Guidelines on Health Technology Assessment”, 2007 and “Cochrane Handbook for Systematic Reviews of Interventions”. In order to identify RCTs medical databases were searched: e.g. Medline, Embase and Cochrane Library. Calculations and metaanalyses were performed using StatsDirect statistical software.

RESULTS: Nineteen RCTs (treatment period 2–16 weeks), in which a total number of 1795 patients with PAH participated, were included in the SR. All patients continued CT with anticoagulants, vasodilators, diuretics and/or digitalis glycosides Bosentan, epoprostenol, iloprost and sildenafil significantly increase exercise capacity (according to the NYHA classification) comparing to placebo in the PAH population: bosentan vs. placebo: OR = 3.99 (95%CI: 1.74; 9.14); epoprostenol vs. placebo: OR = 5.96 (95%CI: 2.75; 13.0); iloprost vs. placebo: OR = 2.25 (95%CI: 1.02; 5.37); sildenafil vs. placebo: OR = 6.94 (95%CI: 2.78; 17.31). In bosentan, iloprost, sildenafil and treprostinil groups significantly higher improvement in exercise capacity, measured using the 6-minute walk test, was found comparing to placebo: WMD = 43.33 m (95%CI: 27.3; 59.8) for bosentan vs. placebo; 36.4 m (p < 0.0004)—iloprost vs. placebo; 55.82 m (95%CI: 38.03; 73.61)—sildenafil vs. placebo and 16.00 m (95%CI: 4.40; 27.60)—treprostinil vs. placebo. In safety analysis no statistically significant differences were observed between bosentan and placebo as well as sildenafil and placebo groups. Comparing to placebo, in epoprostenol group significantly more often jaw pain, nausea and diarrhea occurred, in iloprost group there was higher incidence of serious syncope or flushing and jaw pain and in the treprostinil group—sudden vasodilation, edema, jaw pain and reaction, pain, hemotoma or induration at the injection site. CONCLUSIONS: The use of these five drugs in addition to CT is more effective than CT alone.

OBJECTIVES: To explore the efficacy of irbesartan in reducing blood pressure (BP) compared to candesartan, in a real-world setting. METHODS: We analysed the records of 10,338 (5,425 candesartan; 4,913 irbesartan) adult patients with hypertension who were initiated on the two agents between 1998 and 2006 using the UK THIN GP database. The analyses presented report the comparisons for General hypertensive patients (systolic BP (SBP) ≥140 mmHg, diastolic BP (DBP) ≥90 mmHg) and Severe hypertensive patients (SBP ≥180 mmHg, DBP ≥110 mmHg) on either ARB over the first 2 years of treatment. RESULTS: In the General hypertensive group mean SBP reductions at 1 year reached 14.7 mmHg for irbesartan vs. 13.6 mmHg for candesartan. Mean DBP reductions reached 8.5 mmHg for irbesartan and 7.1 mmHg for candesartan. In the Severe group, mean SBP reductions reached 31.6 mmHg for irbesartan vs. 31.2 mmHg for candesartan. Mean DBP reductions reached 15.8 mmHg for irbesartan vs. 13.4 mmHg for candesartan. Similar comparisons were observed in the second year analysis. All but one of the comparisons were statistically significant in a multivariate analysis after adjusting for baseline BP, age, sex, weight, diabetes status, practice effect, socioeconomic status, 1st line vs. subsequent line usage, number of prior comorbidities, hypertension diagnosis status and type of and number of co-therapies prescribed. In the General hypertensive population, patients receiving irbesartan showed a greater mean reduction in SBP of 1.18 mmHg (p < 0.001) and of 0.55 mmHg (p < 0.001) in DBP over 2 years compared to those receiving candesartan. Similar differences among therapies were observed in Severe patients, 1.79 mmHg in SBP (p = 0.02), −0.10 mmHg in DBP (p = 0.747). Significance may have been affected by the small number of patients in the Severe group. CONCLUSIONS: In a real-world setting, patients receiving irbesartan are observed to achieve greater BP reductions compared to those receiving candesartan.

OBJECTIVES: Missing a single dose is the most common error in patients on once-daily antihypertensives. In this study we explored whether a drug which maintains its efficacy for >48 hrs offers adequate blood pressure (BP) reduction in the face of typical dosing errors. METHODS: Mean BP reduction and rate of loss of efficacy after stopping the drug were derived from a randomized study comparing aliskiren, ramipril, and irbesartan in 654 hypertensives. An independent database of dosing histories, compiled in patients on once-daily antihypertensives and recording electronically whether and when doses were taken, was used to describe the distribution of dosing errors. From this, each compared with BMS. Although DES carried a higher procedural cost, it had similar 12-month costs with BMS due to less post-PTCA intervention. DES was proved to be cost-effective to be used in Hong Kong public hospitals.

OBJECTIVES: The effectiveness of drug-eluting stents (DES) and bare-metal stents (BMS) in reducing restenosis and rate of major adverse cardiac events (MACE) in selected patients has been demonstrated by the randomized controlled trials. Despite the better efficacy of DES over BMS in reducing revascularization, the initial cost of DES is much higher than BMS, which limits its use in clinical practice. We aimed to evaluate the clinical outcome of BMS and DES placement in coronary artery disease patients and estimate the cost of BMS and DES placement in a Chinese setting.

METHODS: Nineteen RCTs (treatment period 2–16 weeks), in which a total number of 1795 patients with PAH participated, were included in the SR. All patients continued CT with anticoagulants, vasodilators, diuretics and/or digitalis glycosides Bosentan, epoprostenol, iloprost and sildenafil significantly increase exercise capacity (according to the NYHA classification) comparing to placebo in the PAH population: bosentan vs. placebo: OR = 2.25 (95% CI: 1.02; 5.37), sildenafil vs. placebo: OR = 6.94 (95% CI: 2.78; 17.31). In bosentan, iloprost, sildenafil and treprostinil groups, significantly higher improvement in exercise capacity, measured using the 6-minute walk test, was found comparing to placebo: WMD = 43.33 m (95% CI: 27.35; 59.17) for bosentan vs. placebo; 36.4 m (p < 0.0004) —iloprost vs. placebo; 55.82 m (95% CI: 38.03; 73.61) —sildenafil vs. placebo and 16.00 m (95% CI: 4.40; 27.60) —treprostinil vs. placebo. In safety analysis, no statistically significant differences were observed between bosentan and placebo as well as sildenafil and placebo groups. Comparing to placebo, in epoprostenol group, significantly more often jaw pain, nausea and diarrhea occurred, in iloprost group there was higher incidence of serious syncope or flushing and jaw pain and in the treprostinil group, sudden vasodilation, edema, jaw pain and reaction, pain, hemotoma or induration at the injection site. CONCLUSIONS: The use of these five drugs in addition to CT is more effective than CT alone.