

## List of publications related to IBEX collagen biomarker assays

### 2022

- Kuhi L, Tamm A, Kumm J, Järv K, Aare M, Agu O, Kisand T and Kisand K, (2021). Associations of Urinary Collagen II Neoepitope C2C with Total Knee Replacement Outcomes: Is OA a Systemic Disease in Rapidly Progressive Cases? *Appl. Sci.* 2022, 12, 164.

### 2019

- Azukizawa M, Ito H, Hamamoto Y, Fujii T, Morita Y et al. (2019). The effects of well-rounded exercise program on systemic biomarkers related to cartilage metabolism. *Cartilage.* 10: 451-8.
- Bender A, Kaessner U, Eichner G, Bachmann G, Steinmeyer J. (2019). Biomarkers of hand osteoarthritis are detectable after mechanical exercise. *J. Clin. Medicine.* 8:1545.
- Bricca A, Struglics A, Larsson S, Steultjens M, Juhl CB, Roos EM. (2019). Impact of exercise therapyon molecular biomarkers related to cartilage and inflammation in people at risk of, or with established, knee osteoarthritis: a systematic review and meta-analysis of randomized controlled trials. *Arthritis Care Res (Hoboken).* 71: 1504-15.
- Knych HK, Mama KR, Moore CE, Hill AE, McKemie DS. (2019). Plasma and synovial fluid concentrations and cartilage toxicity of bupivacaine following intra-articular administration of a liposomal formulation to horses. *Equine Vet.* 51:408-14
- Nelson AE, Fang F, Arbeeva L, Cleveland RJ, Schwartz TA et al. (2019). A machine learning approach to knee osteoarthritis phenotyping: data from the FNIH Biomarkers Consortium. *Osteoarthritis Cartilage.* 27: 994-1001.
- Struglics A, Saleh R, Sundberg E, Olsson M, Erlandsson Harris H, Aulin C. (2019). Juvenile idiopathic arthritis patients have a distinct cartilage and bone biomarker profile that differs from healthy and knee-injured children. *Clin. Exp. Rheumatol. Epub, In press*

### 2018

- Chu CR, Sheth S, Erhart-Hledik JC, Do B, Titchenal, MR, Andriacchi, TP. (2018). Mechanically stimulated biomarkers signal cartilage changes over 5 years consistent with disease progression in medial knee osteoarthritis patients. *J. Orthop. Res.* 36:891-7.
- Davis HC, Spang JT, Loesser RF, Larsson S, Ulici V et al. (2018). Time between anterior cruciate ligament injury and reconstruction and cartilage metabolism six-months following reconstruction. *Knee.* 25:296-305.
- Gabusi E, Paolella F, Manferdini C, Gambari L, Kon E et al. (2018a). Cartilage and bone serum biomarkers as novel tools for monitoring knee osteochondritis dissecans treated with osteochondral scaffold. *Biomed. Res. Int.* 2018: 9275102.
- Gabusi E, Manferdini C, Paolella F, Gambari L, Kon E et al. (2018b). Clinical and Biological signature of osteochondritis dessicans in a cross-sectional study. *Biomed. Res. Int.* 2018: 5458704 39.

- Huang X, Post JN, Zhong L, Leijten J, Larsson S et al (2018). Dickkopf-related protein 1 and gremlin 1 show different response than frizzled-related protein in human synovial fluid following knee injury and in patients with osteoarthritis. *Osteoarthritis Cartilage.* 26: 834-43.
- Ma T, Zhang Z, Song X, Bai H, Li Y et al. (2018). Combined detection of COMP and CS846 biomarkers in experimental rat osteoarthritis: a potential approach for assessment and diagnosis of osteoarthritis. *J. Orthop. Surg. Res.* 13: 230
- Titchenal MR, Williams AA, Asay JL, Migliore E, Erhart-Hledik JC et al. (2018). Mechanically stimulated CS846 correlates with ultrashort echo time enhanced T2\* quantitative MRI and gait mechanics 2 years after anterior cruciate ligament reconstruction. *Osteoarthritis Cartilage.* 26:344.
- Tsuruta A, Horiike T, Yoshimura M, Nagaoka I. (2018). Evaluation of the effect of the administration of a glucosamine-containing supplement on biomarkers for cartilage metabolism in soccer players: a randomized double-blind placebo-controlled study. *Mol. Med. Rep.* 18: 3941-8.

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- Boeth H, MacMahon A, Poole AR, Buttgereit F, Onnefjord P et al. (2017). Differences in biomarkers of cartilage matrix turnover and their changes over 2 years in adolescent and adult volleyball athletes. *J Exp Orthop* 4: 1-11.
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- Hatcher CC, Collins AT, Kim SY, Michel LC, Mostert WC 3rd et al. (2017). Relationship between T1rho magnetic resonance imaging, synovial fluid biomarkers, and the biochemical and biomechanical properties of cartilage. *J Biomech* ;55:18-26.
- Kraus VB, Collins JE, Hargrove D, Losina E, Nevitt M et al. (2017a) Predictive validity of biochemical biomarkers in knee osteoarthritis: data from the FNIH OA Biomarkers Consortium. *Ann Rheum Dis.* 76:186-95.
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- Kubomura D, Ueno T, Yamada M, Tomonaga M, Nagaoka I. (2017). Effect of N-acetylglucosamine administration on cartilage metabolism and safety in healthy subjects without symptoms of arthritis: A case report. *Exp. Ther. Med.* 13: 1614-21.
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## 2016

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