Together we *know more.*
Together we *do more.*

# SEoEING THE LINK

## Eosinophilic oesophagitis and other atopic conditions

EoE is a chronic, Th2-mediated allergic disease with pathological eosinophilic infiltration of the oesophagus and clinical symptoms of oesophageal dysfunction[1]

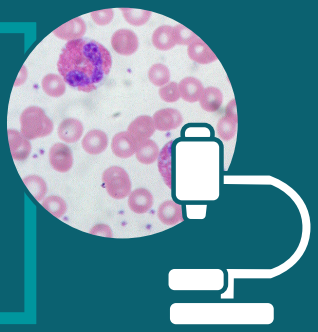
### Symptoms point to EoE[2]

**Does the patient:**

- Experience heartburn or indigestion?
- Avoid foods which are difficult to swallow?
- Feel like food is sticking on the way down?
- Frequently wash food down by drinking?
- Chew meals thoroughly and be the last to finish?
- Experience self-resolving food bolus obstructions?

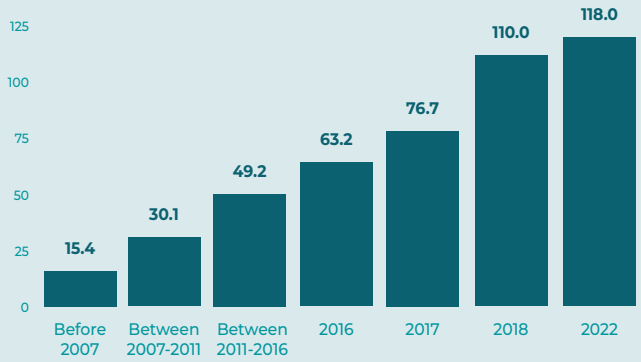
### Pathology confirms the diagnosis[3]

**EoE:**
**≥15 eos per hpf or ≥15 eos/ 0.3 mm²**



### Once regarded as a rare disease, there has been a progressive rise in the prevalence of EoE[4-7]

Prevalence (number of cases / 100,000 population)




### EoE is several times more prevalent in patients with allergic disease than in the general population[8]

Of 100 consecutive adults presenting to an allergy clinic with allergic rhinitis, asthma, atopic dermatitis, or IgE-mediated food allergy:[8]

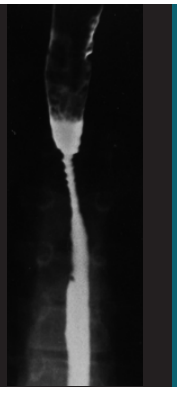
**44%** had typical EoE symptoms

**37%** had atypical EoE symptoms

**19%** were asymptomatic

Of patients with typical EoE symptoms who were followed up histologically, **37%** had EoE[8]

**10** years +



Roughly one-third of EoE patients wait over 10 years for a diagnosis; some 40% of these patients will have developed oesophageal strictures waiting to be diagnosed[9,10]

Inquiring about EoE-specific symptoms in high-risk populations could dramatically decrease the delay in EoE diagnosis improving patient outcomes[8]

> **"...we recommend that physicians who care for patients with allergic conditions ask about solid food dysphagia and food impactions as part of routine treatment[8]"**

While eosinophils are a biomarker for the diagnosis of EoE and are key effector cells, they are not solely responsible for driving the pathogenesis of the condition.[1,11] As a T-cell-mediated disease, there are multiple other cytokines and cell types involved.[1]

Elimination of single elements in the pathway with monoclonal antibodies has not delivered such broad treatment effects as seen in trials of the UK's first licensed medicine for EoE, Jorveza (orodispersible budesonide).[1,11,12]

| | Mepolizumab[1] 300 mg/month | Dupilumab[13]* 300 mg/week | Jorveza[14] 1 mg bd |
|---|---|---|---|
| Therapy type | biologic | biologic | topically acting corticosteroid |
| Delivery | injection | injection | orodispersible tablet |
| Target receptors | IL-5 | IL-4 and IL-13 | multiple – powerful anti-inflammatory |
| Histological remission | ≤6 eos/hpf at 3 months **34%** | ≤6 eos/hpf at 24 weeks **60%** | <5 eos/hpf at 12 weeks **93%** |
| Symptomatic remission | EEsAI score ≤20 at 3 months **6%** | No dysphagia symptoms in the PGIS at 24 weeks **40%** | ≤2 (on a 0-10 NRS) for dysphagia and odynophagia severity at 12 weeks **85%** |

*licensed in Europe excluding the UK

In the absence of treatment, the symptoms of EoE tend to persist over time, causing psychological distress and impacting on social activities that revolve around food[15]

# A MISSED DIAGNOSIS IS A MISSED OPPORTUNITY TO TREAT

BUDESONIDE
Jorveza®
ORODISPERSIBLE TABLETS

**Prescribing Information (refer to full SmPC before prescribing).**
**Presentations**: Jorveza 1mg and 0.5mg orodispersible tablets containing 1mg or 0.5mg of budesonide. **Indications:** treatment of eosinophilic esophagitis (EoE) in adults (older than 18 years of age). **Dosage:** Induction of remission: one 1mg tablet taken twice daily (morning and evening) after a meal and immediately after removal of the tablet from the blister pack. Usual duration of induction treatment is 6 weeks. Extend up to 12 weeks for non-responding patients. Maintenance of remission: 0.5mg twice daily or 1mg twice daily depending on clinical need. A maintenance dose of 1mg twice daily is recommended for patients with long-standing disease history and/or high extent of esophageal inflammation in the acute disease state. Duration of maintenance treatment - to be determined by the treating physician. **Administration:** tablet is placed on tip of tongue and pressed to top of mouth then swallowed slowly without liquid or food and without chewing or swallowing undisintegrated. May take 2 to 20 minutes to disintegrate and swallow completely. Wait at least 30 minutes before eating, drinking or performing oral hygiene. **Contra-indications**: hypersensitivity to budesonide or any ingredient of the tablets. **Warnings/precautions:** Infections - suppression of inflammatory response and immune function increases susceptibility to infections and their severity which can be atypical or masked. Oral, oropharyngeal and esophageal candida infections occur at high frequency. Treat symptoms with topical or systemic anti-fungals. Jorveza treatment can continue. Chickenpox, herpes zoster and measles - can be more serious in patients treated with glucocorticosteroids. Check vaccination status. Avoid exposure. Vaccines - avoid co-administration of live vaccines and glucocorticosteroids. The antibody response to other vaccines may be diminished. Special populations - monitor patients with tuberculosis, hypertension, diabetes mellitus, osteoporosis, peptic ulcer, glaucoma, cataract, family history of diabetes, family history of glaucoma. Systemic effects of glucocorticosteroids - may occur, depending on duration of treatment, concomitant and previous glucocorticosteroid treatment and individual sensitivity. Patients with reduced liver function - an increased systemic availability of budesonide may be expected, with increased risk of adverse reactions. Patients with hepatic impairment should not be treated. Not recommended for use in patients with severe renal impairment. Angioedema - treatment should be stopped if signs of angioedema are observed. Visual disturbance - patients with blurred vision or other visual disturbances should be considered for referral to an ophthalmologist. Causes may include cataract, glaucoma or central serous chorioretinopathy resulting from corticosteroid use. Others - glucocorticosteroids may cause suppression of the hypothalamic–pituitary–adrenal (HPA) axis and reduce the stress response. When patients are subject to surgery or other stresses, supplementary systemic glucocorticosteroid treatment is therefore recommended. Concomitant treatment with ketoconazole or other $CYP_3A_4$ inhibitors should be avoided. Serological testing - adrenal function may be suppressed by budesonide so an ACTH stimulation test for diagnosing pituitary insufficiency might show false (low) results. Sodium - contains 52 mg of sodium per daily dose. **Interactions:** $CYP_3A_4$ inhibitors - concomitant treatment with ketoconazole or other potent $CYP_3A$ inhibitors including grapefruit juice should be avoided to reduce the risk of systemic side effects unless the benefit outweighs the risk. Such treatment should be monitored. Oestrogens, oral contraceptives - may elevate plasma concentrations and enhance effects of glucocorticosteroids. Concomitant intake of lowdose combination oral contraceptives has not shown this effect. Cardiac glycosides - action of glycoside can be potentiated by potassium deficiency - a potential and known adverse reaction of glucocorticoids. Saluretics - potassium excretion can be enhanced and hypolalaemia aggravated. **Use in pregnancy:** should be avoided unless there are compelling reasons for therapy. Breast-feeding - budesonide is excreted in human milk. The benefit of breast feeding for the child and the benefit of therapy for the woman should be assessed. Fertility - there are no data on the effect of budesonide on human fertility. **Undesirable effects:** fungal infections in the mouth, pharynx and the oesophagus were the most frequently observed adverse reactions in clinical studies. Long term treatment did not increase the rate. **Adverse reactions and frequencies:** Very common: esophageal candidiasis, oral and/or oropharyngeal candidiasis. Common: sleep disorder, headache, dysgeusia, dry eyes, gastroesophageal reflux disease, nausea, oral paraesthesia, dyspepsia, upper abdominal pain, dry mouth, glossodynia, tongue disorder, oral herpes, fatigue, blood cortisol decreased. Uncommon: nasopharyngitis, pharyngitis, angioedema, anxiety, agitation, dizziness, hypertension, cough, dry throat, oropharyngeal pain, abdominal pain, abdominal distension, dysphagia, erosive gastritis, gastric ulcer, lip edema, gingival pain, rash, urticaria, sensation of foreign body, osteocalcin decreased, weight increased. Other (class) effects with unknown frequency that may occur: increased risk of infection, Cushing's syndrome, adrenal suppression, growth retardation in children, hypokalaemia, hyperglycaemia, depression, irritability, euphoria, psychomotor hyperactivity, aggression, pseudotumor cerebri including papilloedema in adolescents, glaucoma, cataract (including subcapsular cataract), blurred vision, central serous chorioretinopathy (CSCR), increased risk of thrombosis, vasculitis (withdrawal syndrome after long-term therapy), duodenal ulcers, pancreatitis, constipation, allergic exanthema, petechiae, delayed wound healing, contact dermatitis, ecchymosis, muscle and joint pain, muscle weakness and twitching, osteoporosis, osteonecrosis, malaise. **Legal category**: POM. **Cost**: 1mg - pack of 90 - £323; 0.5mg - pack of 60 - £214.80. Not currently available in Ireland. **Product licence holder**: Dr. Falk Pharma GmbH. **Product licence number:** IE/NI: 1mg: EU/1/17/1254/004, 0.5mg: EU/1/17/1254/008. GB: 1mg: PLGB08637/0030; 0.5mg: PLGB08637/0032. **Date of preparation:** February 2023.
Further information is available on request.

**Adverse events should be reported.** Visit https://yellowcard.mhra.gov.uk/. Adverse events should also be reported to Dr Falk Pharma UK Ltd. at PV@drfalkpharma.co.uk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EEsAI: EoE symptom activity index
EoE: eosinophilic oesophagitis
eos: eosinophils
hpf: high power field
NRS: numerical rating scale
PGIS: patient global impression of severity


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