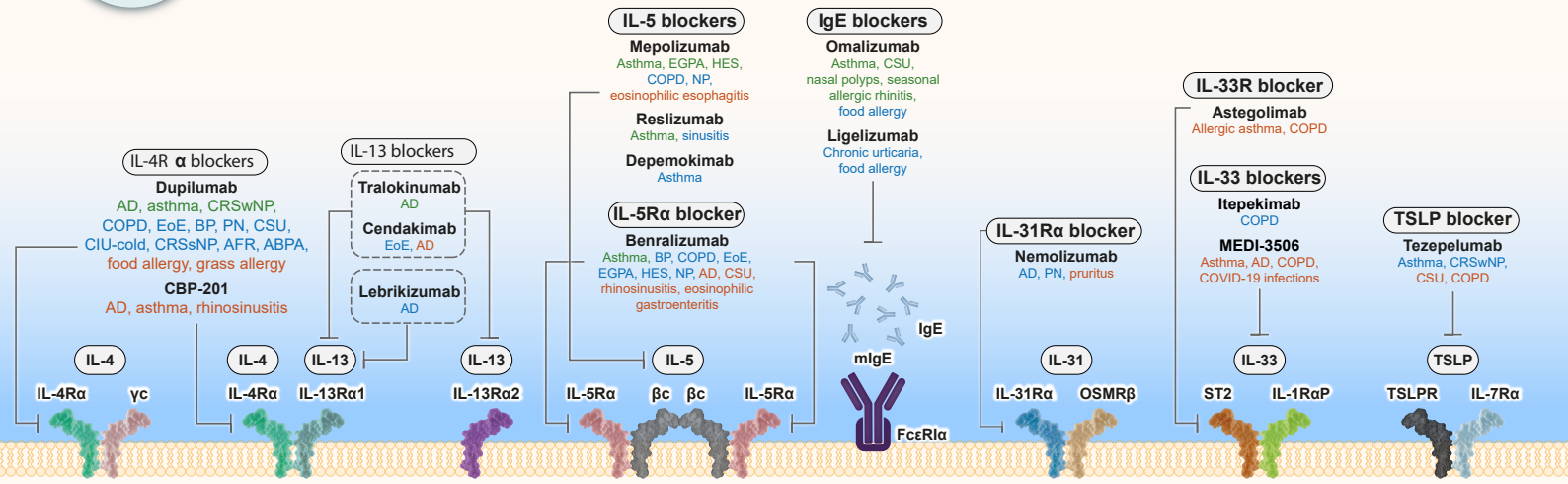
Current and Emerging Strategies to Inhibit Type 2 Inflammation in Atopic Dermatitis

Type 2 immunity evolved to ensure epithelial barrier integrity and protect against parasitic helminths and noxious environmental substances. When dysregulated, type 2 immunity becomes **type 2 inflammation**, which is a principal driving force of several inflammatory diseases, such as **atopic dermatitis** and **asthma**.

Immune dysregulation in such diseases is often highly complex and involves many different cell types and inflammatory mediators. However, clinical studies of targeted therapies suggest that only a few components play a clinically significant role.

Biologics that inhibit type 2 molecules

Targeting type 2 via IgE, cytokines and their receptors

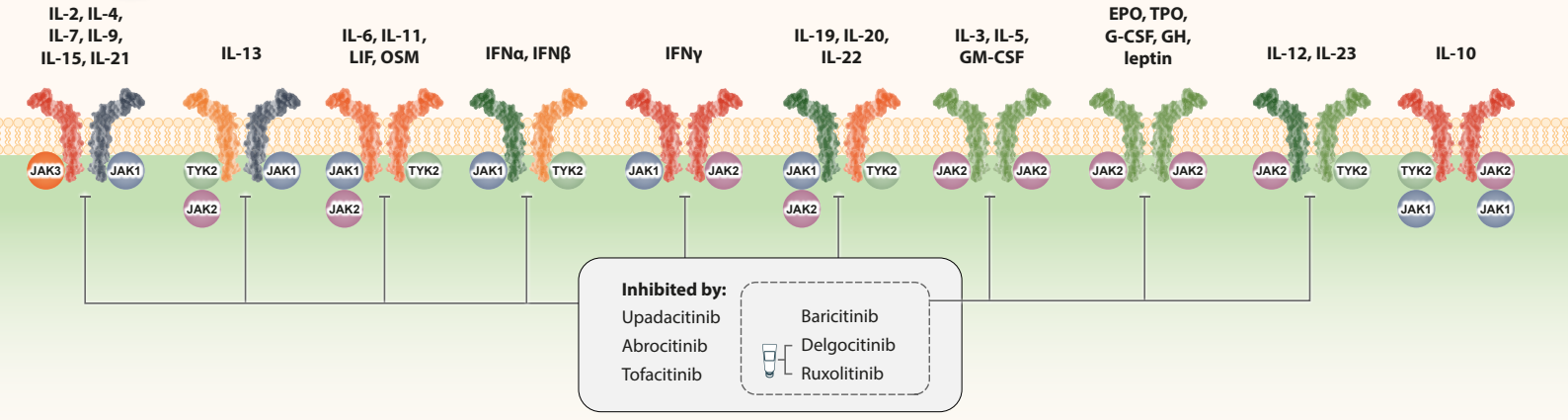


Clinical study phase or approval status as of March 2022 for each therapy by indication: **Approved** **Phase 3,** **Phase 2**

JAK inhibitors targeting JAK signaling pathways*

Simultaneous inhibition of type 1, 2, and 3 cytokines

Selectivity is dose-dependent



*Specific diseases for which therapies are approved are not shown here due to the wide range of inflammatory diseases for which JAK inhibitors are approved.

Studies of drugs targeting type 2 immune mediators helped **clarify the biological mechanisms** that underlie type 2 immunity and that **provide therapeutic advances** for type 2 inflammatory diseases.

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