

Publikationen Professor Dr. med. Gian M. Salzmann

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1. The Validity of Motion Capture Analysis System against the Gold Standard Long-Standing Radiography in the Measurement of Lower Extremity Alignment. Ossendorff R, Richter J, Heijens E, Schildberg FA, Haeder G, **Salzmann GM**. J Clin Med. 2023 Jan 10;12(2):567. doi: 10.3390/jcm12020567. PMID: 36675496 Free PMC article.
2. Biologic principles of minced cartilage implantation: a narrative review. Ossendorff R, Walter SG, Schildberg FA, Spang J, Obudzinski S, Preiss S, Schneider S, **Salzmann GM**. Arch Orthop Trauma Surg. 2022 Nov 16. doi: 10.1007/s00402-022-04692-y. Online ahead of print. PMID: 36385655 Review.
3. Controversies in regenerative medicine: should knee joint osteoarthritis be treated with mesenchymal stromal cells? Ossendorff R, Walter SG, Schildberg FA, Khoury M, **Salzmann GM**. Eur Cell Mater. 2022 Mar 17;43:98-111. doi: 10.22203/eCM.v043a09. PMID: 35298024 Free article. Review.
4. Autologous Minced Cartilage Implantation for Arthroscopic One-Stage Treatment of Osteochondritis Dissecans of the Elbow. Ophoven C, Wagner FC, Izadpanah K, Jaeger M, **Salzmann GM**, Gladbach B, Schmal H, Maier D. Arthrosc Tech. 2022 Feb 28;11(3):e435-e440. doi: 10.1016/j.eats.2021.11.013. eCollection 2022 Mar. PMID: 35256988 Free PMC article.
5. Correlation of the Histological ICRS II Score and the 3D MOCART Score for the Analysis of Aged Osteochondral Regenerates in a Large Animal Model. Schagemann JC, Galle L, Gille J, Frydrychowicz A, Welsch G, **Salzmann G**, Paech A, Mittelstaedt H. Cartilage. 2022 Jan-Mar;13(1):19476035211072254. doi: 10.1177/19476035211072254. PMID: 35176894 Free PMC article.
6. Minced Cartilage Implantation for a Cystic Defect on the Femoral Head-Technical Note. Schumann J, **Salzmann G**, Leunig M, Rüdiger H. Arthrosc Tech. 2021 Sep 21;10(10):e2331-e2336. doi: 10.1016/j.eats.2021.07.011. eCollection 2021 Oct.
7. Cartilage chip transplantation for cartilage defects of the first metatarsophalangeal joint. Roth KE, Klos K, Simons P, Ossendorff R, Drees P, Maier GS, **Salzmann GM**. Oper Orthop Traumatol. 2021 Nov 1. doi: 10.1007/s00064-021-00745-4. Online ahead of print. PMID: 34724079 German.
8. Evaluation of the influence of platelet-rich plasma (PRP), platelet lysate (PL) and mechanical loading on chondrogenesis in vitro. Pötter N, Westbrock F, Grad S, Alini M, Stoddart MJ, Schmal H, Kubosch D, **Salzmann G**, Kubosch EJ. Sci Rep. 2021 Oct 12;11(1):20188. doi: 10.1038/s41598-021-99614-0. PMID: 34642434 Free PMC article.
9. [Patellofemoral cartilage repair]. Ossendorff R, Walter SG, **Salzmann GM**. Sportverletz Sportschaden. 2021 Sep 2. doi: 10.1055/a-1491-2622. Online ahead of print. PMID: 34474494 German.
10. Minced Cartilage Procedure for One-Stage Arthroscopic Repair of Chondral Defects at the Glenohumeral Joint. Lorenz CJ, Freisleder F, **Salzmann GM**, Scheibel M. Arthrosc Tech. 2021 Jun 20;10(7):e1677-e1684. doi: 10.1016/j.eats.2021.03.012. eCollection 2021 Jul. PMID: 34354912 Free PMC article.
11. Correction to: Towards planning of osteotomy around the knee with quantitative inclusion of the adduction moment: a biomechanical approach. Biehl M, Damm P, Trepczynski A, Preiss S, **Salzmann GM**. J Exp Orthop. 2021 Jun 24;8(1):43. doi: 10.1186/s40634-021-00367-6. PMID: 34165647 Free PMC article. No abstract available.
12. Towards planning of osteotomy around the knee with quantitative inclusion of the adduction¹

- moment: a biomechanical approach. Biehl M, Damm P, Trepczynski A, Preiss S, **Salzmann GM**. *J Exp Orthop*. 2021 Jun 11;8(1):39. doi: 10.1186/s40634-021-00324-3. PMID: 34115238 Free PMC article.
13. Arthroscopic Minced Cartilage Implantation for Chondral Lesions at the Talus: A Technical Note. Roth KE, Ossendorff R, Klos K, Simons P, Drees P, **Salzmann GM**. *Arthrosc Tech*. 2021 Mar 22;10(4):e1149-e1154. doi: 10.1016/j.eats.2021.01.006. eCollection 2021 Apr. PMID: 33981564 Free PMC article.
 14. Arthroscopic Minced Cartilage Implantation (MCI): A Technical Note. Schneider S, Ossendorff R, Holz J, **Salzmann GM**. *Arthrosc Tech*. 2020 Dec 19;10(1):e97-e101. doi: 10.1016/j.eats.2020.09.015. eCollection 2021 Jan. PMID: 33532215 Free PMC article.
 15. Microfracture combined with anterior cruciate ligament reconstruction compared to isolated microfractures for osteochondral lesions. Walter SG, Cucchi D, Fröschen F, Luceri F, Schildberg FA, Mangiavini L, Briem T, Thomas TS, **Salzmann GM**. *J Biol Regul Homeost Agents*. 2020 Jul-Aug;34(4 Suppl. 3):125-131. Congress of the Italian Orthopaedic Research Society. PMID: 33261267
 16. Comparison of Human Articular Cartilage Tissue and Chondrocytes Isolated from Peripheral versus Central Regions of Traumatic Lesions. Acevedo L, Iselin L, Berkelaar MHM, **Salzmann GM**, Wolf F, Feliciano S, Vogel N, Pagenstert G, Martin I, Pelttari K, Barbero A, Arnold MP. *Cartilage*. 2020 Sep 22:1947603520958154. doi: 10.1177/1947603520958154. Online ahead of print. PMID: 32959685
 17. Autologous Minced Cartilage Implantation for Treatment of Chondral and Osteochondral Lesions in the Knee Joint: An Overview. Salzmann GM, Ossendorff R, Gilat R, Cole BJ. *Cartilage*. 2020 Jul 25:1947603520942952.
 18. Synovial Fluid Biomarkers in Knee Osteoarthritis: A Systematic Review and Quantitative Evaluation Using BIPEDs Criteria. Boffa A, Merli G, Andriolo L, Lattermann C, Salzmann GM, Filardo G. *Cartilage*. 2020 Jul 25:1947603520942.
 19. Is There a Scientific Rationale for the Refixation of Delaminated Chondral Flaps in Femoroacetabular Impingement? A Laboratory Study. Levinson C, Naal FD, Salzmann GM, Zenobi-Wong M, Leunig M. *Clin Orthop Relat Res*. 2020 Apr;478(4):854-867.
 20. Lumican is upregulated in osteoarthritis and contributes to TLR4-induced pro-inflammatory activation of cartilage degradation and macrophage polarization. Barreto G, Senturk B, Colombo L, Brück O, Neidenbach P, Salzmann G, Zenobi-Wong M, Rottmar M. *Osteoarthritis Cartilage*. 2019 Nov 9.
 21. Quadriceps Neuromuscular Impairments after Arthroscopic Knee Surgery: Comparison between Procedures. Casartelli NC, Item-Glatthorn JF, Friesenbichler B, Bizzini M, Salzmann GM, Maffiuletti NA. *J Clin Med*. 2019 Nov 5;8(11).
 22. Chondrocytes From Device-Minced Articular Cartilage Show Potent Outgrowth Into Fibrin and Collagen Hydrogels. Levinson C, Cavalli E, Sindi DM, Kessel B, Zenobi-Wong M, Preiss S, Salzmann G, Neidenbach P. *Orthop J Sports Med*. 2019 Sep 10;7(9).

23. Patient Expectations about Communication in the Perioperative Setting of Elective Knee Surgery - a Questionnaire-based Cross-sectional Study. Walter SG, Naal F, Impellizzeri FM, Moser B, Schildberg FA, Drobny T, Preiss S, Salzmann GM. *Z Orthop Unfall*. 2019 Sep 18.
24. One-Step Autologous Minced Cartilage Procedure for the Treatment of Knee Joint Chondral and Osteochondral Lesions: A Series of 27 Patients With 2-Year Follow-up. Massen FK, Inauen CR, Harder LP, Runer A, Preiss S, Salzmann GM. *Orthop J Sports Med*. 2019 Jun 13;7(6)
25. Chondrocyte Culture Parameters for Matrix-Assisted Autologous Chondrocyte Implantation Affect Catabolism and Inflammation in a Rabbit Model. Sauerschnig M, Berninger MT, Kaltenhauser T, Plecko M, Wexel G, Schönfelder M, Wienerroither V, Imhoff AB, Schöttle PB, Rosado Balmayor E, Salzmann GM. *Int J Mol Sci*. 2019 Mar 27;20(7).
26. Correlation between the AMADEUS score and preoperative clinical patient-reported outcome measurements (PROMs) in patients undergoing matrix-induced autologous chondrocyte implantation (MACI). Runer A, Jungmann P, Welsch G, Kümmel D, Impellizzeri F, Preiss S, Salzmann G. *J Orthop Surg Res*. 2019 Mar 22;14(1):87.
27. Characterization of polydactyly chondrocytes and their use in cartilage engineering. Cavalli E, Levinson C, Hertl M, Broguiere N, Brück O, Mustjoki S, Gerstenberg A, Weber D, Salzmann G, Steinwachs M, Barreto G, Zenobi-Wong M. *Sci Rep*. 2019 Mar 12;9(1):4275.
28. What are the factors to affect outcome and healing of meniscus bucket handle tears? Hupperich A, Salzmann GM, Niemeyer P, Feucht M, Eberbach H, Südkamp NP, Kühle J. *Arch Orthop Trauma Surg*. 2018 Jun 29. doi: 10.1007/s00402-018-2989-7.
29. Clinical and radiographical ten years long-term outcome of microfracture vs. autologous chondrocyte implantation: a matched-pair analysis. Ossendorff R, Franke K, Erdle B, Uhl M, Südkamp NP, Salzmann GM. *Int Orthop*. 2018 Jun 16. doi: 10.1007/s00264-018-4025-5.
30. Articular Cartilage Repair of the Knee in Children and Adolescents. Salzmann GM, Niemeyer P, Hochrein A, Stoddart MJ, Angele P. *Orthop J Sports Med*. 2018 Mar 13;6(3):2325967118760190. doi: 10.1177/2325967118760190. eCollection 2018 Mar. Review.
31. Autologous Chondrocyte Implantation in Osteoarthritic Surroundings: TNF α and Its Inhibition by Adalimumab in a Knee-Specific Bioreactor. Ossendorff R, Grad S, Stoddart MJ, Alini M, Schmal H, Südkamp N, Salzmann GM. *Am J Sports Med*. 2018 Feb;46(2):431-440. doi: 10.1177/0363546517737497.
32. Human chondroprogenitors in alginate-collagen hybrid scaffolds produce stable cartilage in vivo. Studer D, Cavalli E, Formica FA, Kuhn GA, Salzmann G, Mumme M, Steinwachs MR, Laurent-Applegate LA, Maniura-Weber K, Zenobi-Wong M. *J Tissue Eng Regen Med*. 2017 Nov;11(11):3014-3026. doi: 10.1002.
33. Sporting Activity Is Reduced 11 Years After First-Generation Autologous Chondrocyte Implantation in the Knee Joint. Erdle B, Herrmann S, Porichis S, Uhl M, Ghanem N, Schmal H, Südkamp N, Niemeyer P, Salzmann GM. *Am J Sports Med*. 2017 Oct;45(12):2762-2773. doi: 10.1177/0363546517716920.
34. Magnetic Resonance Imaging Score and Classification System (AMADEUS) for Assessment of Preoperative Cartilage Defect Severity. Jungmann PM, Welsch GH, Brittberg M, Trattng S, Braun S, Imhoff AB, Salzmann GM. *Cartilage*. 2017 Jul;8(3):272-282. doi: 10.1177/1947603516665444.

35. Osteoarthritis in Football. Salzmann GM, Preiss S, Zenobi-Wong M, Harder LP, Maier D, Dvorák J. *Cartilage*. 2017 Apr;8(2):162-172. doi: 10.1177/1947603516648186.
36. The calcification potential of human MSCs can be enhanced by interleukin-1 β in osteogenic medium. Loebel C, Czekanska EM, Staudacher J, Salzmann G, Richards RG, Alini M, Stoddart MJ. *J Tissue Eng Regen Med*. 2017 Feb;11(2):564-571. doi: 10.1002/term.1950.
37. Second-Generation Autologous Minced Cartilage Repair Technique. Salzmann GM, Calek AK, Preiss S. *Arthrosc Tech*. 2017 Jan 30;6(1):e127-e131. doi: 10.1016/j.eats.2016.09.011.
38. Frontal Tendon Lengthening Plasty for Treatment of Structural Patella Baja. Bruhin VF, Preiss S, Salzmann GM, Harder LP. *Arthrosc Tech*. 2016 Dec 5;5(6):e1395-e1400. doi: 10.1016/j.eats.2016.08.004.
39. Current status of anti-inflammatory therapy for posttraumatic osteoarthritis. Schmal H, Marintschev I, Salzmann GM. *Acta Orthop Belg*. 2016 Sep;82(3):427-439. Review.
40. Hyaluronic Acid Suppresses the Expression of Metalloproteinases in Osteoarthritic Cartilage Stimulated Simultaneously by Interleukin 1 β and Mechanical Load. Pohlig F, Guell F, Lenze U, Lenze FW, Mühlhofer HM, Schauwecker J, Toepfer A, Mayer-Kuckuk P, von Eisenhart-Rothe R, Burgkart R, Salzmann GM. *PLoS One*. 2016 Mar 2;11(3):e0150020. doi: 10.1371/journal.pone.0150020.
41. Direct comparison of different surgical approaches in a woman with bilateral osteochondrosis dissecans of her knees: a case report. Schneider MM, Preiss S, Salzmann GM. *J Med Case Rep*. 2016 Jan 19;10:13. doi: 10.1186/s13256-015-0796-0.
42. Spontaneous Minced Cartilage Procedure for Unexpectedly Large Femoral Condyle Surface Defect. Salzmann GM, Baumann GA, Preiss S. *Case Rep Orthop*. 2016;2016:1498135. doi: 10.1155/2016/1498135.
43. Practical execution of defect preparation prior to surgical cartilage intervention: results from a representative meeting survey among experts. Salzmann GM, Niemeyer P, Vogt S, Kreuz P, Arnold M, Fritz J, Mujeeb A, Rosenberger R, Steinwachs M, Angele P. *Springerplus*. 2015 Nov 8;4:682. doi: 10.1186/s40064-015-1451-3. eCollection 2015.
44. Inside-Out Trans-Arthroscopic Drain Application During Knee Joint Arthroscopy. Salzmann GM, Preiss S, Harder LP, Naal FD. *Arthrosc Tech*. 2015 Nov 2;4(6):e643-6. doi: 10.1016/j.eats.2015.07.003.
45. Prospective clinical trial of patients who underwent ankle arthroscopy with articular diseases to match clinical and radiological scores with intra-articular cytokines. Henkelmann R, Schmal H, Pilz IH, Salzmann GM, Dovi-Akue D, Südkamp NP. *Int Orthop*. 2015 Aug;39(8):1631-7. doi: 10.1007/s00264-015-2797-4.
46. Prospective 5-year survival rate data following open-wedge valgus high tibial osteotomy. Bode G, von Heyden J, Pestka J, Schmal H, Salzmann G, Südkamp N, Niemeyer P. *Knee Surg Sports Traumatol Arthrosc*. 2015 Jul;23(7):1949-55. doi: 10.1007/s00167-013-2762-y.
47. Evaluation and analysis of graft hypertrophy by means of arthroscopy, biochemical MRI and osteochondral biopsies in a patient following autologous chondrocyte implantation for treatment of a full-thickness-cartilage defect of the knee. Niemeyer P, Uhl M, Salzmann GM, Morscheid YP, Südkamp NP, Madry H. *Arch Orthop Trauma Surg*. 2015 Jun;135(6):819-30. doi:4

10.1007/s00402-015-2194-x.

48. Destructive chondrolysis following intraarticular application of lavasorb (polihexanid) for treatment of knee empyema. Schneider MM, Preiss S, Harder LP, Salzmänn GM. *MMW Fortschr Med.* 2015 Apr 30;157(8):47-49. doi: 10.1007/s15006-015-3033-2.
49. Associated tears of the lateral meniscus in anterior cruciate ligament injuries: risk factors for different tear patterns. Feucht MJ, Bigdon S, Bode G, Salzmänn GM, Dovi-Akue D, Südkamp NP, Niemeyer P. *J Orthop Surg Res.* 2015 Mar 18;10:34. doi: 10.1186/s13018-015-0184-x.
50. Induction of Osteogenic Differentiation in Human Mesenchymal Stem Cells by Crosstalk with Osteoblasts. Glueck M, Gardner O, Czekanska E, Alini M, Stoddart MJ, Salzmänn GM, Schmal H. *Biores Open Access.* 2015 Jan 1;4(1):121-30. doi: 10.1089/biores.2015.0002.
51. Posterior root tears of the lateral meniscus. Feucht MJ, Salzmänn GM, Bode G, Pestka JM, Kühle J, Südkamp NP, Niemeyer P. *Knee Surg Sports Traumatol Arthrosc.* 2015 Jan;23(1):119-25. doi: 10.1007/s00167-014-2904-x. Epub 2014 Feb 15. Review.
52. Clinical Trial and In Vitro Study for the Role of Cartilage and Synovia in Acute Articular Infection. Langenmair ER, Kubosch EJ, Salzmänn GM, Beck S, Schmal H. *Mediators Inflamm.* 2015;2015:430324. doi: 10.1155/2015/430324.
53. In vitro osteogenic potential of human mesenchymal stem cells is predicted by Runx2/Sox9 ratio. Loebel C, Czekanska EM, Bruderer M, Salzmänn G, Alini M, Stoddart MJ. *Tissue Eng Part A.* 2015 Jan;21(1-2):115-23. doi: 10.1089/ten.TEA.2014.0096.
54. Diverse expression of selected cytokines and proteinases in synovial fluid obtained from osteoarthritic and healthy human knee joints. Sauerschnig M, Stolberg-Stolberg J, Schulze A, Salzmänn GM, Perka C, Dinybil CJ. *Eur J Med Res.* 2014 Nov 29;19:65. doi: 10.1186/s40001-014-0065-5.
55. The treatment of displaced intra-articular distal radius fractures in elderly patients. Bartl C, Stengel D, Bruckner T, Gebhard F; ORCHID Study Group. *Dtsch Arztebl Int.* 2014 Nov 14;111(46):779-87. doi: 10.3238.
56. First-generation versus second-generation autologous chondrocyte implantation for treatment of cartilage defects of the knee: a matched-pair analysis on long-term clinical outcome. Niemeyer P, Salzmänn G, Feucht M, Pestka J, Porichis S, Ogon P, Südkamp N, Schmal H. *Int Orthop.* 2014 Oct;38(10):2065-70. doi: 10.1007/s00264-014-2368-0.
57. Long-term T2 and Qualitative MRI Morphology After First-Generation Knee Autologous Chondrocyte Implantation: Cartilage Ultrastructure Is Not Correlated to Clinical or Qualitative MRI Outcome. Salzmänn GM, Erdle B, Porichis S, Uhl M, Ghanem N, Schmal H, Kubosch D, Südkamp NP, Niemeyer P. *Am J Sports Med.* 2014 Aug;42(8):1832-40. doi: 10.1177/0363546514536682.
58. Alignment does not influence cartilage T2 in asymptomatic knee joints. Sauerschnig M, Bauer JS, Kohn L, Hinterwimmer S, Landwehr S, Woertler K, Jungmann PM, Koestler W, Niemeyer P, Imhoff AB, Salzmänn GM. *Knee Surg Sports Traumatol Arthrosc.* 2014 Jun;22(6):1396-403. doi: 10.1007/s00167-013-2756-9.
59. Association between intraarticular cytokine levels and clinical parameters of osteochondritis dissecans in the ankle. Schmal H, Pilz IH, Henkelmann R, Salzmänn GM, Südkamp NP, Niemeyer P.

P. BMC Musculoskelet Disord. 2014 May 22;15:169. doi: 10.1186/1471-2474-15-169.

60. Particulate cartilage under bioreactor-induced compression and shear. Wang N, Grad S, Stoddart MJ, Niemeyer P, Reising K, Schmal H, Südkamp NP, Alini M, Salzmänn GM. *Int Orthop*. 2014 May;38(5):1105-11. doi: 10.1007/s00264-013-2194-9.
61. Simultaneous avulsion fracture of the posterior medial and posterior lateral meniscus root: a case report and review of the literature. Feucht MJ, Salzmänn GM, Pestka JM, Südkamp NP, Niemeyer P. *Arch Orthop Trauma Surg*. 2014 Apr;134(4):509-14. doi: 10.1007/s00402-013-1915-2.
62. Biochemical characterization of early osteoarthritis in the ankle. Schmal H, Salzmänn GM, Langenmair ER, Henkelmann R, Südkamp NP, Niemeyer P. *ScientificWorldJournal*. 2014 Feb 13;2014:434802. doi: 10.1155/2014/434802.
63. Influence of extremely low frequency, low energy electromagnetic fields and combined mechanical stimulation on chondrocytes in 3-D constructs for cartilage tissue engineering. Hilz FM, Ahrens P, Grad S, Stoddart MJ, Dahmani C, Wilken FL, Sauerschnig M, Niemeyer P, Zwingmann J, Burgkart R, von Eisenhart-Rothe R, Südkamp NP, Weyh T, Imhoff AB, Alini M, Salzmänn GM. *Bioelectromagnetics*. 2014 Feb;35(2):116-28. doi: 10.1002/bem.21822.
64. Clinical outcomes after cell-seeded autologous chondrocyte implantation of the knee: when can success or failure be predicted? Pestka JM, Bode G, Salzmänn G, Steinwachs M, Schmal H, Südkamp NP, Niemeyer P. *Am J Sports Med*. 2014 Jan;42(1):208-15. doi: 10.1177/0363546513507768.
65. Long-term outcomes after first-generation autologous chondrocyte implantation for cartilage defects of the knee. Niemeyer P, Porichis S, Steinwachs M, Erggelet C, Kreuz PC, Schmal H, Uhl M, Ghanem N, Südkamp NP, Salzmänn G. *Am J Sports Med*. 2014 Jan;42(1):150-7. doi: 10.1177/0363546513506593.
66. Early intra-articular complement activation in ankle fractures. Schmal H, Salzmänn GM, Niemeyer P, Langenmair E, Guo R, Schneider C, Habel M, Riedemann N. *Biomed Res Int*. 2014;2014:426893. doi: 10.1155/2014/426893.
67. Does form follow function in trochlear dysplasia? Case report of patellar instability in a below-knee amputee. Salzmänn GM, Dovi-Akue D, Wätzig K, Südkamp NP, Niemeyer P. *Int J Surg Case Rep*. 2014;5(2):91-4. doi: 10.1016/j.ijscr.2013.12.021.
68. Treatment of osteochondral fractures of the knee: a meta-analysis of available scientific evidence. Kühle J, Angele P, Balcarek P, Eichinger M, Feucht M, Haasper C, Alexander G, Jung T, Lill H, Marquass B, Osti M, Rosenberger R, Salzmänn G, Steinwachs M, Voigt C, Vogt S, Zeichen J, Niemeyer P. *Int Orthop*. 2013 Dec;37(12):2385-94.
69. Mid- and long-term efficacy of the arthroscopic patellar release for treatment of patellar tendinopathy unresponsive to nonoperative management. Maier D, Bornebusch L, Salzmänn GM, Südkamp NP, Ogon P. *Arthroscopy*. 2013 Aug;29(8):1338-45. doi: 10.1016/j.arthro.2013.05.004.
70. Microporous calcium phosphate ceramics as tissue engineering scaffolds for the repair of osteochondral defects: Histological results. Bernstein A, Niemeyer P, Salzmänn G, Südkamp NP, Hube R, Klehm J, Menzel M, von Eisenhart-Rothe R, Bohner M, Görz L, Mayr HO. *Acta Biomater*. 2013 Jul;9(7):7490-505. doi: 10.1016/j.actbio.2013.03.021.
71. Cartilage biopsy for autologous chondrocyte implantation (ACI). Pestka JM, Salzmänn GM,⁶

- Südkamp NP, Niemeyer P. *Z Orthop Unfall*. 2013 Jun;151(3):278-83. doi: 10.1055/s-0032-1328494.
72. Bioreactor-Induced Chondrocyte Maturation Is Dependent on Cell Passage and Onset of Loading. Wang N, Grad S, Stoddart MJ, Niemeyer P, Südkamp NP, Pestka J, Alini M, Chen J, Salzmänn GM. *Cartilage*. 2013 Apr;4(2):165-76. doi: 10.1177/1947603512471345.
73. Arthroscopically assisted 2-bundle anatomic reduction of acute acromioclavicular joint separations: 58-month findings. Venjakob AJ, Salzmänn GM, Gabel F, Buchmann S, Walz L, Spang JT, Vogt S, Imhoff AB. *Am J Sports Med*. 2013 Mar;41(3):615-21. doi: 10.1177/0363546512473438.
74. Practice in rehabilitation after cartilage therapy: an expert survey. Vogt S, Angele P, Arnold M, Brehme K, Cotic M, Haasper C, Hinterwimmer S, Imhoff AB, Petersen W, Salzmänn G, Steinwachs M, Venjakob A, Mayr HO. *Arch Orthop Trauma Surg*. 2013 Mar;133(3):311-20. doi: 10.1007/s00402-012-1662-9.
75. Clinical outcome following the first-line, single lesion microfracture at the knee joint. Salzmänn GM, Sah B, Südkamp NP, Niemeyer P. *Arch Orthop Trauma Surg*. 2013 Mar;133(3):303-10. doi: 10.1007/s00402-012-1660-y.
76. Autologous chondrocyte implantation in children and adolescents. Schmal H, Pestka JM, Salzmänn G, Strohm PC, Südkamp NP, Niemeyer P. *Knee Surg Sports Traumatol Arthrosc*. 2013 Mar;21(3):671-7. doi: 10.1007/s00167-012-2036-0.
77. Mesenchymal stem cell chondrogenesis: composite growth factor-bioreactor synergism for human stem cell chondrogenesis. Petrou M, Niemeyer P, Stoddart MJ, Grad S, Bernstein A, Mayr HO, Bode G, Südkamp N, Alini M, Salzmänn GM. *Regen Med*. 2013 Mar;8(2):157-70. doi: 10.2217.
78. Reoperative characteristics after microfracture of knee cartilage lesions in 454 patients. Salzmänn GM, Sah B, Südkamp NP, Niemeyer P. *Knee Surg Sports Traumatol Arthrosc*. 2013 Feb;21(2):365-71. doi: 10.1007/s00167-012-1973-y.
79. Microporous calcium phosphate ceramics as tissue engineering scaffolds for the repair of osteochondral defects: biomechanical results. Mayr HO, Klehm J, Schwan S, Hube R, Südkamp NP, Niemeyer P, Salzmänn G, von Eisenhardt-Rothe R, Heilmann A, Bohner M, Bernstein A. *Acta Biomater*. 2013 Jan;9(1):4845-55. doi: 10.1016/j.actbio.2012.07.040.
80. Early clinical and structural results after autologous chondrocyte transplantation at the glenohumeral joint. Buchmann S, Salzmänn GM, Glanzmann MC, Wörtler K, Vogt S, Imhoff AB. *J Shoulder Elbow Surg*. 2012 Sep;21(9):1213-21. doi: 10.1016/j.jse.2011.07.030.
81. Autologous chondrocyte implantation for the treatment of chondral and osteochondral defects of the talus: a meta-analysis of available evidence. Niemeyer P, Salzmänn G, Schmal H, Mayr H, Südkamp NP. *Knee Surg Sports Traumatol Arthrosc*. 2012 Sep;20(9):1696-703. doi: 10.1007/s00167-011-1729-0.
82. Microfracture for treatment of knee cartilage defects in children and adolescents. Salzmänn GM, Sah BR, Schmal H, Niemeyer P, Südkamp NP. *Pediatr Rep*. 2012 Apr 2;4(2):e21. doi: 10.4081/pr.2012.e21.
83. Influence of cell quality on clinical outcome after autologous chondrocyte implantation. Niemeyer P, Pestka JM, Salzmänn GM, Südkamp NP, Schmal H. *Am J Sports Med*. 2012 Mar;40(3):556-61.7

doi: 10.1177/0363546511428879.

84. Clinical outcome of autologous chondrocyte implantation for failed microfracture treatment of full-thickness cartilage defects of the knee joint. Pestka JM, Bode G, Salzmann G, Südkamp NP, Niemeyer P. *Am J Sports Med.* 2012 Feb;40(2):325-31. doi: 10.1177/0363546511425651.
85. Factors that influence clinical outcome following autologous chondrocyte implantation for cartilage defects of the knee. Niemeyer P, Salzmann GM, Hirschmüller A, Südkamp NP. *Z Orthop Unfall.* 2012 Feb;150(1):83-8. doi: 10.1055/s-0030-1270894.
86. Autologous chondrocyte implantation for treatment of cartilage defects of the knee: what predicts the need for reintervention? Jungmann PM, Salzmann GM, Schmal H, Pestka JM, Südkamp NP, Niemeyer P. *Am J Sports Med.* 2012 Jan;40(1):58-67. doi: 10.1177/0363546511423522.
87. Combined tears of the subscapularis and supraspinatus tendon: clinical outcome, rotator cuff strength and structural integrity following open repair. Bartl C, Senftl M, Eichhorn S, Holzapfel K, Imhoff A, Salzmann G. *Arch Orthop Trauma Surg.* 2012 Jan;132(1):41-50. doi: 10.1007/s00402-011-1400-8.
88. What Patients Expect About Autologous Chondrocyte Implantation (ACI) for Treatment of Cartilage Defects at the Knee Joint. Niemeyer P, Porichis S, Salzmann G, Südkamp NP. *Cartilage.* 2012 Jan;3(1):13-9. doi: 10.1177/1947603511415840.
89. Long-term outcome and structural integrity following open repair of massive rotator cuff tears. Bartl C, Kouloumentas P, Holzapfel K, Eichhorn S, Wörtler K, Imhoff A, Salzmann GM. *Int J Shoulder Surg.* 2012 Jan;6(1):1-8. doi: 10.4103/0973-6042.94304.
90. A combination of shear and dynamic compression leads to mechanically induced chondrogenesis of human mesenchymal stem cells. Schätti O, Grad S, Goldhahn J, Salzmann G, Li Z, Alini M, Stoddart MJ. *Eur Cell Mater.* 2011 Oct 11;22:214-25.
91. The dependence of autologous chondrocyte transplantation on varying cellular passage, yield and culture duration. Salzmann GM, Sauerschnig M, Berninger MT, Kaltenhauser T, Schönfelder M, Vogt S, Wexel G, Tischer T, Südkamp N, Niemeyer P, Imhoff AB, Schöttle PB. *Biomaterials.* 2011 Sep;32(25):5810-8. doi: 10.1016.
92. Subscapularis function and structural integrity after arthroscopic repair of isolated subscapularis tears. Bartl C, Salzmann GM, Seppel G, Eichhorn S, Holzapfel K, Wörtler K, Imhoff AB. *Am J Sports Med.* 2011 Jun;39(6):1255-62. doi: 10.1177/0363546510396317.
93. In vitro cell quality of articular chondrocytes assigned for autologous implantation in dependence of specific patient characteristics. Pestka JM, Schmal H, Salzmann G, Hecky J, Südkamp NP, Niemeyer P. *Arch Orthop Trauma Surg.* 2011 Jun;131(6):779-89. doi: 10.1007/s00402-010-1219-8.
94. Cartilage repair approach and treatment characteristics across the knee joint: a European survey. Salzmann GM, Niemeyer P, Steinwachs M, Kreuz PC, Südkamp NP, Mayr HO. *Arch Orthop Trauma Surg.* 2011 Mar;131(3):283-91. doi: 10.1007/s00402-010-1047.
95. Platelet concentrate vs. saline in a rat patellar tendon healing model. Spang JT, Tischer T, Salzmann GM, Winkler T, Burgkart R, Wexel G, Imhoff AB. *Knee Surg Sports Traumatol Arthrosc.* 2011 Mar;19(3):495-502. doi: 10.1007/s00167-010-1291-1.

96. Varying regional topology within knee articular chondrocytes under simulated in vivo conditions. Salzmänn GM, Buchberger MS, Stoddart MJ, Grad S, Milz S, Niemyer P, Südkamp NP, Imhoff AB, Alini M. *Tissue Eng Part A*. 2011 Feb;17(3-4):451-61. doi: 10.1089/ten.TEA.2009.0819.
97. Comparison of arthroscopic and open assessment of size and grade of cartilage defects of the knee. Niemyer P, Pestka JM, Erggelet C, Steinwachs M, Salzmänn GM, Südkamp NP. *Arthroscopy*. 2011 Jan;27(1):46-51. doi: 10.1016/j.arthro.2010.05.024.
98. Autologous chondrocyte implantation for treatment of focal cartilage defects in patients age 40 years and older: A matched-pair analysis with 2-year follow-up. Niemyer P, Köstler W, Salzmänn GM, Lenz P, Kreuz PC, Südkamp NP. *Am J Sports Med*. 2010 Dec;38(12):2410-6. doi: 10.1177/0363546510376742
99. Presence of subchondral bone marrow edema at the time of treatment represents a negative prognostic factor for early outcome after autologous chondrocyte implantation. Niemyer P, Salzmänn G, Steinwachs M, Südkamp NP, Schmal H, Lenz P, Köstler W. *Arch Orthop Trauma Surg*. 2010 Aug;130(8):977-83. doi: 10.1007/s00402-010-1049-8.
100. Chondrocyte-seeded type I/III collagen membrane for autologous chondrocyte transplantation: prospective 2-year results in patients with cartilage defects of the knee joint. Niemyer P, Lenz P, Kreuz PC, Salzmänn GM, Südkamp NP, Schmal H, Steinwachs M. *Arthroscopy*. 2010 Aug;26(8):1074-82. doi: 10.1016/j.arthro.2009.12.028.
101. Standardized cartilage biopsies from the intercondylar notch for autologous chondrocyte implantation (ACI). Niemyer P, Pestka JM, Kreuz PC, Salzmänn GM, Köstler W, Südkamp NP, Steinwachs M. *Knee Surg Sports Traumatol Arthrosc*. 2010 Aug;18(8):1122-7. doi: 10.1007/s00167-009-1033-4.
102. Arthroscopically assisted 2-bundle anatomical reduction of acute acromioclavicular joint separations. Salzmänn GM, Walz L, Buchmann S, Glabgly P, Venjakob A, Imhoff AB. *Am J Sports Med*. 2010 Jun;38(6):1179-87. doi: 10.1177/0363546509355645.
103. Comparison of native axial radiographs with axial MR imaging for determination of the trochlear morphology in patients with trochlear dysplasia. Salzmänn GM, Weber TS, Spang JT, Imhoff AB, Schöttle PB. *Arch Orthop Trauma Surg*. 2010 Mar;130(3):335-40. doi: 10.1007/s00402-009-0912-y.
104. T2 assessment and clinical outcome following autologous matrix-assisted chondrocyte and osteochondral autograft transplantation. Salzmänn GM, Paul J, Bauer JS, Woertler K, Sauerschnig M, Landwehr S, Imhoff AB, Schöttle PB. *Osteoarthritis Cartilage*. 2009 Dec;17(12):1576-82. doi: 10.1016/j.joca.2009.07.010.
105. Chondrocytes - one cell type, different subpopulations : characteristics and behavior of different types of chondrocytes and implications for tissue engineering applications. Grad S, Salzmänn GM. *Orthopade*. 2009 Nov;38(11):1038-44. doi: 10.1007/s00132-009-1489-4.
106. Physicobiochemical synergism through gene therapy and functional tissue engineering for in vitro chondrogenesis. Salzmänn GM, Nuernberger B, Schmitz P, Anton M, Stoddart MJ, Grad S, Milz S, Tischer T, Vogt S, Gansbacher B, Imhoff AB, Alini M. *Tissue Eng Part A*. 2009 Sep;15(9):2513-24. doi: 10.1089/ten.tea.2008.0479.
107. Patellar height before and after unicompartmental knee arthroplasty: association with early clinical outcome? Naal FD, Neuerburg C, von Knoch F, Salzmänn GM, Kriner M, Munzinger G

U. Arch Orthop Trauma Surg. 2009 Apr;129(4):541-7. doi: 10.1007/s00402-008-0654-2.

108. Association of body mass index and clinical outcome 2 years after unicompartmental knee arthroplasty. Naal FD, Neuerburg C, Salzmann GM, Kriner M, von Knoch F, Preiss S, Drobny T, Munzinger U. Arch Orthop Trauma Surg. 2009 Apr;129(4):463-8. doi: 10.1007/s00402-008-0633-7.
109. The influence of the stable expression of BMP2 in fibrin clots on the remodelling and repair of osteochondral defects. Vogt S, Wexel G, Tischer T, Schillinger U, Ueblacker P, Wagner B, Hensler D, Wilisch J, Geis C, Wübbenhorst D, Aigner J, Gerg M, Krüger A, Salzmann GM, Martinek V, Anton M, Plank C, Imhoff AB, Gansbacher B. Biomaterials. 2009 Apr;30(12):2385-92. doi: 10.1016/j.biomaterials.2009.01.016.
110. Double-bundle anterior cruciate ligament reconstruction in a skeletally immature adolescent athlete. Salzmann GM, Spang JT, Imhoff AB. Arthroscopy. 2009 Mar;25(3):321-4. doi: 10.1016/j.arthro.2008.11.008.
111. Sporting activity after high tibial osteotomy for the treatment of medial compartment knee osteoarthritis. Salzmann GM, Ahrens P, Naal FD, El-Azab H, Spang JT, Imhoff AB, Lorenz S. Am J Sports Med. 2009 Feb;37(2):312-8. doi: 10.1177/0363546508325666.
112. Incidence of associated injuries with acute acromioclavicular joint dislocations types III through V. Tischer T, Salzmann GM, El-Azab H, Vogt S, Imhoff AB. Am J Sports Med. 2009 Jan;37(1):136-9. doi: 10.1177/0363546508322891.
113. The anatomic reconstruction of acromioclavicular joint dislocations using 2 TightRope devices: a biomechanical study. Walz L, Salzmann GM, Fabbro T, Eichhorn S, Imhoff AB. Am J Sports Med. 2008 Dec;36(12):2398-406. doi: 10.1177/0363546508322524.
114. The coracoidal insertion of the coracoclavicular ligaments: an anatomic study. Salzmann GM, Paul J, Sandmann GH, Imhoff AB, Schöttle PB. Am J Sports Med. 2008 Dec;36(12):2392-7. doi: 10.1177/0363546508322887.
115. Arthroscopic anatomical reconstruction of the acromioclavicular joint. Salzmann GM, Walz L, Schoettle PB, Imhoff AB. Acta Orthop Belg. 2008 Jun;74(3):397-400.
116. The effects of clindamycin on human osteoblasts in vitro. Naal FD, Salzmann GM, von Knoch F, Tuebel J, Diehl P, Gradinger R, Schauwecker J. Arch Orthop Trauma Surg. 2008 Mar;128(3):317-23. doi: 10.1007/s00402-007-0561-y.
117. In vivo analysis of retroviral gene transfer to chondrocytes within collagen scaffolds for the treatment of osteochondral defects. Ueblacker P, Wagner B, Vogt S, Salzmann G, Wexel G, Krüger A, Plank C, Brill T, Specht K, Hennig T, Schillinger U, Imhoff AB, Martinek V, Gansbacher B. Biomaterials. 2007 Oct;28(30):4480-7. Epub 2007 Jul 13.
118. Rotator cuff tears and internal impingement in athletes. Tischer T, Salzmann GM, Imhoff AB. Orthopade. 2007 Oct;36(10):950, 952-6. Review. German.
119. Effects of cefuroxime on human osteoblasts in vitro. Salzmann GM, Naal FD, von Knoch F, Tuebel J, Gradinger R, Imhoff AB, Schauwecker J. J Biomed Mater Res A. 2007 Aug;82(2):462-8.
120. Laparoscopic resection of esophageal stricture with transgastric stapled anastomosis in a child with AIDS. Sidler D, Salzmann GM, Juzi JT, Moore SW. J Laparoendosc Adv Surg Tech A. 10

2006 Jun;16(3):331-4.

121. Inducible nonviral gene expression in the treatment of osteochondral defects. Ueblacker P, Wagner B, Krüger A, Vogt S, DeSantis G, Kennerknecht E, Brill T, Hillemanns M, Salzmann GM, Imhoff AB, Plank C, Gänzbacher B, Martinek V. *Osteoarthritis Cartilage*. 2004 Sep;12(9):711-9.