Physician Summary
Non- Surgical Treatment of Osteoarthritis of the Knee
March 4, 2014

The two factors that influence how osteoarthritis (OA) of the knee is managed are the presence of comorbidities and involvement of other joint sites. As such, for the first time, OARSI has developed guidelines for the non-surgical treatment of osteoarthritis of the knee that are stratified to each of four patient groups: patients with knee-only OA and no comorbidities, patients with knee-only OA with comorbidities, patients with multi-joint OA and no comorbidities, and patients with multi-joint OA with comorbidities. Comorbities included diabetes, hypertension, cardiovascular disease, renal failure, GI bleeding, depression, or a physical impairment limiting activity, including obesity.

After a comprehensive review of the current scientific evidence, each working group member gave each treatment a score for appropriateness, therapeutic benefit, and overall risk *for each of the four different patient populations*. These scores were converted into a recommendation category of either "appropriate", "not appropriate", or "uncertain" and a composite risk-benefit score.

It is important to note that an "uncertain" recommendation is NOT a negative recommendation, nor is it meant to rule out the use of a therapy. Instead, this category means that the working group found too little scientific evidence to support a recommendation or that a treatment has a moderately high risk profile coupled with low efficacy. As such, "uncertain" treatments should be weighed by physicians and patients for merit in specific, individual circumstances.

The new guidelines recommend a set of non-pharmacological core treatments as appropriate for all individuals (listed in order from highest benefit-to-risk score to lowest): land-based exercise, weight management, strength training, water-based exercise, and self-management and education. For weight management, the OARSI guidelines make a specific recommendation of achieving a 5% weight loss within a 20-week period to be effective at treating knee OA.

In drafting these guidelines, OARSI found relatively little scientific evidence specifically pertaining to management of patients who have OA in multiple joints and other health conditions, which represents a majority of people with OA. This highlights the need for additional research involving these patients that would help physicians and manage OA in this group most effectively.

**Key Updates to 2013 OARSI Guidelines:**

--Topical NSAIDs are recommended as appropriate for all patients with knee-only OA and in a scientific review, were found overall to be safer and better tolerated compared to oral NSAIDs.

--The prescription drug duloxetine was evaluated for the first time and found to be an appropriate treatment for knee-only OA patients without comorbidities and all multi-joint OA patients.

--Due to increased safety concerns about toxicity, acetaminophen/paracetamol was given an “uncertain” recommendation for all patients with comorbidities.

--Oral and transdermal opioid painkillers were given an “uncertain” recommendation for all patient groups due to concerns about increased risks for adverse and serious adverse events.

--Glucosamine and chondroitin were both found to be “not appropriate” for all patients when used for disease modification and “uncertain” for all patients when used for symptom relief.

--Balneotherapy, defined as using baths containing thermal mineral waters, was evaluated for the first time and found to be an appropriate therapy for patients with multi-joint OA and comorbidities, as this group has few other treatment options.