

ECONOMIC EVALUATION OF BENRALIZUMAB AS ADD-ON MAINTENANCE TREATMENT OF ADULT PATIENTS IN MEXICO WITH UNCONTROLLED SEVERE EOSINOPHILIC ASTHMA

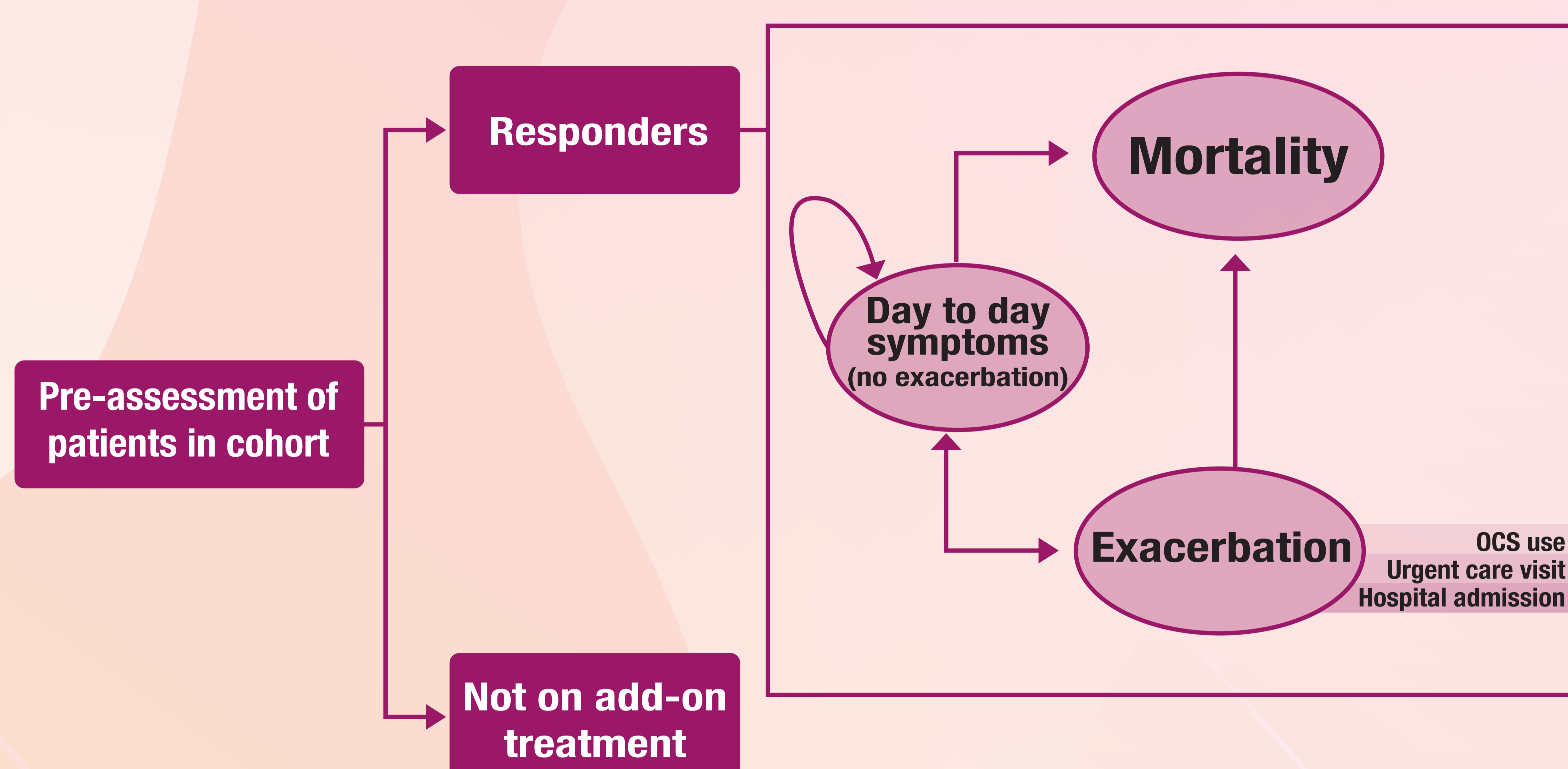
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Objective

We determined the cost-effectiveness as well as the budgetary impact of benralizumab plus high dosages of inhaled corticosteroids plus long-acting β 2-agonists (ICS-LABA) compared with omalizumab plus ICS-LABA for the treatment of adults with severe uncontrolled eosinophilic asthma.

Methods

- A cost-effectiveness analysis (CEA) was undertaken from the perspective of the Mexican public health system.
- A matching-adjusted indirect comparison was performed considering SIROCCO and CALIMA trials for benralizumab, INNOVATE and EXTRA for omalizumab.
- Before entering to Markov process, patients were classified according to their levels of response after a preestablished period (8 weeks for benralizumab and 16 weeks for omalizumab) to continue or not receiving biological add-on treatment.
- The outcome measure was exacerbations frequency.
- Direct medical costs were assessed. A lifetime horizon was used with a discount rate of 5%.
- Sensitivity analyzes and a budget impact analysis (BIA) were conducted.



Results

Biologics plus ICS-LABA suggested a cumulative frequency of exacerbations per patient of 20.34 for benralizumab and 22.53 for omalizumab. Benralizumab plus ICS-LABA was more cost-effective than omalizumab plus ICS-LABA with MXN\$68,087 less cost for exacerbation avoided. In addition, BIA demonstrates the small increase of benralizumab (0.016%) on the budget that Mexican public health system allocates for medicines and pharmaceutical products. Sensitivity analyses suggest that the conclusions of the base case are robust.

Conclusions

Using model input from the Mexican public health system, benralizumab as add-on to maintenance treatment for uncontrolled, severe eosinophilic asthma decreased the occurrence and costs of clinically relevant exacerbations. Benralizumab demonstrated its cost-effectiveness and reduced budgetary impact against omalizumab on the Mexican public health sector.

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