

**Table S1** Detailed quantification and imaging combining cine MRU and Whitaker test

Patient	Caliber of the ileal graft (A <sup>†</sup> /B <sup>‡</sup> )			Length of ileal graft (mm)	Mean Amplitude (mm)	Mean contraction ratio	Urine jets (n)	Peristaltic waves	Pressure difference (cmH <sub>2</sub> O)	Pelvis pressure (cmH <sub>2</sub> O)	Perfusion volume (mL)	Final perfusion volume (mL)	Imaging in MRU		Imaging in Whitaker test
	Upper (mm)	Middle (mm)	Lower (mm)										Peristalsis	Anastomosis	
1	4.30/28.60	8.50/22.50	3.10/24.50	28.33	19.90	0.79	3	6	40	57	NA	55	Regular	Narrow and local wall thickening	UPJ narrow
2	4.00/14.70	5.60/16.50	8.20/12.20	27.97	9.87	0.62	2	7	-6	54	113	211	Regular	Bilateral narrow	Clear
3	5.20/17.30	6.40/20.40	6.30/19.10	22.14	13.0	0.69	4	8	-5	26	71	205	Regular	Inflammation	Poor imaging at lower ureter
4	5.70/28.70	7.30/18.00	4.50/8.60	14.47	12.60	0.68	2	3	-24	Normal	-	53	Slow	Normal	Clear
5	6.70/14.80	6.90/16.80	4.70/21.50	14.44	11.60	0.66	6	6	-3	Normal	-	243	Regular	Normal	Clear
6	6.80/15.10	11.40/22.70	11.50/20.20	22.53	9.43	0.49	4	4	3	Normal	-	307.8	Slow	Slight narrow	Clear
7	4.20/11.60	4.70/10.80	2.50/9.40	17.06	6.80	0.64	7	7	5	Normal	-	170	Regular	Slight narrow	Clear
8	3.00/14.40	9.10/25.60	7.20/14.10	28.20	11.60	0.64	6	8	6	Normal	-	197	Regular	Normal	Clear
9	9.30/18.60	8.80/17.40	3.60/12.50	25.77	8.93	0.55	4	5	1	Normal	-	126	Regular	Normal	Clear
10	4.23/11.96	6.64/16.78	8.09/15.44	19.51	8.41	0.57	2	4	-2	Normal	-	120	Regular	Normal	Clear
11	5.65/22.00	9.21/24.72	11.42/25.70	30.88	15.38	0.64	5	5	1	Normal	-	43	Regular	Normal	Clear
12	8.10/17.79	12.77/28.71	NA	19.76	8.54	0.55	2	3	-2	Normal	-	22	Regular	Normal	Clear
13	16.46/22.34	10.90/19.71	11.07/19.33	29.11	7.65	0.37	NA	3	3	Normal	-	120	Regular	Normal	Clear
14	7.92/10.41	8.92/11.81	11.07/14.86	21.74	3.06	0.25	1	3	1	Normal	-	160	Regular	Normal	Clear
15	11.92/20.80	12.69/18.07	11.43/18.84	25.69	7.22	0.38	NA	4	-1	Normal	-	100	Regular	Normal	Clear
16	11.56/17.94	15.38/22.28	8.93/18.74	27.26	7.70	0.39	2	4	2	Normal	-	120	Regular	Normal	Clear
17	14.49/17.44	8.30/17.85	10.81/17.94	25.36	6.54	0.37	4	6	3	Normal	-	140	Regular	Normal	Clear
18	7.92/12.51	6.59/8.91	6.19/9.06	15.67	3.26	0.32	2	3	14	Normal	-	120	Regular	Normal	Clear
19	10.34/16.46	10.50/14.56	14.02/17.24	22.81	4.47	0.28	NA	4	10	Normal	-	110	Regular	Normal	Clear
20	9.26/14.44	9.00/13.10	10.28/13.89	19.46	4.30	0.31	3	4	1	Normal	-	140	Regular	Normal	Clear

<sup>†</sup>, diameter of maximum contraction; <sup>‡</sup>, diameter of maximum extension. MRU, magnetic resonance urography.