

Combination Therapy Is Superior to Sequential Monotherapy for the Initial Treatment of Hypertension: A Double-Blind Randomized Controlled Trial.

MacDonald TM, *et al.* British Hypertension Society Programme of Prevention And Treatment of Hypertension With Algorithm-based Therapy (PATHWAY). *J Am Heart Assoc.* 2017; 6(11). pii: e006986.

- Guidelines for hypertension vary in their preference for initial combination therapy or initial monotherapy (based on patient profile); therefore, efficacy and tolerability of these approaches were compared in a 1-year, randomized controlled trial in 605 patients with systolic blood pressure (BP) ≥ 150 mm Hg or diastolic BP ≥ 95 mm Hg.
 - At weeks 0-16, patients were randomly assigned to initial monotherapy (**losartan 50-100 mg or hydrochlorothiazide 12.5-25 mg** crossing over at 8 weeks), or initial combination (**losartan 50-100 mg plus hydrochlorothiazide 12.5-25 mg**).
 - At weeks 33-52, amlodipine with or without doxazosin could be added to achieve target BP.
- At Week 32, decline in systolic BP after initial combination therapy was greater (by 4.9 mm Hg) than after initial monotherapy. Plasma renin levels fluctuated with monotherapy, whereas response to combination therapy was uniform. There were no differences in withdrawals due to adverse events.

Initial combination therapy can be recommended for patients with BP >150/95 mm Hg.