

Letter to the Editor

TRUE Test® and baseline series

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Dear Editor,

We read with interest the recent contribution to Contact Points, 'Are all new allergens in TRUE Test® essential for a baseline set?' by Echechipía et al. (*Contact Dermatitis* 2015; 73: 185–186, accessed 6 May 2015) (1). The authors reported the results of patch testing 1046 patients with the five most recent allergens approved by the Food and Drug Administration (FDA) for inclusion in our ready-to-use patch test system TRUE Test®: gold sodium thiosulfate (GST), bacitracin, parthenolide, Disperse Blue 106, and 2-bromo-2-nitropropane-1,3-diol (bronopol). The authors' goal was to determine the relevance of these allergens to the European baseline series. We appreciate their independent evaluation of our product, and would like to elaborate on a few points raised by their discussion.

On the basis of the recommendation of Bruze et al. that a sensitizer should normally only be included in a baseline series if its prevalence as an allergen exceeds 0.5–1% of patients (2), their results led them to conclude that only two of the new allergens – Disperse Blue 106 and bacitracin – should be included in the European baseline series. They found that the prevalence rates of Disperse Blue 106 and bacitracin as allergens were 0.57% and 0.46%, respectively.

As Echechipía et al. also report, the prevalence of positive reactions to GST was 3.2%, which is well above the threshold for inclusion suggested by Bruze et al. (2). However, they discredit inclusion of this allergen in their baseline series, because 'a positive test result has been considered to be clinically irrelevant in most patients'. Nonetheless, they also found that GST was relevant in 12% of their patients with positive reactions. This substantial yield may be insufficient to justify the inclusion of GST in their baseline series, but, in this case, the application of their rationale seems inconsistent.

This point might be countered by their comment that 'sometimes strong and persistent reactions' in conjunction with the apparent lack of clinical relevance led to the

exclusion of GST from some standard series. Indeed, the North American Contact Dermatitis Group did exclude GST from its series after the 2003–2004 study period (3). As recently as 2013, however, the American Contact Dermatitis Society (ACDS) opted to include GST in its Core Series (4). In fact, in 2001, the ACDS named gold the allergen of the year, and Fowler declared that it might even be considered to be the allergen of the millennium (5). The Mayo Clinic also includes GST in its baseline series of allergens. In fact, the Mayo series spanning from 2006 through 2010 included testing with GST at both 2% and 0.5% (6). The Japanese baseline series also includes GST (0.5%). The reality is that our ability to identify gold allergies is limited because the appropriateness of screening agents, concentrations and time course is still poorly understood. Consequently, both Fowler (7) and Chen and Lampel (8) have recently encouraged continued patch testing with gold coupled with a multidisciplinary approach to understand the relevance of this metal allergen.

As the authors themselves note, social and environmental conditions affect the regional prevalence rates of contact allergy to specific allergens, but TRUE Test® is a product used around the world. Although the prevalence of positive reactions to 2-bromo-2-nitropropane-1,3-diol may have been only 0.38% in this study from seven allergy departments across Spain, its prevalence across North America, for example, is 1.6%, which is well above the cutoff recommended by Bruze et al. (2, 9).

In 1992, the original owner of TRUE Test®, Pharmacia, explored the possibility of developing a patch for sesquiterpene lactone mix, but no reliable raw materials that complied with the pharmaceutical requirements were commercially available at that time. In 2001, the ownership of Pharmacia changed to Mekos Laboratories ApS (purchased by SmartPractice in 2006), and the relevancy of a diagnostic patch for Compositae allergy was revisited by its advisory board. In 2002, no reliable source for alantolactone, one of the three components of sesquiterpene lactone mix, could be identified. Consequently, the company decided to pursue development of the parthenolide patch, which received approval from the FDA in 2012. The article by Orion et al. (10),

which Echechipía et al. cite, states that, of 2244 patients, 73–75% reacted to parthenolide. Orion et al. did not recommend parthenolide as a supplement to testing with sesquiterpene lactone mix, which they noted was a ‘safe, though inadequate, screen for Compositae allergy,’ but they concluded that parthenolide was a ‘fairly good screening allergen’ on its own (10). Although Compositae allergy has been found to be relatively rare in southern Europe as compared with northern Europe, its average positivity rate across 11 European centres was 1% (11). Furthermore, on the basis of unpublished data from the Department of Dermatology, Odense University Hospital, Denmark, on > 5000 patients tested, the rate of positive reactions to parthenolide (2.18%) was very similar to the rate of positive reactions to sesquiterpene lactone mix (2.23%, KE Andersen, pers. comm. 2015).

The comments by Orion et al. (10) lead to our final and perhaps most important point concerning TRUE

Test®. It is impossible to manufacture a ready-to-use patch testing product that includes all of the > 4000 known allergens. Therefore, TRUE Test® was and continues to be developed as an easy-to-use and standardized screening test intended to include the broadest range of allergens relevant across vastly different regional contexts – a formidable challenge for a small manufacturer in today’s demanding regulatory environment. As the only patch testing product that has been subjected to the rigorous tests required by the US FDA to receive its marketing approval, TRUE Test® can simplify the preparations needed for administering any baseline series by eliminating the need to dispense the same allergens in pet.

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