fracture healing by fostering MSCs recruitment and osteogenic differentiation	Journal of Nanobiotechnology	https://doi.org/10.1186/s12951-024-02679-y	2024	Cheng, Wu, Jing, Yan, Chenglong, Ge, Lucheng, Xie, Yunjie, He, Ziyin, Zhao, Yekun, Deng, Qirong, Dong, Lichen, Yin	No
The paravertebral lymphatic system is involved in the resorption of the herniated nucleus pulposus and the regression of inflammation associated with disc herniation	Osteoarthritis and Cartilage	https://doi.org/10.1016/j.joca.2024.08.007	2024	Yuanfei, Fu, Zhiming, Lan, Ning, Li, Lianping, Xing, Luying, Yuan, Juyi, Lai, Hualong, Feng, Lin, Cong, Yongjun, Wang, Shenghua, He, Qianqian, Liang	No
Positive feedback loop PU.1-IL9 in Th9 promotes rheumatoid arthritis development	Annals of the Rheumatic Diseases	https://doi.org/10.1136/ard-2024-226067	2024	Jiajie, Tu, Weile, Chen, Wei, Huang, Xinming, Wang, Yilong, Fang, Xuming, Wu, Huiru, Zhang, Chong, Liu, Xuewen, Tan, Xiangling, Zhu, Huihui, Wang, Dafei, Han, Yizhao, Chen, Anqi, Wang, Yuanyuan, Zhou, Zimeng, Xue, Hui, Xue, Shangxue, Yan, Lingling, Zhang, Zhenbao, Li, Chunlan, Yang, Yujie, Deng, Shihao, Zhang, Chen, Zhu, Wei, Wei	No
Photoacoustic imaging of a cyanine dye targeting bacterial infection	Scientific Reports	https://doi.org/10.1038/s41598-024-69148-2	2024	Rowan, Swann, Daniel, Hernández-Valdés, Luis Rafael, Silva, Yusra Mahmood, Marfatia, Mohamed E., El-Zaria, Afaf R., Genady, Jacek M., Kwiecien, John F., Valliant, Saman, Sadeghi	No
High-fat diet-induced obesity exacerbated collagenase-induced tendon injury with upregulation of interleukin-1beta and matrix metalloproteinase-1	Connective Tissue Research	https://doi.org/10.1080/03008207.2024.2409751	2024	Samuel Ka Kin, Ling, Zuru, Liang, Pauline Po Yee, Lui	No
Antisense mediated blockade of Dickkopf 1 attenuates tumor survival, metastases and bone damage in experimental osteosarcoma	Scientific Reports	https://doi.org/10.1038/s41598-024-84037-4	2025	Andrew, Haskell, Simin, Pan, Robert, Reese, Anthony, Powers, Megan G., Lopez, Sebastian, Lomeli, Christopher, Story, Joshua, Benton, J. Chris, Blazier, Roland, Kaunas, Carl A., Gregory	No
Limiting serine availability during tumor progression promotes muscle wasting in cancer cachexia	Cell Death Discovery	https://doi.org/10.1038/s41420-024-02271-1	2024	Erica, Pranzini, Livio, Muccillo, Ilaria, Nesi, Alice, Santi, Caterina, Mancini, Giulia, Lori, Massimo, Genovese, Tiziano, Lottini, Giuseppina, Comito, Anna, Caselli, Annarosa, Arcangeli, Lina, Sabatino, Vittorio, Colantuoni, Maria Letizia, Taddei, Paolo, Cirri, Paolo, Paoli	No

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GRK2 activates TRAF2–NF-κB signalling to promote hyperproliferation of fibroblast-like synoviocytes in rheumatoid arthritis	Acta Pharmaceutica Sinica B	https://doi.org/10.1016/j.apsb.2025.02.031	2025	Chenchen, Han, Liping, Jiang, Weikang, Wang, Shujun, Zuo, Jintao, Gu, Luying, Chen, Zhuo, Chen, Jiajie, Kuai, Xuezhi, Yang, Liang, Xu, Yang, Ma, Wei, Wei	No
Botulinum toxin (A)-induced bone loss is associated with increased blood velocity and reduced vascular bone porosity	Journal of Bone and Mineral Research	https://doi.org/10.1093/jbmr/zjaf057	2025	Mahmoud S, Moussa, Taylor, de Vet, Nadine, Lebcir, Paul, Zaslansky, Lorraine E, Chalifour, Bettina M, Willie, Svetlana V, Komarova	No
Sixteen weeks of high-speed treadmill running is insufficient to induce Achilles tendinopathy in a rat model	American Journal of Physiology - Cell Physiology	https://doi.org/10.1152/ajpcell.00186.2025	2025	Snehal S., Shetye, Margaret K., Tamburro, Ashley K., Fung, Thomas P., Leahy, Madison N., Magee, Harina A., Raja, Stephanie N., Weiss, Courtney A., Nuss, Daniel C., Farber, Louis J., Soslowsky	No
Evaluation of luciferase and prefusion-stabilized F protein from respiratory syncytial virus mRNA/LNPs in pre-clinical models using jet delivery compared to needle and syringe	Vaccine: X	https://doi.org/10.1016/j.jvacx.2023.100420	2024	Brian K., Meyer, Debbie, Nahas, Myunggi, An, Andrew, Danziger, Jeffrey, Smith, Manish, Patel, Shu An, Lin, Alexa, Gleason, Kara, Cox, Robert, Capen, John, Howe, Andrew, Bett	No
Reactive oxygen species (ROS)-mediated M1 macrophage-dependent nanomedicine remodels inflammatory microenvironment for osteoarthritis recession	Bioactive Materials	https://doi.org/10.1016/j.bioactmat.2023.10.032	2024	Chunchun, Xue, Jia, Tian, Zepeng, Cui, Yang, Liu, Dawei, Sun, Mengting, Xiong, Nanxing, Yi, Kaiqiang, Wang, Xiaofeng, Li, Yongjun, Wang, Hao, Xu, Weian, Zhang, Qianqian, Liang	No
Establishment and pathophysiological evaluation of a novel model of acute compartment syndrome in rats	BMC Musculoskeletal Disorders	https://doi.org/10.1186/s12891-024-07187-6	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
In Vivo Photoacoustic Ultrasound (PAUS) Assay for Monitoring Tendon Collagen Compositional Changes during Injury and Healing	Diagnostics	https://doi.org/10.3390/diagnostics14141498	2024	Joseph B., Newton, Courtney A., Nuss, Stephanie N., Weiss, Rebecca L., Betts, Chandra M., Sehgal, Louis J., Soslowsky	No
Early skeletal muscle loss in adolescent and young adult cancer patients treated with anthracycline chemotherapy	Cancer Medicine	https://doi.org/10.1002/cam4.6646	2023	Savannah V., Wooten, Fei, Wang, Michael E., Roth, Guanshu, Liu, J. Andrew, Livingston, Behrang, Amini, Susan C., Gilchrist, Michelle, Hildebrandt, Eugenie S., Kleinerman	No
Sildenafil, a phosphodiesterase-5 inhibitor, stimulates angiogenesis and bone regeneration in an atrophic non-union model in mice	Journal of Translational Medicine	https://doi.org/10.1186/s12967-023-04441-8	2023	Maximilian M., Menger, David, Bauer, Michelle, Bleimehl, Claudia, Scheuer, Benedikt J., Braun, Steven C., Herath, Mika F., Rollmann, Michael D., Menger, Matthias W., Laschke, Tina, Histing	No
Direct optogenetic activation of upper airway muscles in an acute model of upper airway hypotonia mimicking sleep onset	SLEEP	https://doi.org/10.1093/sleep/zsad226	2023	Fiona L, Knapman, E Myfanwy, Cohen, Tom, Kulaga, Nigel, Lovell, Leszek, Lisowski, Simon, McMullan, Peter G R, Burke, Lynne E, Bilston	No

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Anti-inflammatory therapy enables robot-actuated regeneration of aged muscle	Science robotics	https://doi.org/10.1126/scirobotics.add9369	2023	S. L., McNamara, B. R., Seo, B. R., Freedman, E. B., Roloson, J. T., Alvarez, C. T., O'Neill, H. H., Vandenburgh, C. J., Walsh, D. J., Mooney	No
Skeletal muscle regeneration with robotic actuation–mediated clearance of neutrophils	Science Translational Medicine	https://doi.org/10.1126/scitranslmed.abe8868	2021	Bo Ri, Seo, Christopher J., Payne, Stephanie L., McNamara, Benjamin R., Freedman, Brian J., Kwee, Sungmin, Nam, Irene, de Lázaro, Max, Darnell, Jonathan T., Alvarez, Maxence O., Dellacherie, Herman H., Vandenburgh, Conor J., Walsh, David J., Mooney	No
Aging and matrix viscoelasticity affect multiscale tendon properties and tendon derived cell behavior	Acta Biomaterialia	https://doi.org/10.1016/j.actbio.2022.03.006	2022	Benjamin R., Freedman, Raphael S., Knecht, Yann, Tinguely, G. Ege, Eskibozkurt, Cathy S., Wang, David J., Mooney	No
Monitoring Muscle Perfusion in Rodents During Short-Term Ischemia Using Power Doppler Ultrasound	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562923000650	2023	Somaye, Babaei, Bingze, Dai, Craig K, Abbey, Yamenah, Ambreen, Wawrzyniec L., Dobrucki, Michael F., Insana	No
Multifunctional Nanoparticles Co-Loaded with Perfluoropropane, Indocyanine Green, and Methotrexate for Enhanced Multimodal Imaging of Collagen-Induced Arthritis	Molecular Pharmaceutics	https://doi.org/10.1021/acs.molpharmaceut.2c00174	2022	Xinyu, He, Huanhuan, Chen, Shufang, Chang, Shenyin, Zhu	No
Therapeutic Properties of Ayahuasca Components in Ischemia/Reperfusion Injury of the Eye	Biomedicines	https://doi.org/10.3390/biomedicines10050997	2022	Anna, Szilágyi, Barbara, Takács, Réka, Szekeres, Vera, Tarjányi, Mariann, Bombicz, Dániel, Priksz, Attila, Kovács, Béla, Juhász, Ede, Frecska, Zoltán, Szilvássy, Balázs, Varga	No
The Therapeutic Effect of iMSC-Derived Small Extracellular Vesicles on Tendinopathy Related Pain Through Alleviating Inflammation: An in vivo and in vitro Study	Journal of Inflammation Research	https://doi.org/10.2147/JIR.S345517	2022	Zhaochen, Zhu, Renzhi, Gao, Teng, Ye, Kai, Feng, Juntao, Zhang, Yu, Chen, Zongping, Xie, Yang, Wang	No
Ultrasound imaging tracking of mesenchymal stem cells intracellularly labeled with biosynthetic gas vesicles for treatment of rheumatoid arthritis	Theranostics	https://doi.org/10.7150/thno.66905	2022	Zheli, Gong, Yanni, He, Meijun, Zhou, Huijuan, Xin, Min, Pan, Muhammad, Fiaz, Hongmei, Liu, Fei, Yan	No
Mechanical Deformation of Peripapillary Retina in Response to Acute Intraocular Pressure Elevation	Journal of Biomechanical Engineering	https://doi.org/10.1115/1.4053450	2022	Sunny, Kwok, Manqi, Pan, Nicholas, Hazen, Xueliang, Pan, Jun, Liu	No
Ultrasound strain mapping of the mouse Achilles tendon during passive dorsiflexion	Journal of Biomechanics	https://doi.org/10.1016/j.jbiomech.2021.110920	2022	Keshia E., Mora, Samuel J., Mlawer, Albert J., Bae, Michael S., Richards, Alayna E., Loiselle, Mark R., Buckley	No
Nonsurgical treatment reduces tendon inflammation and elevates tendon markers in early healing	Journal of Orthopaedic Research	https://doi.org/10.1002/jor.25251	2022	Benjamin R., Freedman, Kwasi, Adu-Berchie, Carrie, Barnum, George W., Fryhofer, Nabeel S., Salka, Snehal, Shetye, Louis J., Soslowsky	No
Achilles Tendon Ruptures in Middle-Aged Rats Heal Poorly Compared With Those in Young and Old Rats	American Journal of Sports Medicine	https://doi.org/10.1177/03635465211055476	2022	Thomas P., Leahy, Courtney A., Nuss, Mary Kate, Evans, Ashley K., Fung, Snehal S., Shetye, Louis J., Soslowsky	No

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Enhanced tendon healing by a tough hydrogel with an adhesive side and high drug-loading capacity	Nature Biomedical Engineering	https://doi.org/10.1038/s41551-021-00810-0	2022	Benjamin R., Freedman, Andreas, Kuttler, Nicolau, Beckmann, Sungmin, Nam, Daniel, Kent, Michael, Schuleit, Farshad, Ramazani, Nathalie, Accart, Anna, Rock, Jianyu, Li, Markus, Kurz, Andreas, Fisch, Thomas, Ullrich, Michael W., Hast, Yann, Tinguely, Eckhard, Weber, David J., Mooney	No
In vivo multimodal imaging of hyaluronan-mediated in fl ammatory response in articular cartilage	Osteorthritis and Cartilage	https://doi.org/10.1016/j.joca.2021.11.006	2022	C, Zhang, M K, Cowman, A, Ruiz, A, Duarte, D, Bravo, E Ramos, Gavil, T, Kirsch, M, Milne, L G, Luyt, J G, Raya	No
A bioorthogonal methylene blue derived probe for targeted photoacoustic imaging	European Journal of Medicinal Chemistry Reports	https://doi.org/10.1016/j.ejmcr.2021.100021	2022	Afaf R., Genady, Samantha R., Slikboer, Rowan, Swann, Kevin, Wyszatko, Nancy, Janzen, Luis Rafael, Silva, Mohamed E., El-Zaria, Saman, Sadeghi, John F., Valliant	No
A smart ROS/NIR dual-responsive melanin delivery platform for photoacoustic imaging-guided osteoarthritis therapy	Applied Materials Today	https://doi.org/10.1016/j.apmt.2021.101216	2021	Jihao, Ruan, Qili, Yu, Haomin, Cui, Xing, Qin, Limei, Qin, Shuai, Chen, Dechao, Niu, Cunyi, Fan	No
3D-Printed Reinforcement Scaffolds with Targeted Biodegradation Properties for the Tissue Engineering of Articular Cartilage	Advanced Healthcare Materials	https://doi.org/10.1002/adhm.202101094	2021	Enrico, Tosoratti, Philipp, Fisch, Scott, Taylor, Lee Ann, Laurent-Applegate, Marcy, Zenobi-Wong	No
Dental Pulp Mesenchymal Stem Cells Attenuate Limb Ischemia via Promoting Capillary Proliferation and Collateral Development in a Preclinical Model	Stem Cells International	https://doi.org/10.1155/2021/5585255	2021	Youfeng, Li, Yuning, Zhang, Hua, Wang, Chengfeng, Sun, Dongmei, Liu, Hongying, Liu, Jia, He, Furong, Chen, Weiting, Wang, Xi, Jiang, Chu Tse, Wu, Yuefeng, Yang	No
Regional variation of corneal stromal deformation measured by high-frequency ultrasound elastography	Experimental Biology and Medicine	http://journals.sagepub.com/doi/10.1177/15353702211029283	2021	Sunny, Kwok, Nicholas, Hazen, Keyton, Clayson, Xueliang, Pan, Jun, Liu	No
Intercellular arc signaling regulates vasodilation	Journal of Neuroscience	https://doi.org/10.1523/JNEUROSCI.0440-21.2021	2021	June Bryan, de la Peña, Paulino, Barragan-Iglesias, Tzu Fang, Lou, Nikesh, Kunder, Sarah, Loerch, Tarjani, Shukla, Lokesh, Basavarajappa, Jane, Song, Dominique N., James, Salim, Megat, Jamie K., Moy, Andi, Wanghzou, Pradipta R., Ray, Kenneth, Hoyt, Oswald, Steward, Theodore J., Price, Jason, Shepherd, Zachary T., Campbell	No
Nerve Growth Factor-Targeted Molecular Theranostics Based on Molybdenum Disulfide Nanosheet-Coated Gold Nanorods (MoS2-AuNR) for Osteoarthritis Pain	ACS Nano	https://doi.org/10.1021/acsnano.1c02454	2021	Man Ting, Au, Jingyu, Shi, Yadi, Fan, Junguo, Ni, Chunyi, Wen, Mo, Yang	No
Limited Scar Resection for Chronic Achilles Tendon Repair: Use of a Rat Model	American Journal of Sports Medicine	https://doi.org/10.1177/03635465211023096	2021	Matthew, Counihan, Thomas, Leahy, Courtney, Nuss, Joseph, Newton, Sarthak, Mohanty, Louis J., Soslowsky, Daniel, Farber	No

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In vivo photoacoustic imaging for monitoring treatment outcome of corneal neovascularization with metformin eye drops	Biomedical Optics Express	https://www.osapublishing.org/abstract.cfm?URI=boe-12-6-3597	2021	Kwok-Ho, Lui, Shiying, Li, Wai-sum, Lo, Yanjuan, Gu, Wing-Tak, Wong	No
Real-time visualisation of peripheral nerve trauma during subepineural injection in pig brachial plexus using micro-ultrasound	British Journal of Anaesthesia	https://doi.org/10.1016/j.bja.2021.03.036	2021	Anu, Chandra, Yohannes, Soenjaya, Judy, Yan, Paul, Felts, Graeme, McLeod, Christine, Demore	No
Hypoxia-induced miR-210 modulates the inflammatory response and fibrosis upon acute ischemia	Cell Death and Disease	https://doi.org/10.1038/s41419-021-03713-9	2021	Zaccagnini, Germana, Greco, Simona, Longo, Marialucia, Maimone, Biagina, Voellenkle, Christine, Fuschi, Paola, Carrara, Matteo, Creo, Pasquale, Maselli, Davide, Tirone, Mario, Mazzone, Massimiliano, Gaetano, Carlo, Spinetti, Gaia, Martelli, Fabio	No
Ultrasonography study of the skin wound healing process in gilthead seabream (Sparus aurata)	Journal of Fish Diseases	https://doi.org/10.1111/jfd.13370	2021	Diana, Ceballos-Francisco, Nuria, García-Carrillo, Alberto, Cuesta, María Ángeles, Esteban	No
Polydatin prevents calcium pyrophosphate crystal-induced arthritis in mice	Nutrients	https://doi.org/10.3390/nu13030929	2021	Francesca, Oliviero, Paola, Galozzi, Anna, Scanu, Francesca, Galuppini, Vanni, Lazzarin, Silvia, Brocco, Giampietro, Ravagnan, Paolo, Sfriso, Roberta, Ramonda, Paolo, Spinella, Leonardo, Punzi, Gianmaria, Pennelli, Roberto, Luisetto	No
Crumbs proteins stabilize the cone mosaics of photoreceptors and improve vision in zebrafish	Journal of Genetics and Genomics	https://doi.org/10.1016/j.jgg.2020.12.002	2021	Qinlong, Hao, Mingjie, Zheng, Kechao, Weng, Yumei, Hao, Yao, Zhou, Yuchen, Lin, Feng, Gao, Ziqi, Kou, Shoji, Kawamura, Ke, Yao, Pinglong, Xu, Jinghai, Chen, Jian, Zou	No
Suppression of hypoxia-inducible factor 1α by low-molecular- weight heparin mitigates ventilation-induced diaphragm dysfunction in a murine endotoxemia model	International Journal of Molecular Sciences	https://doi.org/10.3390/ijms22041702	2021	Li Fu, Li, Chung Chieh, Yu, Hung Yu, Huang, Huang Pin, Wu, Chien Ming, Chu, Chih Yu, Huang, Ping Chi, Liu, Yung Yang, Liu	No
Hydration State and Hyaluronidase Treatment Significantly Affect Porcine Vocal Fold Biomechanics	Journal of Voice	https://doi.org/10.1016/j.jvoice.2021.01.014	2021	Chenwei, Duan, Julian M., Jimenez, Craig, Goergen, Abigail, Cox, Preeti M., Sivasankar, Sarah, Calve	No
Cutaneous optical coherence tomography for longitudinal volumetric assessment of intradermal volumes in a mouse model	Scientific Reports	https://doi.org/10.1038/s41598-020-61276-9	2020	Kornelia, Schuetzenberger, Martin, Pfister, Alina, Messner, Gerhard, Garhöfer, Christine, Hohenadl, Ulrike, Pfeiffenberger, Leopold, Schmetterer, René M., Werkmeister	No
Ultrasonography validation for early alteration of diaphragm echodensity and function in the mdx mouse model of Duchenne muscular dystrophy	PLoS ONE	http://dx.doi.org/10.1371/journal.pone.0245397	2021	Antonietta, Mele, Paola, Mantuano, Adriano, Fonzino, Francesco, Rana, Roberta Francesca, Capogrosso, Francesca, Sanarica, Jean Francois, Rolland, Ornella, Cappellari, Annamaria, de Luca	No
Photoacoustic Imaging and Sensing: A New Way to See the Eye	Journal of Ocular Pharmacology and Therapeutics	https://www.liebertpub.com/doi/10.1089/jop.2020.0045	2021	Randolph D., Glickman	No

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Hemodynamic Assay of Hind Limb in Multiple Animal Models	Military Medicine	https://academic.oup.com/milmed/article/186/Supplement_1/351/6119490	2021	Steven M, Hansen, Luke E, Schepers, Ruchira, Pratihar, Jackson, Tibbett, Gilberto, Vallejo, Graham, Grubbs, Thomas, Fisher, Paul E, Hansen, Craig J, Goergen	No
Multispecies Evaluation of a Long-Acting Tenofovir Alafenamide Subdermal Implant for HIV Prophylaxis	Frontiers in Pharmacology	https://doi.org/10.3389/fphar.2020.569373	2020	Manjula, Gunawardana, Mariana, Remedios-Chan, Debbie, Sanchez, Simon, Webster, Patricia, Galvan, Rob, Fanter, Amalia E., Castonguay, Paul, Webster, John A., Moss, Joseph, Kuo, Philippe A., Gallay, Kathleen L., Vincent, Massoud, Motamedi, Dana, Weinberger, Mark A., Marzinke, Craig W., Hendrix, Marc M., Baum	No
Heartbeat-induced corneal axial displacement and strain measured by high frequency ultrasound elastography in human volunteers	Translational Vision Science and Technology	https://doi.org/10.1167/tvst.9.13.33	2020	Sunny, Kwok, Keyton, Clayson, Nicholas, Hazen, Xueliang, Pan, Yanhui, Ma, Andrew J., Hendershot, Jun, Liu	No
Ultrasound Monitoring of Thymus Involution in Septic Mice	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2020.11.031	2021	Misa, Ito, Qian, Wang, Dan, Hao, Hisashi, Sawada, Bin, Huang, Ling, Guo, Alan, Daugherty, Xiang An, Li	No
A novel mouse model of obstructive sleep apnea by bulking agent-induced tongue enlargement results in left ventricular contractile dysfunction	PLoS ONE	http://dx.doi.org/10.1371/journal.pone.0243844	2020	Simon, Lebek, Philipp, Hegner, Christian, Schach, Kathrin, Reuthner, Maria, Tafelmeier, Lars, Siegfried Maier, Michael, Arzt, Stefan, Wagner	No
Ultrasound-guided platelet-rich plasma injection and multimodality ultrasound examination of peripheral nerve crush injury	npj Regenerative Medicine	http://dx.doi.org/10.1038/s41536-020-00101-3	2020	Yaqiong, Zhu, Zhuang, Jin, Jing, Wang, Siming, Chen, Yongqiang, Hu, Ling, Ren, Yuexiang, Wang, Qing, Song, Xiaoqi, Tian, Fang, Xie, Jiang, Peng, Nan, Peng, Yukun, Luo, Yuexiang, Wang	No
Comparison of photoacoustic and fluorescence tomography for the in vivo imaging of ICG-labelled liposomes in the medullary cavity in mice	Photoacoustics	https://linkinghub.elsevier.com/retrieve/pii/S2213597920300501	2020	Jana, Humbert, Olga, Will, Tuula, Peñate-Medina, Oula, Peñate-Medina, Olav, Jansen, Marcus, Both, Claus-Christian, Glüer	No
Evaluation of Hemodynamics in a Murine Hindlimb Ischemia Model Using Spatial Frequency Domain Imaging	Lasers in Surgery and Medicine	https://doi.org/10.1002/lsm.23320	2020	Katherine A., Leyba, Sandhya, Vasudevan, Thomas D., O'Sullivan, Craig J., Goergen	No
IOP-induced regional displacements in the optic nerve head and correlation with peripapillary sclera thickness	Experimental Eye Research	https://doi.org/10.1016/j.exer.2020.108202	2020	Yanhui, Ma, Sunny, Kwok, Jiajun, Sun, Xueliang, Pan, Elias, Pavlatos, Keyton, Clayson, Nicholas, Hazen, Jun, Liu	No
Deficiency of β-arrestin2 exacerbates inflammatory arthritis by facilitating plasma cell formation	Acta Pharmacologica Sinica	https://doi.org/10.1038/s41401-020-00507-1	2020	Wei jie, Zhou, Dan dan, Wang, Juan, Tao, Yu, Tai, Zheng wei, Zhou, Zhen, Wang, Pai pai, Guo, Wu yi, Sun, Jing yu, Chen, Hua xun, Wu, Shang xue, Yan, Ling ling, Zhang, Qing tong, Wang, Wei, Wei	No

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Dual-modal magnetic resonance and photoacoustic tracking and outcome of transplanted tendon stem cells in the rat rotator cuff injury model	Scientific Reports	https://doi.org/10.1038/s41598-020-69214-5	2020	Xueqing, Cheng, Jinshun, Xu, Ziyue, Hu, Jingzhen, Jiang, Zhigang, Wang, Man, Lu	No
Long-Term Monitoring of Donor Xenogeneic Testis Tissue Grafts and Cell Implants in Recipient Mice Using Ultrasound Biomicroscopy	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2020.07.010	2020	Mohammad Amin, Fayaz, Awang Hazmi, Awang-Junaidi, Jaswant, Singh, Ali, Honaramooz	No
Ergogenic Effect of BCAAs and L-Alanine Supplementation: Proof-of-Concept Study in a Murine Model of Physiological Exercise	Nutrients	https://www.mdpi.com/2072-6643/12/8/2295	2020	Paola, Mantuano, Gianluca, Bianchini, Ornella, Cappellari, Brigida, Boccanegra, Elena, Conte, Francesca, Sanarica, Antonietta, Mele, Giulia M, Camerino, Laura, Brandolini, Marcello, Allegretti, Michela, De Bellis, Andrea, Aramini, Annamaria, De Luca	No
EphA7+ perivascular cells as myogenic and angiogenic precursors improving skeletal muscle regeneration in a muscular dystrophic mouse model	Stem Cell Research	https://doi.org/10.1016/j.scr.2020.101914	2020	Kohei, Kano, Kiwamu, Horiuchi, Yuri, Yoshida, Taiki, Hayasaka, Maki, Kabara, Yui, Tomita, Takamitsu, Tatsukawa, Risa, Matsuo, Jun, Sawada, Naoki, Nakagawa, Naofumi, Takehara, Naoyuki, Hasebe, Jun-ichi, Kawabe	No
3D High-Frequency Ultrasound Imaging of Cartilage-Bone Interface Compared with Micro-CT	BioMed Research International	https://www.hindawi.com/journals/bmri/2020/6906148/	2020	Yanping, Huang, Choi Han, Chan, Guangquan, Zhou, Yongping, Zheng, Chun Hoi, Yan, Chunyi, Wen	No
Assessment of Age-related Oxygenation Changes in Calf Skeletal Muscle by Photoacoustic Imaging: A Potential Tool for Peripheral Arterial Disease	Ultrasonic Imaging	http://journals.sagepub.com/doi/10.1177/0161734619862287	2019	Brooke M., Kirkham, Susan M., Schultz, Khalid, Ashi, Chandra M., Sehgal	No
Non-Invasive Ultrasound Quantification of Scar Tissue Volume Identifies Early Functional Changes During Tendon Healing	Journal of Orthopaedic Research	http://dx.doi.org/10.1002/jor.24397	2019	Jessica E., Ackerman, Valentina, Studentsova, Marlin, Myers, Mark R., Buckley, Michael S., Richards, Alayna E., Loiselle	No
Ultrasound Evaluation of Anti-Vascular Endothelial Growth Factor–Induced Changes in Vascular Response Following Tendon Injury	Ultrasound in Medicine and Biology	https://doi.org/10.1016/j.ultrasmedbio.2019.03.002	2019	Corinne N., Riggin, Susan M., Schultz, Chandra M., Sehgal, Louis J., Soslowsky	No
Ultrasound-guided dry needling of the healthy rat supraspinatus tendon elicits early healing without causing permanent damage	Journal of Orthopaedic Research	https://onlinelibrary.wiley.com/doi/abs/10.1002/jor.24329	2019	Corinne N, Riggin, Mengcun, Chen, Joshua A, Gordon, Susan M, Schultz, Louis J, Soslowsky, Viviane, Khoury	No
Chronic Nicotine Exposure Alters Uninjured Tendon Vascularity and Viscoelasticity	Foot & Ankle Orthopaedics	http://journals.sagepub.com/doi/10.1177/2473011419842529	2019	Daniel, Gittings, Corinne, Riggin, James, Boorman-Padgett, Stephanie, Weiss, George, Fryhofer, Daniel, Farber, David, Steinberg, Louis J., Soslowsky	No
Data processing of 3D and 4D in-vivo electron paramagnetic resonance imaging co-registered with ultrasound. 3D printing as a registration tool	Computers & Electrical Engineering	https://linkinghub.elsevier.com/retrieve/pii/S0045790617334560	2019	M., Gonet, B., Epel, M., Elas	No

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Effects of Immobilization Angle on Tendon Healing after Achilles Rupture in a Rat Model	Journal of Orthopaedic Research	https://onlinelibrary.wiley.com/doi/abs/10.1002/jor.24241	2019	Cody D., Hillin, George W., Fryhofer, Benjamin R., Freedman, Daniel S., Choi, Stephanie N., Weiss, Julianne, Huegel, Louis J., Soslowsky	No
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Myopia disease mouse models: a missense point mutation (S673G) and a protein-truncating mutation of the Zfp644 mimic human disease phenotype	Cell & Bioscience	https://cellandbioscience.biomedcentral.com/articles/10.1186/s13578-019-0280-4	2019	Katarzyna I., Szczerkowska, Silvia, Petrezselyova, Jiri, Lindovsky, Marcela, Palkova, Jan, Dvorak, Peter, Makovicky, Mingyan, Fang, Chongyi, Jiang, Lingyan, Chen, Mingming, Shi, Xiao, Liu, Jianguo, Zhang, Agnieszka, Kubik-Zahorodna, Bjoern, Schuster, Inken M., Beck, Vendula, Novosadova, Jan, Prochazka, Radislav, Sedlacek	No
A noninvasive MRI based approach to estimate the mechanical properties of human knee ligaments	Journal of the Mechanical Behavior of Biomedical Materials	https://linkinghub.elsevier.com/retrieve/pii/S1751616118311056	2019	Hamid, Naghibi, Valentina, Mazzoli, Kaj, Gijsbertse, Gerjon, Hannink, Andre, Sprengers, Dennis, Janssen, Ton, Van den Boogaard, Nico, Verdonschot	No
Fibro-Adipogenic Remodeling of the Diaphragm in Obesity-Associated Respiratory Dysfunction	Diabetes	http://diabetes.diabetesjournals.org/lookup/doi/10.2337/db18-0209	2019	Eric D., Buras, Kimber, Converso-Baran, Carol S., Davis, Takeshi, Akama, Fumihito, Hikage, Daniel E., Michele, Susan V., Brooks, Tae-Hwa, Chun	No
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Biceps Detachment Preserves Joint Function in a Chronic Massive Rotator Cuff Tear Rat Model	The American Journal of Sports Medicine	http://journals.sagepub.com/doi/10.1177/0363546518805091	2018	Mengcun, Chen, Snehal S., Shetye, Julianne, Huegel, Corinne N., Riggin, Daniel J., Gittings, Courtney A., Nuss, Stephanie N., Weiss, Andrew F., Kuntz, Louis J., Soslowsky	No
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Nicotine impairs intra-substance tendon healing after full thickness injury in a rat model	Journal of Orthopaedic Research®	http://doi.wiley.com/10.1002/jor.24167	2018	Adnan N., Cheema, Joseph B., Newton, James F., Boorman-Padgett, Stephanie N., Weiss, Courtney A., Nuss, Daniel J., Gittings, Daniel C., Farber, Louis J., Soslowsky	No

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Validation of ultrasound as a diagnostic tool to assess vocal cord motion in an animal feasibility study		https://doi.org/10.21037/gs.2018.07.09	2018	Karuna, Dewan, Merry E, Sebelik, John D, Boughter, Courtney B, Shires	No
Development and evaluation of a CEACAM6-targeting theranostic nanomedicine for photoacoustic-based diagnosis and chemotherapy of metastatic cancer	Theranostics	http://www.thno.org/v08p4247.htm	2018	Hohyeon, Lee, Yongho, Jang, Suhyun, Park, Hyejin, Jang, Eun-Joo, Park, Hyun Jung, Kim, Hyuncheol, Kim	No
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Regional Deformation of the Optic Nerve Head and Peripapillary Sclera During IOP Elevation	Investigative Opthalmology & Visual Science	http://iovs.arvojournals.org/article.aspx?doi=10.1167/iovs.18-24462	2018	Elias, Pavlatos, Yanhui, Ma, Keyton, Clayson, Xueliang, Pan, Jun, Liu	No
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Stretching reduces skin thickness and improves subcutaneous tissue mobility in a murine model of systemic sclerosis	Frontiers in Immunology	https://doi.org/10.3389/fimmu.2017.00124	2017	Ying, Xiong, Lisbeth, Berrueta, Katia, Urso, Sara, Olenich, Igla, Muskaj, Gary J., Badger, Antonios, Aliprantis, Robert, Lafyatis, Helene M., Langevin	No
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Positive End-expiratory Pressure Ventilation Induces Longitudinal Atrophy in Diaphragm Fibers	American Journal of Respiratory and Critical Care Medicine	http://www.atsjournals.org/doi/10.1164/rccm.201709-1917OC	2018	Johan, Lindqvist, Marloes, van den Berg, Robbert, van der Pijl, Pleuni E., Hooijman, Albertus, Beishuizen, Judith, Elshof, Monique, de Waard, Armand, Girbes, Angelique, Spoelstra-de Man, Zhong-Hua, Shi, Charissa, van den Brom, Sylvia, Bogaards, Shengyi, Shen, Joshua, Strom, Henk, Granzier, Jeroen, Kole, René J.P., Musters, Marinus A., Paul, Leo M.A., Heunks, Coen A.C., Ottenheijm	No

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Strain imaging of the lateral collateral ligament using high frequency and conventional ultrasound imaging: An ex-vivo comparison	Journal of Biomechanics	http://linkinghub.elsevier.com/retrieve/pii/S0021929018302240	2018	Kaj, Gijsbertse, André, Sprengers, Hamid, Naghibi Beidokhti, Maartje, Nillesen, Chris, de Korte, Nico, Verdonschot	No
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Local administration of Trolox, a vitamin E analog, reduced tendon adhesion in a chicken model of flexor digitorum profundus tendon injury	Journal of Orthopaedic Translation	http://linkinghub.elsevier.com/retrieve/pii/S2214031X16302728	2016	Yuk Wa, Lee, Sai Chuen, Fu, Tsui Yu, Mok, Kai Ming, Chan, Leung Kim, Hung	No
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