

Skin Testing Techniques for Immediate and Delayed Hypersensitivity Reaction

here are multiple techniques for allergy testing available to confirm or identify aeroallergen allergic disease as well as the level of sensitivity. These include in vivo and in vitro modalities. It is important to have a technique that is standardized with the use of appropriate controls to be reproducible, sensitive and specific.

Skin testing techniques for immediate and delayed sensitivity are an important method of testing to identify and confirm allergic disease.

1 Percutaneous (Prick) Testing: Prick testing utilizes a non-traumatic introducer device. Reproducible results can be obtained based on the location of testing on the body, potency of allergen extracts, and the proficiency of the skin tester.¹

- 2 Intradermal Testing: single intradermal and intradermal dilutional testing techniques can give both qualitative and quantitative sensitivity information
- 3 Modified Quantitative Testing (MQT or blended techniques): is an accurate and can be a more cost-effective method of testing than intradermal dilutional testing alone, while still obtaining quantitative results.^{2,3} MQT is one method to blend skin prick testing with intradermal testing to help assess sensitivity.
- 4 Scratch Testing: is a technique that is less sensitive, more painful, not reproducible and is not recommended for diagnostic testing.⁴

- Bernstein, L. et al. Allergy Diagnostic Testing: an updated practice parameter. Annals of Allergy, Asthma, and Immunology 2008, Volume 100, Number 3, Supplement 3. S15-S29.
- 2 Krouse, JH. Skin Testing for inhalant allergy 2003: current strategies. OTO-HNS Journal, October 2003; 129 (4 Suppl): 33-49.
- 3 Council on Scientific Affairs. In vivo diagnostic testing and immunotherapy for allergy. Report I, Part I, of allergy panel. JAMA 1987;258(10):1363-7.
- 4 Int Forum Allergy Rhinol. 2018 Feb; 8 (2) 108-352. doi: 10.1002/alr.22073

Note: American Academy of Otolaryngic Allergy's (AAOA) Clinical Care Statements attempt to assist otolaryngic allergists by sharing summaries of recommended therapies and practices from current medical literature. They do not attempt to define a quality of care for legal malpractice proceedings. They should not be taken as recommending for or against a particular company's products. The Statements are not meant for patients to use in treating themselves or making decisions about their care. Advances constantly occur in medicine, and some advances will doubtless occur faster than these Statements can be updated. Otolaryngic allergists will want to keep abreast of the most recent medical literature in deciding the best course for treating their patients.