On December 5 and 6, 2002, OMERACT (Outcome Measures in Rheumatology Clinical Trials) and OARSI (Osteoarthritis Research Society International), with support from various pharmaceutical companies listed at the beginning of this supplement, held a Workshop for Consensus on Osteoarthritis Imaging in Bethesda, MD. The Workshop included participants from the academic, pharmaceutical and regulatory communities from US, Europe and Australia. The aim of the Workshop was to provide a state of the art review of imaging outcome measures for osteoarthritis of the knee to help guide scientists and pharmaceutical companies in conducting longitudinal, multi-site studies of this disease. A specific goal was to recommend robust techniques for acquiring radiographs and magnetic resonance images (MRI) of the knee for the Osteoarthritis Initiative (web site), a 5000-subject, 5-year observational study aimed at understanding the structural determinants of clinical outcomes in osteoarthritis and identifying biomarkers applicable to clinical trials of potential therapies for this disease. Another goal of the Workshop was to identify techniques that could be used in studies of less than 1-year duration — for so-called “Proof of Concept”.

The following reports summarize the results of these discussions and are organized in two sections. The first section addresses applications of MRI for quantifying articular cartilage in the knee and evaluating the joint as a whole organ. The second section focuses on radiographic techniques for monitoring structural progression in osteoarthritis. While it is true that advances have been made in both of these areas since the Workshop was originally held in 2002, the pace of this progress has been slow. It is hoped, therefore, that by publishing this information, research in this area will be accelerated and the field will move more rapidly towards a deeper understanding of this enigmatic disease and potential ways of treating it.

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