## **SUPPLEMENTAL DIGITAL CONTENT**

SDC, Table S1. Causes of graft loss. A total of 97 grafts were lost, most commonly due to death with a functioning graft (n=46, 47% of graft losses) and chronic allograft nephropathy (n=32, 33%).

	Treatment group						
Timing of graft loss	AZA	MMF 2g/d	MMF 3g/d				
<1 year							
Acute rejection	2	1	0				
Death with functioning graft	0	1	2				
Other	4	2	1				
1 to <5 years							
Chronic allograft nephropathy	2	5	1				
Death with functioning graft	2	2	4				
GN recurrence	0	2	0				
Other	0	1	0				
>=5 years							
Chronic allograft nephropathy	7	11	6				
Death with functioning graft	15	9	11				
GN recurrence	1	0	2				
Other	1	1	1				

GN, glomerulonephritis

SDC, Table S2. Kidney function. Only functioning grafts were included in these analyses. There were no differences between the groups in either the 15-year mean eGFR or the slope of eGFR against time.

	Treatment group								
	AZA	MMF 2g/d	MMF 3g/d	P					
eGFR									
Mean <sup>1</sup> (95% CI)	46.1 (41.8, 50.6)	45.9 (41.5, 50.2)	50.9 (46.5, 55.2)	0.17					
Slope <sup>2</sup> (95% CI)	-0.9 (-0.1, -1.7)	-1.6 (-0.8, -2.4)	-0.7 (+0.1, -1.4)	0.24					

eGFR, estimated glomerular filtration rate (abbreviated MDRD formula) Units: \(^1\text{mL/min}/1.73\text{m}^2\), \(^2\text{mL/min}/1.73\text{m}^2\)/year

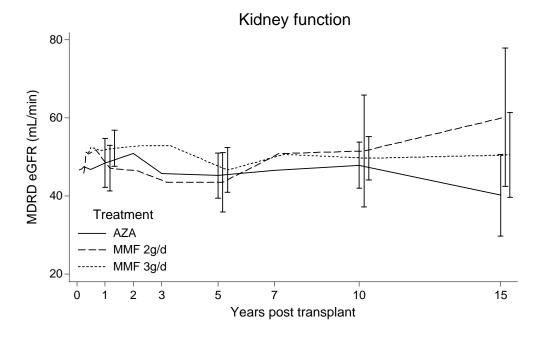
## SUPPLEMENTAL DIGITAL CONTENT

**SDC, Table S3. Prescribed antimetabolite and dose.** The table shows the number of patients taking AZA or MMF in each treatment group, as well as the mean daily dose of each drug. Some patients randomized to AZA crossed over to MMF (beginning at 36 months with 1 patient) and vice versa (beginning at 1 month). The mean daily MMF dose in the MMF 3g/d group was less than 3g at each time point, but was clearly higher than the dose received in the 2g/d group until 5 years post transplant. See also figure 3 and SDC figure 2.

	Months post transplant											
Treatment group	0	1	2	3	6	12	24	36	60	84	120	180
AZA												
# functioning grafts	45	42	40	39	39	39	38	38	35	29	20	12
# on AZA	45	39	40	38	39	34	36	34	30	19	12	5
AZA dose*	112	112	108	112	109	102	98	94	93	83	67	60
# on MMF	0	0	0	0	0	0	0	1	1	5	3	4
MMF dose*	-	-	-	-	-	-	-	3000	2000	2000	1667	1250
MMF 2g/d												
# functioning grafts	44	43	43	42	41	40	38	36	30	24	21	10
# on AZA	0	3	4	5	5	8	13	11	8	5	4	3
AZA dose*	-	100	106	90	86	91	92	81	109	90	100	92
# on MMF	44	39	37	36	35	32	24	24	21	18	13	6
MMF dose*	2000	2000	1973	2000	1971	1938	1958	2000	1857	1806	1654	1667
MMF 3g/d												
# functioning grafts	44	43	43	43	42	41	39	38	36	32	27	16
# on AZA	0	1	1	3	3	7	14	15	13	11	7	7
AZA dose*	-	100	100	83	83	111	105	97	111	102	86	64
# on MMF	44	42	41	40	38	32	22	20	20	17	13	6
MMF dose*	2966	2893	2927	2888	2803	2859	2727	2600	2175	1897	1769	1583

\*Mean dose in those receiving drug, mg/day

**SDC, Figure S1. Kidney function.** The lines show mean eGFR within each group over time; the capped vertical lines show 95% confidence intervals for mean eGFR at selected time points. There was no difference in overall mean eGFR (p=0.17) or in the slope of eGFR against time (p=0.24). See SDC table 2.



## **SUPPLEMENTAL DIGITAL CONTENT**

**SDC, Figure S2.** Crossover. The graph shows the cumulative proportion of patients crossing over to the other antimetabolite. Over the first 3 years post transplant approximately one third of patients assigned to MMF switched to AZA; this proportion then remained relatively stable over the following years. Only a very small proportion of patients in the AZA group switched to MMF until 7 years post transplant.

