

## Equivalence seen between drug classes for hypertension monotherapy

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(HealthDay)—Most estimates show no differences in effectiveness



between classes of antihypertensive agents, according to a systematic, multinational, large-scale analysis published online Oct. 24 in *The Lancet*.

Marc A. Suchard, M.D., from the University of California in Los Angeles, and colleagues conducted a systematic, multinational, largescale study to estimate the relative risks of three primary (acute myocardial infarction, hospitalization for <u>heart failure</u>, and stroke) and six secondary effectiveness outcomes as well as 46 safety outcomes associated with use of different monotherapy drug classes for hypertension using real-world evidence.

Twenty-two thousand calibrated, propensity score-adjusted hazard ratios were generated comparing all classes and outcomes across databases for 4.9 million patients. The researchers found no effectiveness differences between classes in most estimates; however, better primary effectiveness was seen for thiazide or thiazide-like diuretics than angiotensin-converting enzyme inhibitors (hazard ratios, 0.84, 0.83, and 0.83 for acute myocardial infarction, hospitalization for heart failure, and stroke, respectively, while on initial treatment). Thiazide or thiazide-like diuretics were favored over angiotensin-converting enzyme inhibitors in safety profiles. Compared with four other classes (thiazide or thiazide-like diuretics, angiotensin-converting enzyme inhibitors, angiotensin receptor blockers, and dihydropyridine calcium channel blockers), nondihydropyridine calcium channel blockers were significantly inferior.

"Going forward, use of this analytical technique in this scenario might allow new insights and clarify otherwise unanswerable questions to empower clinicians to practice evidence-based medicine," write the authors of an accompanying editorial.

Several authors disclosed financial ties to the pharmaceutical, health



<u>insurance</u>, and other industries, including Janssen Research & Development and IQVIA, which partially funded the study.

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