

Overall I agree with the conclusions, and that Pharmedgen venom immunotherapy (PhVIT) is most cost effective when targeted at those where quality of life is affected by anxiety and at those at high risk of future stings. It would be interesting to know the results of cost effectiveness for patients who are at moderate risk of future stings, and specifically at what rate of stings per year does PhVIT stop being dominant to other interventions.

Some specific comments are below:

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Elderly individuals are most at risk from death from anaphylaxis following a sting (in contrast to food allergies where adolescents and young adults are at highest risk)^{1,2}. Although rates of anaphylaxis to hymenoptera venom in under 20's may be rising³, venom allergy remains particularly problematic in the elderly population.

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“RAST tests” – radioallergosorbent testing is no longer used, as acknowledged on page 15 of the assessment report. The term specific IgE testing should be used instead.

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The statement that there are “approximately 1600 inpatient episodes due to anaphylaxis each year” may significantly underestimate the total number of episodes of anaphylaxis.

Using inpatient episodes will only capture a proportion of episodes of anaphylaxis, and for example will miss those who attend A&E but are not admitted as inpatients. Furthermore, reliance upon clinical coding appears to underestimate the incidence of anaphylaxis.

Using coding to estimate the incidence of anaphylaxis gives an incidence of 3.2 to 20 per 100,000 per year⁴. This would translate into 1,920 to 12,000 episodes of anaphylaxis per year for a population of 60 million. However, using studies which do not rely on coding gives higher incidences. A study examining anaphylaxis attendances at a UK A&E department with a catchment population of 500,000 identified 77 attendances over 6 months (ie, an incidence of 30.8 per 100,000 or approximately 18,500 episodes per year in 60 million)⁵. An American study (Rochester, Minnesota) which did not rely on coding found an incidence of 49.8 per 100,000 per year⁶, which would be equivalent to almost 30,000 episodes of anaphylaxis per year for a 60 million population.

The reported average of 20 deaths due to anaphylaxis per year may also be an underestimate⁷.

The Mueller grading system has limitations, and not all anaphylactic reactions are necessarily Mueller grade 4. For example, a patient with urticaria, itching, constriction in chest, wheeze, dizziness and dyspnoea would meet internationally

agreed definitions of anaphylaxis⁸, but would be a grade 2 reaction according to the Mueller system.

References:

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