

Allergen immunotherapy for the treatment of allergic rhinitis and/or asthma

FINAL COMPREHENSIVE RESEARCH PLAN

June 2015

Study Team: Pharmacoeconomic Unit

ODPRN Drug Class Review Proposal: Pharmacoeconomic Unit

Study Title: Allergen immunotherapy for the treatment of allergic rhinitis and/or asthma

Research Questions

- RQ1. What is the current evidence for the comparative cost-effectiveness of allergen immunotherapy for the treatment of allergic rhinitis and/or asthma?
- RQ2. What is the budget impact of alternative policies for reimbursing allergen immunotherapy options for the treatment of allergic rhinitis and/or asthma?

Methods

Systematic Review of Published Economic Evaluations

To address RQ1 we will conduct a systematic review of the available literature on the cost-effectiveness of allergen immunotherapies for the treatment of allergic disorders. Specifically, therapeutic options will include subcutaneous immunotherapy (SCIT), sublingual immunotherapy (SLIT), multiallergen versus single allergen SCIT, as compared with each other, placebo and/or standard pharmacotherapy (e.g. intranasal steroids, antihistamines).

A search of the medical literature will be conducted in MEDLINE (OVID interface, indexed, in-process and other non-indexed citations, 1946 onwards), EMBASE (OVID interface, 1947 onwards), NHS EED, and Tufts CEA registry in order to capture all relevant literature based on the NHS EED recommended search strategy. This literature search will be carried out by coupling a standard search strategy for identifying economic studies with the clinical search terms adopted by the clinical review. Moreover, a search of grey literature sources such as the CADTH and NICE websites, as well as hand-searching of reference lists of retrieved studies will supplement the electronic database search.

Two independent reviewers will screen the titles and abstracts of citations retrieved by the initial literature search, and potentially relevant full-text articles will be obtained and screened for inclusion in the economic appraisal by the same two reviewers. Any disagreements will be resolved by discussion or the involvement of a third reviewer.

Extracted studies will then be further reviewed with studies excluded for lack of context or for not being full economic evaluations.

Critical appraisal of economic evidence will entail identifying common methodological issues within included studies. Each study will be assessed through a three step process: initial assessment for validity, assessment of study quality, and assessment of study's pertinence to the decision question. Comparators will include SCIT, SLIT, multiallergen versus single allergen SCIT, as compared with each other, placebo and/or standard pharmacotherapy.

Emphasis will be placed on the strength and quality of evidence addressing the cost-effectiveness of allergen immunotherapies versus placebo, other immunotherapy options, or usual care for the treatment of allergic rhinitis and/or asthma.

Reimbursement-based Budget Impact Analysis

The aim of this portion of the pharmacoeconomic review is to develop a budget impact

analysis that will facilitate the reimbursement decision-making process. Emphasis will be placed on identifying the budget impact of alternative approaches to the current reimbursement status of pharmacologic treatments for patients with allergic rhinitis and/or asthma. This will be achieved through a three stage process.

1. Forecasting of current expenditure for allergen immunotherapies.
 - We will obtain data on current usage of allergen immunotherapy options for treating rhinitis and/or asthma from OPDP to allow identification of the number of claims, number of claimants, total costs, and drug unit costs in a given year (broken down quarterly).
2. Identification of candidate reimbursement strategies
 - The second stage will involve identifying alternative approaches to reimbursement of combination therapies. This will rely heavily on strategies identified during the scoping assessment along with further consultation with OPDP. Reimbursement strategies could be general (applied to all products) or specific (targeted at specific products), and consideration may be given to the availability of generics and changes to EAP listing.
3. Assessment of budget impact of candidate scenarios
 - Using the techniques adopted in step 1, we will forecast the budget expenditure on pharmacotherapies for the treatment of rhinitis and/or asthma for each alternative reimbursement strategy.

Deliverables

We will provide a written report detailing methods adopted, results, discussion and summary policy recommendations. The report will comprise a two-page executive summary followed by a detailed technical report.

Timelines

Our work will commence on acceptance of this proposal. The review of economic evidence will be completed within 6 weeks of project onset. Forecasting of drug expenditures will be completed within 12 weeks of commencement. Reanalyses and revisions of the final report will be available 4 weeks after receipt of stakeholder reviews.