

Eosinophilic Research at the Cincinnati Center for Eosinophilic Disorders (CCED)

The [Cincinnati Center for Eosinophilic Disorders](#) (CCED) is a leader in research for these often-misunderstood conditions. Our research spans all states of therapeutic development. Developing new treatments and cures is an involved process that requires significant time and investment, especially during the fundamental stages of basic research and discovery validation, which are a major priority of the CCED. The CCED has a critical role in this process, working tirelessly on each stage, and has already had a key role in the development of therapeutic strategies for eosinophilic disorders such as [eosinophilic esophagitis](#) (EoE) and hypereosinophilic syndrome (HES).

Current Pipeline of Diagnostic and Therapeutic CCED Research*

Mechanism	Target	CCED Research	Therapeutic Agent	CCED Clinical Trials	Phase of Development
Suppress inflammatory response					
Systemic corticosteroids	Immune system	1-3			Off-label clinical use
Topical corticosteroids	Local inflammation	1-3	Flovent Budesonide	4, 5 and Current Trial (enrollment closed)	Off-label clinical use III
Blockade of eosinophil recruitment					
Chemokine inhibition	CCR3	6-33			II
Chemokine inhibition	CCL11 (eotaxin-1)	6, 7, 9, 11, 14, 17, 19, 22-24, 27, 28, 30, 32-74	Bertilimumab		III
Cytokine inhibition	IL-13	1, 3, 14, 15, 17, 24, 26, 27, 30, 31, 53, 56, 57, 59, 63, 67, 72, 75-109	QAX576 RPC4046	Current Trial (enrollment closed)	III
Cytokine receptor inhibition	IL-13R	27, 76, 78, 79, 88, 100, 102, 104, 105			III
Cytokine receptor inhibition	IL-4R	27, 31, 72, 75-77, 99, 100, 102, 103, 110, 111	Dupilumab	Current Trial (enrollment open)	II
Chemokine inhibition	CCL26 (eotaxin-3)	1, 3, 21, 26, 77, 80, 101, 112-114			Preclinical
Adhesion molecule inhibition	Periostin	115			Preclinical

<i>Adhesion molecule inhibition</i>	CDH26	Pre-publication		Fundamental
<i>Anti-inflammatory</i>	TGF-β	27, 69, 103, 116	Lorsartan	Current Trial (enrolling soon) II
<i>Impaired barrier function</i>	Improve barrier function	104, 117		Fundamental
<i>Epigenome modifiers</i>	Epigenome	80		Fundamental
Inhibition of eosinophil survival				
<i>Cytokine inhibition</i>	IL-5	7, 11, 13-15, 22, 25, 26, 29-31, 38, 44, 46, 47, 49, 50, 53, 55-61, 63, 68, 70, 72, 73, 77, 102, 109, 118-	Mepolizumab	25, 29, 126, 135 FDA-approved for eosinophilic asthma
		140	Reslizumab	¹³⁸ and Current Trial (enrollment closed) FDA-approved for eosinophilic asthma
<i>Eosinophil depletion</i>	IL-5R-α		Benralizumab	III
<i>Activation of inhibitory receptor</i>	Siglec-8	122, 134, 141, 142		Preclinical
<i>Activation of inhibitory receptor</i>	PIRB	28, 143		Preclinical
Inhibition of eosinophil activation				
<i>Cytokine inhibition</i>	TSLP	144, 145	AMG 157	II
<i>Cytokine inhibition</i>	IL-33	Pre-publication		Preclinical
Molecular diagnostics				
<i>Gene expression</i>	Eosinophilic Esophagitis (EoE) Diagnostic Panel	1, 105, 107, 146-148		Clinical validation

*As of December 2015

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