Introduction. Despite advances in endovascular interventions, including the introduction of drug-eluting stents (DES), high target lesion revascularization (TLR) rates still burden the treatment of symptomatic lower-limb peripheral arterial disease (PAD). Eluvia™, a novel, sustained-release, paclitaxel-eluting DES, was shown to further reduce TLRs when compared with the paclitaxel-coated Zilver® PTX® stent, in the IMPERIAL randomized controlled trial. This evaluation estimated the cost-effectiveness of Eluvia when compared with Zilver PTX in Australia, based on 12-month clinical outcomes from the IMPERIAL trial.

Methods. A state-transition, decision-analytic model with a 12-month time horizon was developed from an Australian public healthcare system perspective. Cost parameters were obtained from the Australian National Hospital Cost Data Collection Cost Report (2016–17). All costs were captured in Australian dollars (AUD), where AUD 1 = USD 0.69 (June 2020). Complete sets of clinical parameters (primary patency loss, TLR, amputation, and death) and cost parameters from their respective distributions were bootstrapped in samples of 1,000 patients, for each intervention arm of the model. One-way and probabilistic sensitivity analyses were performed.

Results. At 12 months, modeled TLR rates were 4.5 percent for Eluvia and 8.9 percent for Zilver PTX, and mean total direct costs were AUD 6,537 [USD 4,511] and AUD 6,908 [USD 4,767], respectively (Eluvia average per patient savings; overall cohort=AUD 371 [USD 256]; diabetic cohort=AUD 625 [USD 431]). In probabilistic sensitivity analyses, Eluvia was cost-effective relative to Zilver PTX in 92.0 percent of all simulations at a threshold of $10,000 per TLR avoided. Eluvia was more effective and less costly (dominant) than Zilver PTX in 76.0 percent of simulations.

Conclusions. In the first year after the intervention, Eluvia was more effective and less costly than Zilver PTX, making Eluvia the dominant treatment strategy for treatment of symptomatic lower-limb PAD, from an Australian public healthcare system perspective. These findings should be considered when formulating policy and practice guidelines in the context of priority setting and making evidence-based resource allocation decisions for treatment of PAD in Australia.

PP339 A Budget Impact Model Of The Eluvia™ Drug-Eluting Stent from The Australian Public Hospital And National Payer Perspective

Nishath Altaf, Thathya V. Ariyaratne (Thathya.Ariyaratne@bsci.com), Adrian Peacock, Irene Deltetto, Jad El-Hoss, Shannon Thomas, Colman Taylor and Patrice Mwipatayi

Introduction. Improving long-term outcomes like target lesions revascularizations (TLRs) is a focus for endovascular interventions aimed at treating symptomatic lower-limb peripheral arterial disease (PAD). Eluvia™, a paclitaxel-eluting drug-eluting stent (DES) was shown to further reduce TLRs when compared with the paclitaxel-coated Zilver® PTX® stent in the IMPERIAL trial, a global, randomized controlled study. This budget-impact evaluation investigated cost-savings from Eluvia-use when compared with Zilver PTX, relying on the 12- to 24-month outcomes from the IMPERIAL trial.

Methods. A budget-impact model comparing Eluvia and Zilver PTX was developed from the Australian public healthcare payer, and an individual hospital perspective, with a 5-year time-horizon. Observed trial results were applied to each year's incident population and associated costs, and no extrapolation was conducted. The analysis used publicly available Australian national hospital cost data, population estimates, procedural statistics, epidemiological literature, and data from public hospital audits to verify eligible population for endovascular procedures (EVP) including DES. All costs were captured in Australian dollars (AUD), where AUD 1 = USD 0.69 (June 2020).

Results. Assuming 80-percent EVP eligibility, and a DES-use range of 10–28 percent, the 5-year model estimated potential national savings of AUD 4.3–12.1 million (M) [USD 3–8.3M] to the public healthcare payer, driven by reduced TLRs from Eluvia-use compared with Zilver-PTX. The model projected potential national savings of AUD 33.1–92.6M (USD 22.8–63.9M) to individual hospitals through reduced hospital bed days for adverse events (AE). The model forecasted 14,428–40,399 treated patients; 1,499–4,198 fewer TLRs; and 16,515–46,243 fewer hospital days for AE. At a state level, projected hospital savings were: New South Wales AUD 10.9–30.7M [USD 7.5–21.1M]; Victoria AUD 8.4–23.4M [USD 5.8–16.1M]; Queensland AUD 6.5–18.3M [USD 4.5–12.6M]; Western Australia AUD 3.4–9.5M [USD 2.3–6.5M]; South Australia AUD 2.3–6.4M [USD 1.6–4.4M].

Conclusions. Treatment of symptomatic lower-limb PAD with the Eluvia DES could lead to potential savings for the Australian healthcare system, at the national, state, and the local hospital level, based on improved patient outcomes.

PP349 Use Of Applications For Mobile Devices In Asthma Control: A Systematic Review Of Literature

Caroline Pavin Lacerda, Katiuce Tomazi Kny (katiuce.kny@gmail.com) and Maria Angélica Pires Ferreira

Introduction. Cell phones and information technology can be allies in the care of chronic diseases. Despite the wide availability of mobile device applications (apps), many offered by industry and providers, questions remain about the real efficacy of these technologies. The objective of this study was to evaluate the efficacy of mobile device apps designed for use by outpatients in treatment for asthma and describe its main characteristics and functionalities.

Methods. A systematic review according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol was conducted. MEDLINE and EMBASE were searched for randomized clinical trials (RCTs) evaluating the adoption of mobile apps on Android or iOS systems compared to the usual care, published in the last five years. Asthma control rate was defined as the primary outcome, and visits to

https://doi.org/10.1017/S0266462320001609 Published online by Cambridge University Press