represent a cost-effective alternative to salmeterol and ipratropium if daily cost for tiotropium can be reduced to a reasonable level in Taiwan’s National Health Insurance.

PRS39
AMINO ACID FORMULA AS A FIRST-LINE DIAGNOSIS TOOL IN INFANTS WITH COW’S MILK ALLERGY (CMA). A COST-EFFECTIVENESS ANALYSIS UNDER THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM PERSPECTIVE
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OBJECTIVES: Cow’s milk allergy (CMA) is the main cause of food allergy in infants, resulting in life-threatening events such as anaphylaxis, impairment in growth and quality of life. CMA symptoms are also related to other diseases, making the differential diagnosis crucial for an earlier effective treatment, avoiding waste of resources. Amino acid formula (AAF) is an alternative in treatment of CMA patients, but it can also be used as a diagnostic tool for children with CMA suspicion, shortening the time for diagnosis, which may reduce resources use. Our goal is to estimate the cost-effectiveness of an alternative practice (AP) using AAF as a diagnostic tool for CMA. Methods: We performed a retrospective study where 199 children were contacted by letter, and 36 (18%) were interviewed by physician. Of those, 24 children were referred to a secondary care specialist food provocation was performed to confirm the IVD result. CONCLUSIONS: CMA IVD was beneficial in 54% of the cases and in 21% of the cases it was critical for decision making. The aim of the study was reached as avoiding events such as allergic reactions, early food introduction, low food intake and recruitment, it is likely that introducing IVD/IVD to traditional diagnostic algorithm can be considered cost-effective, with an average cost per avoided unnecessary diet for 480 EURs per child. To confirm the findings a larger study will be executed.

PRS42
COST EFFECTIVENESS ANALYSIS OF RESPIRATORY SYNCTIAL VIRUS INFECTION PROPHYLAXIS IN CHILDREN WITH CONGENITAL HEART DISEASE
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OBJECTIVES: The use of respiratory syncytial virus (RSV) prophylaxis is the leading cause of acute lower respiratory illness in children under two years of age. In Brazil, the VSR is the cause of 54% of all hospitalizations for pneumonia bronchiolitis in infants under one year old, reaching up to 70% during the epidemic periods. Congenital heart disease has an important risk factor for morbidity and mortality of RSV infection. This study performed a cost effectiveness analysis of Palivizumab (PVZ) to prevent RSV infection in infants undergoing cardiac surgery for correction of CHD.

METHODS: Three Systematic Reviews (SR) of literature were performed, in Medline, Cochrane and LilACS, for efficacy, safety of PVZ and the prevalence of RSV in infants in Brazil. The economic evaluation developed a decision analytic model to estimate the cost-effectiveness ratio of using PVZ for prophylaxis of RSV infection in children under two years of age treated with cardiac surgery. From the perspective of Public Health System, with the time horizon of the postoperatively period. RESULTS: Efficacy search (478 titles) showed that PVZ reduces hospitalization for children with CHD by 45%. Safety search (67 titles) showed that PVZ is safe for this population and the prevalence of RSV in Brazil search (120 titles) showed that in children hospitalized with lower respiratory tract infection there is a prevalence of 24.35% of RSV infection. The analytical model showed that the cost-effectiveness ratio of using PVZ is BRL1.20, BRL1.47, BRL2.30BRL, in the use of varenicline monotherapy, varenicline monotherapy as standard. CONCLUSIONS: The prevalence of RSV in Brazil is 24.35% PVZ was effective and safe to prevent severe RSV infection in children under two years of age with CHD, but it is not cost-effective. Its use has an important role in hospitalization of children receiving medication. Studies published worldwide are controversial, requiring discussion for the implementation of the therapy in Brazil.

PRS43
COST EFFECTIVENESS ANALYSIS OF VARENICLINE USE FOR SMOKING CESSATION IN THE CITY OF SÃO PAULO FROM THE PUBLIC HEALTH SYSTEM PERSPECTIVE
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OBJECTIVES: Drugs for smoking cessation are considered of great importance to the treatment of this epidemic, as smoking is the largest preventable cause of death worldwide. This study aimed to evaluate the cost-effectiveness of varenicline compared with bupropion and NRT (gum and patches) in the treatment of smoking population from São Paulo, Brazil’s city. METHODS: Effectiveness data of 6-months of treatment were obtained from 350 titles (540) in the current smoking cessation database. In the current smoking cessation database. 120 titles were analyzed, representing the best evidence in the field. The Cochrane Systematic review (120 titles) showed that in children hospitalized with lower respiratory tract infection there is a prevalence of 24.35% of RSV infection. The analytical model showed that the cost-effectiveness ratio of using PVZ is BRL1.20, BRL1.47, BRL2.30BRL, in the use of varenicline monotherapy, varenicline associated with bupropion, bupropion associated with gum, bupropion associated with NRT (gum and patches) and NRT (gum and patches, respectively. The ICERs were BRL 1.66 billion, BRL 153 million and per patient of BRL 1.400 and BRL 138.41 for varenicline associated with bupropion and bupropion associated with gum respectively and ICERs for bupropion associated with NRT and isolated NRT respectively were BRL 1.65 billion and BRL 164 billion (dominant). CONCLUSIONS: According to the results, treatment with varenicline (monotherapy) is cost-effective for all comparators and cost saving when compared to NRT and bupropion associated with NRT.

PRS44
COST-EFFECTIVENESS ANALYSIS OF A NEW EPINEPHRINE AUTO-INJECTOR FOR THE TREATMENT OF FOOD-ALLERGY REACTIONS: DECISION MODELLING USING SOCIETAL PERSPECTIVE
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OBJECTIVES: Food allergy affects around 15 million Americans with an annual economic burden of over $25 billion. Guidelines emphasize prompt use of epinephrine auto-injector (EAI) for emergency treatment of allergic reactions. This study was focused to assess the cost-effectiveness of Aanaphylaxis EAI in routine daily life and emergency setting of life-threatening food-allergy reactions. METHODS: A Markov Decision analysis model was developed to estimate the incremental cost-effectiveness ratio (ICER) compared to standard EAI, from a societal perspective. The EAI is defined as emergency access to food limbic injectors with BRL 100 per injector, 5% chance of treatment failure and 5% immediate death after food ingestion. RESULTS: The ICERs were two times lower than 0.98 for all the modelled values of reduction in time with symptoms. Sensitivity analyses adopting various alternative assumptions found only modest differences in cost savings between the phases, but did not change the conclusions of the analysis. Results of the net health regression provided further evidence that the analysis was cost-effective. CONCLUSIONS: The effectiveness of all EAI strategies can be considered cost-effective for clinical practice in routine daily life and emergency setting of life-threatening food-allergy reactions.