

ABSTRACT

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Allergen immunotherapy, cancer, and immune disorders.

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PURPOSE OF THE REVIEW: The purpose of this review is to provide an update on the intriguing relationships between allergies, allergen immunotherapy, cancer, and immune disorders. Allergic diseases and cancer are increasing in incidence and prevalence and a potential relationship, or not, between these diseases have been suggested for many years.

RECENT FINDINGS: Recent findings suggest that there may be some causative effects between certain types of cancer and allergic diseases, as described in the text. Some types of cancer may be more linked to the presence of an allergic disease, than others. However, epigenetic factors, such as tobacco smoke alcohol and toxic substances should also be taken into consideration.

SUMMARY: The association between allergy and cancer is complex and depends on the specific allergy and the specific organ under consideration. Regarding pancreatic cancer, colorectal cancer (CRC), and glioma, all types of allergies were shown to be a protective factor. Conversely, asthma is a risk factor for lung cancer as is atopic dermatitis for skin cancer. Despite extensive research, no definite relationship has been determined, and no clear relationship, either positive or negative, to allergies can be observed. These results should be corroborated with large epidemiological well designed prospective studies due to some weaknesses in the previous investigations.

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