Purpose: Evaluate the effectiveness of a fixed dose polypill containing a beta-blocker, ACE-inhibitor, diuretic and statin compared to placebo on primary prevention of CV events in a population with intermediate CVD risk.

Trial Design: N = 5713 randomized, men over 50 years and women over 55 with IHRS 10 or over, or men and women over 65 years with IHRS 5 or over; 84% had hypertension and 37% elevated blood glucose at baseline, mean follow up 4.6 years. 2x2x2 factorial RCT design. Polycap: atenolol 100 mg daily, ramipril 10 mg daily, hydrochlorothiazide 25 mg/daily, simvastatin 40 mg/daily vs. placebo.

Primary Endpoint: First occurrence of the composite of: CV death, non–fatal MI, non-fatal stroke, heart failure, resuscitated cardiac arrest or arterial revascularization.

Results:
• Polypill treatment resulted in a 21% reduction in primary CV outcome.
• SBP reduced by 5.8 mmHg over follow up.
• LDL-D reduced by 19 mg/dL over follow up.