

## 2019年1月～12月 教室学術論文 (英語)

1. Kou I, Otomo N, Takeda K, Momozawa Y, Lu HF, Kubo M, Kamatani Y, Ogura Y, Takahashi Y, Nakajima M, Minami S, Uno K, Kawakami N, Ito M, Yonezawa I, Watanabe K, Kaito T, Yanagida H, Taneichi H, Harimaya K, Taniguchi Y, Shigematsu H, Iida T, Demura S, Sugawara R, Fujita N, Yagi M, Okada E, Hosogane N, Kono K, Nakamura M, Chiba K, Kotani T, Sakuma T, Akazawa T, Suzuki T, Nishida K, Kakutani K, Tsuji T, Sudo H, Iwata A, Sato T, Inami S, Matsumoto M, Terao C, Watanabe K, Ikegawa S: Genome-wide association study identifies 14 novel susceptibility loci for adolescent idiopathic scoliosis in Japanese. *Nat Commun* 10, 3685,2019
2. Sugawara E, Kato M, Kudo Y, Lee W, Hisada R, Fujieda Y, Oku K, Bohgaki T, Amengual O, Yasuda S, Onodera T, Hatakeyama S, Atsumi T. Autophagy promotes citrullination of VIM (vimentin) and its interaction with major histocompatibility complex class II in synovial fibroblasts. *Autophagy*. 2019 Sep 8:1-10. doi: 10.1080/15548627.2019.1664144.
3. Liu J, Wu N; Deciphering Disorders Involving Scoliosis and Comorbidities (DISCO) study, Yang N, Takeda K, Chen W, Li W, Du R, Liu S, Zhou Y, Zhang L, Liu Z, Zuo Y, Zhao S, Blank R, Pehlivan D, Dong S, Zhang J, Shen J, Si N, Wang Y, Liu G, Li S, Zhao Y, Zhao H, Chen Y, Zhao Y, Song X, Hu J, Lin M, Tian Y, Yuan B, Yu K, Niu Y, Yu B, Li X, Chen J, Yan Z, Zhu Q, Meng X, Chen X, Su J, Zhao X, Wang X, Ming Y, Li X, Raggio CL, Zhang B, Weng X, Zhang S, Zhang X, Watanabe K, Matsumoto M, Sudo H; Japan Early Onset Scoliosis Research Group, Jin L, Shen Y, Sobreira N, Posey JE, Giampietro PF, Valle D; Baylor-Hopkins Center for Mendelian Genomics, Liu P, Wu Z, Ikegawa S, Lupski JR, Zhang F, Qiu G. TBX6-associated congenital scoliosis (TACS) as a clinically distinguishable subtype of congenital scoliosis: further evidence supporting the compound inheritance and TBX6 gene dosage model. *Genet Med* 21,1548-1558,2019.
4. Ota M, Tanaka Y, Nakagawa I, Jiang JJ, Arima Y, Kamimura D, Onodera T, Iwasaki N, Murakami M. Chondrocytes play a role in the development of rheumatoid arthritis via TMEM147-mediated NF- $\kappa$ B activation. *Arthritis Rheumatol*. 2019 Nov 29. doi: 10.1002/art.41182.
5. Kumamaru H, Lu P, Rosenzweig ES, Kadoya K, Tuszynski MH. Regenerating Corticospinal Axons Innervate Phenotypically Appropriate Neurons within Neural Stem Cell Grafts. *Cell Rep*. 2019 Feb 26;26(9):2329-2339.
6. Aoyagi K, Wang H, Sudo H, Chiba A: Simple method to construct process maps for additive manufacturing using support vector machine. *Additive Manufacturing* 27,353-362,2019
7. Terkawi MA, Kadoya K, Takahashi D, Tian Y, Hamasaki M, Matsumae G, Alhasan H, Elmorsy S, Uetsuki K, Onodera T, Takahata M, Iwasaki N. Identification of IL-27 as a potent regulator of inflammatory osteolysis associated with vitamin E-blended ultra-high molecular weight polyethylene debris of orthopedic implants. *Acta Biomater*. 2019 Apr 1

- 5;89:242-251. doi: 10.1016/j.actbio.2019.03.028.
8. Kim W, Onodera T, Kondo E, Kawaguchi Y, Terkawi MA, Baba R, Hontani K, Joutoku Z, Matsubara S, Homan K, Hishimura R, Iwasaki N. Effects of ultra-purified alginate gel implantation on meniscal defects in rabbits. *Am J Sports Med* 47(3):640-650,2019
  9. Kim W, Onodera T, Kondo E, Terkawi MA, Homan K, Hishimura R, Iwasaki N: Which contributes to meniscal repair, the synovium or the meniscus? An in vivo rabbit model study with the freeze-thaw method. *Am J Sports Med.* 27:363546520906140.
  10. Hishimura R, Onodera T, Hontani K, Baba R, Homan K, Matsubara S, Joutoku Z, Kim W, Nonoyama T, Kurokawa T, Gong JP, Iwasaki N. Osteochondral Autograft Transplantation Technique Augmented by an Ultrapurified Alginate Gel Enhances Osteochondral Repair in a Rabbit Model. *Am J Sports Med.* 2019 Feb;47(2):468-478. doi: 10.1177/0363546518817527.
  11. Hanamatsu H, Nishikaze T, Tsumoto H, Ogawa K, Kobayashi T, Yokota I, Morikawa K, Suda G, Sho T, Nakai M, Miura N, Higashino K, Sekiya S, Iwamoto S, Miura Y, \*Furukawa JI, Tanaka K, Sakamoto N. Comparative Glycomic Analysis of Sialyl Linkage Isomers by Sialic Acid Linkage-Specific Alkylamidation in Combination with Stable Isotope Labeling of  $\alpha$ 2,3-Linked Sialic Acid Residues. *Anal Chem.* 2019 Nov 5;91(21):13343-13348.
  12. Otomo N, Takeda K, Kawai S, Kou I, Guo L, Osawa M, Alev C, Kawakami N, Miyake N, Matsumoto N, Yasuhiko Y, Kotani T, Suzuki T, Uno K, Sudo H, Inami S, Taneichi H, Shigematsu H, Watanabe K, Yonezawa I, Sugawara R, Taniguchi Y, Minami S, Kaneko K, Nakamura M, Matsumoto M, Toguchida J, Watanabe K, Ikegawa S. Bi-allelic loss of function variants of TBX6 causes a spectrum of malformation of spine and rib including congenital scoliosis and spondylocostal dysostosis. *J Med Genet* 56,622-628,2019
  13. Usami Y, Gunawardena AT, Francois NB, Otsuru S, Takano H, Hirose K, Matsuoka M, Suzuki A, Huang J, Qin L, Iwamoto M, Yang W, Toyosawa S, Enomoto-Iwamoto M. Possible Contribution of Wnt-Responsive Chondroprogenitors to the Postnatal Murine Growth Plate. *J Bone Miner Res.* 2019 May;34(5):964-974.
  14. Kato T, Inose H, Ichimura S, Tokuhashi Y, Nakamura H, Hoshino M, Togawa D, Hirano T, Haro H, Ohba T, Tsuji T, Sato K, Sasao Y, Takahata M, Otani K, Momoshima S, Tateishi U, Tomita M, Takemasa R, Yuasa M, Hirai T, Yoshii T, Okawa A. Comparison of Rigid and Soft-Brace Treatments for Acute Osteoporotic Vertebral Compression Fracture: A Prospective, Randomized, Multicenter Study. *J Clin Med.* 2019 Feb 6;8(2):198.
  15. Momma D, Onodera T, Homan K, Matsubara S, Sasazawa F, Furukawa JI, Matsuoka M, Yamashita T, Iwasaki N. Coordinated existence of multiple gangliosides is required for cartilage metabolism. *Osteoarthritis Cartilage.* 2019 Feb;27(2):314-325. doi: 10.1016/j.joca.2018.11.003.
  16. Shimizu T, Samaan MA, Tanaka MS, Pedroia V, Souza RB, Li X, Ma CB: Abnormal Biomechanics at 6 Months Are Associated With Cartilage Degeneration at 3 Years After Anterior Cruciate Ligament Reconstruction. *Arthroscopy.* 35(2):511-520, 2019
  17. Shimizu T, Cheng Z, Samaan MA, Tanaka MS, Souza RB, Li X, Ma CB: Increases in Joint Laxity After Anterior Cruciate Ligament Reconstruction Are Associated With Sagittal

Biomechanical Asymmetry. *Arthroscopy*. 35(7):2072-2079, 2019

18. Endo T, Kadoya K, Suzuki Y, Kawamura D, Iwasaki N. A novel experimental model to determine the axon-promoting effects of grafted cells after peripheral nerve injury. *Frontiers in cellular neuroscience*. 2019 June 28;13,280.
19. Kokabu T, Kawakami N, Uno K, Kotani T, Suzuki T, Abe Y, Maeda K, Inage F, Ito YM, Iwasaki N, Sudo H: A three-dimensional depth sensor imaging in identifying adolescent idiopathic scoliosis: a prospective multicenter cohort study. *Sci Rep* 9, 9678, 2019
20. Ohnishi T, Yamada K, Iwasaki K, Tsujimoto T, Higashi H, Kimura T, Iwasaki N, Sudo H. Caspase-3 knockout inhibits intervertebral disc degeneration related to injury but accelerates degeneration related to aging. *Sci Rep*, 9:19324, 2019
21. Joutoku Z, Onodera T, Matsuoka M, Homan K, Momma D, Baba R, Hontani K, Hama saki M, Matsubara S, Hishimura R, Iwasaki N. CCL21/CCR7 axis regulating juvenile cartilage repair can enhance cartilage healing in adults. *Sci Rep*. 2019 Mar 26;9(1):5165. doi: 10.1038/s41598-019-41621-3.
22. Stofkova A, Kamimura D, Ohki T, Ota M, Arima Y, Murakami M: Photopic light-mediated down-regulation of local  $\alpha$ 1A-adrenergic signaling protects blood-retina barrier in experimental autoimmune uveoretinitis. *Sci Rep*. 2019 Feb 20;9(1):2353. doi: 10.1038/s41598-019-38895-y.
23. Ogawa K, Kobayashi T, Furukawa JI, Hanamatsu H, Nakamura A, Suzuki K, Kawagishi N, Ohara M, Umemura M, Nakai M, Sho T, Suda G, Morikawa K, Baba M, Furuya K, Terashita K, Kobayashi T, Onodera M, Horimoto T, Shinada K, Tsunematsu S, Tsunematsu I, Meguro T, Mitsuhashi T, Hato M, Higashino K, Shinohara Y, Sakamoto N. Tri-antennary tri-sialylated mono-fucosylated glycan of alpha-1 antitrypsin as a non-invasive biomarker for non-alcoholic steatohepatitis: a novel glycobiomarker for non-alcoholic steatohepatitis. *Sci Rep*. 2020 Jan 15;10(1):321.
24. Homan K, Hanamatsu H, Furukawa JI, Okada K, Yokota I, Onodera T, Iwasaki N. Alteration of the Total Cellular Glycome during Late Differentiation of Chondrocytes. *Int J Mol Sci*. 2019 Jul 19;20(14). pii: E3546. doi: 10.3390/ijms20143546.
25. Miyazaki T, Hanamatsu H, Xu L, Onodera T, Furukawa J, Homan K, Baba R, Kawasaki T, Iwasaki N. Evaluation of Residual Human-Induced Pluripotent Stem Cells in Human Chondrocytes by Cell Type-Specific Glycosphingolipid Glycome Analysis Based on the Aminolysis-SALSA Technique. *Int J Mol Sci*. 2019 Dec 28;21(1).
26. Kobayashi T, Ogawa K, Furukawa JI, Hanamatsu H, Hato M, Yoshinaga T, Morikawa K, Suda G, Sho T, Nakai M, Higashino K, Numata Y, Shinohara Y, Sakamoto N. Quantifying Protein-Specific N-Glycome Profiles by Focused Protein and Immunoprecipitation Glycomics. *J Proteome Res*. 2019 Aug 2;18(8):3133-3141.
27. Lee WS, Yasuda S, Kono M, Kudo Y, Shimamura S, Kono M, Fujieda Y, Kato M, Oku K, Shimizu T, Onodera T, Iwasaki N, Atsumi T. MicroRNA-9 ameliorates destructive arthritis through down-regulation of NF- $\kappa$ B1-RANKL pathway in fibroblast-like synoviocytes. *Clin Immunol*. in press.

28. Yamada K, Sudo H, Iwasaki N, Chiba A: Mechanical analysis of notch-free pre-bent rods for spinal deformity surgery. *Spine (Phila Pa 1976)* 2019, in press
29. Shimizu T, Cruz A, Tanaka M, Mamoto K, Pedroia V, Burghardt AJ, Heilmeier U, Link TM, Graf J, Imboden JB, Li X: Structural Changes over a Short Period Are Associated with Functional Assessments in Rheumatoid Arthritis. *J Rheumatol.* 46(7):676-684, 2019
30. Watanabe T, Kanayama M, Takahata M, Oda I, Suda K, Abe Y, Okumura J, Hojo Y, Iwasaki N. Perioperative complications of spine surgery in patients 80 years of age or older: a multicenter prospective cohort study. *J Neurosurg Spine.* 2019 Dec 17:1-9.
31. Iwasaki K, Inoue M, Kasahara Y, Tsukuda K, Kawahara H, Yokota I, Kondo E, Iwasaki N, Yasuda K. Inclination of Blumensaat's line influences on the accuracy of the quadrant method in evaluation for anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2019 Jul 9 ; doi/10.1007/s00167-019-05619-8. (Epub ahead of print)
32. Hontani K, Onodera T, Terashima M, Momma D, Matsuoka M, Baba R, Joutoku Z, Matsubara S, Homan K, Hishimura R, Xu L, Iwasaki N. Chondrogenic differentiation of mouse induced pluripotent stem cells using the three-dimensional culture with ultra-purified alginate gel. *J Biomed Mater Res A.* 2019 May;107(5):1086-1093. doi: 10.1002/jbm.a.36615.
33. Ura K, Sudo H, Iwasaki K, Tsujimoto T, Ohnishi T, Ukeba D, Iwasaki N: Effects of intradiscal injection of local anesthetics on intervertebral disc degeneration in rabbit degenerated intervertebral disc. *J Orthop Res* 37:1963-1971,2019
34. Matsubara S, Onodera T, Maeda E, Momma D, Matsuoka M, Homan K, Ohashi T, Iwasaki N. Depletion of glycosphingolipids induces excessive response of chondrocytes under mechanical stress. *J Biomech.* 2019 Sep 20;94:22-30. doi: 10.1016/j.jbiomech.2019.07.006.
35. Fujita R, Hamano H, Kameda Y, Arai R, Shimizu T, Ota M, Sato D, Kobayashi H, Iwasaki N, Takahata M. Breast cancer cells expressing cancer-associated sialyl-Tn antigen have less capacity to develop osteolytic lesions in a mouse model of skeletal colonization. *Clin Exp Metastasis.* 2019 Dec;36(6):539-549.
36. Takeda K, Kou I, Otomo N, Grauers A, Fan YH, Ogura Y, Takahashi Y, Momozawa Y, Einarsdottir E, Kere J, Kawakami N, Tsuji T, Uno K, Suzuki T, Ito M, Minami S, Kotani T, Sakuma T, Yanagida H, Taneichi H, Yonezawa I, Sudo H, Chiba K, Hosogane N, Nishida K, Kakutani K, Akazawa T, Kaito T, Watanabe K, Harimaya K, Taniguchi Y, Shigematsu H, Demura S, Iida T, Kono K, Okada E, Fujita N, Yagi M., Matsumoto M, Qiu Y, Song YQ, Gerdhem P, Watanabe K, Ikegawa S. A multi-ethnic meta-analysis defined the association of rs12946942 with severe adolescent idiopathic scoliosis. *J Hum Genet* 64:493-498,2019
37. Yunoki S, Hatayama H, Ebisawa M, Kondo E, Yasuda K. A novel method for continuous formation of cord-like collagen gels to fabricate durable fibers in which collagen fibrils are longitudinally aligned. *J Biomed Mater Res B Appl Biomater* 107(4):1011-1023,2019
38. Murata K, Matsuoka Y, Nishimura H, Endo K, Suzuki H, Takamatsu T, Sawaji Y, Aihara T,

- Kusakabe T, Maekawa A, Yamamoto K, Watanabe K, Kaito T, Terai H, Tamai K, Tagami A, Yoshii T, Harimaya K, Kawaguchi K, Kimura A, Inoue G, Nakano A, Sakai D, Hiyama A, Ikegami S, Ohtori S, Furuya T, Orita S, Imagama S, Kobayashi K, Kiyasu K, Murakami H, Yoshioka K, Seki S, Hongo M, Kakutani K, Yurube T, Aoki Y, Uei H, Ajiro Y, Takahata M, Endo H, Abe T, Nakanishi K, Watanabe K, Okada E, Hosogane N, Funao H, Isogai N, Ishii K. The factors related to the poor ADL in the patients with osteoporotic vertebral fracture after instrumentation surgery. *Eur Spine J*. 2019 Aug 10;10.1007/s00586-019-06092-0.
39. Hamasaki M, Terkawi MA, Onodera T, Homan K, Iwasaki N. A Novel Cartilage Fragments Stimulation Model Revealed that Macrophage Inflammatory Response Causes an Upregulation of Catabolic Factors of Chondrocytes In Vitro. *Cartilage*. 2019 Feb 1;1947603519828426. doi: 10.1177/1947603519828426.
  40. Yanke AB, Urita A, Shin JJ, Cvetanovich GL, Moran EK, Bach BR Jr, Cole BJ, Inoue N, Verma NN. Topographic Analysis of the Distal Femoral Condyle Articular Cartilage Surface: Adequacy of the Graft from Opposite Condyles of the Same or Different Size for the Osteochondral Allograft Transplantation. *Cartilage*. 2019 Apr;10(2):205-213.
  41. Endo T, Kadoya K, Suzuki Y, Kawamura D, Iwasaki N. Evidence for cell-contact factor involvement in neurite outgrowth of DRG neurons stimulated by Schwann cells. *Experimental Physiology*. 2019 oct;104(10),1447-1454.
  42. Shimizu T, Markes AR, Samaan MA, Tanaka MS, Souza RB, Li X, Ma CB. Patients With Abnormal Limb Kinetics at 6 Months After Anterior Cruciate Ligament Reconstruction Have an Increased Risk of Persistent Medial Meniscal Abnormality at 3 Years. *Orthop J Sports Med*. 23;8(1):2325967119895248, 2020
  43. Tanabe Y, Yasuda K, Kondo E, Kawaguchi Y, Akita K, Yagi T. Comparison of graft length changes during knee motion among 5 different anatomic single-bundle anterior cruciate ligament reconstruction approaches: a biomechanical study. *Orthop J Sports Med* 26; 7(3):2325967119834933,2019
  44. Baba R, Kondo E, Iwasaki K, Joutoku Z, Onodera J, Onodera T, Yagi T, Iwasaki N, Yasuda K. Impact of Surgical Timing on Clinical Outcomes in Anatomic Double-Bundle Anterior Cruciate Ligament Reconstruction Using Hamstring Tendon Autografts. *Orthop J Sports Med* 15;7(11):2325967119880553, 2019
  45. Yabuuchi K, Kondo E, Onodera J, Onodera T, Yagi T, Iwasaki N, Yasuda K: Clinical outcomes and complications during and after medial open-wedge high tibial osteotomy using a locking plate: A 3 to 7-year follow-up study. *Orthop J Sports Med*.in press
  46. Shimizu H, Shimizu T, Takahashi D, Asano T, Arai R, Takakuwa Y, Iwasaki N. Corticosteroid dose increase is a risk factor for nonalcoholic fatty liver disease and contralateral osteonecrosis of the femoral head: a case report. *BMC Musculoskelet Disord*. 2019 Feb 19;20(1):88.
  47. Irie T, Takahashi D, Asano T, Shimizu T, Arai R, Terkawi AM, Ito YM, Iwasaki N. Effects of femoral bone defect morphology on initial polished tapered stem stability in massive defect model: a biomechanical study. *BMC Musculoskelet Disord*. 2019 Aug 1;20(1):355.
  48. Sato D, Kondo E, Yabuuchi K, Onodera J, Onodera T, Yagi T, Sakamoto K, Takasawa

- A, Iwasaki N, Yasuda K. Assessment of valgus laxity after release of the medial structure in medial open-wedge high tibial osteotomy: an in vivo biomechanical study using quantitative valgus stress radiography. *BMC Musculoskelet Disord* 20(1):481,2019
49. Onodera T, Nakano H, Homan K, Kondo E, Iwasaki N. Preoperative radiographic and clinical factors associated with postoperative floating of the lesser toes after resection arthroplasty for rheumatoid forefoot deformity. *BMC Musculoskelet Disord* 19;20(1):87,2019
  50. Matsuoka M, Onodera T, Majima T, Iwasaki K, Takahashi D, Kondo E, Iwasaki N. Correction osteotomy for bilateral varus knee deformity caused by premature epiphyseal closure induced by hypervitaminosis A: a case report. *BMC Musculoskelet Disord* 15;20(1):287,2019
  51. Watanabe K, Katsumi K, Ohashi M, Shibuya Y, Izumi T, Hirano T, Endo N, Kaito T, Yamashita T, Fujiwara H, Nagamoto Y, Matsuoka Y, Suzuki H, Nishimura H, Terai H, Tamai K, Tagami A, Yamada S, Adachi S, Yoshii T, Ushio S, Harimaya K, Kawaguchi K, Yokoyama N, Oishi H, Doi T, Kimura A, Inoue H, Inoue G, Miyagi M, Saito W, Nakano A, Sakai D, Nukaga T, Ikegami S, Shimizu M, Futatsugi T, Ohtori S, Furuya T, Orita S, Imagama S, Ando K, Kobayashi K, Kiyasu K, Murakami H, Yoshioka K, Seki S, Hongo M, Kakutani K, Yurube T, Aoki Y, Oshima M, Takahata M, Iwata A, Endo H, Abe T, Tsukanishi T, Nakanishi K, Watanabe K, Hikata T, Suzuki S, Isogai N, Okada E, Funao H, Ueda S, Shiono Y, Nojiri K, Hosogane N, Ishii K. Surgical outcomes of spinal fusion for osteoporotic thoracolumbar vertebral fractures in patients with Parkinson's disease: what is the impact of Parkinson's disease on surgical outcome? *BMC Musculoskelet Disord*. 2019 Mar 9;20(1):103.
  52. Endo K, Takahata M, Sugimori H, Yamada S, Tadano S, Wang J, Todoh M, Ito YM, Takahashi D, Kudo K, Iwasaki N. Magnetic Resonance Imaging T1 and T2 Mapping Provide Complementary Information on the Bone Mineral Density Regarding Cancellous Bone Strength in the femoral head of post-menopausal women with osteoarthritis, *Clin Biomech*, 2019; 65:13-18
  53. Asano T, Shimizu T, Takahashi D, Ota M, Sato D, Hamano H, Hiratsuka S, Takahata M, Iwasaki N. Potential Association with Early Changes of Serum Calcium Level after Switching to Denosumab Combined with Eldecartilol, *J Bone Miner Metab*. 2019;37(2):351-357
  54. Shimodan S, Sato D, Takahashi K, Nakamura Y, Hyakkan R, Watanabe T, Hishimura R, Ota M, Shimizu H, Hojo Y, Hasegawa Y, Chubachi T, Yasui K, Tsujimoto T, Tsukuda Y, Asano T, Takahashi D, Takahata M, Iwasaki N, Shimizu T\*. Ten years change in post fracture care for hip fracture patients. *J Bone Miner Metab* 2019 Oct 3;10.1007/s00774-019-01047-3.
  55. Ota M, Takahata M, Shimizu T, Momma D, Hamano H, Hiratsuka S, Amizuka N, Hasegawa T, Iwasaki N. Optimal administration frequency and dose of teriparatide for acceleration of biomechanical healing of long-bone fracture in a mouse model. *J Bone Miner Metab*. 2019 Mar;37(2):256-263.
  56. Endo T, Takahata M, Koike Y, Iwasaki N. Clinical characteristics of patients with thoracic

myelopathy caused by ossification of the posterior longitudinal ligament. *J Bone Miner Metab.* 2019, in press.

57. Abe Y, Yamada K, Abumi K, Iwasaki N, Sudo H: Long-term Changes in Vertebral Morphology after Cervical Spinal Fusion in Adolescent /Pediatric Patients: Retrospective Case Series with up to a Minimum 12 years of Follow-up. *World Neurosurg* 122:e765-772,2019.
58. Matsui Y, Minami A, Kondo M, Ishikawa J, Motomiya M, Iwasaki N. A Minimum 5-Year Longitudinal Study of New Total Wrist Arthroplasty in Patients with Rheumatoid Arthritis. *J Hand Surg Am.* 2019. in press.
59. Yamada K, Suda K, Matsumoto Harmon S, Komatsu M, Ushiku C, Takahata M, Minami A, Iwasaki N. Rapidly progressive cervical myelopathy had a high risk of developing deep venous thrombosis: a prospective observational study in 289 cases with degenerative cervical spine disease. *Spinal Cord.* 2019 Jan;57(1):58-64. doi: 10.1038/s41393-018-0213-9.
60. Kawaguchi Y, Kondo E, Iwasaki N, Tanaka Y, Yagi T, Yasuda K. Autologous living chondrocytes contained in the meniscal matrix play an important role in in vivo meniscus regeneration induced by in situ meniscus fragment implantation. *Orthop Traumatol Surg Res* 105(4):683-690,2019
61. Momma D, Iwamoto W, Iwasaki N. Long-term stress distribution patterns across the wrist joint in gymnasts assessed by computed tomography osteoabsorptiometry. *J Hand Surg Eur Vol.* 2019 Dec;44(10):1098-1100.
62. Hashii N, Suzuki J, Hanamatsu H, Furukawa JI, Ishii-Watabe A. In-depth site-specific O-Glycosylation analysis of therapeutic Fc-fusion protein by electron-transfer/higher-energy collisional dissociation mass spectrometry. *Biologicals.* 2019 Mar;58:35-43. (5-year IF=1.836)
63. El-Sayed S, Rizk MA, Terkawi M, Igarashi I. Cocktail Babesia bovis antigens for global detection of Babesia bovis infection in cattle. *Exp Parasitol.* 2019 Nov;206:107758.
64. Sato N, Okita G, Uchiyama S, Matsui Y, Wakabayashi Y, Ishii S, Kuniyoshi K, Hirachi K, Haro H, Kato H. Ulnar neuropathy at the elbow in 413 Japanese patients: An assessment of pathological elbow lesions and neurological severity. *J Orthop Sci.* 2019. in press.
65. Fujita R, Takahata M, Kokabu T, Oda I, Kajino T, Hisada Y, Takeuchi H, Iwasaki N. Retrospective study to evaluate the clinical significance of a second rise in C-reactive protein level following instrumented spinal fusion surgery. *J Orthop Sci.* 2019 Nov;24(6):963-968. doi: 10.1016/j.jos.2019.09.002. Epub 2019Sep 21.
66. Hiratsuka S, Takahata M, Hojo Y, Kajino T, Hisada Y, Iwata A, Yamada K, Iwasaki N. Increased risk of symptomatic progression of instability following decompression for lumbar canal stenosis in patients receiving chronic glucocorticoids therapy. *J Orthop Sci.* 2019 Jan;24(1):14-18.
67. Shimizu H, Endo T, Takahata M, Yasui K, Sodeyama Y, Iwasaki N. Occipitoatlantoaxial rotatory fixation caused by minor traumatic occipitoatlantal rotatory fixation with compensatory counter-rotation in atlantoaxial joint: A case report. *J Orthop Sci.* 2019 Oct 10.

68. Sakai Y, Kaito T, Takenaka S, Yamashita T, Makino T, Hosogane N, Nojiri K, Suzuki S, Okada E, Watanabe K, Funao H, Isogai N, Ueda S, Hikata T, Shiono Y, Watanabe K, Katsumi K, Fujiwara H, Nagamoto Y, Terai H, Tamai K, Matsuoka Y, Suzuki H, Nishimura H, Tagami A, Yamada S, Adachi S, Ohtori S, Orita S, Furuya T, Yoshii T, Ushio S, Inoue G, Miyagi M, Saito W, Imagama S, Ando K, Sakai D, Nukaga T, Kiyasu K, Kimura A, Inoue H, Nakano A, Harimaya K, Doi T, Kawaguchi K, Yokoyama N, Oishi H, Ikegami S, Futatsugi T, Shimizu M, Kakutani K, Yurube T, Oshima M, Uei H, Aoki Y, Takahata M, Iwata A, Seki S, Murakami H, Yoshioka K, Endo H, Hongo M, Nakanishi K, Abe T, Tsukanishi T, Ishii K. Complications after spinal fixation surgery for osteoporotic vertebral collapse with neurological deficits: Japan Association of Spine Surgeons with ambition multicenter study. *J Orthop Sci.* 2019 Nov;24(6):985-990.
69. Ishizu H, Shimizu T, Kaibara T, Asano T, Terkawi MA, Takahashi D, Iwasaki N. Bilateral subchondral insufficiency fractures of the femoral head in a normally active adolescent patient: A case report, *J Orthop Sci* 2019 Jun 5. pii: S0949-2658(19)30148-4
70. Watanabe K, Katsumi K, Ohashi M, Shibuya Y, Hirano T, Endo N, Kaito T, Yamashita T, Fujiwara H, Nagamoto Y, Matsuoka Y, Suzuki H, Nishimura H, Terai H, Tamai K, Tagami A, Yamada S, Adachi S, Yoshii T, Ushio S, Harimaya K, Kawaguchi K, Yokoyama N, Oishi H, Doi T, Kimura A, Inoue H, Inoue G, Miyagi M, Saito W, Nakano A, Sakai D, Nukaga T, Ikegami S, Shimizu M, Futatsugi T, Ohtori S, Furuya T, Orita S, Imagama S, Ando K, Kobayashi K, Kiyasu K, Murakami H, Yoshioka K, Seki S, Hongo M, Kakutani K, Yurube T, Aoki Y, Oshima M, Takahata M, Iwata A, Endo H, Abe T, Tsukanishi T, Nakanishi K, Watanabe K, Hikata T, Suzuki S, Isogai N, Okada E, Funao H, Ueda S, Shiono Y, Nojiri K, Hosogane N, Ishii K. Surgical outcomes of spinal fusion for osteoporotic vertebral fracture in the thoracolumbar spine: Comprehensive evaluations of 5 typical surgical fusion techniques. *J Orthop Sci.* 2019 Nov;24(6):1020-1026.
71. Onodera T, Baba R, Kasahara Y, Tsuda T, Iwasaki N. Therapeutic effects and adaptive limits of an acellular technique by ultrapurified alginate (UPAL) gel implantation in canine osteochondral defect models. *Regen Ther.* in press
72. Yamamoto J, Nakazawa D, Nishio S, Ishikawa Y, Makita M, Kusunoki Y, Nagai S, Fujieda Y, Takahata M, Yamada K, Yamamura T, Yotsukura A, Saito M, Shimazaki M, Atsumi T. Impact of Weekly Teriparatide on the Bone and Mineral Metabolism in Hemodialysis Patients With Relatively Low Serum Parathyroid Hormone: A Pilot Study. *Ther Apher Dial.* 2019 Jun 18;10.1111/1744-9987.12867.
73. Tsuji O, Suda K, Takahata M, Matsumoto-Harmon S, Komatsu M, Menjo Y, Watanabe K, Ishii K, Nakamura M, Matsumoto M, Minami A, Iwasaki N. Early surgical intervention may facilitate recovery of cervical spinal cord injury in DISH. *J Orthop Surg (Hong Kong).* 2019 Jan-Apr;27(1):2309499019834783.
74. Ishibashi Y, Adachi N, Hideyuki Koga H, Eiji Kondo E, Kuroda R, Mae T, Uchio T: J

apanese Orthopaedic Association 2019 guidelines for anterior cruciate ligament injuries (3rd Edition). *J Orthop Sci*, in press

75. Morita M, Kamegaya M, Takahashi D, Kamada H, Tsukagoshi Y, Tomaru Y. Proposal of a new type of innominate osteotomy without a bone graft in children- a preliminary study. *JBJS Open Access* 2019 Sep 16;4(3).
76. Yamaguchi T, Urita A, Endo T, Ota M, Iwasaki N: Charcot arthropathy of the shoulder joint in a patient with Guillain-Barre syndrome: A case report. *JBJS Cases Connector*. 2019, in press.
77. Hosogane N, Nojiri K, Suzuki S, Funao H, Okada E, Isogai N, Ueda S, Hikata T, Shiono Y, Watanabe K, Kaito T, Yamashita T, Fujiwara H, Nagamoto Y, Terai H, Tamai K, Matsuoka Y, Suzuki H, Nishimura H, Tagami A, Yamada S, Adachi S, Ohtori S, Orita S, Furuya T, Yoshii T, Ushio S, Inoue G, Miyagi M, Saito W, Imagama S, Ando K, Sakai D, Nukaga T, Kiyasu K, Kimura A, Inoue H, Nakano A, Harimaya K, Kawaguchi K, Yokoyama N, Oishi H, Doi T, Ikegami S, Shimizu M, Futatsugi T, Kakutani K, Yurube T, Oshima M, Uei H, Aoki Y, Takahata M, Iwata A, Seki S, Murakami H, Yoshioka K, Endo H, Hongo M, Nakanishi K, Abe T, Tsukanishi T, Ishii K. Surgical Treatment of Osteoporotic Vertebral Fracture with Neurological Deficit-A Nationwide Multicenter Study in Japan. *Spine Surg Relat Res*. 2019 Mar 22;3(4):361-367.
78. Iwata A, Abumi K, Takahata M, Sudo H, Yamada K, Endo T, Iwasaki N. Late Subaxial Lesion after Overcorrected Occipitocervical Reconstruction in Patients with Rheumatoid Arthritis. *Asian Spine J*. 2019 Apr;13(2):181-188.
79. Shiota J, Kawamura D, Iwasaki N. Chronic dislocation of the distal interphalangeal joint: Case Report. *Journal of Trauma and Injury* 2019;32(1):47-50.
80. Kawamura D, Funakoshi T, Iwasaki N. Trapeziectomy with Ligament Reconstruction and Interposition Arthroplasty using the Palmaris Longus Tendon: An Average 5-Year Follow-Up. *Clin Orthop Surg*. 2019 Dec;11(4):453-458.
81. Nagano Y, Kawamura D, Terkawi A, Urita A, Matsui Y, Iwasaki N. Minimum Ten-Year Outcomes of Partial Ulnar Nerve Transfer for Restoration of Elbow Flexion in Patients with Upper Brachial Plexus Injury. *J Hand Surg Asian Pac Vol*. 2019 Sep;24(3):283-288.
82. Kondo E: Anterior cruciate ligament reconstruction with remnant preservation: Current concepts. *J Isakos*, in press
83. Yamaji T, Hanamatsu H, Sekizuka T, Kuroda M, Iwasaki N, Ohnishi M, Furukawa JI, Yahiro K, Hanada K. A CRISPR Screen Using Subtilase Cytotoxin Identifies SLC39A9 as a Glycan-Regulating Factor. *iScience*. 2019 May 31;15:407-420.