IL-4, IL-13, AND IL-5 ARE KEY DRIVERS OF TYPE 2 INFLAMMATION IN ASTHMA

IL-4 AND IL-13 ARE CENTRAL TYPE 2 CYTOKINES WITH DISTINCT AND OVERLAPPING ROLES

IL-4 drives Th2 cell differentiation and mediates the production of downstream Type 2 cytokines.

IL-13 mediates goblet cell hyperplasia and increased mucus secretion, and promotes airway obstruction, bronchial hyperreactivity, smooth muscle hypertrophy, and airway remodeling.

IL-4 and IL-13 play an important role in class switching of B cells to produce IgE.

IL-5 mediates the differentiation of eosinophils in bone marrow; IL-4 and IL-13 drive the trafficking of eosinophils to sites of inflammation.

Type 2 inflammation in asthma can result in increased exacerbations and decreased lung function.