Unmet treatment needs in the management of patients with eosinophilic esophagitis: insights from a real-world survey

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Background

- Eosinophilic esophagitis (EoE) is a chronic, progressive Type 2 inflammatory disorder characterized clinically by symptoms of esophageal dysfunction and histologically by eosinophilic inflammation[1]
- Previous research has suggested that patients value improvement in symptoms and quality of life (QoL) when judging a treatment; early patient and physician alignment on treatment goals can also lead to better treatment compliance and outcomes[2]
- Treatment of EoE varies depending on patient clinical profile. Patients are typically prescribed medicinal therapy and/or dietary treatment (elemental and elimination diets), and in cases of symptomatic strictures refractory to these treatments, esophageal dilation[3,4]
- Proton pump inhibitors (PPIs) and topical (swallowed) corticosteroids (TCS) have been the mainstay pharmacologic therapies used in EoE; several studies have shown PPIs are the most common treatments,[5] although recent approvals of the first biologic and topical corticosteroids have expanded treatment options[6-8]
- Data are conflicting around the use of TCS in EoE with many used off-label; while evidence has been presented on the long-term benefits,[9] concerns around continued usage have encouraged physicians to use alternative treatments within regimens[10]
- Despite treatment effectively reducing the frequency and severity of most symptoms, and generally improving QoL, research highlights that there remains an unmet treatment need given the long-term, residual impact of the condition[11]

Aim

- The presented research explored current treatment dynamics for patients with EoE and looked to highlight any unmet need

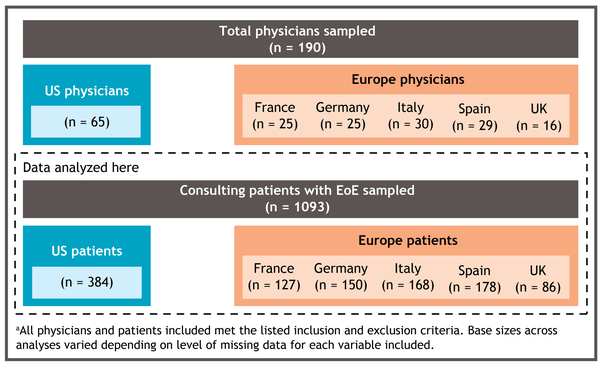
Methods

- Data were derived from the Adelphi Real World EoE Disease Specific Programme™ (DSP™), a real-world, cross-sectional survey of gastroenterologists, allergists, and internists and their patients in the United States (US), Europe (France, Germany, Italy, Spain, and the United Kingdom [UK]), conducted between July and December 2023. The DSP methodology has been previously published and validated.[12-15] Institutional Review Board exemption was obtained (#2023-0215)
- Physicians personally responsible for the management and treatment of EoE, and who saw at least 2 patients with a confirmed diagnosis per month, completed patient record forms for up to 8 consecutively consulting patients
- Data collected included current treatment, reasons for choice of treatment, and areas of treatment improvement. Analyses were descriptive

Table 1. Physician specialties sampled

	Overall (n = 190)	US (n = 65)	Europe (n = 125)
Physician specialty, n (%)			
Gastroenterologist	147 (77)	40 (62)	107 (86)
Allergist	36 (19)	25 (38)	11 (9)
Internist	7 (4)	—	7 (6)

Figure 1. Analysis flow chart, outlining maximum sample sizes



[a]All physicians and patients included met the listed inclusion and exclusion criteria. Base sizes across analyses varied depending on level of missing data for each variable included.

Results

Patient demographics

- Physicians (n = 190) provided data on 1093 patients with EoE. Patient demographics are summarized in **Table 2**

Pharmacological treatments

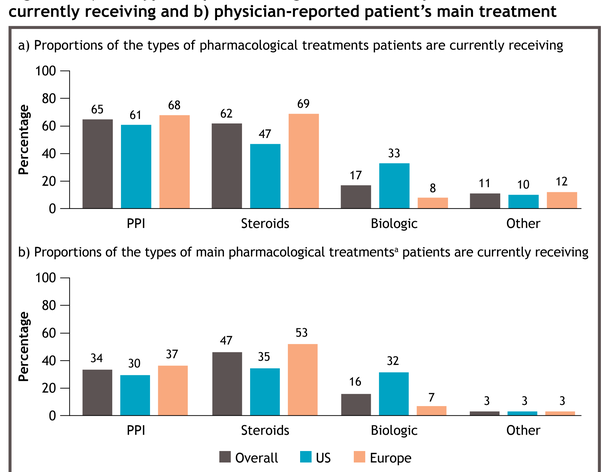
- Overall, 65% of patients received a PPI as part of their current treatment regimen. PPIs were only considered as the main treatment for 34% of overall population (**Figure 2a and 2b**)
- Overall, 62% of patients received a steroid as part of their current treatment regimen. Steroids were considered the main treatment for 47% of all patients (**Figure 2a and 2b**)

Table 2. Patient demographics

	Overall[a] (n = 1093)	US[a] (n = 384)	Europe[a] (n = 709)
Age Mean (SD)	36.7 (14.8)	35.6 (16.7)	37.3 (13.6)
Sex, n (%) Male	725 (66)	248 (65)	477 (67)
Ethnicity, n (%) White	854 (88)[b]	297 (77)	557 (96)[b]
BMI Mean (SD)	24.2 (3.5)	24.7 (4.1)	23.9 (3.0)
Employment status, n (%) Working full-time	658 (66)	224 (67)	434 (66)

[a]Base sizes vary per variable. [b]Data on patient ethnicity was not collected in France (due to GDPR regulations).
BMI, body mass index; SD, standard deviation.

Figure 2. a) The types of pharmacological treatments patients were currently receiving and b) physician-reported patient's main treatment



[a]Main pharmacological treatment: of all currently prescribed treatments in the patient regimen, judgement of the treatment that provides the most significant benefit in managing the condition. Other category includes H2 blockers, antihistamines, other treatment (cromolyn sodium, montelukast, and other [specify]).

Lines of pharmacological treatment

- Overall, 58% of patients were currently receiving their 1st line pharmacological treatment (**Figure 3a**). PPIs were the most commonly prescribed 1st line treatment (71% overall) and were considered the main pharmacological treatment in 45% of patients on a 1st line treatment (**Figure 3b and 3c**)
- Of the overall sample, 42% of patients were receiving their 2nd line+ pharmacological treatment (**Figure 3a**). Prescription of steroids and biologics was 59% to 65%; and 8% to 29%, respectively, in 2nd line+ patients. Regarding main treatment, 45% and 50% of patients at 2nd line+ were receiving steroids and biologics, respectively, compared with 7% and 27% of 1st line patients (**Figure 3b and 3c**)
- Across 2nd line+ patients in Europe, steroid prescription was 53% (vs 35% in the US); for these same patients, biologic prescription was 7% (vs 32% in the US) (**Figure 3b**)

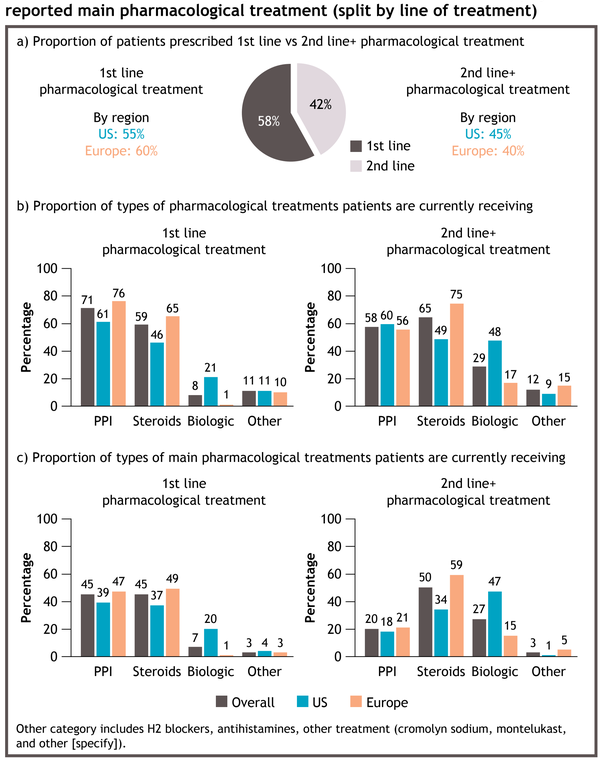
Reasons for choice and areas of treatment improvement

- Overall, the top 5 most common physician-reported reasons for choice of current treatment were: symptomatic relief (74%), improves QoL (56%), speed of onset of action (49%), well-tolerated side-effect profile (44%), and ease of use of administration (30%) (**Figure 4a**)
- Overall, the top 5 most common physician-reported areas of treatment improvement for patients were: speed of onset of action (25%), well-tolerated side-effect profile (21%), symptomatic relief (19%), improves patient's QoL (17%), and provides improvement in a concomitant condition (16%) (**Figure 4b**)

Reasons for treatment switching

- For patients on their 2nd line+ treatment, the top 5 most common physician-reported reasons for switching the patient away from their most recently regimen were: the treatment wasn't having the desired effect on symptoms (42%), new drug availability (17%), slow onset and relief of symptoms (15%), superior clinical trials results of another product (14%), and the selected treatment was not suitable for the severity of the diagnosis (13%) (**Figure 5a**)
- Physicians reported that of patients on their 2nd line+ treatment, most recently switched away or escalated from a PPI (69%), a steroid (56%), and a biologic (9%) (**Figure 5b**). Biologic switch data appeared to be driven by US prescription

Figure 3. a) Proportion of patients currently receiving 1st line vs 2nd line+ pharmacological treatment, b) the types of pharmacological treatments patients are currently receiving (split by line of treatment), and c) physician-reported main pharmacological treatment (split by line of treatment)



Other category includes H2 blockers, antihistamines, other treatment (cromolyn sodium, montelukast, and other [specify]).

Figure 4. a) Top 5 physician-reported reasons for current treatment and b) top 5 physician-reported areas of treatment improvement for the patient

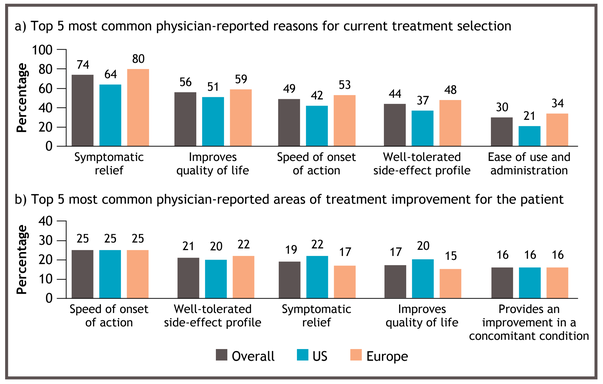
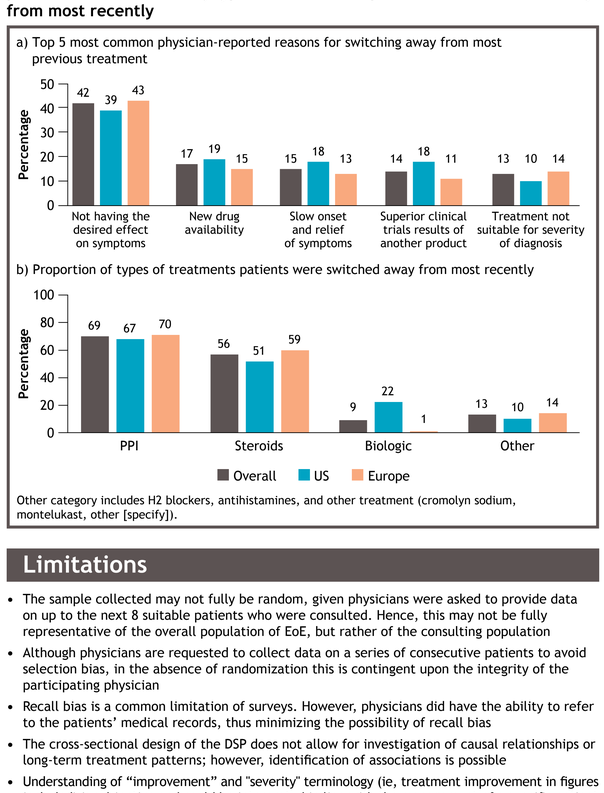


Figure 5. a) Top 5 physician-reported reasons for switching away from most previous treatment and b) types of treatments patients were switched away from most recently



Other category includes H2 blockers, antihistamines, and other treatment (cromolyn sodium, montelukast, other [specify]).

Limitations

- The sample collected may not fully be random, given physicians were asked to provide data on up to the next 8 suitable patients who were consulted. Hence, this may not be fully representative of the overall population of EoE, but rather of the consulting population
- Although physicians are requested to collect data on a series of consecutive patients to avoid selection bias, in the absence of randomization this is contingent upon the integrity of the participating physician
- Recall bias is a common limitation of surveys. However, physicians did have the ability to refer to the patients' medical records, thus minimizing the possibility of recall bias
- The cross-sectional design of the DSP does not allow for investigation of causal relationships or long-term treatment patterns; however, identification of associations is possible
- Understanding of "improvement" and "severity" terminology (ie, treatment improvement in figures included) is subjective and could be interpreted in line with the management of a specific patient

Conclusions

- There is a significant unmet need for highly effective, targeted treatments that will improve both short- and long-term outcomes for patients
- Despite most patients receiving a PPI, physicians still heavily depended on prescribing steroids as the main treatment for EoE; fewer instances of PPIs being regarded as the patient's main treatment when the patient has already had at least 1 treatment line
- A large proportion of patients have switched between treatments, suggesting existing treatment choices are not adequately managing the disease
- Physicians' treatment choices were driven by the patient perspective with symptomatic relief and improving quality of life as the top reasons. These were also selected commonly when considering areas of improvement in current treatment, indicating an unmet need
- The most common reasons for switching treatment was the regimen not having the desired effect on symptoms
- Approval of new medication across regions (biologics and topical steroids) may be driving switch behavior and could begin to bridge unmet need

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