**CARDIOVASCULAR OUTCOMES OF AMLODIPINE-BASED COMBINATION THERAPIES IN HIGH-RISK HYPERTENSIVE PATIENTS**

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**Objective:** To evaluate the treatment efficacy with the combination of a dihydropyridine calcium-channel blocker amlodipine with diuretics or angiotensin II receptor blocker on reducing the rate of cardiovascular events.

**Methods:**In a randomized, open-label, blinded-endpoint trial, hypertensive patients at high risk for cardiovascular events from 180 clinical centers in China were assigned to receive treatment with either amlodipine plus amiloride/hydrochlorothiazide (n=6776) or telmisartan (n=6766). The primary outcome was the composite of nonfatal stroke, nonfatal myocardial infarction or death from cardiovascular causes.

**Results:**The median follow-up was 41 months. No between-group difference was observed in the mean BP lowering. However, the primary-outcome events were reduced by 23.7% in the amlodipine-diuretics group compared with the amlodipine-telmisartan group (hazard ratio [HR], 0.76; p=0.006). Of note, amlodipine-diuretics treatment significantly lowered the risk of cardiovascular death (HR, 0.64; p=0.035) and fatal and nonfatal stroke (HR, 0.78; p=0.037) relative to amlodipine-telmisartan combination. Both treatments were safe and well tolerated.

**Conclusion:**The amlodipine-diuretics combination was more efficacious in reducing cardiovascular events than the amlodipine-telmisartan combination in hypertensive patients with high risk for such events, independent of blood pressure reduction.

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| Table 1: Hazard ratios for primary, secondary and other outcomes. |
| **Outcome-no. (%)** | **Amlodipine-Diuretics Group (N=6776)** | **Amlodipine-Telmisartan Group (N=6766)** | **Hazard Ratio (95% CI)** | **P value** |
| Primary outcome | 179 (2.6) | 235 (3.5) | 0.76 (0.63, 0.93) | 0.006 |
| Fatal and nonfatal stroke | 127 (1.9) | 163 (2.4) | 0.78 (0.62, 0.99) | 0.037 |
| Death from cardiovascular causes | 37 (0.5) | 58 (0.9) | 0.64 (0.43, 0.97) | 0.035 |
| Fatal and nonfatal myocardial infarction | 35 (0.5) | 38 (0.6) | 0.93 (0.59, 1.47) | 0.747 |
| Hospitalization for unstable angina | 49 (0.7) | 60 (0.9) | 0.82 (0.56,1.20) | 0.312 |
| Coronary revascularization | 33 (0.5) | 48 (0.7) | 0.69 (0.44,1.08) | 0.104 |
| Hospitalization for congestive heart failure | 6 (0.1) | 16 (0.2) | 0.38 (0.15, 0.97) | 0.042 |
| Composite of cardiovascular events | 192 (2.8) | 243 (3.6) | 0.79 (0.66, 0.96) | 0.016 |
| Death from any cause | 110 (1.6) | 98 (1.4) | 1.13 (0.86, 1.48) | 0.385 |