# Drugs and Aging, 2019

**Supplement: Safety of Anti-Osteoarthritis Medications** 

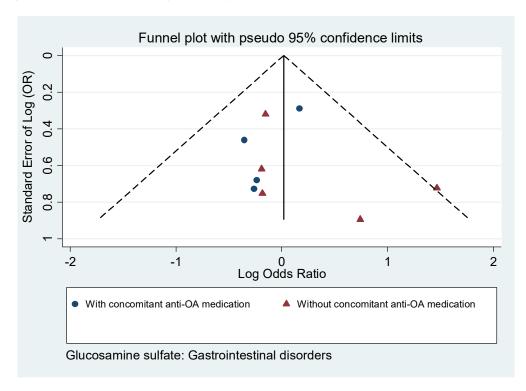
Safety of symptomatic slow-acting drugs in osteoarthritis: outcomes of a systematic review and meta-analysis

Germain Honvo, Jean-Yves Reginster, Véronique Rabenda, Anton Geerinck, Ouafa Mkinsi, Alexia Charles, Rene Rizzoli, Cyrus Cooper, Bernard Avouac, Olivier Bruyère

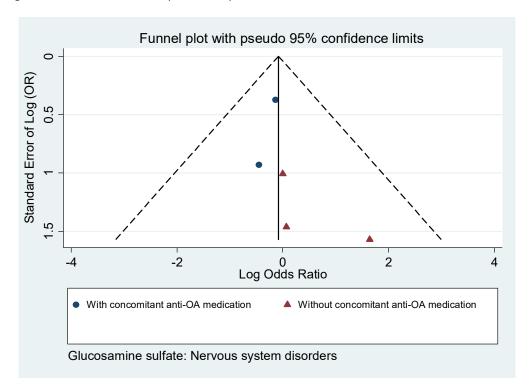
**ELECTRONIC SUPPLEMENTARY MATERIAL 3** 

### 1. Publication bias in studies on Glucosamine sulfate

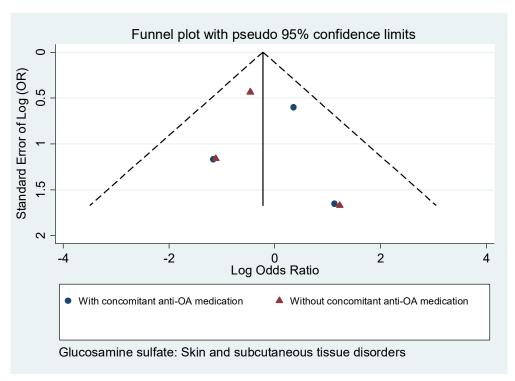
**Figure 48:** Funnel plot using data for the meta-analysis comparing gastrointestinal disorders with glucosamine sulfate versus placebo in patients with OA



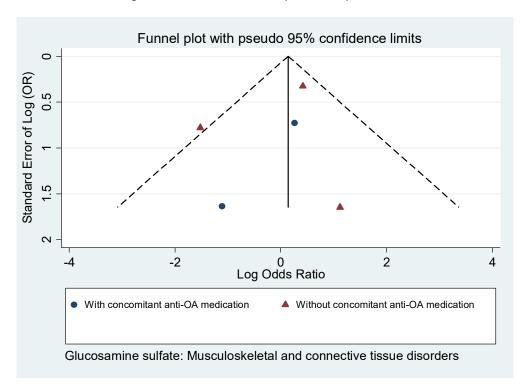
**Figure 49:** Funnel plot using data for the meta-analysis comparing nervous system disorders with glucosamine sulfate versus placebo in patients with OA



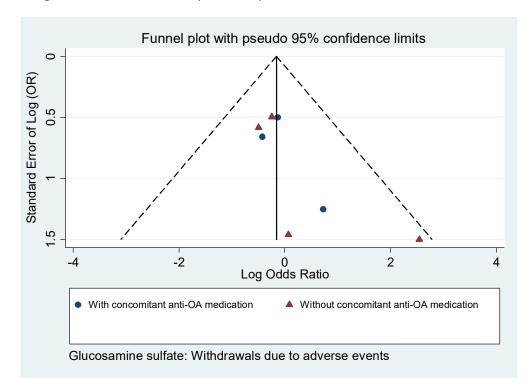
**Figure 50:** Funnel plot using data for the meta-analysis comparing skin and subcutaneous tissue disorders with glucosamine sulfate versus placebo in patients with OA



**Figure 51:** Funnel plot using data for the meta-analysis comparing musculoskeletal and connective tissue disorders with glucosamine sulfate versus placebo in patients with OA



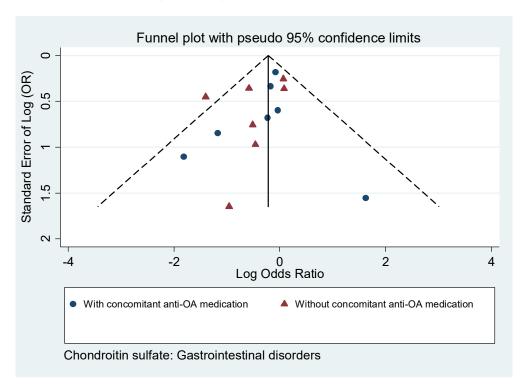
**Figure 52:** Funnel plot using data for the meta-analysis comparing dropouts due to adverse events with glucosamine sulfate versus placebo in patients with OA



Note: Very few studies of glucosamine sulfate versus placebo (<5) were available for the metaanalyses for cardiac disorders, vascular disorders, severe adverse events, and serious adverse events; therefore, the funnel plots for these outcomes are not displayed. For renal and urinary disorders, all studies were with null events in both the GS and placebo groups.

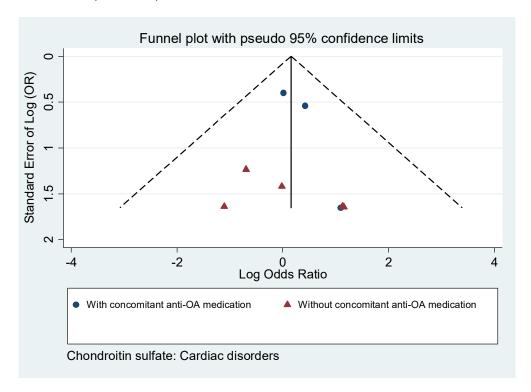
### 2. Publication bias in studies on Chondroitin sulfate

**Figure 53:** Funnel plot using data for the meta-analysis comparing gastrointestinal disorders with chondroitin sulfate versus placebo in patients with OA

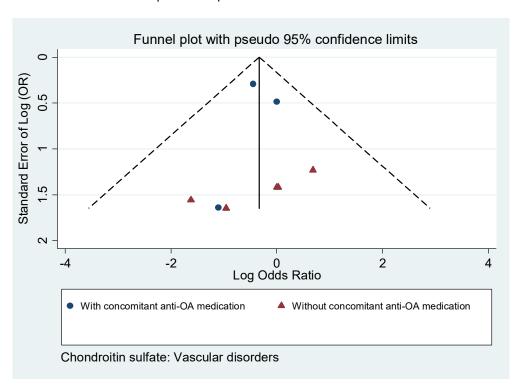


Harbord's test: p = 0.29

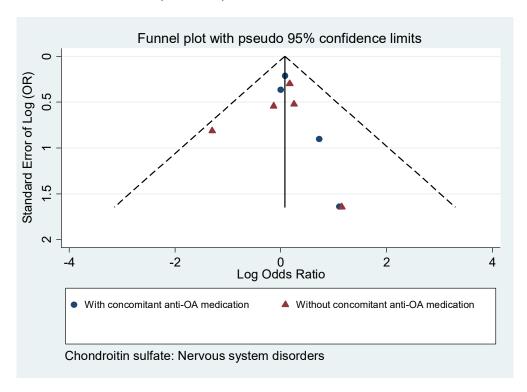
**Figure 54:** Funnel plot using data for the meta-analysis comparing cardiac disorders with chondroitin sulfate versus placebo in patients with OA



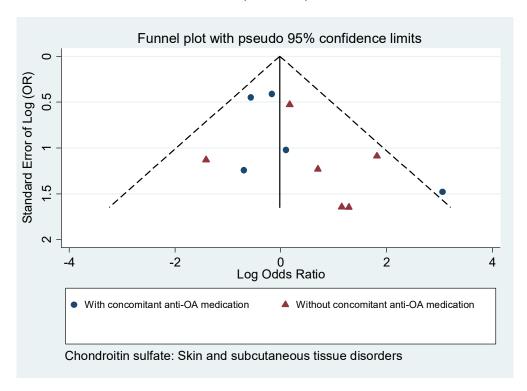
**Figure 55:** Funnel plot using data for the meta-analysis comparing vascular disorders with chondroitin sulfate versus placebo in patients with OA



**Figure 56:** Funnel plot using data for the meta-analysis comparing nervous system disorders with chondroitin sulfate versus placebo in patients with OA

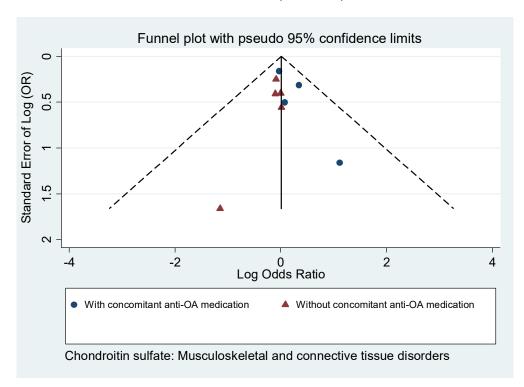


**Figure 57:** Funnel plot using data for the meta-analysis comparing skin and subcutaneous tissue disorders with chondroitin sulfate versus placebo in patients with OA

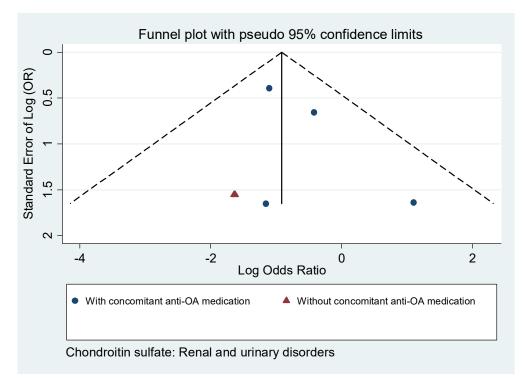


Harbord's test: p = 0.21

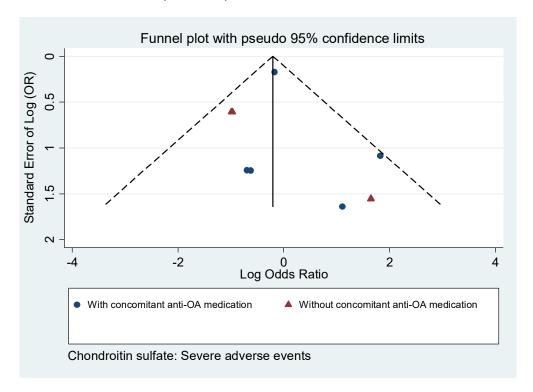
**Figure 58:** Funnel plot using data for the meta-analysis comparing musculoskeletal and connective tissue disorders with chondroitin sulfate versus placebo in patients with OA



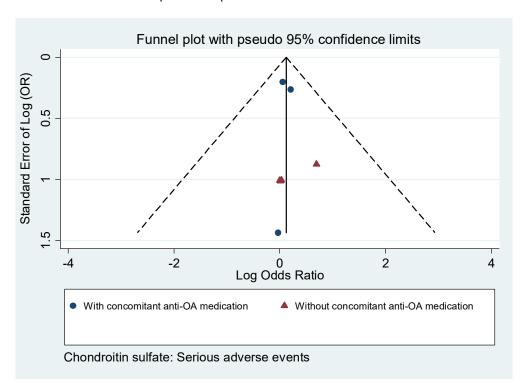
**Figure 59:** Funnel plot using data for the meta-analysis comparing renal and urinary system disorders with chondroitin sulfate versus placebo in patients with OA



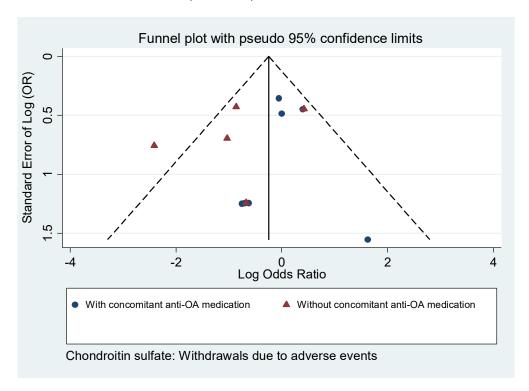
**Figure 60:** Funnel plot using data for the meta-analysis comparing severe adverse events with chondroitin sulfate versus placebo in patients with OA



**Figure 61:** Funnel plot using data for the meta-analysis comparing serious adverse events with chondroitin sulfate versus placebo in patients with OA



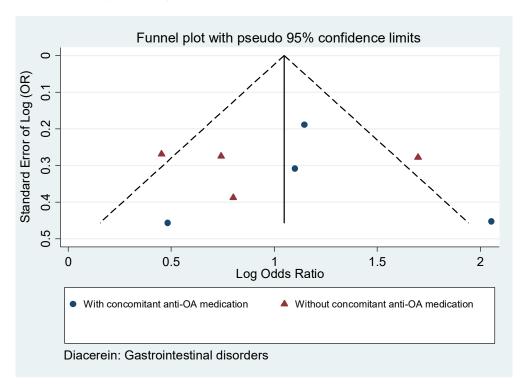
**Figure 62:** Funnel plot using data for the meta-analysis comparing dropouts due to adverse events with chondroitin sulfate versus placebo in patients with OA



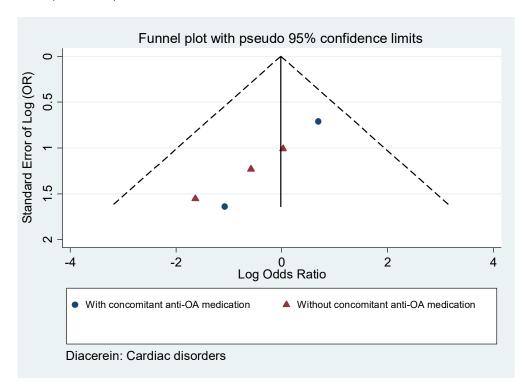
Harbord's test: p = 0.98

### 3. Publication bias in studies on Diacerein

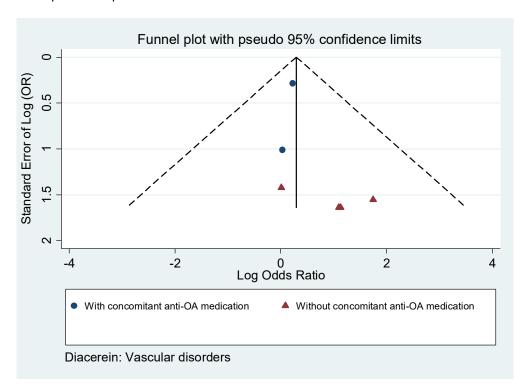
**Figure 63**: Funnel plot using data for the meta-analysis comparing gastrointestinal disorders with diacerein versus placebo in patients with OA



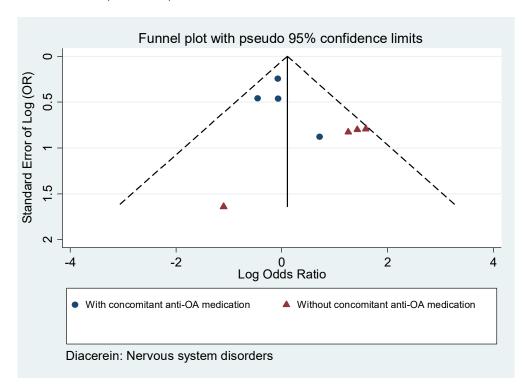
**Figure 64**: Funnel plot using data for the meta-analysis comparing cardiac disorders with diacerein versus placebo in patients with OA



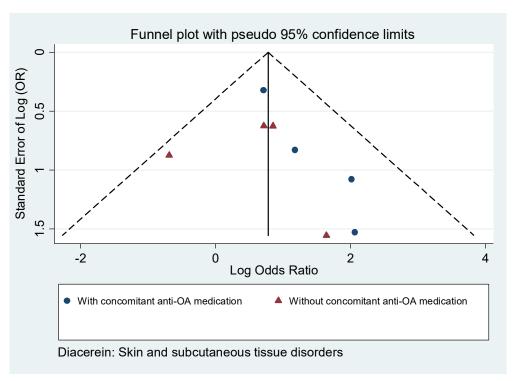
**Figure 65**: Funnel plot using data for the meta-analysis comparing vascular disorders with diacerein versus placebo in patients with OA



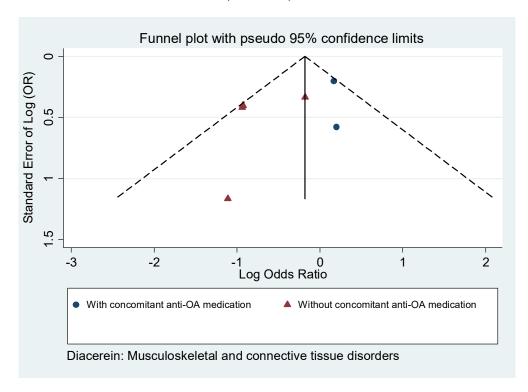
**Figure 66**: Funnel plot using data for the meta-analysis comparing nervous system disorders with diacerein versus placebo in patients with OA



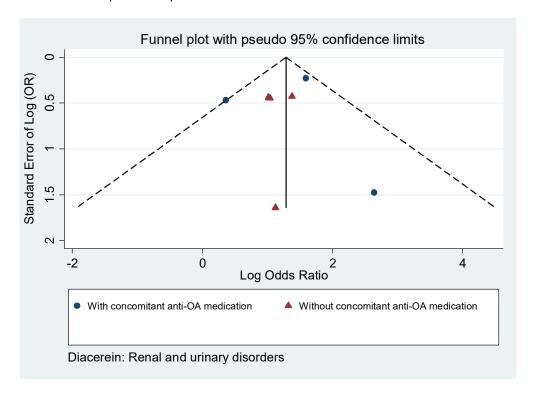
**Figure 67**: Funnel plot using data for the meta-analysis comparing skin and subcutaneous tissue disorders with diacerein versus placebo in patients with OA



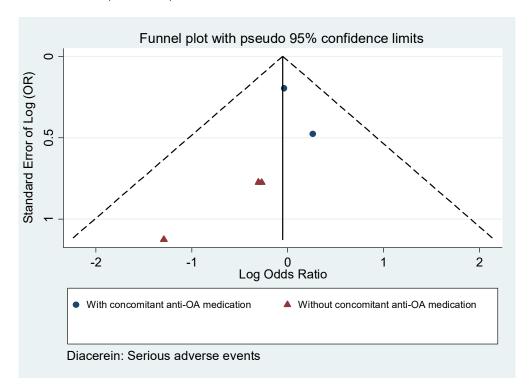
**Figure 68**: Funnel plot using data for the meta-analysis comparing musculoskeletal and connective tissue disorders with diacerein versus placebo in patients with OA



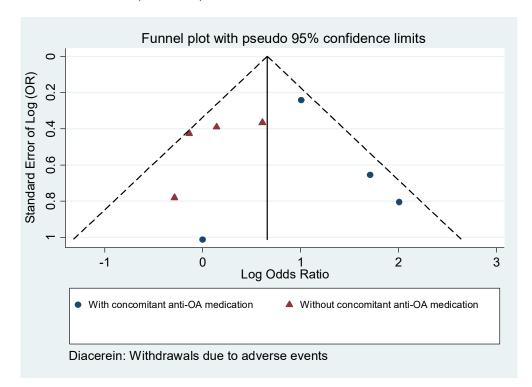
**Figure 69**: Funnel plot using data for the meta-analysis comparing renal and urinary disorders with diacerein versus placebo in patients with OA



**Figure 70**: Funnel plot using data for the meta-analysis comparing serious adverse events with diacerein versus placebo in patients with OA



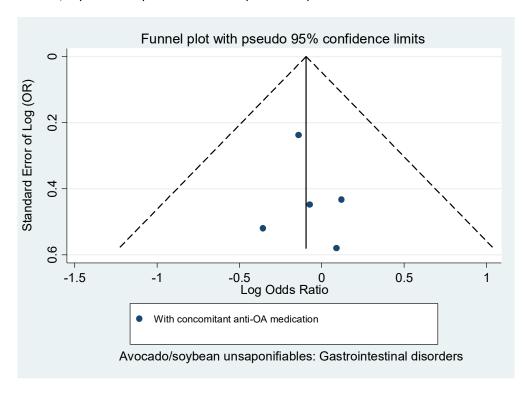
**Figure 71**: Funnel plot using data for the meta-analysis comparing dropouts due to adverse events with diacerein versus placebo in patients with OA



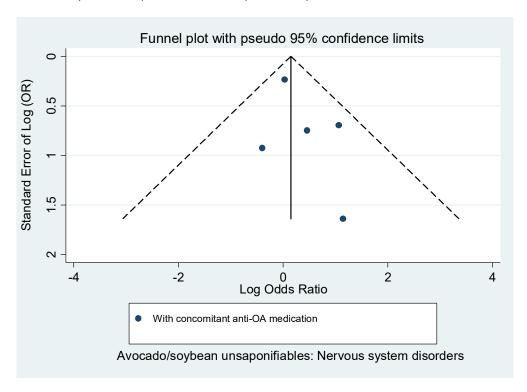
Note: Very few studies of diacerein versus placebo (<5) were available for the meta-analysis for severe adverse events; therefore, the funnel plot for this outcome is not displayed

## 4. Publication bias in studies on Avocado/soybean unsaponifiables

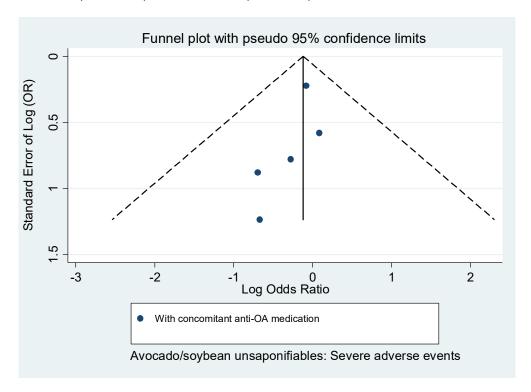
**Figure 72**: Funnel plot using data for the meta-analysis comparing gastrointestinal disorders with avocado/soybean unsaponifiables versus placebo in patients with OA



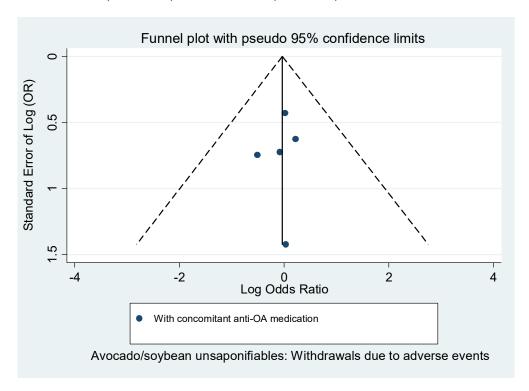
**Figure 73**: Funnel plot using data for the meta-analysis comparing nervous system disorders with avocado/soybean unsaponifiables versus placebo in patients with OA



**Figure 74**: Funnel plot using data for the meta-analysis comparing severe adverse events with avocado/soybean unsaponifiables versus placebo in patients with OA



**Figure 75**: Funnel plot using data for the meta-analysis comparing dropouts due to adverse events with avocado/soybean unsaponifiables versus placebo in patients with OA



Note: Very few studies of avocado/soybean unsaponifiables versus placebo (<5) were available for the meta-analyses for cardiac disorders, vascular disorders, skin and subcutaneous tissue disorders, musculoskeletal and connective tissue disorders, renal and urinary disorders, and serious adverse events; therefore, the funnel plots for these outcomes are not displayed.