prophylaxis cost far exceeding the direct financial benefit of preventing hospitalizations. Factors associated with lower ICERs included young age and the presence of multiple indications.

**PR518**

**COST-EFFECTIVENESS ANALYSIS OF FORMOTEROL ASSOCIATED TO Budesonide for Maintenance and reliever therapy (SYMBICORT SMART) VERSUS Salmeterol associated to Fluticasone for the treatment of moderate to severe persistent asthma under the Brazilian societal perspective**

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**OBJECTIVES:** To develop a cost-effectiveness analysis of formoterol associated to budesonide for maintenance and reliever therapy (FB SMART) versus salmeterol associated do fluticasone (SF) in the treatment of patients with moderate to severe persistent asthma, under the Brazilian societal perspective. **METHODS:** A Markov model was developed to project costs and outcomes associated with disease progression of patients with moderate to severe persistent asthma receiving SMART therapy or SF in a one year time horizon. Weekly cycles were considered and the model structure consisted of four possible health states: disease control, use of oral corticoids (OAC), hospitalization/emergency visit (HEV) and death. The probabilities of having severe exacerbations (OC or HEV) were extracted from the study by Kuna et al. All cause mortality rates were obtained from national epidemiological databases. Adverse events were not significantly different between comparators so were excluded from the model. Outcomes were expressed as quality-adjusted life years (QALY) and only direct medical costs were included in the analysis. Resource use during hospitalization, was estimated based on an expert panel. Maximum prices to consumer were obtained for drugs, and procedure costs were extracted from the Brazilian Stratification of Medical Conditions (CMS) database. **RESULTS:** In one year, the average number of severe exacerbations was 0.2436 in the SMART group and 0.3928 in the SF group, resulting in 0.1492 severe exacerbations avoided. Total cost for the SMART and SF groups were R$1823.56 and R$1417.49, respectively (incremental cost = R$406.07). The incremental cost-effectiveness ratio in 1 year was R$2721/SEA (US$1944 2005 PPP index USD1.0 = R$1.4). The variables that most influenced the results were the costs of SMART and SF therapy and the cost of hospitalization. **CONCLUSIONS:** SMART therapy reduces the risk of severe exacerbations when compared to SF in patients with moderate to severe persistent asthma, under the Brazilian societal perspective.

**PR519**

**IS IT TIME FOR SMOKING CESSATION PRODUCTS TO BE REIMBURSABLE IN THAILAND?**

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**OBJECTIVES:** Currently, no smoking cessation product is listed on National Essential List of Essential Medicine in Thailand. This study aimed to evaluate the cost-effectiveness of non-nicotine smoking cessation products in Thailand from health care system perspective. **METHODS:** A Markov model was used to model smoking cessation on cohorts of 10,000 male smokers age 40 who regularly smoked 10–20 cigarettes a day. An incremental cost-effectiveness ratio of varenicline, bupropion, and nortriptyline compared to self-quitting was estimated. Transition probabilities were obtained from literature reviews, while medical care costs and utilities were derived from a database of a Thai tertiary-care hospital and from the literature. The efficacy of all three products was obtained from a Bayesian meta-analysis. Costs of the medications were obtained from the Thai Drug and Medical Supply Information Center. Both costs and outcome were discounted at three percent. All costs were presented in 2008 Thai Baht. A series of sensitivity analysis including probabilistic sensitivity analysis, and cost-effectiveness acceptability curve were performed. **RESULTS:** In comparison to self-quitting, using a non-nicotine smoking cessation product results in cost-savings. Varenicline use results in the highest cost savings of 21,187 Baht or approximately US$6605 and life-years gained of 0.25 years. The use of nortriptyline and bupropion was shown to lead to similar magnitude of both life years saved and cost-savings. Nortriptyline and bupropion use had cost-savings of 11,506 Baht and 10,734 Baht, respectively. Probabilistic sensitivity analysis demonstrated that the probability of cost-saving from using nortriptyline, varenicline, and bupropion for smoking cessation was 99%, 85%, and 80%, respectively. **CONCLUSIONS:** From the perspective of the health care system, using any of the three products yielded cost-savings and life-year gains. These findings may persuade Thai policy-makers to consider including these smoking cessation products on the National List of Essential Medicine.