



# Effective Health Care Arthritis Therapies for Persons with Comorbid Cardiomyopathies Nomination Summary Document

## Results of Topic Selection Process & Next Steps

- Arthritis therapies for persons with comorbid cardiomyopathies was examined in two AHRQ comparative effectiveness reviews.
  - Chou R, McDonagh MS, Nakamoto E, Griffin J. Analgesics for Osteoarthritis: An Update of the 2006 Comparative Effectiveness Review. Comparative Effectiveness Review No. 38. (Prepared by the Oregon Evidence-based Practice Center under Contract No. HHS 290 2007 10057 I) AHRQ Publication No. 11(12)-EHC076-EF. Rockville, MD: Agency for Healthcare Research and Quality. October 2011. <http://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productid=805>
  - Donahue KE, Jonas DE, Hansen RA, et al. Drug Therapy for Rheumatoid Arthritis in Adults: An Update. Comparative Effectiveness Review No. 55 (Prepared by RTI-UNC Evidence-based Practice Center under Contract No. 290-02-0016-I.) Rockville, MD: Agency for Healthcare Research and Quality. April 2012. <http://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productid=1042>
- Given the lack of studies addressing this group of patients, arthritis therapies for persons with comorbid cardiomyopathies could potentially be considered for new research in comparative effectiveness.

## Topic Description

**Nominator:** Individual

**Nomination Summary:** The nominator is interested in knowing which arthritis treatments, particularly drugs, are best for use in individuals with comorbid heart disease.

### Staff-Generated PICO

**Population(s):** Adult patients with arthritis (osteoarthritis or rheumatoid arthritis) and comorbid cardiomyopathies (subgroups may include adults aged 60 and older; individuals with AEDs)

**Intervention(s):** Medications (e.g., NSAIDs, oral and local corticosteroids, other analgesics, biologic and non-biologic disease-modifying antirheumatic drugs (DMARDs), local viscosupplementation), patient education, and exercise

**Comparator(s):** Treatments compared to each other, alone or in combination

**Outcome(s):** Improved arthritis symptoms, slowed progression of arthritis, adverse cardiovascular outcomes

## Key Questions

from Nominator: None

## Considerations

- The topic meets Effective Health Care (EHC) Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- This topic has two main areas:
  1. Osteoarthritis treatment for individuals with comorbid heart disease
  2. Rheumatoid arthritis treatment for individuals with comorbid heart disease.
- The topic of osteoarthritis treatment for individuals with comorbid heart disease was found to be addressed by a 2011 AHRQ comparative effectiveness review titled *Analgesics for Osteoarthritis: An Update of the 2006 Comparative Effectiveness Review*. Key questions from this report include:
  - KQ1. What are the comparative benefits and harms of treating osteoarthritis with oral medications or supplements? How do these benefits and harms change with dosage and duration of treatment?
  - **KQ2. Do the comparative benefits and harms of oral treatments for osteoarthritis vary for certain demographic and clinical subgroups of patients?**
  - KQ3. What are the comparative effects of coprescribing H2 receptor antagonists, misoprostol, or proton pump inhibitors (PPIs) on the gastrointestinal harms associated with NSAID use?
  - KQ4. What are the comparative benefits and harms of treating osteoarthritis with oral medications compared with topical preparations, or of different topical medications compared with one another?
- The topic of rheumatoid arthritis treatment for individuals with comorbid heart disease was found to be addressed by a 2012 AHRQ comparative effectiveness review titled *Drug Therapy for Rheumatoid Arthritis in Adults: an Update*. Key questions from this report include:
  - KQ1. For patients with RA, do drug therapies differ in their ability to reduce disease activity, to slow or limit the progression of radiographic joint damage, or to maintain remission?
  - KQ2. For patients with RA, do drug therapies differ in their ability to improve patient-reported symptoms, functional capacity, or quality of life?
  - KQ3. For patients with RA, do drug therapies differ in harms, tolerability, patient adherence, or adverse effects?
  - **KQ4. What are the comparative benefits and harms of drug therapies for RA in subgroups of patients based on stage of disease, prior therapy, demographics, concomitant therapies, or comorbidities?**

## Importance of New Research

- The most common comorbid condition among adults with arthritis is heart disease. Drugs used for symptom control in rheumatoid arthritis and osteoarthritis may include NSAIDs, which may have cardiovascular toxicity, and tumor necrosis factor (TNF) inhibitors, which may be associated with new or worsening heart failure and are not recommended in the treatment of patients with comorbid rheumatoid arthritis and heart failure.

## Research Gaps

- Very little research examining arthritis treatment outcomes in patients with comorbid heart disease was identified in the recently completed AHRQ comparative effectiveness reviews on treatment of osteoarthritis and rheumatoid arthritis. Searches of the medical (Medline) literature found only a handful of studies examining arthritis treatment outcomes in this patient population. A review of study registries identified only a small number of studies related to heart disease among patients with osteoarthritis or rheumatoid arthritis.