## NICE MTA: Pharmalgen for bee and wasp allergy

## **Personal statement:**

## Dr Nicola Brathwaite

Qualifications: MBChB (University of Stellenbosch, South Africa 1988) FCPaedSA (Fellow of the College of Paediatrics, South Africa, 1997) FRCPCH (Fellow of the Royal College of Paediatrics and Child Health, 2007)

GMC: on specialist register in Paediatrics (no 3443525) HPCSA (Health Professions Council of South Africa) – Specialist in Paediatrics (MP 0335967)

I am a consultant paediatric allergist at Kings College Hospital NHS Foundation Trust. This is a tertiary children's allergy service offering a full range of allergy diagnosis and treatment including immunotherapy for bee and wasp allergy. I completed my paediatric and allergy training in Cape Town, South Africa and have been employed in my current post since 2005.

Kings College Hospital is one of the few UK centres providing wasp and bee venom desensitisation (immunotherapy) to children. We use Pharmalgen which I have found to be a safe and effective product. I am also experienced in the use of immunotherapy for severe grass and tree pollen allergies.

I am a member of the British Society of Allergy and Clinical Immunology Standards of Care Committee working on their guideline on Wasp and Bee venom allergy. I am a co-author on the egg allergy guidelines<sup>1</sup> and have published on immunotherapy.<sup>2</sup>

I worked on the RCPCH Allergy Pathways for Drug, Venom and Latex allergy and was the lead on the Venom allergy pathway. The Allergy Pathways address the patient pathway for children with a defined allergy and the competences needed for healthcare providers to ensure

Allergic reaction to the venom of bees and wasps are the most important venom allergies in children in the UK. Severe allergic reactions to wasp and bee sting can be fatal and the risk of recurrence can persist for decades. The prevalence of systemic allergic reactions in Europe varies between 0.3-7.7%.<sup>3</sup> There is no published evidence on the prevalence of venom allergy in the UK, but in a 10 year study of UK fatal anaphylaxis, 47 of 214 deaths from anaphylaxis were ascribed to bee or wasp venom.<sup>4</sup> Children with moderate to severe systemic reactions involving cardio-respiratory symptoms have a 30% risk of recurrence on re sting.(1)

Venom immunotherapy is a safe and highly effective (75-98% success in preventing sting anaphylaxis in adults) treatment. <sup>5</sup> After 3-5 years of treatment in children, most were still immune 10-20 years later. Immunotherapy is indicated in children who have had a severe systemic reaction to venom.<sup>6</sup> There is good evidence that in adults with venom allergy, immunotherapy provides a significantly greater improvement in

quality of life than the alternative management of advice to avoid bee or wasp stings and to carry an emergency adrenaline injector. <sup>7</sup>Pharmalgen is currently the only licenced product used in venom immunotherapy in the UK.

Signed:

Nicola Brathwaite 25/2/2011

<sup>1</sup> Clark AT, Skypala I, Leech SC, Ewan PW, Dugué P, Brathwaite N, Huber PA, Nasser SM; British Society for Allergy and Clinical Immunology guidelines for the management of egg allergy. Clin Exp Allergy. 2010 Aug;40(8):1116-29.

<sup>2</sup> Brathwaite N, Leech S. Allergen Immunotherapy in Children. Paediatrics and Child Health 2008: 18(7) 329-332 (review)

<sup>3</sup> Bilò BM, Bonifazi F. Epidemiology of insect-venom anaphylaxis. *Curr Opin Allergy Clin Immunol* 2008; **8**:330–7.

<sup>4</sup> Pumphrey RS. Fatal anaphylaxis in the UK, 1992-2001. Novartis Found Symp 2004; 257:116-28.

<sup>5</sup> Ross RN, Nelson HS, Finegold I. Effectiveness of specific immunotherapy in the treatment of hymenoptera venom hypersensitivity: a meta-analysis. Clin Ther 2000;22(3) 351-8

<sup>6</sup> Golden DB, Kagey-Sobotka A, Norman PS, Hamilton RG, Lichtenstein LM. Outcomes of allergy to insect stings in children, with and without venom immunotherapy. N Engl J Med 2004; 351:668-74.

<sup>7</sup> Oude-Elberinck J, de Monchy J et al. Venom immunotherapy improves healthrelated quality of life in patients allergic to yellow jacket venom. J Allergy Clin Immunol. 2002; 110(1): 174-182