Barrier Dysfunction, Type 2 Inflammation, and Neuroimmune Dysregulation Interact to Drive the Pathophysiology of AD, Asthma, CRSwNP, and EoE[1-17]

A triad of interacting mechanisms

- Type 2 inflammation
- Barrier dysfunction
- Neuroimmune dysregulation

> **Underlie multiple pathophysiological processes** across multiple diseases[1-17]

> Are associated with **recurring and debilitating symptoms, and progressive tissue damage** in a range of diseases with type 2 inflammation component[1-17]

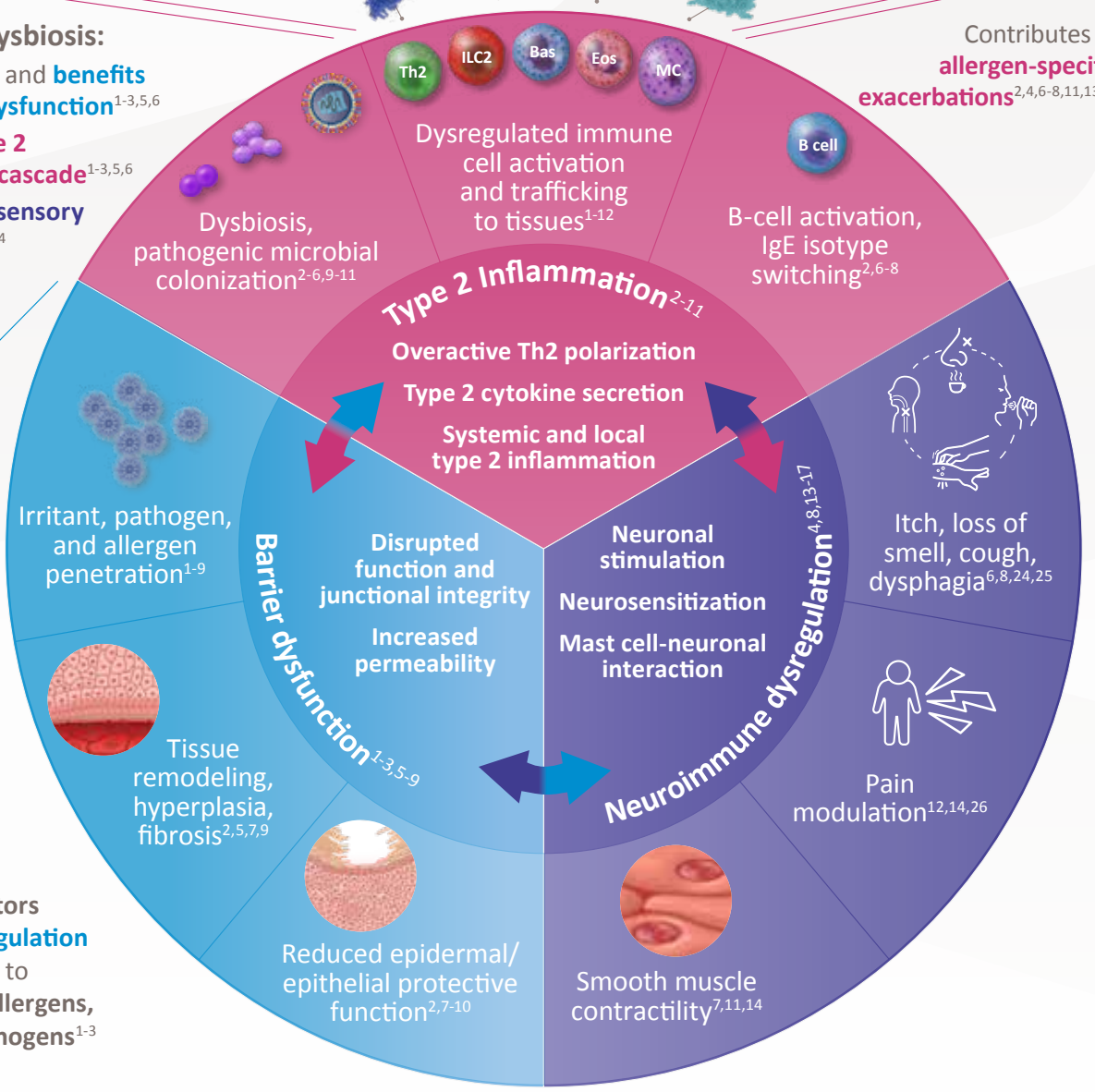
Type 2 inflammatory cytokines have key roles in pathogenic processes in diseases with type 2 inflammation component[5-12]

Predominant **driver of systemic effects**, including activation of Th2 cells and other immune cells[2,5,10,11]	Drivers of **local tissue responses, inflammation** and various **disease symptoms**[2,5-7,10]	Roles in eosinophil **maturation, differentiation, and survival** which impact the functions of many immune cells[2,7,18,19]	Roles in **AD itch, neuroimmune signaling**[5,6,20]

Microbiome dysbiosis:

- **Contributes** to and **benefits** from **barrier dysfunction**[1-3,5,6]
- Intensifies **type 2 inflammatory cascade**[1-3,5,6]
- Interacts with **sensory mechanisms**[4,14]

Contributes to **allergen-specific exacerbations**[2,4,6-8,11,13,16]



Contributing factors for **barrier dysregulation** include exposure to **environmental allergens, irritants** and **pathogens**[1-3]

AD, atopic dermatitis; **Bas**, basophil; **CRSwNP**, chronic rhinosinusitis with nasal polyps; **EoE**, eosinophilc esophagitis; **Eos**, eosinophil; **ILC2**, innate lymphoid type-2 cell; **MC**, mast cell; **Th2**, T helper 2 cell.

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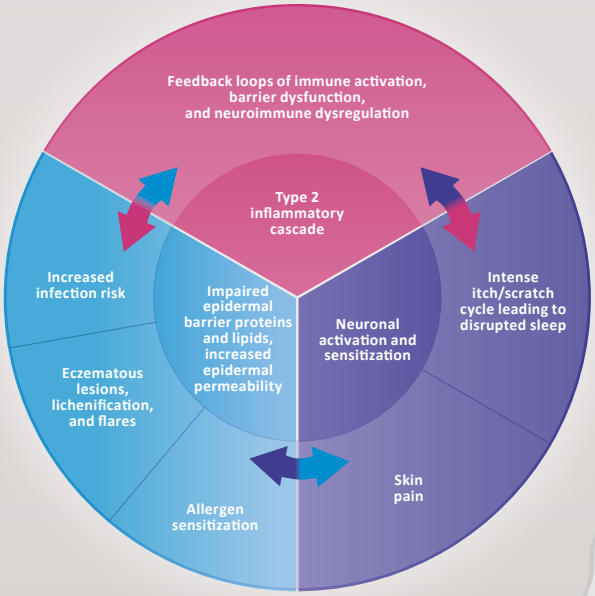
ADVENT ADVANCES IN THE SCIENCE OF TYPE 2 INFLAMMATION

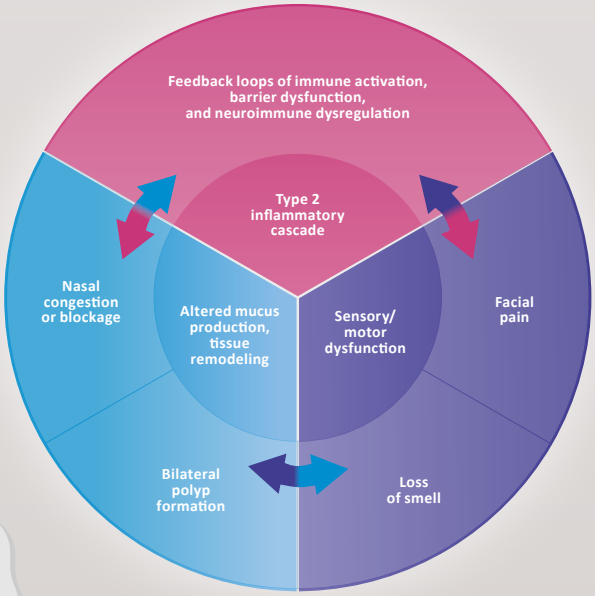
Triad of Dysregulated Mechanisms Driven by Type 2 Inflammation Impacts Patients' Quality of Life[2-10]

STAY IN THE KNOW ABOUT DISEASES WITH UNDERLYING TYPE 2 INFLAMMATION
For more information visit ADVENTprogram.com

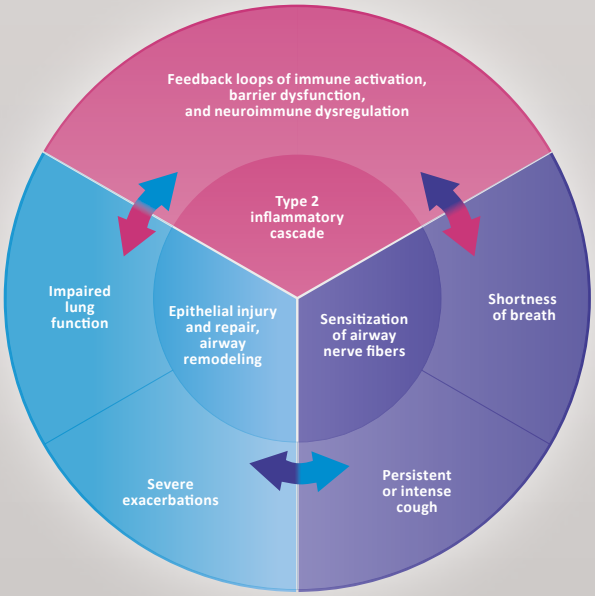
ATOPIC DERMATITIS[1-3,5,6,22,23]



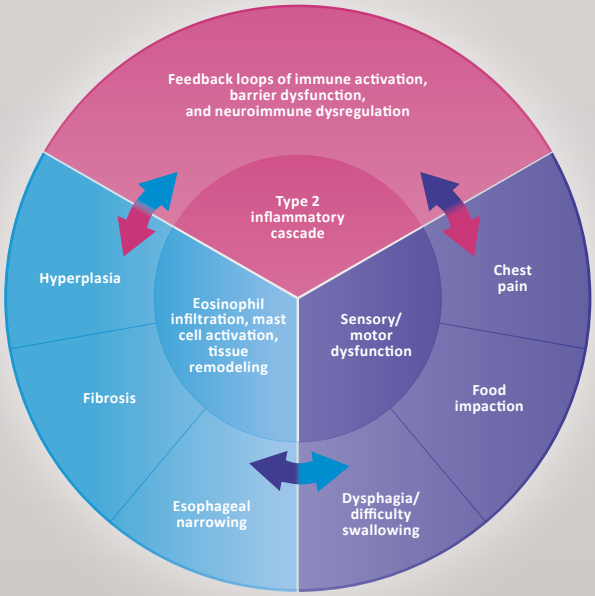
CHRONIC RHINOSINUSITIS WITH NASAL POLYPS[1-3,9-12,15,17]



ASTHMA[1-4,7,8]



EOSINOPHILIC ESOPHAGITIS[1-3,11-13]



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