

# OBESITY AND WEIGHT MANAGEMENT

&

# VACCINES AND IMMUNOLOGY

June 28-29, 2018 | Amsterdam, Netherlands

Asian J Biomed Pharmaceut Sci 2018, Volume 8 | DOI: 10.4066/2249-622X-C1-003

## IMMUNOLOGICAL ASPECTS OF SUBLINGUAL AND SUBCUTANEOUS ALLERGEN-SPECIFIC IMMUNOTHERAPY

**Nerin Nadir Bahceciler Onder**

Near East University, Cyprus

Although, allergen specific sublingual (SL) and subcutaneous immunotherapy (SCIT) have been demonstrated to be clinically efficient with similar immunological responses, head to head studies comparing those two modes of allergen administration in terms of onset of clinical improvement along with simultaneous immunological responses and underlying mechanisms of preventive effect is scarce. Compared to SLIT, SCIT provides a rapid onset of clinical improvement by eliciting a simultaneous surge in production of Th1 and Treg cytokines and blocking antibodies. Similar immunological and clinical responses are evoked quite later, with no effect on IgG4 levels during SLIT. Increases in TGF-beta secretion due to non-relevant allergens during SLIT may explain the preventive effect on new sensitizations. SLIT and SCIT are both clinically efficient in the treatment of respiratory allergic diseases with slight differences in the early phase in terms of onset of clinical efficacy and simultaneous immunological responses. Both SLIT and SCIT induce similar T cell responses with different dynamics, but specific IgG4 blocking antibody responses are more prevalent following SCIT. Further studies addressing the efficacy and immunological responses multiallergen IT in polysensitized patients are warranted. Updated scientific data on immunological and clinical tolerance of SLIT vs. SCIT will be presented.

[nerin74@gmail.com](mailto:nerin74@gmail.com)