

Importance of challenging and updating allergy skin test concentrations

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Abstract

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To the Editor,

We would like to thank Dr. Stingeni's group for their comment on our paper¹ on adverse reactions after intradermal COVID-19 vaccine testing.²

We agree that the skin testing concentrations provided by the European Network on Drug Allergy, Drug Allergy Interest Group position paper indeed serve as landmark guidance of *in vivo* skin testing for allergology workup.³ However, multiple skin-testing concentrations suggested in the position paper have since been superseded by more recent concentrations, such as cephalosporins and other vaccines. Likewise, updated, non-irritant concentrations for intradermal skin testing (IDT) have been suggested specifically for COVID-19 mRNA vaccines, including the Pfizer-BioNTech SARS-CoV-2 vaccine (BNT).^{4, 5}

Since the establishment of our Vaccine Allergy Safety Clinics in Hong Kong, we also tested our initial 24 patients with all three dilutions: 1:100, 1:10, and undiluted concentrations of both vaccines, BNT and Sinovac Coronavac (SV), with no evidence of irritant reactions in any patients. We defined irritant reactions as reactions that present with an increase in wheal size and noticeable flare-up on immediate IDT reading. In view of this, we have been performing all subsequent vaccine skin tests with fresh, undiluted concentrations only, in agreement with other reports.^{4, 5}

Both Dr. Stingeni *et al.* and our team agree that the delayed reactions observed reflect a type IV cellular immunity response rather than an allergy. Blistering lesions were extremely rare: only one case out of the 202 BNT and SV vaccine IDTs we have performed so far at our Vaccine Allergy Safety Clinics (as of 29 November 21). We perform all our skin tests in accordance with recent updates in evidence. We urge other providers to continuously adjust their protocols to relevant recommendations to optimize test performance and patient care.

CONFLICT OF INTEREST

The authors have declared no conflicts.

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