

PCV10

COST-EFFECTIVENESS OF A LIFESTYLE INTERVENTION FOR HYPERTENSION: AN OPEN RANDOMISED CONTROLLED TRIALMartikainen JA¹, Kastarinen M², Puska P³, Nissinen A³¹University of Kuopio, Kuopio, Finland, ²Kuopio University Hospital, Kuopio, Finland, ³National Public Health Institute, Helsinki, Finland

Elevated blood pressure (BP) is a common chronic condition. Hypertension is a significant risk factor for cardiovascular diseases (CVD) and mortality. In addition, its consequences are a significant burden to society due to hospital admissions, use of anti-hypertensive drugs, sickness leaves, and disability pensions. **OBJECTIVE:** To estimate the cost-effectiveness of systematic health counselling in the treatment of hypertension in primary health care. **METHODS:** A cost-effectiveness analysis was performed alongside an open clinical trial, where 698 subjects aged 25–74 years with systolic BP (SBP) 140–179 mmHg and/or diastolic BP (DBP) 90–109 mmHg or antihypertensive drug treatment were randomised to intervention and usual care groups. The intervention was provided by trained public health nurses, who gave lifestyle counselling targeting weight reduction, restriction in salt, alcohol and saturated fat consumption, and increasing leisure time physical activity. Short-term effects in the BP levels were extrapolated to obtain 10-year fatal CVD events by using the SCORE risk function. Incremental cost-effectiveness (ICER) was determined as cost per 1 mmHg reduction in SBP and DBP levels, and cost per life-years saved (LYS). Uncertainty was handled using a parametric Bayesian framework. **RESULTS:** The absolute change in the BP levels was significantly greater in the intervention group among patients without antihypertensive drug treatment compared to similar patients in the usual care group (–2.4 mmHg in SBP and –2.0 mmHg in DBP). The difference in the BP reduction in patients with antihypertensive drug treatment was not significant between groups. For the patients not receiving antihypertensive drugs ICERs were €60 per 1 mmHg reduction in SBP and €72 per 1 mmHg reduction in DBP, and €98,000 per LYS. **CONCLUSIONS:** The lifestyle counselling in the primary care setting is a moderately cost-effective method to treat patients to the treatment goals at least for patients without previous antihypertensive drug treatment.

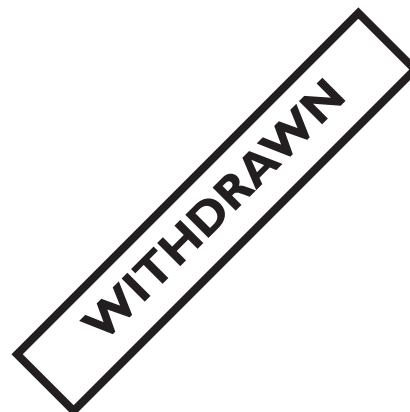
PCV11

CLINICAL EFFECTIVENESS OF BETALOC ZOC COMPARED TO METOPROLOL TARTRATE OR CARVEDILOL IN HYPERTENSION TREATMENTKawalec P¹, Borek E²¹Jagiellonian University, Kraków, Poland, ²Astra Zeneca Poland, Warsaw, Poland

OBJECTIVES: To assess the clinical effectiveness of Betaloc ZOC (metoprolol succinate), metoprolol tartrate or carvedilol in a treatment of primary arterial hypertension. **METHODS:** Systematic review of published clinical trials selected in accordance with Cochrane Collaboration guidelines was conducted to assess effectiveness and safety of the drugs in hypertension treatment. Systematic review was conducted in August 2005; Medline (Pubmed) Cochrane and EMBASE were searched to find relevant clinical trials. Only randomized clinical trials with credibility assessment of two or more points according to Jadad scale were included in the systematic review. In case no clinical trials with “head to head comparison” between metoprolol succinate and metoprolol tartrate or carvedilol were found, indirect effectiveness assessment with a common reference was done. Clinical data was pooled with RevMan 4.2. **RESULTS:** Six relevant clinical trials with direct comparison of metoprolol succinate and metoprolol tartrate were found. Pooled clinical data on proba-

bility of diastolic pressure normalization (BP < 95 mmHg) in case of Betaloc ZOC use compared to metoprolol tartrate revealed insignificant trend favouring Betaloc ZOC (respectively 69.2% vs. 63.4%); no significant difference in safety profile was shown between the drugs (respectively 40.7% vs. 41.9%). Systematic review revealed no randomized, “head to head comparison” clinical trials with metoprolol succinate and carvedilol; indirect comparison of the drugs with atenolol as a common reference was done to assess their clinical effectiveness. Indirect comparison showed superiority of Betaloc ZOC over carvedilol in hypertension treatment (respectively: 81% vs 71.4%); no significant differences in safety profile were revealed. **CONCLUSIONS:** Betaloc ZOC use in place of metoprolol tartrate or carvedilol lead to higher clinical effectiveness in primary arterial hypertension treatment.

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PCV13

EFFECT OF ABSOLUTE REDUCTION IN LDL CHOLESTEROL ON CARDIOVASCULAR EVENTS: DOES FINAL LDL CHOLESTEROL ACHIEVED MATTER?Rahilly CR¹, Gaziano J², Scranton R²¹Boston VA Health care System, Jamaica Plain, MA, USA, ²VA Boston Health care System, Harvard Medical School, Boston, MA, USA

OBJECTIVE: A recent meta-regression of clinical trials of statins demonstrated a linear relationship between magnitude of reduction of low-density lipoprotein cholesterol (LDL-C) and magnitude of cardiovascular risk reduction. We hypothesized that magnitude of reduction of LDL-C would be roughly proportional to degree of cardiovascular risk reduction, both for