

## Comprehensive treatment for locoregionally advanced nasopharyngeal carcinoma

**Jun Ma, PhD**

Sun Yat-sen University Cancer Center, Guangzhou, People's Republic of China

### ABSTRACT

**Introduction:** The optimal treatment mode for locoregionally advanced nasopharyngeal carcinoma (NPC) remains controversial. **Methods:** This topic will help summarize current evidences and ongoing trials to direct future development of the comprehensive treatment for NPC. **Results:** First, we stressed the importance of precision therapy to minimize toxicities and avoid overtreatment while maximizing survival benefits. It was confirmed that adjuvant chemotherapy following concurrent chemoradiotherapy with a conventional regimen did not provide additional benefits to NPC patients. This may be mainly due to the low compliance after radical chemoradiation (about 50 ~ 60%). On this basis, a multicentre phase 3 trial to evaluate the efficacy of metronomic capecitabine as adjuvant chemotherapy in NPC was initiated to assess whether this high-efficiency, low-toxicity treatment mode can further improve the benefit of patients with NPC. In addition, it was demonstrated that induction chemotherapy with TPF reduces the risk of patients with distant metastasis and improves survival. To further optimize the induction regimen and seek for drugs with low toxicity, another multicentre phase 3 trial to evaluate the efficacy of GP induction chemotherapy was conducted. It was confirmed that GP was an equivalent low-toxicity induction regimen. Finally, as lymphocytes are abundant in NPC, immunotherapy has a promising prospect in this disease. A number of trials have confirmed that the efficacy of anti-PD-1 drugs in advanced NPC. Therefore, several trials evaluating the efficacy and toxicity of anti-PD-1 drugs are being conducted in locoregionally advanced NPC. **Conclusion:** Through the above work and efforts, we hope to make NPC history with collaborations and supports of colleagues all over the world.

## Basic view of current immunotherapy approaches in allergic rhinitis

**Kavita Reginald, PhD**

Department of Biological Sciences, School of Medical and Life Sciences, Sunway University, Selangor, Malaysia.

### ABSTRACT

**Introduction:** Allergic rhinitis (AR) is an IgE-mediated allergic disease that is triggered by the inhalant allergens that affects the upper airways. Mild AR is treated using pharmacotherapy, while allergen immunotherapy (AIT) is recommended for patients having moderate to severe allergic rhinitis (AR) that cannot be controlled using pharmacotherapy, or who experience unacceptable side effects due to medical therapy. **Methods:** This presentation highlights the role of allergen immunotherapy in the treatment of allergic rhinitis. A detailed account of the different types of allergen immunotherapy will be presented. **Results:** Allergen immunotherapy (AIT) is the only disease-modifying therapy for the treatment of allergies. It provides rapid symptomatic relieve, improves the patient's quality of life and has demonstrated to have long-term relief of symptoms even after the immunotherapy period has ended. Current AIT approaches include subcutaneous (SCIT) and sublingual (SLIT) administration methods. SCIT and SLIT preparations are available for house dust mite, tree pollens and grass pollens. The mechanisms of AIT can be broadly classified into rapid desensitization, where effector cells are less responsive to allergen, early tolerance with the generation of T- and B- regulatory cells and specific 'blocking' IgG antibodies, and sustained tolerance. While AIT has been beneficial for the majority of patients that it is prescribed to, it has the potential to result in adverse effects, as current AIT preparations are based on natural extracts that contain allergens with intact IgE-epitopes. Due to the nature of AIT which requires high doses to induce the tolerance response, IgE-mediated adverse effects are observed in some AIT receivers. New AIT approaches that are being tested in experimental setting are based on purified allergen molecules or peptides that are devoid of the IgE epitope, but still contain immunogenic portions to stimulate the immune system. Other routes of immunization such as intralymphatic and epicutaneous immunotherapies are also being tested as another means to reduce adverse reactions to AIT preparations. **Conclusion:** AIT modifies the disease progression and has been shown to be clinically effective in allergic rhinitis.