Appendix E1

Expert Panel Composition

1. Tuhina Neogi, Professor of Rheumatology and Epidemiology, Boston University. Her research focused primarily on risk factors for knee osteoarthritis and gout, pain mechanisms in knee osteoarthritis, as well as methodologic issues of relevance for rheumatic diseases. Dr. Neogi has authored more than 200 peer-reviewed publications to date. Dr. Neogi is a past chair of the FDA Arthritis Advisory Committee, serves/served on the boards two international societies: Osteoarthritis Research Society International (OARSI) and Gout, Hyperuricemia, and Crystal-Associated Diseases Network (G-CAN), and on committees for the American College of Rheumatology (ACR) and International Association for the Study Pain (IASP), among others. Her work has been recognized with the prestigious 2014 ACR Henry Kunkel Young Investigator Award for outstanding and promising independent contributions to rheumatology research. She is on the Core Steering committee for the 2019 ACR-AF Osteoarthritis Treatment Guidelines and is co-PI of the 2020 ACR Gout Treatment Guidelines.

2. Jeffrey N. Katz, Professor of Orthopedics and Medicine (Rheumatology), Harvard Medical School, Brigham and Women's Hospital, Boston. Dr. Katz is Principal Investigator of two NIH funded trials of rehabilitative and surgical outcomes in patients with osteoarthritis and meniscal tear. He has over 30-year experience in research utilizing a range of methodologies (trials, cohort, case control, qualitative, diagnostic) to address pressing questions relating to osteoarthritis and other musculoskeletal conditions. Dr. Katz is Past President of the Osteoarthritis Research Society International (OARSI). He authored more than 620 peer-reviewed papers focusing on osteoarthritis treatment and surgical outcomes especially total joint replacement.

3. C. Kent Kwoh, Professor of Medicine and Medical Imaging, Chief of the Division of Rheumatology, the Charles A.L. and Suzanne M. Stephens Chair of Rheumatology, and Director of the University of Arizona Arthritis Center. Dr. Kwoh's major research interests include outcome assessment and the examination of risk factors for the development includes the examination of risk factor assessment and outcomes related to knee and hip osteoarthritis; the identification of biomarkers, most notably MRI imaging biomarkers, for the development and/or progression of knee osteoarthritis; the examination of racial/ethnic disparities in the utilization of joint replacement and other treatment options for osteoarthritis; and the evaluation of predictive factors for outcomes following total joint replacement. Dr. Kwoh has authored more than 250 peer-reviewed publications to date. He was an original site Principal Investigator on the NIH-funded Osteoarthritis Initiative (OAI), and NIH-funded OAI ancillary studies such as the Pivotal OAI MRI Analyses and the Biomarkers of Early Arthritis of the Knee (BEAK). He has been the member of Expert Panels or committees for the development of guidelines for the management of hand, hip and knee osteoarthritis for the American College of Rheumatology (ACR), Osteoarthritis Research Society International (OARSI) and the American Academy of Orthopedic Surgeons (AAOS).

4. Philip G. Conaghan, Professor of Musculoskeletal Medicine and Director of the Leeds Institute of Rheumatic and Musculoskeletal Medicine at the University of Leeds, UK, a EULAR Centre of Excellence. He is a Rheumatologist and Deputy Director of the NIHR Leeds Biomedical Research Centre. His research spans early translational studies through large late-phase clinical trials, with major interests in understanding pathogenesis and developing effective therapies for osteoarthritis. He is an executive member of the international outcomes group OMERACT, was inaugural Chair of the European League Against Rheumatism (EULAR) Standing Committee on Musculoskeletal Imaging, and chaired UK NICE Osteoarthritis Clinical Guidelines in 2008 and 2014. He is on several editorial boards, is coeditor of the most recent Oxford Textbook of Rheumatology and has authored/coauthored over 550 PubMed listed peer-reviewed publications.

5. David T. Felson, Professor of Rheumatology and Epidemiology, Boston University, and Professor of Rheumatology and Public Health at the University of Manchester in England. His clinical research focuses on osteoarthritis. He was the founder of the Framingham Heart Study Osteoarthritis Substudy and is the scientific principal investigator of the NIH funded Multicenter Osteoarthritis Study. His research group was the first to identify that obesity caused knee osteoarthritis and they were the first to explore nutritional factors such as vitamin D and their effect on osteoarthritis. He carried out the first studies of MRI findings in OA, showing that bone marrow lesions and synovitis were sources of pain. He was the first nonbasic science recipient of the Kunkel young investigator award and the inaugural recipient of the Clinical Research Award from the American College of Rheumatology (ACR). He also received a lifetime achievement award from the Osteoarthritis Research Society International (OARSI) and in 2017, received the Carol Nachman prize given to a rheumatologist who has made a major contribution to our understanding of rheumatic disease. Dr. Felson authored/coauthored over 660 PubMed listed peer-reviewed publications.

6. Frank W. Roemer, Professor of Radiology, University of Erlangen (Germany) & Boston University, World expert on OA structure, progression and OA outcomes with more than 340 scientific peer reviewed publications. He developed and validated multiple instruments for tissue characterization in osteoarthritis and comprehensive joint assessment using quantitative and semiquantitative evaluation tools for application in cross-sectional and longitudinal fashion. An additional focus is the role of posttraumatic changes and later OA development. Dr. Roemer is Associate Editor for Imaging of one the leading journals of orthopedics and rheumatology "Osteoarthritis & Cartilage" since 2011.

7. Ali Guermazi, Professor of Radiology and Medicine, Boston University, World specialist in imaging of osteoarthritis with focus on early disease as defined by MRI. Under his leadership, the department of radiology started an ultrasound guided MSK intervention clinic with emphasis on intra-articular corticosteroid injections which turns to be very popular with more than 3,000 injections per year. Dr. Guermazi received the Clinical Award of the Osteoarthritis Research Society International (OARSI) in 2018 for his 25-year work on imaging of osteoarthritis. He published more than 550 peer-reviewed publications.