The practicalities of eosinophilic oesophagitis management: A closer look at emerging biologic treatment options



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*Expert panel



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Agenda

EoE in children and adults: What are the similarities and differences?

Caring for children with EoE: How can we manage the transition to adult services?

Treating children and adults with EoE: What do the latest data show?



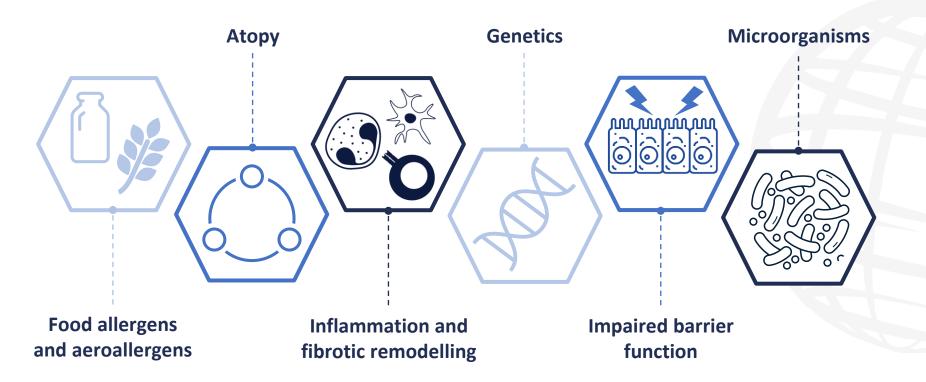
EoE in children and adults: What are the similarities and differences?

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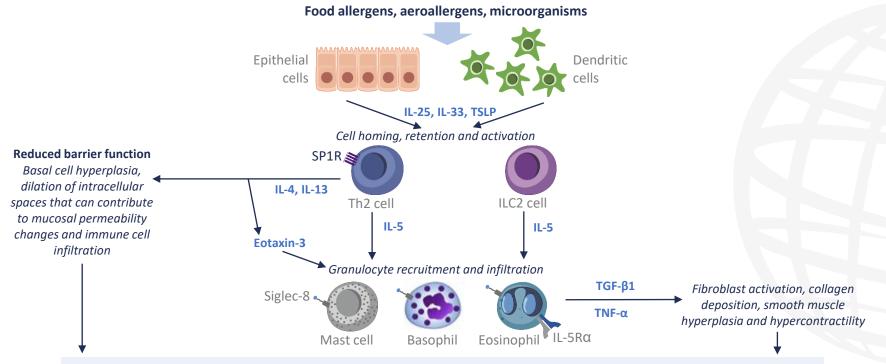


. * Underlying mechanisms of EoE development^{1,2}





EoE pathophysiology overview¹⁻⁵



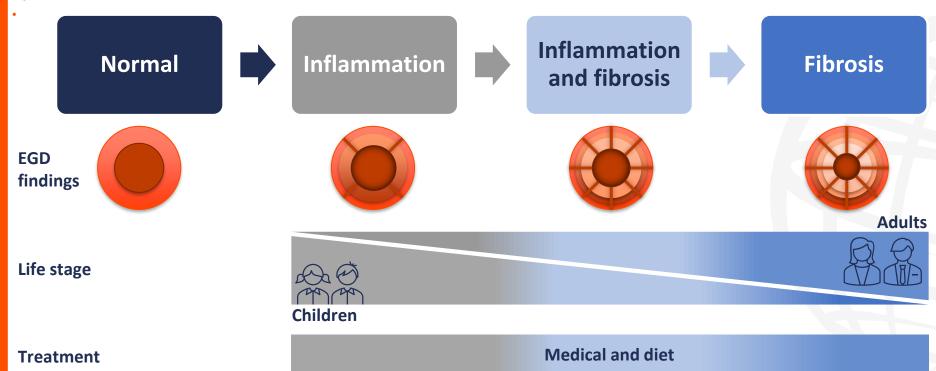
Furrows, white exudates, oedema, concentric rings, longitudinal shearing, strictures, fibrosis

EoE, eosinophilic esophagitis; IL, interleukin; IL-5Rα, IL-5 receptor α; ILC2, type 2 innate lymphoid cells; Siglec-8, sialic acid-binding Ig-like lectin 8; SP1R, sphingosine-1-phosphate receptor; TGF-β, transforming growth factor-β; Th2, T-helper cell type 2; TNF-α, tumour necrosis factor-α; TSLP, thymic stromal lymphopoietin.

1. Muir A, Falk GW. *JAMA*. 2021;326:1310–8; 2. Racca F, et al. *Front Physiol*. 2022;12:815842; 3. Furuta GT, Katzka DA. *N Engl J Med*. 2015;373:1640–8; 4. Hill DA, Spergel JM. *J Allergy Clin Immunol*. 2018;142:1757–8; 5. Lam AY, et al. *Curr Opin Pharmacol*. 2022;63:102183.



EoE as a continuum from inflammation to fibrosis



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Oesophageal dilation

Caring for children with EoE: How can we manage the transition to adult services?

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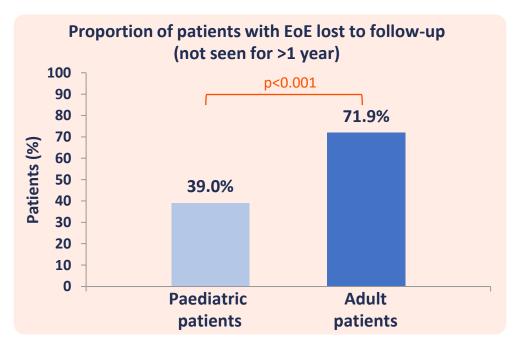




Many patients with EoE are lost to follow-up



Retrospective chart review of patients with EoE at a tertiary care medical centre





N=177 patients with EoE:

- n=41 children (<21 years)
- n=136 adults (>21 years)





Findings underscore the importance of effective transition of care, and ensuring patients engage with ongoing management and follow-up



EoE, eosinophilic oesophagitis. Schuval S, et al. *J Allergy Clin Immunol*. 2021;147(Suppl. AB90): Abstract 288.

Transition of care: Patient and provider responsibilities













Patient responsibilities

 Know disease name and medications¹ Understand treatments, procedures and risk of nonadherence or loss to follow-up¹

• Participate in decision making¹

 Assume responsibility for own care, e.g. appointments, prescriptions¹

Paediatric provider responsibilities

- Introduce transfer of care^{1,2}
- Develop individualized care transition plan^{1,3}
- Address misunderstandings²
- Identify psychological, social or economic issues²
- Ongoing assessment of transition readiness;* identify and address areas for improvement^{1,3}
- Promote self-management skills²
- Discuss individualized care plan and simplified treatment regimen²
- Continue or establish care with adult sub-specialists, e.g. allergists and dietitians¹
- Discuss implications of EoE for education and work²

Adult provider responsibilities

- Joint review of patient case^{1,3}
- Joint visits with paediatric and adult gastroenterologists, allergists and dietitians^{1,3}
- Transfer to adult clinic^{1,3}
- Assume and continue care³



^{*}Includes understanding medical condition, knowledge of medications, obtaining refills, scheduling appointments, maintaining health records and functioning independently in the health care setting.³
EoE, eosinophilic oesophagitis.

^{1.} Hiremath G, et al. *Trans Sci Rare Dis.* 2022;6:13–23; 2. Roberts G, et al. *Allergy.* 2020;75:2734–52; 3. Dellon ES, et al. *Dis Esophagus.* 2013;26:7–13.

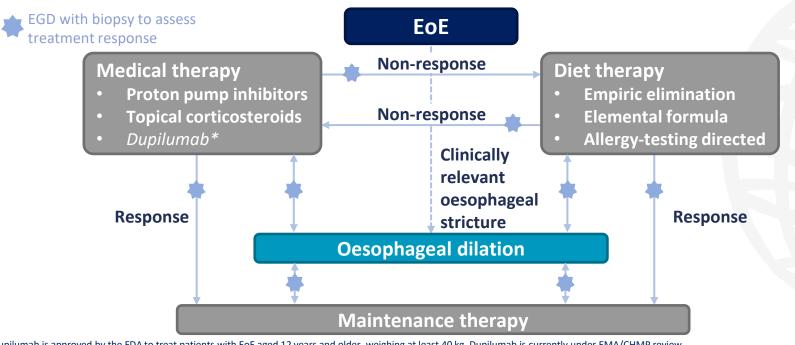
Treating children and adults with EoE: What do the latest data show?

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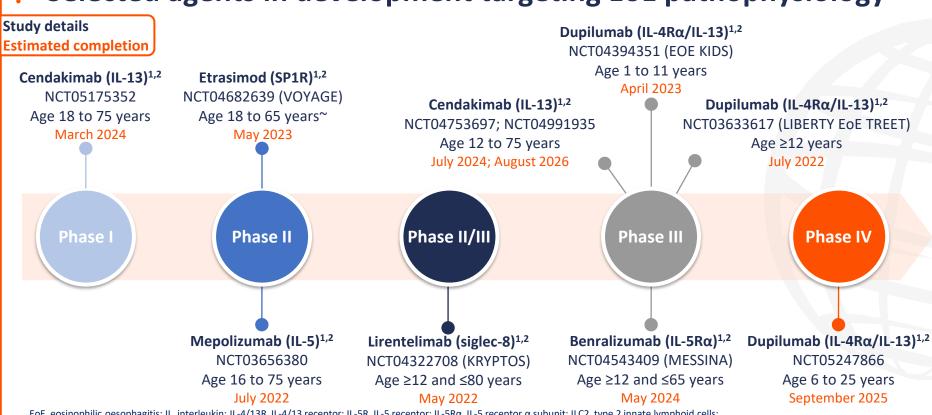
• Treatment of patients with EoE: Clinical decision support tool^{1–5}



*Dupilumab is approved by the FDA to treat patients with EoE aged 12 years and older, weighing at least 40 kg. Dupilumab is currently under EMA/CHMP review. CHMP, Committee for medicinal products for human use; EGD, oesophagogastroduodenoscopy; EMA, European Medicines Agency; EoE, eosinophilic oesophagitis. 1. Hirano I, et al. *Gastroenterology*. 2020;158:1776–86; 2. Rank MA, et al. *Gastroenterology*. 2020;158:1789–810; 3. Rank MA, et al. *Ann Allergy Asthma Immunol*. 2020;124:424–40; 4. Hirano I, et al. *Ann Allergy Asthma Immunol*. 2020;124:416–23; 5. FDA. Dupilumab prescribing information 2022. Available at: www.accessdata.fda.gov/drugsatfda docs/label/2022/761055s040lbl.pdf (accessed 7 June 2022).



Selected agents in development targeting EoE pathophysiology



EoE, eosinophilic oesophagitis; IL, interleukin; IL-4/13R, IL-4/13 receptor; IL-5R, IL-5 receptor; IL-5R α , IL-5 receptor α subunit; ILC2, type 2 innate lymphoid cells; siglec-8, sialic acid-binding Ig-like lectin 8; SP1R, sphingosine-1-phosphate receptor; TGF- β , transforming growth factor- β ; Th2, T-helper cell type 2; TNF- α , tumour necrosis factor- α ; TSLP, thymic stromal lymphopoietin.

1. Racca F, et al. Front Physiol. 2022;12:815842; 2. ClinicalTrials.gov. Available at: https://clinicaltrials.gov/ct2/home (accessed 19 May 2022).

