

Supplemental Table 1 – Comparison of inflammatory and fibrostenotic phenotypes of EoE

	Inflammatory (n = 134; 36%)	Any fibrostenosis* (n = 240; 64%)	p [†]
Age (mean years ± SD)	13.3 ± 14.4	32.3 ± 17.3	< 0.001
Adults ≥ 18 years	26 (19)	173 (72)	< 0.001
Males (n, %)	99 (74)	174 (73)	0.77
Whites (n, %)	92 (69)	210 (88)	< 0.001
Symptoms (n, %)			
Dysphagia	47 (36)	193 (82)	< 0.001
Food impaction	15 (12)	83 (38)	< 0.001
Heartburn	63 (49)	75 (34)	0.006
Chest pain	8 (6)	25 (11)	0.11
Abdominal pain	51 (39)	32 (15)	< 0.001
Nausea	20 (15)	16 (7)	0.02
Vomiting	54 (41)	33 (15)	< 0.001
Failure to thrive	33 (26)	14 (6)	< 0.001
Symptom length prior to dx (mean years ± SD)	5.3 ± 7.6	8.4 ± 9.3	0.005
Atopic diseases (n, %)			
Allergic rhinitis/sinusitis/dermatitis	50 (39)	72 (33)	0.29
Asthma	35 (27)	54 (25)	0.67
Food allergy	32 (27)	29 (16)	0.02
Endoscopic findings (n, %)			
Normal	63 (47)	0 (0)	-
Rings	0	148 (62)	-
Stricture	0	66 (28)	-
Narrowing	0	44 (18)	-
Linear furrows	56 (42)	94 (40)	-
White plaques	39 (29)	42 (18)	-
Decreased vascularity	25 (19)	33 (14)	0.21
Crêpe-paper	7 (5)	16 (7)	0.58
Erosive esophagitis	14 (10)	75 (31)	< 0.001
Hiatal hernia	2 (1)	33 (14)	< 0.001
Dilation performed	0	76 (32)	-
Max eosinophil count (mean eos/hpf ± SD)	84.2 ± 75.9	86.7 ± 84.7	0.78

* Any fibrostenosis was defined by the presence of esophageal rings, narrowing, or strictures, regardless of whether there were also inflammatory findings present.

† p values calculated using a one-way ANOVA for continuous variables and chi-square for categorical variables; p values were not compared for the endoscopic findings used to construct the phenotype groups.

Supplemental Table 2 – Comparison of EoE characteristics by atopic status

	Not atopic (n = 155; 47%)	Atopic (n = 177; 53%)	p*
Age (mean years ± SD)	26.1 ± 19.6	22.3 ± 17.7	0.06
Adults ≥ 18 years	85 (55)	80 (45)	0.08
Males (n, %)	118 (76)	126 (72)	0.31
Whites (n, %)	127 (82)	140 (80)	0.58
Symptoms (n, %)			
Dysphagia	89 (58)	117 (67)	0.08
Food impaction	42 (27)	50 (29)	0.69
Heartburn	52 (34)	76 (44)	0.05
Chest pain	12 (8)	17 (10)	0.50
Abdominal pain	35 (23)	40 (23)	0.91
Nausea	17 (11)	17 (10)	0.75
Vomiting	39 (25)	47 (27)	0.68
Failure to thrive	19 (12)	29 (17)	0.25
Symptom length prior to dx (mean years ± SD)	7.4 ± 9.6	6.9 ± 8.2	0.62
Atopic diseases (n, %)			
Allergic rhinitis, sinusitis, dermatitis	-	125 (71)	--
Asthma	-	89 (51)	--
Food allergy	-	62 (42)	--
Endoscopic findings (n, %)			
Normal	28 (18)	30 (17)	0.84
Rings	60 (39)	67 (39)	0.97
Stricture	29 (19)	22 (13)	0.13
Narrowing	13 (8)	27 (16)	0.05
Linear furrows	59 (38)	79 (46)	0.18
White plaques	34 (22)	44 (25)	0.48
Decreased vascularity	22 (14)	32 (19)	0.31
Crêpe-paper	10 (6)	11 (6)	0.96
Erosive esophagitis	36 (23)	40 (23)	0.96
Hiatal hernia	16 (10)	14 (8)	0.46
Dilation performed	36 (24)	24 (14)	0.02
Max eosinophil count (mean eos/hpf ± SD)	80.7 ± 76.8	85.5 ± 79.3	0.58

* p values calculated using a t-test for continuous variables and chi-square for categorical variables.

Supplemental Table 3 – Comparison of EoE features by level of esophageal eosinophilia

	Eos/hpf = 15-50 (n = 117; 31%)	Eos/hpf = 51-99 (n = 134; 35%)	Eos/hpf ≥ 100 (n = 128; 34%)	p*
Age (mean years ± SD)	27.5 ± 20.4	25.5 ± 18.5	23.1 ± 17.0	0.14
Adults ≥ 18 years	66 (56)	71 (53)	62 (48)	0.45
Males (n, %)	85 (73)	102 (77)	90 (70)	0.50
Whites (n, %)	94 (81)	105 (79)	105 (82)	0.81
Symptoms (n, %)				
Dysphagia	72 (62)	83 (65)	88 (69)	0.49
Food impaction	25 (23)	37 (30)	37 (31)	0.29
Heartburn	49 (44)	43 (35)	37 (37)	0.36
Chest pain	13 (12)	12 (10)	8 (7)	0.43
Abdominal pain	28 (25)	25 (20)	30 (25)	0.61
Nausea	8 (7)	12 (10)	18 (15)	0.13
Vomiting	32 (29)	28 (23)	31 (26)	0.57
Failure to thrive	19 (17)	15 (12)	15 (13)	0.51
Symptom length prior to dx (mean years ± SD)	9.0 ± 11.9	6.3 ± 6.7	5.9 ± 6.2	0.04
Atopic diseases (n, %)				
Allergic rhinitis, sinusitis, dermatitis	39 (35)	48 (39)	38 (33)	0.63
Asthma	25 (23)	32 (26)	32 (28)	0.70
Food allergy	20 (20)	21 (20)	21 (21)	0.96
Endoscopic findings (n, %)				
Normal	20 (17)	26 (20)	17 (14)	0.42
Rings	51 (44)	49 (37)	48 (38)	0.51
Stricture	20 (17)	17 (13)	29 (23)	0.09
Narrowing	14 (12)	13 (10)	17 (14)	0.64
Linear furrows	48 (41)	56 (42)	45 (36)	0.54
White plaques	20 (17)	33 (25)	28 (22)	0.33
Decreased vascularity	22 (19)	22 (17)	14 (11)	0.23
Crêpe-paper	11 (9)	7 (5)	5 (4)	0.18
Erosive esophagitis	27 (23)	23 (17)	38 (30)	0.05
Hiatal hernia	15 (13)	13 (10)	7 (6)	0.14
Dilation performed	28 (25)	22 (17)	26 (21)	0.32
Max eosinophil count (mean eos/hpf ± SD)	29.6 ± 10.2	64.1 ± 12.1	159.3 ± 102.0	--

* p values calculated using ANOVA for continuous variables and chi-square for categorical variables.

Supplemental Table 4 – EoE characteristics by pediatric versus adult onset of disease*

	Peds. onset (n = 172; 45%)	Adult onset (n = 207; 55%)	p [†]
Age (mean years ± SD)	9.0 ± 8.1	33.7 ± 16.9	--
Males (n, %)	104 (81)	174 (70)	0.02
Whites (n, %)	88 (68)	217 (87)	< 0.001
Symptoms (n, %)			
Dysphagia	46 (37)	198 (80)	< 0.001
Food impaction	19 (15)	81 (35)	< 0.001
Heartburn	58 (46)	81 (35)	0.05
Chest pain	4 (3)	29 (13)	0.003
Abdominal pain	37 (29)	46 (20)	0.05
Nausea	13 (10)	25 (11)	0.86
Vomiting	55 (44)	36 (16)	< 0.001
Failure to thrive	39 (31)	10 (4)	< 0.001
Symptom length prior to dx (mean years ± SD)	5.5 ± 6.4	8.5 ± 10.3	0.004
Atopic diseases (n, %)			
Allergic rhinitis/sinusitis/dermatitis	51 (41)	74 (33)	0.11
Asthma	35 (28)	54 (24)	0.35
Food allergy	31 (28)	31 (16)	0.01
Endoscopic findings (n, %)			
Normal	42 (33)	21 (9)	< 0.001
Rings	11 (9)	137 (55)	< 0.001
Stricture	6 (5)	60 (24)	< 0.001
Narrowing	5 (4)	39 (16)	< 0.001
Linear furrows	38 (30)	112 (45)	0.004
White plaques	29 (23)	52 (21)	0.69
Decreased vascularity	30 (24)	28 (11)	0.002
Crêpe-paper	9 (7)	14 (5)	0.59
Erosive esophagitis	29 (23)	60 (24)	0.75
Hiatal hernia	2 (2)	33 (13)	< 0.001
Dilation performed	6 (5)	70 (29)	< 0.001
Max eosinophil count (mean eos/hpf ± SD)	83.1 ± 67.9	86.9 ± 87.2	0.67

* Adult status now defined as any subject ≥ 12 years old, and pediatric status defined as < 12 years old.

† p values calculated using a t-test for continuous variables and chi-square for categorical variables.