

Supplemental Table 1: Severity Scores Assigned on Admission

Supplemental Table 2: Sensitivities and specificities of the different cytokines in predicting clinical outcomes

Supplemental Figure: Time to diarrhea resolution in patients with and without immunosuppression.

A. In non-immunosuppressed patients: Time to diarrhea resolution is more prolonged in patients with high IL-8 mRNA ($\Delta\text{CT IL-8 mRNA} > 0\text{m}$) at diagnosis (IL-8 +, green line) (median 12 days) compared to those with low IL-8 mRNA levels (IL-8 -, blue line) (median 3 days).

B. In immunosuppressed patients: Time to diarrhea resolution does not differ between patients with high fecal IL-8 mRNA at diagnosis (IL-8 +, red line) (median 5 days) and those with low IL-8 mRNA levels (IL-8 -, orange line) (median 4 days).

+ represents censored values. p represents the p value of the Log Rank (Mantel-Cox) test.

*represents $p < 0.05$

Supplemental Table 1: Severity Scores Assigned on Admission

	Points assigned		
	HINES VA [16]	UPMC1 [14]	CSI [13]
Fever > 38°C	1		
Ileus (clinical or radiographic)	1		
Systolic blood pressure < 100mmHg	1		
15 000 < WBC < 30 000 (cells/μL)	1		
WBC >30 000 cells/μL	2		
CT scan findings (colonic wall thickening, colonic dilatation, ascites)	1 for 1 finding 2 for ≥2 findings		
Abdominal Pain		1	
WBC >20 000 or <1 500 (cells/μL)		1	
Bowel wall thickening, ascites or ileus		1	
Malignancy			1
WBC >20 000 cells/μL			1
Blood albumin < 3 g/dL			1
Blood creatinine >1.5 times baseline			1
Disease is considered severe if total points	≥ 3	≥ 2	≥ 2

Supplemental Table 2: Sensitivities and specificities of the different cytokines in predicting clinical outcomes.

Biomarkers	Diarrhea persistent 5 days after initiation of CDI therapy		Treatment with vancomycin		Severe disease (ICU admission, toxic megacolon, colectomy or death)	
	Sensitivity	Specificity	Sensitivity	Specificity	Sensitivity	Specificity
CXCL-5 mRNA Δ CT > 0	0.43	0.84	0.45	0.82	0.40	0.70
IL-8 mRNA Δ CT > 0	0.75	0.5	0.81	0.53	0.8	0.4
IL-8 protein >0.75 ng/mL	0.61	0.59	0.63	0.58	0.45	0.48
Lactoferrin protein > 7.25 μ g/mL	0.67	0.43	0.69	0.45	0.73	0.41
HINES VA Severe if \geq 3	0.14	0.91	0.17	0.94	0.45	0.93
UPMC1 Severe if \geq 2	0.4	0.8	0.38	0.78	0.54	0.74
CSI Severe if \geq 2	0.29	0.78	0.31	0.82	0.54	0.8

