**NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS): CARDIOVASCULAR EVENTS ARE RELATED PRIMARILY TO IMPACT OF NSAIDS ON BLOOD PRESSURE RATHER THAN TO COX SELECTIVITY**

**J.S. Borer**1,2, F. PRECISION Trial Executive Committee3;   
1,2Cell Biology, Radiology, Public Health and Surgery, SUNY Downstate, New York, NY, USA

3Multiple, Cleveland, OH, USA

Nonsteroidal anti-inflammatory drugs (NSAIDs), both non-selective and selective cyclooxygenase-2 (COX-2) inhibitors, are very widely prescribed, but they may cause increased blood pressure (BP) and adverse cardiovascular (CV) events. PRECISION-ABPM, a 4 month double-blind, non-inferiority substudy of PRECISION, was conducted in 444 pts (mean age 62±10 yrs) with osteo- or rheumatoid arthritis with relatively high CAD risk at 60 sites to determine BP effects (by 24 hr ABP) of the selective COX-2 inhibitor celecoxib (100-200mg bid) vs. the non-selective NSAIDs naproxen (375-500mg bid) and ibuprofen (600-800mg tid).The change in mean 24-hour SBP with celecoxib, ibuprofen and naproxen was -0.3mmHg (95% CI, -2.25, 1.74), 3.7 (95% CI, 1.72, 5.58) and 1.6mmHg (95% CI, -0.40, 3.57), respectively. BP difference was -3.9mmHg (p=0.009) between celecoxib and ibuprofen, -1.8mmHg (p=0.12) between celecoxib and naproxen, and -2.1mmHg (p=0.08) between naproxen and ibuprofen. The percentage of patients with normal baseline BP who developed hypertension was 23.2% for ibuprofen, 19.0% for naproxen and 10.3% for celecoxib (odds ratio 0.39, p=0.004 and odds ratio 0.49, p=0.03 vs. ibuprofen and naproxen, respectively). In PRECISION-ABPM, allocation to the non-selective NSAID ibuprofen, compared with the COX-2 selective inhibitor celecoxib associated with a significant increase of systolic BP, and a higher incidence of new-onset hypertension.