

**TABLE S1:** Demographic, clinical, and treatment characteristics of the case-control sample

Variables	Number of patients	Characteristics			
		Total (N = 340)	Control (n = 272)	Case (n = 68)	P value
Recipient age at transplant (years)	340	50.2 ( $\pm$ 12.8)	49.5 ( $\pm$ 12.8)	52.8 ( $\pm$ 12.6)	0.06
Recipient sex					0.14
Male	197 (163 / 34)	57.9%	59.9%	50.0%	
Female	143 (109 / 34)	42.1%	40.1%	50.0%	
Recipient race					0.76
Nonwhite	110 (89 / 21)	32.9%	33.3%	31.3%	
White	224 (178 / 46)	67.1%	66.7%	68.7%	
Mean Body Mass Index (BMI)	309 (246 / 63)	26.3 (23.2, 30.2)	26.1 (23.0, 29.4)	27.5 (23.5, 31.9)	0.11
Cause of ESRD					0.10
GN	107 (90 / 17)	31.8%	33.3%	25.4%	
DM	91 (65 / 26)	27.0%	24.1%	38.8%	
PKD	46 (37 / 9)	13.7%	13.7%	13.4%	
Other	93 (78 / 15)	27.6%	28.9%	22.4%	
Time on dialysis prior to transplant (years)	332 (267 / 65)	2.8 (1.1, 5.5)	2.6 (1.0, 5.2)	4.0 (2.0, 6.2)	0.01
Peak PRA					0.80
= 0%	163 (132 / 31)	49.9%	50.2%	48.4%	
> 0%	164 (131 / 33)	50.2%	49.8%	51.6%	
Donor age at donation (years)	326 (261 / 65)	45.1 ( $\pm$ 14.3)	44.7 ( $\pm$ 13.6)	46.9 ( $\pm$ 16.8)	0.27
Donor type					< 0.001
Deceased	190 (137 / 53)	55.9%	50.4%	77.9%	
Living	150 (135 / 15)	44.1%	49.6%	22.1%	
Type of induction					0.25
Nondepleting agent	86 (74 / 12)	25.3%	27.2%	17.7%	
Depleting agent	221 (173 / 48)	65.0%	63.6%	70.6%	
No induction	33 (25 / 8)	9.7%	9.2%	11.8%	
Type of calcineurin inhibitor (CNI)					0.25
Tacrolimus	243 (192 / 51)	74.1%	72.7%	79.7%	
Cyclosporine	85 (72 / 13)	25.9%	27.3%	20.3%	

**TABLE S1** (continued)

Variables	Number of patients	Characteristics			
		Total (N = 340)	Control (n = 272)	Case (n = 68)	P value
Length of stay in hospital at transplant or posttransplant (days)	340 (272 / 68)	9 (7, 16)	9 (7, 14)	16 (8, 31.5)	< 0.001
Biopsy-proven acute rejection before CDI*					0.001
No	317 (260 / 57)	93.2%	95.6%	83.8%	
Yes	23 (12 / 11)	6.8%	4.4%	16.2%	
Antibiotics therapy 1 year prior to CDI*					< 0.001
No	166 (149 / 17)	48.8%	54.8%	25.0%	
Yes	174 (123 / 51)	51.2%	45.2%	75.0%	
PPI therapy 1 year prior to CDI*					0.04
No	117 (101 / 16)	34.4%	37.1%	23.5%	
Yes	223 (171 / 52)	65.6%	62.9%	76.5%	
H2RA therapy 1 year prior to CDI*					0.91
No	158 (126 / 32)	46.5%	46.3%	47.1%	
Yes	182 (146 / 36)	53.5%	53.7%	52.9%	
Gastrointestinal surgeries 1 year prior to CDI*					0.001
No	303 (250 / 53)	89.1%	91.9%	77.9%	
Yes	37 (22 / 15)	10.9%	8.1%	22.1%	

\* For controls, the follow-up time is the same as that of the case in the same case-control set.

**TABLE S2:** Incidence of any or net immunosuppression reduction during the first four weeks after *Clostridium difficile* infection diagnosis among patients who did or did not subsequently develop biopsy-proven acute rejection

CDI cases (n = 68)	CNI any ↓	CNI net ↓	MPA any ↓	MPA net ↓	CST any ↓	CST net ↓
BPAR+ (n = 10)	5 (50%)	3 (30%)	2 (20%)	1 (10%)	4 (40%)	4 (40%)
BPAR- (n = 58)	19 (33%)	18 (31%)	17 (29%)	18 (31%)	19 (33%)	20 (34%)
<i>P</i> value*	0.31	1.00	0.71	0.26	0.72	0.73

CDI = *Clostridium difficile* infection; BPAR = biopsy-proven acute rejection; CNI = calcineurin inhibitor; MPA = mycophenolic acid; CST = corticosteroids

\* Two-tailed *P* value based on the Fisher's exact test