

Supplemental Table 1 Clinical characteristics of eosinophilic gastroenteritis patients

	All patients (N = 55)	Non glucocorticoid treatment (N = 12)	Glucocorticoid treatment (N = 43)	p value	Non-glucocorticoid dependent (N = 22)	Glucocorticoid dependent (N = 21)	p value
<i>Demographic characteristics</i>							
Sex (female), n (%)	31 (56.4)	8 (66.7)	23 (53.5)	0.519	10 (45.5)	13 (61.9)	0.364
Age (yr) ²	38.00 [25.50,50.00]	44.00 [27.75,48.75]	36.00 [25.00,50.00]	0.838	36.00 [26.00,53.25]	36.00 [25.00,48.00]	0.780
BMI (kg/m ²) ¹	23.281 ± 3.96	23.43 ± 2.84	23.24 ± 4.25	0.888	24.51 ± 4.55	21.85 ± 3.50	0.04 ^a
BMI > 24, n, (%)	21 (38.9)	6 (50.0)	15 (35.7)	0.504	11 (50.0)	4 (20.0)	0.05 ^b
<i>Clinical manifestations</i>							
Disease duration (mo) ²	5.00 [1.00,30.00]	2.00 [1.00,10.00]	7.00 [1.00,41.00]	0.223	3.00 [1.00,15.75]	11.00 [4.00,60.00]	0.05 ^b
Allergic history, n (%)	18 (32.7)	2 (16.7)	16 (37.2)	0.298	8 (36.4)	8 (38.1)	1.000
Allergic rhinitis	10 (18.2)	0 (0.0)	10 (23.3)	0.096 ^b	5 (22.7)	5 (23.8)	1.000
Asthma	11 (20.0)	1 (8.3)	10 (23.3)	0.422	4 (18.2)	6 (28.6)	0.488
Urticaria	2 (3.6)	1 (8.3)	1 (2.3)	0.392	1 (4.5)	0 (0.0)	1.000
Symptoms, n (%)							
Abdominal pain	49 (89.1)	11 (91.7)	38 (88.4)	1.000	19 (86.4)	19 (90.5)	1.000
Diarrhea	34 (61.8)	8 (66.7)	26 (60.5)	0.750	12 (54.5)	14 (66.7)	0.537
Nausea	29 (52.7)	6 (50.0)	23 (53.5)	1.000	11 (50.0)	12 (57.1)	0.763
Vomiting	26 (47.3)	3 (25.0)	23 (53.5)	0.108	12 (54.5)	11 (52.4)	1.000

Distension	27 (49.1)	7 (58.3)	20 (46.5)	0.528	11 (50.0)	9 (42.9)	0.763
GI bleeding	3 (5.5)	1 (8.3)	2 (4.7)	0.530	1 (4.5)	1 (4.8)	1.000
Weight loss	36 (65.5)	10 (83.3)	26 (60.5)	0.183	14 (63.6)	12 (57.1)	0.760
Fever	4 (7.3)	2 (16.7)	2 (4.7)	0.204	2 (9.1)	0 (0.0)	0.488
Rash	6 (10.9)	2 (16.7)	4 (9.3)	0.602	2 (9.1)	2 (9.5)	1.000
Complications, n (%)							
Ascite	17 (30.9)	4 (33.3)	13 (30.2)	1.000	8 (36.4)	5 (23.8)	0.510
Intestinal obstruction	8 (14.5)	1 (8.3)	7 (16.3)	0.670	3 (13.6)	4 (19.0)	0.698
Comorbidities, n (%)							
Hp infection	16 (16/50, 32.0)	5 (5/11, 45.5)	11 (11/39, 28.2)	0.297	6 (6/20, 30.0)	5 (5/19, 26.3)	1.000
HTN	8 (14.5)	3 (25.0)	5 (11.6)	0.352	1 (4.5)	4 (19.0)	0.185
DM	3 (5.5)	1 (8.3)	2 (4.7)	0.530	0 (0.0)	2 (9.5)	0.233
HBV infection	4 (7.3)	2 (16.7)	2 (4.7)	0.204	1 (4.5)	1 (4.8)	1.000
<i>Klein Classification, n (%)</i>							
Mucosal type	28 (50.9)	6 (50.0)	22 (51.2)	1.000	11 (50.0)	11 (52.4)	0.298
Muscular type	9 (16.4)	2 (16.7)	7 (16.3)		2 (9.1)	5 (23.8)	
Serosal type	18 (32.7)	4 (33.3)	14 (32.6)		9 (40.9)	5 (23.8)	
<i>Laboratory tests</i>							
EOS# (*10 ⁹ /L) ²	1.16 [0.67,3.91]	0.76 [0.51,2.32]	1.48 [0.95,4.00]	0.124	2.46 [1.13,3.96]	1.01 [0.48,3.99]	0.065
							b
Hb (g/L) ¹	138.36 ± 14.81	137.83 ± 11.51	138.51 ± 15.72	0.890	141.77 ± 15.76	135.10 ± 15.30	0.166
PLT (*10 ⁹ /L) ¹	279.29 ± 81.84	252.17 ± 115.18	286.86 ± 69.77	0.197	284.55 ± 71.72	289.29 ± 69.35	0.827

Alb (g/L) ²	40.00 [37.00,42.00]	40.00 [36.75,41.25]	40.00 [37.00,42.50]	0.546	40.00 [37.25,43.50]	41.00 [37.00,42.00]	0.922
IgE (KU/L) ²	152.00 [66.55,335.50]	54.50 [23.77,629.75]	166.00 [72.90,298.00]	0.406	234.00 [118.00,343.25]	118.00 [67.10,191.00]	0.082 ^b
IgE>60, n (%)	38 (79.2)	5 (50.0)	33 (86.8)	0.022 ^a	7 (35.0)	2 (11.8)	0.137
IgE>300, n (%)	13 (27.1)	4 (40.0)	9 (24.3)	0.429	17 (85.0)	16 (88.9)	1.000
ESR (mm/h) ²	4.00 [2.00,8.00]	5.00 [3.00,6.50]	3.50 [2.00,8.75]	0.856	3.00 [2.00,7.00]	5.50 [3.00,10.75]	0.111
Elevated ESR (>15), n (%)	7 (7/49, 14.3)	1 (1/11, 9.1)	6 (6/38, 15.8)	1.000	2 (2/20, 10.0)	4 (4/18, 22.2)	0.395
CRP (mg/L) ²	1.62 [0.84,4.38]	1.04 [0.71,1.64]	2.08 [0.85,8.60]	0.125	1.61 [0.97,3.72]	3.06 [0.74,11.02]	0.537
Elevated hsCRP (>3), n (%)	11 (11/53, 20.8)	1 (1/11, 9.1)	10 (10/42, 23.8)	0.423	3 (3/22, 13.6)	7 (7/20, 35.0)	0.152
Autoantibody (+), n (%)	11 (11/51, 21.6)	2 (2/9, 22.2)	9 (9/35, 25.7)	1.000	4 (4/21, 19.0)	5 (5/18, 27.8)	0.706
ANA (+)	8 (8/47, 17.0)	2 (2/12, 16.7)	6 (6/36, 16.7)	1.000	3 (3/18, 16.7)	3 (3/18, 16.7)	1.000
ANCA (+)	4 (4/46, 8.7)	0 (0.0)	4 (4/37, 10.8)	0.571	2 (2/20, 10.0)	2 (2/17, 11.8)	1.000
Allergen test (+), n (%)	14 (14/28, 50.0)	5 (5/7, 71.4)	9 (9/21, 42.9)	0.385	5 (5/11, 45.5)	4 (4/10, 40.0)	1.000
Inhalant allergen	8 (8/25, 32.0)	2 (2/5, 40.0)	6 (6/20, 30.0)	1.000	4 (4/10, 40.0)	2 (2/10, 20.0)	0.628
Food allergen	8 (8/27, 29.6)	4 (4/7, 57.1)	4 (4/20, 20.0)	0.145	2 (2/10, 20.0)	2 (2/10, 20.0)	1.000
<i>Endoscopy findings, n (%)</i>							
No abnormalities	8 (14.5)	3 (25.0)	5 (11.6)	0.352	3 (13.6)	2 (9.5)	1.000
Duodenum involvement	40 (40/54, 74.1)	7 (7/11, 63.6)	33 (33/43, 76.7)	0.448	15 (68.2)	18 (85.7)	0.281
Bulb	27 (27/54, 50.0)	5 (5/11, 45.5)	21 (21/43, 48.8)	1.000	9 (40.9)	13 (61.9)	0.227

Post-bulb	16 (16/54, 29.6)	1 (1/11, 9.1)	15 (15/43, 34.9)	0.144	11 (50.0)	4 (19.0)	0.055
							^b
Descending part	29 (29/54, 55.6)	3 (3/11, 27.3)	27 (27/43, 62.8)	0.046 ^a	12 (54.5)	15 (71.4)	0.347
Hyperaemia	31 (31/54, 57.4)	6 (6/11, 54.5)	25 (25/43, 58.1)	1.000	14 (63.6)	11 (52.4)	0.543
Erosion	13 (13/54, 24.1)	3 (3/11, 27.3)	10 (10/43, 23.3)	1.000	4 (18.2)	6 (28.6)	0.488
Ulcer	5 (5/54, 9.3)	1 (1/11, 9.1)	4 (4/43, 9.3)	1.000	0 (0.0)	4 (19.0)	0.04 ^a
Therapy, n (%)							
Diet therapy	7 (12.7)	1 (8.3)	6 (14.0)	1.000	4 (18.2)	2 (9.5)	0.664
Anti-allergic agents	7 (12.7)	3 (25.0)	4 (9.3)	0.168	3 (13.6)	1 (4.8)	0.607
Immunosuppressors	3 (5.5)	0 (0.0)	3 (7.0)	1.000	1 (4.5)	2 (9.5)	0.607

¹Mean \pm SD.

²Mean [Q1, Q3].

^ap<0.05.

^bp<0.10.

EGE, eosinophilic gastroenteritis; BMI, body mass index; GI bleeding, gastrointestinal bleeding; Hp, *Helicobacter pylori*; HTN, hypertension; DM, diabetes mellitus; HBV, hepatitis B virus; EOS#, eosinophil count; Hb, hemoglobin; PLT, platelet; T-IgE, total serum Immunoglobulin E; hsCRP, high sensitivity C reactive protein; ESR, erythrocyte sedimentation rate; ANA, antinuclear autoantibodies; ANCA, anti-neutrophil cytoplasmic antibodies.

Supplemental Table 2 Univariate COX analysis of possible variables

Characteristics	HR (95%CI)	P value	Characteristics	HR (95%CI)	P value
Demographic characteristics			Klein classification		
Sex			Mucosal type	1	
Male	1	0.811	Muscular type	2.2420 (0.8546-5.8820)	0.101
Female	0.9197 (0.4482-1.8874)		Serosal type	1.2040 (0.5457-2.6570)	0.646
Age (yr)			Laboratory tests		
> 40	1	0.044 ^a	IgE (KU/L)		
< = 40	2.0408 (1.0082-4.1312)		< = 300	1	0.022 ^a
BMI (kg/m ²)			> 300	0.2773 (0.1204-0.6384)	
< = 24	1	0.014 ^a	IgE (KU/L)		
>24	0.3922 (0.1916 -0.8027)		< = 60	1	0.367
Disease duration (months)			>60	1.6068 (0.6410-4.0275)	
< = 3.5	1	0.011 ^a	ESR (mm/h)		
>3.5	2.4725 (1.2200-5.0110)		< = 15	1	0.278
Allergic history ¹	0.8905 (0.4173-1.9003)	0.762	>15	1.7547 (0.4698-6.5545)	
Allergic rhinitis ¹	1.0972 (0.4084-2.9477)	0.844	hsCRP (mg/L)		
Asthma ¹	1.4060 (0.5530-3.5752)	0.408	< = 3	1	0.119
Urticaria ¹	0.7017 (0.1292-3.8096)	0.719	>3	1.8949 (0.6722-5.3413)	
Symptoms					

Abdominal pain ¹	1.2951 (0.4415-3.7989)	0.661	Ab ¹	1.5006 (0.5710-3.9426)	0.335
Diarrhea ¹	1.7539 (0.8591-3.5809)	0.139	ANA ¹	1.6005 (0.5103-5.0198)	0.317
Nausea ¹	1.5510 (0.7671-3.1360)	0.216	ANCA ¹	1.7015 (0.3813-7.5922)	0.367
Vomiting ¹	3.1259 (1.5246-6.4093)	0.001 ^a	Specific allergen test ¹	0.8779 (0.3123-2.4678)	0.804
Distension ¹	0.6097 (0.3015-1.2329)	0.163	Duodenum involvement¹	0.8756 (0.3810-2.0123)	0.738
GI bleeding ¹	1.7063 (0.2760-10.5505)	0.447	Bulb ¹	0.9736 (0.4812-1.9700)	0.939
Weight loss ¹	0.5327 (0.2524-1.1242)	0.066 ^b	Post-bulb ¹	0.7408 (0.3482-1.5761)	0.450
Fever ¹	0.3772 (0.1040-1.3689)	0.305	Descending part ¹	1.2722 (0.6288-2.5739)	0.495
Rash ¹	0.7683 (0.2624-2.2491)	0.655	Duodenum presentations		
Complications			Hyperaemia ¹	0.5653 (0.2698-1.1847)	0.096 ^b
Ascite ¹	1.1437 (0.5393-2.4254)	0.712	Erosion ¹	0.8312 (0.3724-1.8552)	0.656
GI obstruction ¹	1.8067 (0.6049-5.3959)	0.173	Ulcer ¹	2.0179 (0.5003-8.1383)	0.167
HBV infection ¹	0.3232 (0.0965-1.0831)	0.229	Therapy		
Comorbidities			Diet ¹	2.0179 (0.5003-8.1383)	0.167
Hp infection ¹	0.8954 (0.4016-1.9963)	0.785	Glucocorticoid ¹	6.1434 (2.8446-13.2676)	0.003 ^a
HTN ¹	0.8214 (0.3088-2.1852)	0.705	Anti-allergic agents ¹	0.4128 (0.1511-1.1278)	0.199
DM ¹	1.5494 (0.2712-8.8520)	0.534	Immunosuppressors ¹	1.4514 (0.2673-7.8784)	0.597

¹For these dichotomous variables, the reference group of hazard ratio is defined as “no” that is the absence of this variable.

^ap<0.05.

^bp<0.10.

HR, hazard ratio; CI, confidence interval; BMI, body mass index; GI bleeding, gastrointestinal bleeding; Hp, *Helicobacter pylori*; HTN, hypertension; DM, diabetes mellitus; HBV, hepatitis B virus; EOS#, eosinophil count; Hb, hemoglobin; PLT, platelet; T-IgE, total serum

Immunoglobulin E; hsCRP, high sensitivity C reactive protein; ESR, erythrocyte sedimentation rate; Ab, auto-antibodies; ANA, antinuclear autoantibodies; ANCA, anti-neutrophil cytoplasmic antibodies.