

ASSESSING HETEROGENEITY OF EFFECTS ON BLOOD PRESSURE IN A META-ANALYSIS OF PHARMACIST INTERVENTIONS TRIALS. Arnaud Chiolerio, Bernard Burnand, Robert Platt, Gilles Paradis, \*Valérie Santschi (University of Lausanne & McGill University, Switzerland & Canada)

**Background:** Recent reviews of randomized control trials have shown that pharmacist interventions improve cardiovascular diseases (CVD) risk factors in outpatients. Various interventions were evaluated in different settings, and a substantial heterogeneity was observed in the effect estimates. To better express uncertainties in the effect estimates, prediction intervals (PI) have been proposed but are, however, rarely reported. **Objective:** Pooling data from two systematic reviews, we estimated the effect of pharmacist interventions on systolic blood pressure (BP), computed PI, and evaluated potential causes of heterogeneity. **Methods:** Data were pooled from systematic reviews assessing the effect of pharmacist interventions on CVD risk factors in patients with or without diabetes, respectively. Effects were estimated using random effect models. **Results:** Systolic BP was the outcome in 31 trials including 12 373 patients. Pharmacist interventions included patient educational interventions, patient-reminder systems, measurement of BP, medication management and feedback to physician, or educational intervention to health care professionals. Pharmacist interventions were associated with a large reduction in systolic BP (-7.5 mmHg; 95% CI: -9.0 to -5.9). There was a substantial heterogeneity (I<sup>2</sup>: 66%). The 95% PI ranged from -13.9 to -1.0 mmHg. The effect tended to be larger if the intervention was conducted in a community pharmacy and if the pharmacist intervened at least monthly. **Conclusion:** On average, the effect of pharmacist interventions on BP was substantial. However, the wide PI suggests that the effect differed between interventions, with some having modest effects and others very large effects on BP. Part of the heterogeneity could be due to differences in the setting and in the frequency of the interventions.