# **Disease Burden and Diagnosis Pathways Among Patients With Eosinophilic Esophagitis in the United States: Evidence From Real-World Clinical Practice**

Xiao Xu,<sup>1,2,\*</sup> Justin Kwiatek,<sup>2</sup> James Siddall,<sup>3</sup> Eduardo Genofre,<sup>4</sup> Heide Stirnadel-Farrant,<sup>5</sup> Rohit Katial<sup>2</sup> <sup>1</sup>BioPharmaceuticals Market Access and Pricing, AstraZeneca, Gaithersburg, Maryland, USA; <sup>3</sup>Adelphi Real World, Bollington, Cheshire, UK; <sup>4</sup>BioPharmaceuticals Medical, AstraZeneca, Gaithersburg, Maryland, USA; <sup>3</sup>Adelphi Real World, Bollington, Cheshire, UK; <sup>4</sup>BioPharmaceuticals Medical, AstraZeneca, Gaithersburg, Maryland, USA; <sup>3</sup>Adelphi Real World, Bollington, Cheshire, UK; <sup>4</sup>BioPharmaceuticals Medical, AstraZeneca, Cambridge, UK \*Submitting and presenting author

### Introduction

- Eosinophilic esophagitis (EoE) is a chronic, immune-mediated disease of the esophagus, in which eosinophilic inflammation is believed to play a central pathogenic role<sup>1,2</sup>
- Common EoE symptoms are dysphagia, food impaction, abdominal pain, and nausea<sup>3</sup>
- EoE is associated with significant health burden and upper gastrointestinal morbidity, which impair health-related quality of life (HRQoL)<sup>4</sup>

## **Q** Objective

• To characterize the patient journey to diagnosis and treatment among US patients with EoE

## **A** Methods

### Study Design

- Adelphi Real World Disease Specific Programmes<sup>™</sup> (DSPs) are multinational, point-in-time surveys, completed by physicians for their patients that provide data regarding the real-world clinical practice for a range of chronic health conditions<sup>5</sup>
- This descriptive analysis used the Adelphi EoE DSP, which collected information in 2020 from US patients with EoE

### **Patient Selection**

 Patients were included if they were aged ≥12 years and had a physician-confirmed diagnosis of EoE, had an esophageal count of ≥15 eosinophils/high-power field (eos/hpf) at diagnosis, and were currently receiving treatment for EoE

### **Results**

- Overall, 322 patients with EoE in the United States were included; mean (standard deviation) age for patients was 35.6 (14.9) years, and 63% were male
- Among 310 patients with a known employment status, 66% were employed full time, 8% were employed part time, 15% were students, 3% were unemployed, and <1% were on long-term sick leave
- The patient journey from onset of EoE symptoms to diagnosis is shown in **Figure 1**
- Mean age at EoE symptom onset was 33.7 years, mean time from symptom onset to first health care provider (HCP) consult was 15.2 months, and mean time from first consult to EoE diagnosis was 6.7 months; mean age at diagnosis was 35.5 years
- Upon diagnosis, most patients (88%) had either moderate (67%) or severe (21%) EoE
- Allergic rhinitis (27%), asthma (22%), and anxiety (17%) were the most common comorbidities (Figure 2)
- Among 76 patients assessed using the EoE Endoscopic Reference Score (EREFS), 57%, 91%, 67%, 80%, and 41% scored above grade 0 in edema, rings, exudate, furrows, and stricture, respectively, and mean EREFS score was 4.4 (Figure 3)
- Among 148 patients with a specified eosinophil count at baseline, 25% had >60 eos/hpf, and 75% had 15-60 eos/hpf

#### Acknowledgments

This analysis was funded by AstraZeneca (Cambridge, UK). The Adelphi Real World EoE DSP that was used in this analysis was funded and collected independently by Adelphi Real World. We thank Lucy Earl (Adelphi Real World) for study conduct support. Medical writing support was provided by CiTRUS Health Group (United States), which was in accordance with Good Publication Practice (GPP3) guidelines and funded by AstraZeneca (Cambridge, UK).

#### **Disclosures**

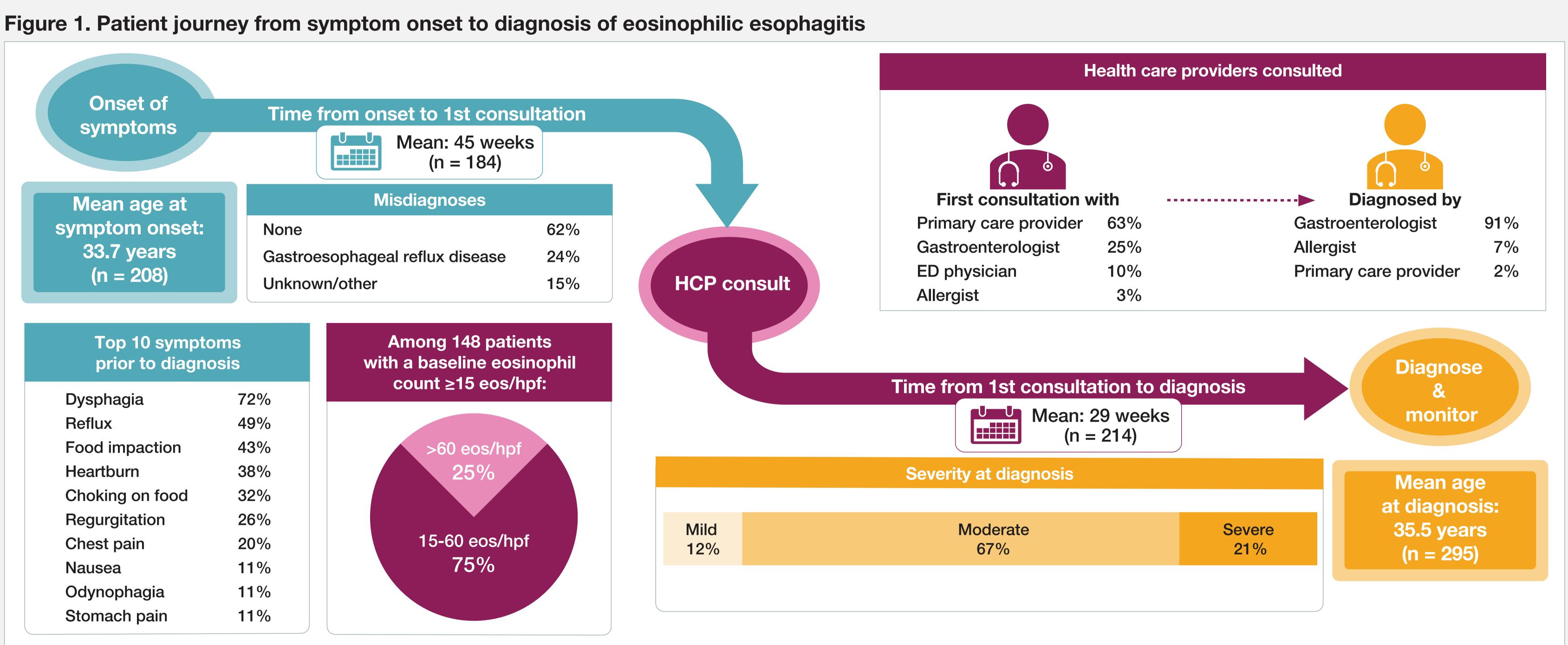
Xiao Xu, Justin Kwiatek, Heide Stirnadel-Farrant, Eduardo Genofre, and Rohit Katial are or were employees of AstraZeneca at the time of study conduct and may own stock. James Siddall is an employee of Adelphi Real World, which received funding from AstraZeneca to conduct this analysis.

#### References

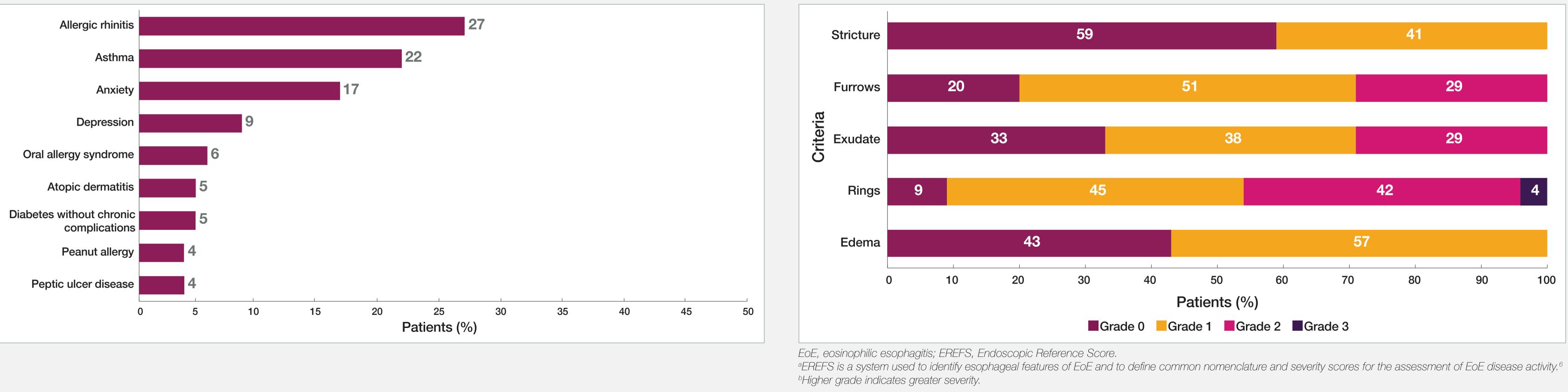
NEIEIEIICE3			
1.	Liacouras CA, et al. <i>J Allergy Clin Immuno</i> l. 2011;128:3-20.	4.	Lucendo AJ, et al.
2.	Jacobsen EA, et al. Annu Rev Immunol. 2021;39:719-757.	5.	Babineaux SM, et
З.	Dellon ES, et al. Am J Gastroenterol. 2013;108:679-692.	6.	Hirano I, et al. Gut

Poster presented at the American College of Gastroenterology (ACG) Annual Scientific Meeting, October 21-26, 2022, Charlotte, North Carolina, USA

al. United European Gastroenterol J. 2017;5:335-358. et al. BMJ Open. 2016;6:e010352. Gut. 2013;62:489-495.



### Figure 2. Comorbidities among patients with eosinophilic esophagitis, n = 322



## Conclusions

ED, emergency department; eos/hpf, eosinophils/high-power field; HCP, health care provider.

### Figure 3. EREFS<sup>a</sup> Score<sup>b</sup> at diagnosis among patients with eosinophilic esophagitis, n = 76

• EoE presents troublesome symptoms and comorbidities that could substantially impact patients' HRQoL

• Furthermore, patients face a 22-month wait from symptom onset to HCP consult and receipt of an accurate diagnosis, at which point most patients have moderate or severe disease; these data highlight the need for greater awareness and an increased urgency to treat EoE

