

DAFTAR PUSTAKA

- Agel, J. and LaPrade, R.F. (2009) ‘Assessment of differences between the modified Cincinnati and International Knee Documentation Committee patient outcome scores’, *The American Journal of Sports Medicine*, 37(11), pp. 2151–2157. doi:10.1177/0363546509337698.
- Agung, M., Ochi, M., Yanada, S., Adachi, N., Izuta, Y., Yamasaki, T. and Toda, K. (2006). Mobilization of bone marrow-derived mesenchymal stem cells into the injured tissues after intraarticular injection and their contribution to tissue regeneration, *Knee Surg Sports Traumatol Arthrosc*, 14 (12), 1307-14. Available at: 10.1007/s00167-006-0124-8
- Alentorn-Geli, E., Seijas, R., Martinez-De la Torre, A., Cusco, X., Steinbacher, G., Alvarez-Diaz, P., Barastegui, D., Navarro, J., Serra-Renom, J. M., Nishishinya, B., Catala, J., Laiz, P., Garcia-Balletbo, M. and Cugat, R. (2019). Effects of autologous adipose-derived regenerative stem cells administered at the time of anterior cruciate ligament reconstruction on knee function and graft healing, *J Orthop Surg (Hong Kong)*, 27 (3), 2309499019867580. Available at: 10.1177/2309499019867580
- Amodeo, G., Niada, S., Moschetti, G., Franchi, S., Savadori, P., Brini, A. T. and Sacerdote, P. (2021). Secretome of human adipose-derived mesenchymal stem cell relieves pain and neuroinflammation independently of the route of administration in experimental osteoarthritis, *Brain Behav Immun*, 94 29-40. Available at: 10.1016/j.bbi.2021.03.011
- Bai, M.-Y., Vy, V. P. T., Tang, S.-L., Hung, T. N. K., Wang, C.-W., Liang, J.-Y., Wong, C.-C., & Chan, W. P. (2023). Current progress of platelet-rich derivatives in cartilage and joint repairs. *International Journal of Molecular Sciences*, 24(16). <https://doi.org/10.3390/ijms241612608>
- Barton, K. I., Heard, B. J., Kroker, A., Sevick, J. L., Raymond, D. A., Chung, M., Achari, Y., Martin, C. R., Frank, C. B., Boyd, S. K., Shrive, N. G. and Hart, D. A. (2021). Structural Consequences of a Partial Anterior Cruciate Ligament Injury on Remaining Joint Integrity: Evidence for Ligament and Bone Changes Over Time in an Ovine Model, *Am J Sports Med*, 49 (3), 637-648. Available at: 10.1177/0363546520985279
- Bascunan, A. L., Biedrzycki, A., Banks, S. A., Lewis, D. D. and Kim, S. E. (2019). Large Animal Models for Anterior Cruciate Ligament Research, *Front Vet Sci*, 6 292. Available at: 10.3389/fvets.2019.00292

- Beaufils, P. and Pujol, N. (2017). Management of traumatic meniscal tear and degenerative meniscal lesions. Save the meniscus, *Orthop Traumatol Surg Res*, 103 (8S), S237-S244. Available at: 10.1016/j.otsr.2017.08.003
- Besztak, D., Szczypiór-Piasecka, K., Mińko, A., & Antczak, K. (2021). Comprehensive rehabilitation after reconstruction of the anterior cruciate ligament. *Journal of Education, Health and Sport*, 11(8), 182-193. <https://doi.org/10.12775/jehs.2021.11.08.018>
- Beylerli, O., Gareev, I., Zhao, B., & Musaev, E. (2024). Donor variability in adipose tissue-derived stem cells: implications for the clinical efficacy of autologous fat grafting. *Exploration of Medicine*, 601–614.
- Bird, A. (2002) ‘DNA methylation patterns and epigenetic memory’, *Genes & Development*, 16(1), pp. 6–21. doi:10.1101/gad.947102.
- Boulton, J. and Wainscoat, J.S. (2007) ‘Gene silencing by DNA methylation in haematological malignancies’, *British Journal of Haematology*, 138(1), pp. 3–11. doi:10.1111/j.1365-2141.2007.06604.x.
- Braun, H. J., Wasterlain, A. S., & Dragoo, J. L. (2013). The use of prp in ligament and meniscal healing. *Sports Medicine and Arthroscopy Review*, 21(4), 206-212. <https://doi.org/10.1097/jsa.0000000000000005>
- Briggs, K.K. et al. (2009) ‘The reliability, validity, and responsiveness of the lysholm score and Tegner activity scale for anterior cruciate ligament injuries of the knee’, *The American Journal of Sports Medicine*, 37(5), pp. 890–897. doi:10.1177/0363546508330143.
- Brindle, T., Nyland, J., Johnson, D. (2001). The meniscus: review of basic principles with application to surgery and rehabilitation, *Journal of Athletic Training*, 36 (2), 160-169.
- Caley, M. P., Martins, V. L. C., & O’Toole, E. A. (2015). Metalloproteinases and wound healing. *Advances in Wound Care*, 4(4), 225–234.
- Centeno, C. J., Pitts, J., Al-Sayegh, H. and Freeman, M. D. (2015). Anterior cruciate ligament tears treated with percutaneous injection of autologous bone marrow nucleated cells: a case series, *J Pain Res*, 8 437-47. Available at: 10.2147/JPR.S86244
- Chen, G., Tang, X., Li, Q., Zheng, G., Yang, T. and Li, J. (2015). The evaluation of patient-specific factors associated with meniscal and chondral injuries accompanying ACL rupture in young adult patients, *Knee Surg Sports Traumatol Arthrosc*, 23 (3), 792-8. Available at: 10.1007/s00167-013-2718-2

- Chen, W., Sun, Y., Gu, X., Hao, Y., Liu, X., Lin, J., Chen, J. and Chen, S. (2019). Conditioned medium of mesenchymal stem cells delays osteoarthritis progression in a rat model by protecting subchondral bone, maintaining matrix homeostasis, and enhancing autophagy, *J Tissue Eng Regen Med*, 13 (9), 1618-1628. Available at: [10.1002/term.2916](https://doi.org/10.1002/term.2916)
- Chouw, A., Sartika, C. R., Milanda, T., & Faried, A. (2022). Interleukins profiling in umbilical cord mesenchymal stem cell-derived secretome. *Stem Cells and Cloning: Advances and Applications*, 15, 1–9.
- Chu, C.R., Szczodry, M., Bruno, S., 2010. Animal models for cartilage regeneration and repair. *Tissue Eng Part B Rev* 16, 105–115.
- Collins, M., Posthumus, M., & Schwellnus, M. P. (2010). The COL1A1 gene and acute soft tissue ruptures. *British Journal of Sports Medicine*, 44(14), 1063–1064.
- Cope, P.J., Ourradi, K., Li, Y., Sharif, M., 2019. Models of osteoarthritis: the good, the bad and the promising. *Osteoarthritis Cartilage* 27, 230–239.
- Crum JA, Laprade RF, Wentorf FA. The anatomy of the posterolateral aspect of the rabbit knee. *J Orthop Res.* (2003) 21:723–9. doi: [10.1016/S0736-0266\(02\)00250-4](https://doi.org/10.1016/S0736-0266(02)00250-4)
- Cui C, Lin F, Xia L, Zhang X. Mesenchymal stem cells therapy for the treatment of non-union fractures: A systematic review and meta-analysis. *BMC Musculoskeletal Disorders.* 2025;26(1). doi:[10.1186/s12891-025-08365-w](https://doi.org/10.1186/s12891-025-08365-w)
- Dallo, I., Chahla, J., Mitchell, J. J., Pascual-Garrido, C., Feagin, J. A. and LaPrade, R. F. (2017). Biologic Approaches for the Treatment of Partial Tears of the Anterior Cruciate Ligament: A Current Concepts Review, *Orthop J Sports Med*, 5 (1), 2325967116681724. Available at: [10.1177/2325967116681724](https://doi.org/10.1177/2325967116681724)
- de Albornoz, P. F., F. (2012). The meniscal healing process, *Muscles, ligaments and Tendons Journal* 2(1), 10-18.
- de Girolamo, L., Galliera, E., Volpi, P., Denti, M., Dogliotti, G., Quaglia, A., Cabitza, P., Corsi Romanelli, M. M. and Randelli, P. (2015). Why menisci show higher healing rate when repaired during ACL reconstruction? Growth factors release can be the explanation, *Knee Surg Sports Traumatol Arthrosc*, 23 (1), 90-6. Available at: [10.1007/s00167-013-2712-8](https://doi.org/10.1007/s00167-013-2712-8)
- DeFranco, M. J. and Bach, B. R., Jr. (2009). A comprehensive review of partial anterior cruciate ligament tears, *J Bone Joint Surg Am*, 91 (1), 198-208. Available at: [10.2106/JBJS.H.00819](https://doi.org/10.2106/JBJS.H.00819)

- Deviandri, R., van der Veen, H. C., Lubis, A. M. T., Utoyo, G. A., van den Akker-Scheek, I., & Postma, M. J. (2022). Burden and cost of anterior cruciate ligament reconstruction and reimbursement of its treatment in a developing country: An observational study in Indonesia. *ClinicoEconomics and Outcomes Research: CEOR*, 14, 479–486.
- Diermeier, T., Rothrauff, B. B., Engebretsen, L., Lynch, A. D., Ayeni, O. R., Paterno, M. V., Xerogeanes, J. W., Fu, F. H., Karlsson, J., Musahl, V., Panther Symposium ACL Treatment Consensus Group, Brown, C. H., Jr, Chmielewski, T. L., Clatworthy, M., Villa, S. D., Ernlund, L., Fink, C., Getgood, A., Hewett, T. E., ... Wilk, K. E. (2020). Treatment after anterior cruciate ligament injury: Panther symposium ACL treatment consensus group. *Orthopaedic Journal of Sports Medicine*, 8(6), 2325967120931097.
- Domnick, C., Raschke, M. J., & Herbort, M. (2016). Biomechanics of the anterior cruciate ligament: Physiology, rupture and reconstruction techniques. *World Journal of Orthopedics*, 7(2), 82–93.
- Du, G., Zhan, H., Ding, D., Wang, S., Wei, X., Wei, F., Zhang, J., Bilgen, B., Reginato, A. M., Fleming, B. C., Deng, J. and Wei, L. (2016). Abnormal Mechanical Loading Induces Cartilage Degeneration by Accelerating Meniscus Hypertrophy and Mineralization After ACL Injuries In Vivo, *Am J Sports Med*, 44 (3), 652-63. Available at: [10.1177/0363546515621285](https://doi.org/10.1177/0363546515621285)
- Duri, Z. A. A., P. M. (1995). Partial anterior cruciate ligament tears: evaluation and a clinical review, *Knee*, 2 (3), 131-138.
- Dursun, R. *et al.* (2023) 'Immunohistochemical Evaluation of TNF- α , IL-1, IL-12, IL-17, IL-23 Expression and Investigation of the Effect of Demodex in Patients with Discoid Lupus Erythematosus,' *Turkish Journal of Immunology*, 11(1), pp. 23–28. <https://doi.org/10.4274/tji.galenos.2023.63626>.
- Efe, T., Fuglein, A., Getgood, A., Heyse, T. J., Fuchs-Winkelmann, S., Patzer, T., El-Zayat, B. F., Lakemeier, S. and Schofer, M. D. (2012). Anterior cruciate ligament deficiency leads to early instability of scaffold for cartilage regeneration: a controlled laboratory ex-vivo study, *Int Orthop*, 36 (6), 1315-20. Available at: [10.1007/s00264-011-1437-x](https://doi.org/10.1007/s00264-011-1437-x)
- Evans, J., Mabrouk, A., & Nielson, J. L. (2023). Anterior Cruciate Ligament Knee Injury. StatPearls [Internet]. Treasure Island. <https://www.ncbi.nlm.nih.gov/pubmed/29763023>

Evans, S., Shaginaw, J. and Bartolozzi, A. (2014). Clinical commentary ACL Reconstruction - it's all about timing *The International Journal of Sports Physical Therapy*, 9 (2), 268-273.

Farooq, M., Duan, X., Yan, M., Brophy, R. H., & Cai, L. (2024). Loss of periostin function impairs ligament fibroblast activity and facilitates ros- mediated cellular senescence. *The FASEB Journal*, 38(16). <https://doi.org/10.1096/fj.202302615rr>

Fayard, J. M., Sonnery-Cottet, B., Vrgoc, G., O'Loughlin, P., de Mont Marin, G. D., Freychet, B., Vieira, T. D. and Thauinat, M. (2019). Incidence and Risk Factors for a Partial Anterior Cruciate Ligament Tear Progressing to a Complete Tear After Nonoperative Treatment in Patients Younger Than 30 Years, *Orthop J Sports Med*, 7 (7), 2325967119856624. Available at: [10.1177/2325967119856624](https://doi.org/10.1177/2325967119856624)

Filbay, S. R., & Grindem, H. (2019). Evidence-based recommendations for the management of anterior cruciate ligament (ACL) rupture. *Best Practice & Research. Clinical Rheumatology*, 33(1), 33–47.

Finsterbush, A. F., U.; Matan, Y. (1990). Secondary damage to the knee after isolated injury of the anterior cruciate ligament, *The American Journal of Sports Medicine* 18 (5), 475-479. Available at:

Font Tellado, S., Bonani, W., Balmayor, E. R., Foehr, P., Motta, A., Migliaresi, C. and van Griensven, M. (2017). (*) Fabrication and Characterization of Biphasic Silk Fibroin Scaffolds for Tendon/Ligament-to-Bone Tissue Engineering, *Tissue Eng Part A*, 23 (15-16), 859-872. Available at: [10.1089/ten.TEA.2016.0460](https://doi.org/10.1089/ten.TEA.2016.0460)

Fox, A. J., Wanivenhaus, F., Burge, A. J., Warren, R. F. and Rodeo, S. A. (2015). The human meniscus: a review of anatomy, function, injury, and advances in treatment, *Clin Anat*, 28 (2), 269-87. Available at: [10.1002/ca.22456](https://doi.org/10.1002/ca.22456)

Funakoshi, T., Majima, T., Iwasaki, N., Yamane, S., Masuko, T., Minami, A., Harada, K., Tamura, H., Tokura, S. and Nishimura, S. (2005). Novel chitosan-based hyaluronan hybrid polymer fibers as a scaffold in ligament tissue engineering, *J Biomed Mater Res A*, 74 (3), 338-46. Available at: [10.1002/jbm.a.30237](https://doi.org/10.1002/jbm.a.30237)

Garcia, J., Wright, K., Roberts, S., Kuiper, J. H., Mangham, C., Richardson, J. and Mennan, C. (2016). Characterisation of synovial fluid and infrapatellar fat pad derived mesenchymal stromal cells: The influence of tissue source and inflammatory stimulus, *Sci Rep*, 6 24295. Available at: [10.1038/srep24295](https://doi.org/10.1038/srep24295)

- Gharpinde, M. R., Pundkar, A., Dhanwani, Y., Chandanwale, R., & Jaiswal, A. M. (2024). Navigating post-operative challenges: A comprehensive review of complications following anterior cruciate ligament (ACL) tear surgery. *Cureus*, *16*(8), e67768.
- Giannasi, C., Cadelano, F., Della Morte, E., Baserga, C., Mazzucato, C., Niada, S., & Baj, A. (2024). Unlocking the therapeutic potential of adipose-derived stem cell secretome in oral and maxillofacial medicine: A composition-based perspective. *Biology*, *13*(12). <https://doi.org/10.3390/biology13121016>
- González-González, A., García-Sánchez, D., Dotta, M., Rodríguez-Rey, J. C., & Pérez-Campo, F. M. (2020). Mesenchymal stem cells secretome: The cornerstone of cell-free regenerative medicine. *World Journal of Stem Cells*, *12*(12), 1529–1552.
- Grevenstein, D., Heilig, J., Dargel, J., Oppermann, J., Eysel, P., Brochhausen, C. and Niehoff, A. (2020). COMP in the Infrapatellar Fat Pad-Results of a Prospective Histological, Immunohistological, and Biochemical Case-Control Study, *J Orthop Res*, *38* (4), 747-758. Available at: [10.1002/jor.24514](https://doi.org/10.1002/jor.24514)
- Hada, S., Hada, M., Yoshida, K., Kaneko, H., Saita, Y., Kubota, M., ... & Ishijima, M. (2024). Conservative treatment using platelet-rich plasma for acute anterior cruciate ligament injuries in highly active patients: a retrospective survey. *Cureus*. <https://doi.org/10.7759/cureus.53102>
- Hagino, T., Ochiai, S., Senga, S., Yamashita, T., Wako, M., Ando, T. and Haro, H. (2015). Meniscal tears associated with anterior cruciate ligament injury, *Arch Orthop Trauma Surg*, *135* (12), 1701-6. Available at: [10.1007/s00402-015-2309-4](https://doi.org/10.1007/s00402-015-2309-4)
- Han, B. *et al.* (2019) 'Repair of rotator cuff tendon defects in aged rats using a growth factor injectable gel scaffold,' *Arthroscopy the Journal of Arthroscopic and Related Surgery*, *36*(3), pp. 629-637. <https://doi.org/10.1016/j.arthro.2019.09.015>.
- Hao, Z.-C., Wang, S.-Z., Zhang, X.-J., & Lu, J. (2016). Stem cell therapy: a promising biological strategy for tendon-bone healing after anterior cruciate ligament reconstruction. *Cell Proliferation*, *49*(2), 154–162.
- Harrell, C. M., B.; Fellabaum, C.; Arsenijevic, N.; Djonov, V.; Volarevic, V. (2019). The role of Interleukin 1 receptor antagonist in mesenchymal stem cell-based tissue repair and regeneration, *BioFactors*, *46* (2), 263-275. Available at: <https://doi.org/10.1002/biof.1587>

- Heard, B. J., Achari, Y., Chung, M., Shrive, N. G. and Frank, C. B. (2011). Early joint tissue changes are highly correlated with a set of inflammatory and degradative synovial biomarkers after ACL autograft and its sham surgery in an ovine model, *J Orthop Res*, 29 (8), 1185-92. Available at: 10.1002/jor.21404
- Heard, B. J., Beveridge, J. E., Atarod, M., O'Brien, E. J., Rolian, C., Frank, C. B., Hart, D. A. and Shrive, N. G. (2017). Analysis of change in gait in the ovine stifle: normal, injured, and anterior cruciate ligament reconstructed, *BMC Musculoskelet Disord*, 18 (1), 212. Available at: 10.1186/s12891-017-1576-3
- Herzog, M. M., Marshall, S. W., Lund, J. L., Pate, V., & Spang, J. T. (2017). Cost of outpatient arthroscopic anterior cruciate ligament reconstruction among commercially insured patients in the United States, 2005-2013. *Orthopaedic Journal of Sports Medicine*, 5(1), 2325967116684776.
- Higgins, L.D. et al. (2007) 'Reliability and validity of the International Knee Documentation Committee (IKDC) subjective knee form', *Joint Bone Spine*, 74(6), pp. 594–599. doi:10.1016/j.jbspin.2007.01.036.
- Hindle, P., Khan, N., Biant, L., & Péault, B. (2017). The infrapatellar fat pad as a source of perivascular stem cells with increased chondrogenic potential for regenerative medicine. *Stem Cells Translational Medicine*, 6(1), 77–87.
- Hirzinger, C., Tauber, M., Korntner, S., Quirchmayr, M., Bauer, H.-C., Traweger, A., & Tempfer, H. (2014). ACL injuries and stem cell therapy. *Archives of Orthopaedic and Trauma Surgery*, 134(11), 1573–1578.
- Hong, I.-S. (2022). Enhancing stem cell-based therapeutic potential by combining various bioengineering technologies. *Frontiers in Cell and Developmental Biology*, 10, 901661.
- Hori A, Takahashi A, Miharu Y, et al. Superior migration ability of umbilical cord-derived mesenchymal stromal cells (mscs) toward activated lymphocytes in comparison with those of bone marrow and adipose-derived mscs. *Frontiers in Cell and Developmental Biology*. 2024;12. doi:10.3389/fcell.2024.1329218
- Hourston, G., Kankam, H., & McDonnell, S. (2022). A systematic review of anterior cruciate ligament primary repair rehabilitation. *Journal of Clinical Orthopaedics and Trauma*, 25, 101774. <https://doi.org/10.1016/j.jcot.2022.101774>
- Ishida, K., Kuroda, R., Miwa, M., Tabata, Y., Hokugo, A., Kawamoto, T., Sasaki, K., Doita, M. and Kurosaka, M. (2007). The regenerative effects of platelet-rich plasma on meniscal cells in vitro and its in vivo application with

biodegradable gelatin hydrogel, *Tissue Eng*, 13 (5), 1103-12. Available at: 10.1089/ten.2006.0193

Jang, K. M., Lim, H. C., Jung, W. Y., Moon, S. W. and Wang, J. H. (2015). Efficacy and Safety of Human Umbilical Cord Blood-Derived Mesenchymal Stem Cells in Anterior Cruciate Ligament Reconstruction of a Rabbit Model: New Strategy to Enhance Tendon Graft Healing, *Arthroscopy*, 31 (8), 1530-9. Available at: 10.1016/j.arthro.2015.02.023

Juang, M., Yang, R. and Chou, P. (2007). Preliminary effects of Hyaluronic Acid on early rehabilitation of patients with isolated anterior cruciate ligament reconstruction, *Clin J Sport Med*, 17 (4), 242-250. Available at:

Jung, H., Kim, H. H., Lee, D. H., Hwang, Y. S., Yang, H. C. and Park, J. C. (2011). Transforming growth factor-beta 1 in adipose derived stem cells conditioned medium is a dominant paracrine mediator determines hyaluronic acid and collagen expression profile, *Cytotechnology*, 63 (1), 57-66. Available at: 10.1007/s10616-010-9327-4

Kaleka, C. C., Debieux, P., da Costa Astur, D., Arliani, G. G. and Cohen, M. (2014). Updates in biological therapies for knee injuries: menisci, *Curr Rev Musculoskelet Med*, 7 (3), 247-55. Available at: 10.1007/s12178-014-9227-x

Kapur, S. K. and Katz, A. J. (2013). Review of the adipose derived stem cell secretome, *Biochimie*, 95 (12), 2222-8. Available at: 10.1016/j.biochi.2013.06.001

Kataoka, K., Hoshino, Y., & Nukuto, K. (2023). Anterior cruciate ligament reconstruction: Recent evolution and technical improvement. *Journal of Joint Surgery and Research*, 1(1), 97–102.

Kiapour, A. M., & Murray, M. M. (2014). Basic science of anterior cruciate ligament injury and repair. *Bone & Joint Research*, 3(2), 20–31.

Killian, M. L., Isaac, D. I., Haut, R. C., Dejardin, L. M., Leetun, D. and Donahue, T. L. (2010). Traumatic anterior cruciate ligament tear and its implications on meniscal degradation: a preliminary novel lapine osteoarthritis model, *J Surg Res*, 164 (2), 234-41. Available at: 10.1016/j.jss.2009.03.006

Kim J-H, Jo CH, Kim H-R, Hwang Y. Comparison of immunological characteristics of mesenchymal stem cells from the periodontal ligament, umbilical cord, and adipose tissue. *Stem Cells International*. 2018;2018:1-12. doi:10.1155/2018/8429042

- Kim, J. Y., Jeon, H. B., Yang, Y. S., Oh, W. and Chang, J. W. (2010). Application of human umbilical cord blood-derived mesenchymal stem cells in disease models, *World J Stem Cells*, 2 (2), 34-8. Available at: 10.4252/wjsc.v2.i2.34
- Kim, Y. J., Seo, D. H., Lee, S. H., Lee, S. H., An, G. H., Ahn, H. J., Kwon, D., Seo, K. W. and Kang, K. S. (2018). Conditioned media from human umbilical cord blood-derived mesenchymal stem cells stimulate rejuvenation function in human skin, *Biochem Biophys Rep*, 16 96-102. Available at: 10.1016/j.bbrep.2018.10.007
- Koch, M., Mayr, F., Achenbach, L., Krutsch, W., Lang, S., Hilber, F., Weber, J., Pfeifer, C. G., Woehl, R., Eichhorn, J., Zellner, J., Nerlich, M. and Angele, P. (2018). Partial Anterior Cruciate Ligament Ruptures: Advantages by Intraligament Autologous Conditioned Plasma Injection and Healing Response Technique-Midterm Outcome Evaluation, *Biomed Res Int*, 2018 3204869. Available at: 10.1155/2018/3204869
- Kon, E., Di Matteo, B., Altomare, D., Iacono, F., Kurpyakov, A., Lychagin, A., Timashev, P., Kalinsky, E. and Lipina, M. (2022). Biologic agents to optimize outcomes following ACL repair and reconstruction: A systematic review of clinical evidence, *J Orthop Res*, 40 (1), 10-28. Available at: 10.1002/jor.25011
- Kono, T., Kono, M., Allen, M.C. and Otsu, K., 2019. Mesenchymal stem cell migration and tissue repair. *Stem Cells International*, 2019, Article ID 7014035. <https://doi.org/10.1155/2019/7014035>
- Law, J. X., Liao, L. L., Saim, A., Yang, Y. and Idrus, R. (2017). Electrospun Collagen Nanofibers and Their Applications in Skin Tissue Engineering, *Tissue Eng Regen Med*, 14 (6), 699-718. Available at: 10.1007/s13770-017-0075-9
- Le Blanc, K., Tammik, C., Rosendahl, K., Zetterberg, E. and Ringdén, O. (2003). HLA expression and immunologic properties of differentiated and undifferentiated mesenchymal stem cells, *Experimental Hematology*, 31 (10), 890-896. Available at: 10.1016/s0301-472x(03)00110-3
- Li, H., Fan, J., Sun, L., Liu, X., Cheng, P. and Fan, H. (2016). Functional regeneration of ligament-bone interface using a triphasic silk-based graft, *Biomaterials*, 106 180-92. Available at: 10.1016/j.biomaterials.2016.08.012
- Lim, W. L., Liao, L. L., Ng, M. H., Chowdhury, S. R. and Law, J. X. (2019). Current Progress in Tendon and Ligament Tissue Engineering, *Tissue Eng Regen Med*, 16 (6), 549-571. Available at: 10.1007/s13770-019-00196-w

- Liu, B., Qiao, G., Cao, W., Li, C. H., Pan, S. H., Wang, L., Liu, Y., Ma, L. and Cui, D. (2021). Proteomics Analyses Reveal Functional Differences between Exosomes of Mesenchymal Stem Cells Derived from The Umbilical Cord and Those Derived from The Adipose Tissue, *Cell J*, 23 (1), 75-84. Available at: 10.22074/cellj.2021.6969
- Liu, N. *et al.* (2022) 'Significance of combined TGF- β 1 and survivin expression on the prognosis of patients with triple-negative breast cancer,' *Oncology Letters*, 23(6). <https://doi.org/10.3892/ol.2022.13313>.
- Liu, Y., Sun, X., Yu, J., Wang, J., Zhai, P., Chen, S., ... & Zhou, Y. (2019). Platelet-rich fibrin as a bone graft material in oral and maxillofacial bone regeneration: classification and summary for better application. *Biomed Research International*, 2019, 1-16. <https://doi.org/10.1155/2019/3295756>
- Lubis, B., Rizaliyana, S., & Budi, A. (2021). Comparison of the effectiveness simvastatin gel 2,5% and platelet-rich fibrin (prf) in full-thickness wound healing of white rats (*rattus norvegicus*). *International Journal of Research Publications*, 80(1). <https://doi.org/10.47119/ijrp100801720212069>
- Ma, M. (2024). Role of hypoxia in mesenchymal stem cells from dental pulp: Influence, mechanism and application. *Cell Biochemistry and Biophysics*, 82(2), 535–547.
- Ma, S., Xie, N., Li, W., Yuan, B., Shi, Y. and Wang, Y. (2014). Immunobiology of mesenchymal stem cells, *Cell Death Differ*, 21 (2), 216-25. Available at: 10.1038/cdd.2013.158
- Martini, L., Fini, M., Giavaresi, G., Giardino, R., 2001. Sheep model in orthopedic research: a literature review. *Comp Med* 51, 292–299.
- Matsuki, K., Hathaway, C. K., Lawrence, M. G., Smithies, O., & Kakoki, M. (2014). The role of transforming growth factor β 1 in the regulation of blood pressure. *Current Hypertension Reviews*, 10(4), 223–238.
- Mebarki, M., Abadie, C., Larghero, J., & Cras, A. (2021). Human umbilical cord-derived mesenchymal stem/stromal cells: a promising candidate for the development of advanced therapy medicinal products. *Stem Cell Research & Therapy*, 12(1), 152.
- Mianehsaz, E., Mirzaei, H. R., Mahjoubin-Tehran, M., Rezaee, A., Sahebhasagh, R., Pourhanifeh, M. H., Mirzaei, H. and Hamblin, M. R. (2019). Mesenchymal stem cell-derived exosomes: a new therapeutic approach to osteoarthritis?, *Stem Cell Res Ther*, 10 (1), 340. Available at: 10.1186/s13287-019-1445-0

- Mizuno, H., 2012. Concise review: Adipose-derived stem cells as a novel tool for future regenerative medicine. *Stem Cells Translational Medicine*, 1(5), pp. 386–391. <https://doi.org/10.5966/sctm.2011-0015>
- Moon, S. W., Park, S., Oh, M. and Wang, J. H. (2021). Outcomes of human umbilical cord blood-derived mesenchymal stem cells in enhancing tendon-graft healing in anterior cruciate ligament reconstruction: an exploratory study, *Knee Surg Relat Res*, 33 (1), 32. Available at: 10.1186/s43019-021-00104-4
- Mukti, A. I., Ilyas, S., Warli, S. M., Putra, A., Rasyid, N., Munir, D., Siregar, K. B., & Ichwan, M. (2022). Umbilical cord-derived mesenchymal stem cells improve TGF- β , α -SMA and collagen on erectile dysfunction in streptozotocin-induced diabetic rats. *Medical Archives (Sarajevo, Bosnia and Herzegovina)*, 76(1), 4–11.
- Muñoz, G., Ripalda, P., Álvarez, E., & Forriol, F. (2001). Nutrición de la zona avascular de los meniscos. Estudio de la superficie meniscal con microscopía electrónica de barrido. *REVISTA DE LA ASOCIACION ESPAÑOLA DE ARTROSCOPIA (AEA)*, 19.
- Murray, M. M. and Fleming, B. C. (2013). Biology of anterior cruciate ligament injury and repair: Kappa delta ann doner vaughn award paper 2013, *J Orthop Res*, 31 (10), 1501-6. Available at: 10.1002/jor.22420
- Murray, M. M., Spindler, K. P., Ballard, P., Welch, T. P., Zurakowski, D. and Nanney, L. B. (2007). Enhanced histologic repair in a central wound in the anterior cruciate ligament with a collagen-platelet-rich plasma scaffold, *J Orthop Res*, 25 (8), 1007-17. Available at: 10.1002/jor.20367
- Myklebust, G. H., I; Mæhlum, S.; Engebretsen, L.; Bahr, R. (2003). Clinical, Functional, and Radiologic Outcome in Team Handball Players 6 to 11 Years after Anterior Cruciate Ligament Injury, *The American Journal of Sports Medicine* 31 (6), 981-989. Available at: <http://dx.doi.org/10.1177/03635465030310063901>
- Nagamura-Inoue, T., & He, H. (2014). Umbilical cord-derived mesenchymal stem cells: Their advantages and potential clinical utility. *World Journal of Stem Cells*, 6(2), 195–202.
- Naraoka, T., Ishibashi, Y., Tsuda, E., Yamamoto, Y., Kusumi, T., Kakizaki, I., ... & Toh, S. (2012). Time-dependent gene expression and immunohistochemical analysis of the injured anterior cruciate ligament. *Bone & Joint Research*, 1(10), 238-244. <https://doi.org/10.1302/2046-3758.110.2000118>

- National Research Council. (2011). *Guide for the Care and Use of Laboratory Animals* (edisi ke-8). Washington, DC: The National Academies Press. <https://www.ncbi.nlm.nih.gov/books/NBK232581/>
- Noverina, R., Widowati, W., Ayuningtyas, W., Kurniawan, D., Afifah, E., Laksmiawati, D. R., Rinendyaputri, R., Rilianawati, R., Faried, A., Bachtiar, I. and Wirakusumah, F. F. (2019). Growth factors profile in conditioned medium human adipose tissue-derived mesenchymal stem cells (CM-hATMSCs), *Clinical Nutrition Experimental*, 24 34-44. Available at: 10.1016/j.yclnex.2019.01.002
- Noyes, F. R., Mooar, L. A., Moorman, C. T., 3rd and McGinniss, G. H. (1989). Partial tears of the anterior cruciate ligament. Progression to complete ligament deficiency, *J Bone Joint Surg Br*, 71 (5), 825-33. Available at: 10.1302/0301-620X.71B5.2584255
- Oe, K., Kushita, T., Okamoto, N., Umeda, M., Nakamura, T., Ikehara, S., Iida, H. (2011). New strategies for anterior cruciate ligament partial rupture using bone marrow transplantation in rats, *Stem Cells and Development*, 20 (4), 671-679.
- Oláh, T., Cai, X., Michaelis, J., Madry, H., 2020. Comparative anatomy and morphology of the knee in translational models for articular cartilage disorders. Part I: Large animals. *Ann Anat*, submitted.
- Pak, J., Lee, J. H. and Lee, S. H. (2014). Regenerative repair of damaged meniscus with autologous adipose tissue-derived stem cells, *Biomed Res Int*, 2014 436029. Available at: 10.1155/2014/436029
- Pauli, C. *et al.* (2011) 'Macroscopic and histopathologic analysis of human knee menisci in aging and osteoarthritis,' *Osteoarthritis and Cartilage*, 19(9), pp. 1132–1141. <https://doi.org/10.1016/j.joca.2011.05.008>.
- Paz, M. C., Ayerza, M. A., Tanoira, I., Astoul, J., & Muscolo, D. L. (2012). Spontaneous healing in complete acl ruptures: a clinical and mri study. *Clinical Orthopaedics & Related Research*, 470(4), 979-985. <https://doi.org/10.1007/s11999-011-1933-8>
- Perrone, G. S., Proffen, B. L., Kiapour, A. M., Sieker, J. T., Fleming, B. C., & Murray, M. M. (2017). Bench- to- bedside: bridge- enhanced anterior cruciate ligament repair. *Journal of Orthopaedic Research*, 35(12), 2606-2612. <https://doi.org/10.1002/jor.23632>
- Podkalicka, P., Stępniewski, J., Mucha, O., Kachamakova-Trojanowska, N., Dulak, J., & Łoboda, A. (2020). Hypoxia as a driving force of pluripotent stem cell

reprogramming and differentiation to endothelial cells. *Biomolecules*, 10(12), 1614.

Proffen BL, McElfresh M, Fleming BC, Murray MM. A comparative anatomical study of the human knee and six animal species. *Knee*. (2012) 19:493–9. doi: 10.1016/j.knee.2011.07.005

Proffen, B. L., Haslauer, C. M., Harris, C. E. and Murray, M. M. (2013). Mesenchymal stem cells from the retroapatellar fat pad and peripheral blood stimulate ACL fibroblast migration, proliferation, and collagen gene expression, *Connect Tissue Res*, 54 (1), 14-21. Available at: 10.3109/03008207.2012.715701

Proffen, B. L., Sieker, J. T. and Murray, M. M. (2015). Bio-enhanced repair of the anterior cruciate ligament, *Arthroscopy*, 31 (5), 990-7. Available at: 10.1016/j.arthro.2014.11.016

Pulido-Escribano, V., Torrecillas-Baena, B., Camacho-Cardenosa, M., Dorado, G., Gálvez-Moreno, M. Á., & Casado-Díaz, A. (2022). Role of hypoxia preconditioning in therapeutic potential of mesenchymal stem-cell-derived extracellular vesicles. *World Journal of Stem Cells*, 14(7), 453–472.

Rai, M. F., Brophy, R. H. and Rosen, V. (2020). Molecular biology of meniscus pathology: Lessons learned from translational studies and mouse models, *J Orthop Res*, 38 (9), 1895-1904. Available at: 10.1002/jor.24630

Raileanu, V. N., Whiteley, J., Chow, T., Kollara, A., Mohamed, A., Keating, A. and Rogers, I. M. (2019). Banking Mesenchymal Stromal Cells from Umbilical Cord Tissue: Large Sample Size Analysis Reveals Consistency Between Donors, *Stem Cells Transl Med*, 8 (10), 1041-1054. Available at: 10.1002/sctm.19-0022

Responde, D. J., Natoli, R. M. and Athanasiou, K. A. (2012). Identification of potential biophysical and molecular signalling mechanisms underlying hyaluronic acid enhancement of cartilage formation, *J R Soc Interface*, 9 (77), 3564-73. Available at: 10.1098/rsif.2012.0399

Rhatomy, S. et al. (2022) ‘Allogeneic umbilical cord mesenchymal stem cell conditioned medium (secretome) for treating posterior cruciate ligament rupture: A prospective single-arm study’, *European Journal of Orthopaedic Surgery & Traumatology*, 33(3), pp. 669–675. doi:10.1007/s00590-022-03278-z.

Rhatomy, S., Prasetyo, T. E., Setyawan, R., Soekarno, N. R., Romaniyanto, F., Sedjati, A. P., Sumarwoto, T., Utomo, D. N., Suroto, H., Mahyudin, F. and

- Prakoeswa, C. R. S. (2020). Prospect of stem cells conditioned medium (secretome) in ligament and tendon healing: A systematic review, *Stem Cells Transl Med*, 9 (8), 895-902. Available at: [10.1002/sctm.19-0388](https://doi.org/10.1002/sctm.19-0388)
- Sakai, D. M., J.; Iwashina, T.; Watanabe, T.; Nakai, T.; Ando, K.; Hotta, T. (2005). Differentiation of Mesenchymal Stem Cells Transplanted to a Rabbit Degenerative Disc Model : Potential and Limitations for Stem Cell Therapy in Disc Regeneration, *Spine*, 30 2379-87.
- Sanders, T. L., Maradit Kremers, H., Bryan, A. J., Larson, D. R., Dahm, D. L., Levy, B. A., Stuart, M. J., & Krych, A. J. (2016). Incidence of anterior cruciate ligament tears and reconstruction. *The American Journal of Sports Medicine*, 44(6), 1502–1507.
- Sandra, F., Sudiono, J., Sidharta, E. A., Sunata, E. P., Sungkono, D. J., Dirgantara, Y. and Chouw, A. (2014). Conditioned Media of Human Umbilical Cord Blood Mesenchymal Stem Cell-derived Secretome Induced Apoptosis and Inhibited Growth of HeLa Cells, *The Indonesian Biomedical Journal*, 6 (1), Available at: [10.18585/inabj.v6i1.44](https://doi.org/10.18585/inabj.v6i1.44)
- Sano, M. T., A.; Urushihata, N.; Liu, X.L. (2022). Effect of human adipose-derived mesenchymal stem cell conditioned medium on musculoskeletal pain, *Eur Rev Med Pharmacol Sci*, 26 1570-8 Available at: https://doi.org/10.26355/eurrev_202203_28223
- Sasaki, H., Rothrauff, B. B., Alexander, P. G., Lin, H., Gottardi, R., Fu, F. H. and Tuan, R. S. (2018). In Vitro Repair of Meniscal Radial Tear with Hydrogels Seeded with Adipose Stem Cells and TGF-beta3, *Am J Sports Med*, 46 (10), 2402-2413. Available at: [10.1177/0363546518782973](https://doi.org/10.1177/0363546518782973)
- Sattar, M. A., Lingens, L. F., Guillaume, V. G. J., Goetzl, R., Beier, J. P., & Ruhl, T. (2024). Association between donor age and osteogenic potential of human adipose stem cells in bone tissue engineering. *Current Issues in Molecular Biology*, 46(2), 1424–1436.
- Scotti, C., Hirschmann, M. T., Antinolfi, P., Martin, I. and Peretti, G. M. (2013). Meniscus repair and regeneration: review on current methods and research potential, *Eur Cell Mater*, 26 150-70. Available at: [10.22203/ecm.v026a11](https://doi.org/10.22203/ecm.v026a11)
- Scull, G., Fisher, M. B. and Brown, A. C. (2021). Fibrin-Based Biomaterial Systems to Enhance Anterior Cruciate Ligament Healing, *Med Devices Sens*, 4 (1), Available at: [10.1002/mds3.10147](https://doi.org/10.1002/mds3.10147)
- Seijas, R., Ares, O., Cusco, X., Alvarez, P., Steinbacher, G. and Cugat, R. (2014). Partial anterior cruciate ligament tears treated with intraligamentary plasma

- rich in growth factors, *World J Orthop*, 5 (3), 373-8. Available at: 10.5312/wjo.v5.i3.373
- Shang, Y., Guan, H. and Zhou, F. (2021). Biological Characteristics of Umbilical Cord Mesenchymal Stem Cells and Its Therapeutic Potential for Hematological Disorders, *Front Cell Dev Biol*, 9 570179. Available at: 10.3389/fcell.2021.570179
- Si, Z., Wang, X., Sun, C., Kang, Y., Xu, J., Wang, X. and Hui, Y. (2019). Adipose-derived stem cells: Sources, potency, and implications for regenerative therapies, *Biomed Pharmacother*, 114 108765. Available at: 10.1016/j.biopha.2019.108765
- Sonnery-Cottet, B., Bazille, C., Hulet, C., Colombet, P., Cucurulo, T., Panisset, J. C., Potel, J. F., Servien, E., Trojani, C., Djian, P., Graveleau, N., Pujol, N. and French Arthroscopic, S. (2014). Histological features of the ACL remnant in partial tears, *Knee*, 21 (6), 1009-13. Available at: 10.1016/j.knee.2014.07.020
- Sriram, M., Priya, S., Mahajan, A., & Katti, D. S. (2024). Directing ligament-mimetic bi-directional cell organization in scaffolds through zone-specific microarchitecture for ligament tissue engineering. *Biofabrication*, 16(2), 025015. <https://doi.org/10.1088/1758-5090/ad22f2>
- Sriramulu, S. B., A.; Liddo, R.; Jothimani, G.; Gonipath, M.; Murugesan, R.; Marotta, F.; Pathak, S. (2017). Concise Review on Clinical Applications of Conditioned Medium Derived from Human Umbilical Cord-Mesenchymal Stem Cells (UC- MSCs), *International Journal of Hematology-Oncology and Stem Cell Research* 12 230-4.
- Stamnitz S, Klimczak A. Mesenchymal stem cells, bioactive factors, and scaffolds in Bone Repair: From research perspectives to clinical practice. *Cells*. 2021;10(8):1925. doi:10.3390/cells10081925
- Sui, B.-D. et al. (2020) 'Epigenetic regulation of mesenchymal stem cell homeostasis', *Trends in Cell Biology*, 30(2), pp. 97–116. doi:10.1016/j.tcb.2019.11.006.
- Sun, J. and Tan, H. (2013). Alginate-Based Biomaterials for Regenerative Medicine Applications, *Materials (Basel)*, 6 (4), 1285-1309. Available at: 10.3390/ma6041285
- Sun, Y., Chen, S., & Pei, M. (2018). Comparative advantages of infrapatellar fat pad: an emerging stem cell source for regenerative medicine. *Rheumatology (Oxford, England)*, 57(12), 2072–2086.

- Temponi, E. F., de Carvalho Junior, L. H., Sonnery-Cottet, B. and Chambat, P. (2015). Partial tearing of the anterior cruciate ligament: diagnosis and treatment, *Rev Bras Ortop*, 50 (1), 9-15. Available at: 10.1016/j.rboe.2015.02.003
- Tesarova, L., Jaresova, K., Simara, P., & Koutna, I. (2020). Umbilical cord-derived mesenchymal stem cells are able to use bFGF treatment and represent a superb tool for immunosuppressive clinical applications. *International Journal of Molecular Sciences*, 21(15), 5366.
- Teven, C.M. et al. (2011) 'Epigenetic regulation of mesenchymal stem cells: A focus on osteogenic and adipogenic differentiation', *Stem Cells International*, 2011, pp. 1–18. doi:10.4061/2011/201371.
- Thaweessaphithak, S., Tantrawatpan, C., Kheolamai, P., Tantikanlayaporn, D., Roytrakul, S. and Manochantr, S. (2019). Human serum enhances the proliferative capacity and immunomodulatory property of MSCs derived from human placenta and umbilical cord, *Stem Cell Res Ther*, 10 (1), 79. Available at: 10.1186/s13287-019-1175-3
- Thomaidou AC, Goulielmaki M, Tsintarakis A, et al. Mirna-guided regulation of mesenchymal stem cells derived from the umbilical cord: Paving the way for stem-cell based regeneration and therapy. *International Journal of Molecular Sciences*. 2023;24(11):9189. doi:10.3390/ijms24119189
- Thorstensson, C. A., Lohmander, L. S., Frobell, R. B., Roos, E. M. and Gooberman-Hill, R. (2009). Choosing surgery: patients' preferences within a trial of treatments for anterior cruciate ligament injury. A qualitative study, *BMC Musculoskelet Disord*, 10 100. Available at: 10.1186/1471-2474-10-100
- Tischer T, Ronga M, Tsai A, Ingham SJ, Ekdahl M, Smolinski P, et al. Biomechanics of the goat three bundle anterior cruciate ligament. *Knee Surg Sports Traumatol Arthrosc*. (2009) 17:935–40. doi: 10.1007/s00167-009-0784-2
- Torres-Torrillas, M., Rubio, M., Damia, E., Cuervo, B., Del Romero, A., Pelaez, P., Chicharro, D., Miguel, L. and Sopena, J. J. (2019). Adipose-Derived Mesenchymal Stem Cells: A Promising Tool in the Treatment of Musculoskeletal Diseases, *Int J Mol Sci*, 20 (12), Available at: 10.3390/ijms20123105
- Trigo, C. M., Rodrigues, J. S., Camões, S. P., Solá, S., & Miranda, J. P. (2024). Mesenchymal stem cell secretome for regenerative medicine: Where do we

stand? *Journal of Advanced Research.*
<https://doi.org/10.1016/j.jare.2024.05.004>

Vahedi, P., Moghaddamshahabi, R., Webster, T. J., Calikoglu Koyuncu, A. C., Ahmadian, E., Khan, W. S., Jimale Mohamed, A., & Eftekhari, A. (2021). The use of infrapatellar fat pad-derived mesenchymal stem cells in articular cartilage regeneration: A review. *International Journal of Molecular Sciences*, 22(17), 9215.

Valachova, K. and Soltes, L. (2021). Versatile Use of Chitosan and Hyaluronan in Medicine, *Molecules*, 26 (4), Available at: [10.3390/molecules26041195](https://doi.org/10.3390/molecules26041195)

Vavken, P., Joshi, S. M. and Murray, M. M. (2011). Fibrin concentration affects ACL fibroblast proliferation and collagen synthesis, *Knee*, 18 (1), 42-6. Available at: [10.1016/j.knee.2009.12.008](https://doi.org/10.1016/j.knee.2009.12.008)

Via, A. G., Frizziero, A., & Oliva, F. (2012). Biological properties of mesenchymal Stem Cells from different sources. *Muscles, Ligaments and Tendons Journal*, 2(3), 154–162.

Vieira de Souza, T., Malmonge, S. M. and Santos, A. R., Jr. (2021). Development of a chitosan and hyaluronic acid hydrogel with potential for bioprinting utilization: A preliminary study, *J Biomater Appl*, 36 (2), 358-371. Available at: [10.1177/08853282211024164](https://doi.org/10.1177/08853282211024164)

Walvekar, P., Lulinski, P., Kumar, P., Aminabhavi, T. M., & Choonara, Y. E. (2024). A review of hyaluronic acid-based therapeutics for the treatment and management of arthritis. *International Journal of Biological Macromolecules*, 264(Pt 2), 130645.

Wang, C., Hu, Y., Zhang, S., Ruan, D., Huang, Z., He, P., Cai, H., Heng, B. C., Chen, X., & Shen, W. (2021). Application of stem cell therapy for ACL graft regeneration. *Stem Cells International*, 2021, 6641818.

Wang, D., Wang, Z., Li, M. and Xu, S. (2020). The underlying mechanism of partial anterior cruciate ligament injuries to the meniscus degeneration of knee joint in rabbit models, *J Orthop Surg Res*, 15 (1), 428. Available at: [10.1186/s13018-020-01954-6](https://doi.org/10.1186/s13018-020-01954-6)

Wang, H.-D., Li, Z., Hu, X., & Ao, Y. (2022). Efficacy of stem cell therapy for tendon graft ligamentization after anterior cruciate ligament reconstruction: A systematic review. *Orthopaedic Journal of Sports Medicine*, 10(6), 23259671221098364

- Wang, T., Hill, R. C., Dzieciatkowska, M., Zhu, L., Infante, A. M., Hu, G., Hansen, K. C. and Pei, M. (2020). Site-Dependent Lineage Preference of Adipose Stem Cells, *Front Cell Dev Biol*, 8 237. Available at: 10.3389/fcell.2020.00237
- Wei Z-J, Wang Q-Q, Cui Z-G, Inadera H, Jiang X, Wu C-A. Which is the most effective one in knee osteoarthritis treatment from mesenchymal stem cells obtained from different sources? —a systematic review with conventional and network meta-analyses of randomized controlled trials. *Annals of Translational Medicine*. 2021;9(6):452-452. doi:10.21037/atm-20-5116
- Wesdorp, M. A., Eijgenraam, S. M., Meuffels, D. E., Bierma-Zeinstra, S. M. A., Kleinrensink, G. J., Bastiaansen-Jenniskens, Y. M. and Reijman, M. (2020). Traumatic Meniscal Tears Are Associated with Meniscal Degeneration, *Am J Sports Med*, 48 (10), 2345-2352. Available at: 10.1177/0363546520934766
- World Organisation for Animal Health. (2024). *Use of Animals in Research and Education*. Dalam *Terrestrial Animal Health Code*. https://www.woah.org/fileadmin/Home/eng/Health_standards/tahc/2024/en_chapitre_aw_research_education.htm
- Xiao, S. P., Tang, L. S., Chen, J. Y., Li, Z. T., Cheng, G. H., Chen, Q. Q., Liu, S. H. and Liu, W. G. (2019). Effect of Cross-Linked Hyaluronate Scaffold on Cartilage Repair: An In Vivo Study, *Orthop Surg*, 11 (4), 679-689. Available at: 10.1111/os.12508
- Xu H-K, Chen L-J, Zhou S-N, Li Y-F, Xiang C. Multifunctional role of micrnas in mesenchymal stem cell-derived exosomes in treatment of diseases. *World Journal of Stem Cells*. 2020;12(11):1276-1294. doi:10.4252/wjsc.v12.i11.1276
- Xu, J., Ye, Z., Han, K., Zheng, T., Zhang, T., Dong, S., Jiang, J., Yan, X., Cai, J. and Zhao, J. (2022). Infrapatellar Fat Pad Mesenchymal Stromal Cell-Derived Exosomes Accelerate Tendon-Bone Healing and Intra-articular Graft Remodeling After Anterior Cruciate Ligament Reconstruction, *Am J Sports Med*, 50 (3), 662-673. Available at: 10.1177/0363546521107227
- Yao, D., Dong, S., Lu, Q., Hu, X., Kaplan, D. L., Zhang, B. and Zhu, H. (2012). Salt-leached silk scaffolds with tunable mechanical properties, *Biomacromolecules*, 13 (11), 3723-9. Available at: 10.1021/bm301197h
- Yao, D., Liu, H. and Fan, Y. (2016). Silk scaffolds for musculoskeletal tissue engineering, *Exp Biol Med (Maywood)*, 241 (3), 238-45. Available at: 10.1177/1535370215606994

- Yoon, J. P., Lee, C. H., Jung, J. W., Lee, H. J., Lee, Y. S., Kim, J. Y., Park, G. Y., Choi, J. H. and Chung, S. W. (2018). Sustained Delivery of Transforming Growth Factor beta1 by Use of Absorbable Alginate Scaffold Enhances Rotator Cuff Healing in a Rabbit Model, *Am J Sports Med*, 46 (6), 1441-1450. Available at: [10.1177/0363546518757759](https://doi.org/10.1177/0363546518757759)
- You, C. K., Chou, C. L., Wu, W. T. and Hsu, Y. C. (2019). Nonoperative Choice of Anterior Cruciate Ligament Partial Tear: Ultrasound-Guided Platelet-Rich Plasma Injection, *J Med Ultrasound*, 27 (3), 148-150. Available at: [10.4103/JMU.JMU_121_18](https://doi.org/10.4103/JMU.JMU_121_18)
- Zavatti, M., Beretti, F., Casciaro, F., Bertucci, E. and Maraldi, T. (2020). Comparison of the therapeutic effect of amniotic fluid stem cells and their exosomes on monoiodoacetate-induced animal model of osteoarthritis, *Biofactors*, 46 (1), 106-117. Available at: [10.1002/biof.1576](https://doi.org/10.1002/biof.1576)
- Zellner, J., Mueller, M., Berner, A., Dienstknecht, T., Kujat, R., Nerlich, M., Hennemann, B., Koller, M., Prantl, L., Angele, M. and Angele, P. (2010). Role of mesenchymal stem cells in tissue engineering of meniscus, *J Biomed Mater Res A*, 94 (4), 1150-61. Available at: [10.1002/jbm.a.32796](https://doi.org/10.1002/jbm.a.32796)
- Zhang, Z., Mi, T., Jin, L., Li, M., Zhanghuang, C., Wang, J., Tan, X., Lu, H., Shen, L., Long, C., Wei, G. and He, D. (2022). Comprehensive proteomic analysis of exosome mimetic vesicles and exosomes derived from human umbilical cord mesenchymal stem cells, *Stem Cell Res Ther*, 13 (1), 312. Available at: [10.1186/s13287-022-03008-6](https://doi.org/10.1186/s13287-022-03008-6)
- Zhong, Y. C., Wang, S. C., Han, Y. H. and Wen, Y. (2020). Recent Advance in Source, Property, Differentiation, and Applications of Infrapatellar Fat Pad Adipose-Derived Stem Cells, *Stem Cells Int*, 2020 2560174. Available at: [10.1155/2020/2560174](https://doi.org/10.1155/2020/2560174)
- Zicaro, J. P., Yacuzzi, C., Garcia-Mansilla, I. and Costa-Paz, M. (2018). Nonsurgical treatment of partial ACL tears: intraarticular injection of Platelet-rich plasma did not change the progression rate to knee instability, *Orthopaedic Journal of Sports Medicine*, 6 (12_suppl5), Available at: [10.1177/2325967118s00189](https://doi.org/10.1177/2325967118s00189)