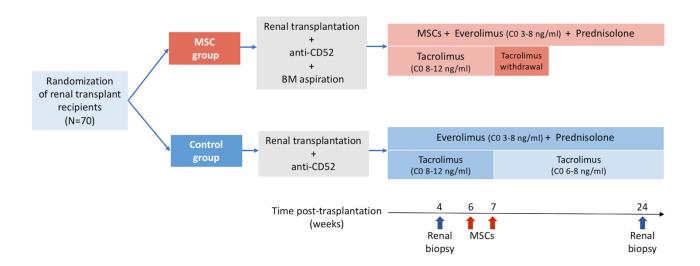


Table S1. Concomitant cardiovascular medications at 24 weeks post-transplantation in each treatment group.

Concomitant cardiovascular medications	MSC group	Control group	P
	(n=27)	(n=27)	value
Calcium-channel blocker (n,%)	11 (40.8)	14 (51.9)	0.41
ACE-I or ARB (n,%)	15 (55.6)	15 (55.6)	1.0
Beta-blocker (n,%)	10 (37)	10 (37)	1.0
Diuretic (n,%)	2 (7.4)	5 (18.5)	0.22
Alfa-blocker (n,%)	2 (7.4)	1 (3.7)	1.0
Anthypertensive drugs ≥2 (n,%)	14 (51.9)	14 (51.9)	1.0
Statin (n,%)	14 (51.9)	16 (61.5)	0.48
Insulin (n,%)	7 (25.9)	1 (3.7)	0.05
Oral antidiabetic (n,%)	3 (11.1)	2 (7.4)	1.0

ACEI: angiotensin-converting enzyme inhibitors; ARB: angiotensin receptor blocker.

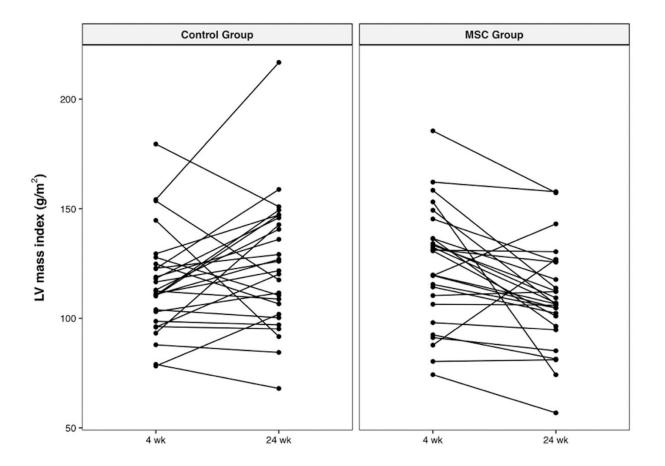
Figure S1. Schematic illustration of study interventions and immunosuppressive regimens.



Adapted from "Autologous bone marrow derived mesenchymal stromal cell therapy with early tacrolimus withdrawal: The randomized prospective, single-center, open-label TRITON study," by MEJ Reinders, 2021, *American Journal of Transplantation* (17).

All patients received prednisolone during the entire period (100 mg at day 1 to 3, 50 mg at day 4, 20 mg at day 5 to 14, 15 mg at day 15 to 21 and 10 mg after day 22). Directly after the 2<sup>nd</sup> MSC infusion, the MSC group received a higher dose of prednisolone (15mg) for two weeks. In addition, all patients received induction treatment with alemtuzumab (anti-CD52), at day 0 and 1 (15 mg subcutaneously) after transplantation. Target trough level of everolimus was 3-8 ng/mL in both groups. The tacrolimus target was 8-12 ng/mL the first 6 weeks post-transplantation and lowered to 6-8 ng/mL in the control group 7 weeks post-transplantation. In the MSC group, BM have been harvested during the renal transplantation and MSCs cultured in the Interdivisional Good Manufacturing Practice (GMP) laboratory. The MSC product was infused via peripheral infusion with a target dose of 1.5x10<sup>6</sup>/kg body weight (range 1-2x10<sup>6</sup>), 6 and 7 weeks after the transplantation. The dose of tacrolimus was reduced to 50% at the time of the second MSC infusion and stopped 1 week later. MSC: mesenchymal stromal cells; BM: bone marrow.

Figure S2. Individual patient data showing the changes of LVM index over time.



MSC: mesenchymal stromal cells; LVM index: left ventricular mass index; wk: weeks.