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LOW-DOSE ASPIRIN FOR THE PRIMARY PREVENTION OF CARDIOVASCULAR EVENTS: A SYSTEMIC META-ANALYSIS COMPARING EAST ASIAN VERSUS WESTERN POPULATION

Moderated Poster Contributions
Prevention Moderated Poster Theater, Poster Area, South Hall A1
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Background: East Asians have shown different risk profiles for both thrombophilia and bleeding compared with Western patients. We sought to evaluate the benefits and risks of low-dose aspirin (≤ 100mg/d) in primary prevention between the races.

Methods: We conducted a systematic search of MEDLINE, EMBASE, Cochrane Library, Web of Science, and Scopus until September 2015 for RCTs of aspirin for primary prevention. Eight RCTs reporting on major adverse CV event (MACE: CV death, MI or stroke) or major bleeding (ICH or major GI bleeding) were included (2 trials with 17,179 East Asians vs. 6 trials with 70,327 Westerners).

Results: Aspirin allocation yielded the similar reduction in MACE between East Asian vs. Western population (relative risk [RR] reduction: 14% vs. 12%; absolute risk [AR] reduction: 0.32% vs. 0.34%): the aspirin effect on MI was significant only in East Asians (RR: 0.65; 95% CI: 0.43-0.96), whereas this effect on stroke was significant only in Western population (RR: 0.86; 95% CI: 0.76-0.97). Aspirin allocation significantly increased the risk of major bleeding in East Asians vs. Westerners (RR increase [RRI]: 148% vs. 42%; AR increase [ARI]: 1.12% vs. 0.31%), which was more prominent for major GI bleeding (RRI: 229% vs. 55%; ARI: 0.91% vs. 0.29%).

Conclusions: Despite clinical benefit in MI prevention, aspirin treatment among East Asians markedly increases the risk of major bleeding in primary prevention. Therefore, routine use of aspirin for primary prevention must be more cautious in this race.