Supplementary Table S1. Secondary outcomes in the MR CLEAN Registry: comparison with MR CLEAN intervention and control arms. Adjustments were made for age, sex, baseline NIHSS, collateral status and pre-stroke mRS.

	MR CLEAN Registry vs MR CLEAN intervention		MR CLEAN Registry vs MR CLEAN control	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
mRS 0-1 at 90 days	1.80 (1.18 to 2.74)	1.92 (1.23 to 3.00)	3.69 (2.19 to 6.23)	3.84 (2.23 to 6.61)
mRS 0-2 at 90 days	1.28 (0.96 to 1.72)	1.63 (1.17 to 2.28)	2.63 (1.90 to 3.63)	3.38 (2.336 to 4.84)
mRS 0-3 at 90 days	1.07 (0.81 to 1.41)	1.44 (1.04 to 1.99)	2.02 (1.54 to 2.65)	2.84 (2.07 to 3.90)
Successful Reperfusion (eTICI 2B-3)	1.00 (0.74 to 1.36)	1.02 (0.74 to 1.39)	NA	NA
	Beta	Beta	Beta	Beta
NIHSS after 24-48 hours	2.40 (1.23 to 3.57)	1.10 (-0.02 to 2.23)	5.01 (3.91 to 6.12)	3.28 (2.21 to 4.35)

Supplementary Table S2. Complications in the MR CLEAN Registry: comparison with MR CLEAN intervention and control arms. Adjustments were made for age, sex, baseline NIHSS, collateral status and pre-stroke mRS.

	MR CLEAN Registry vs MR CLEAN intervention		MR CLEAN Registry vs MR CLEAN control	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Mortality within 7 days	1.03 (0.70 to 1.54)	0.89 (0.58 to 1.37)	1.52 (0.99 to 2.32)	1.51 (0.95 to 2.38)
Mortality within 30 days	1.32 (0.93 to 1.88)	1.07 (0.72 to 1.58)	1.37 (0.98 to 1.91)	1.21 (0.83 to 1.77)
Mortality within 90 days	1.49 (1.06 to 2.08)	1.22 (0.83 to 1.78)	1.39 (1.02 to 1.90)	1.22 (0.86 to 1.75)
Symptomatic intracranial haemorrhage	0.73 (0.43 to 1.24)	0.71 (0.41 to 1.24)	0.90 (0.53 to 1.54)	0.82 (0.47 to 1.42)
Hemicraniectomy	0.39 (0.21 to 0.74)	0.55 (0.28 to 1.08)	0.49 (0.26 to 0.94)	0.65 (0.33 to 1.30)
Progression of ischaemic stroke	0.42 (0.29 to 0.61)	0.37 (0.25 to 0.54)	0.47 (0.33 to 0.67)	0.40 (0.28 to 0.59)
Pneumonia	1.07 (0.70 to 1.64)	0.93 (0.60 to 1.54)	0.73 (0.51 to 1.05)	0.65 (0.44 to 0.95)
Other infection	0.72 (0.41 to 1.26)	0.68 (0.38 to 1.21)	1.36 (0.69 to 2.66)	1.31 (0.66 to 2.61)
Cardiac ischaemia	1.89 (0.24 to 14.57)	1.36 (0.17 to 10.83)	0.53 (0.17 to 1.67)	0.40 (0.12 to 1.34)
Extracranial haemorrhage	*	*	3.00 (0.72 to 12.60)	2.39 (0.56 to 10.18)
Allergic reaction	1.57 (0.30 to 12.32)	1.52 (0.19 to 12.26)	*	*
Other complications	1.17 (0.77 to 1.79)	1.16 (0.76 to 1.78)	1.01 (0.69 to 1.47)	1.01 (0.69 to 1.50)

*Too few events

Supplementary Table S3. Primary and secondary outcomes in the MR CLEAN Registry of non-imputed data (n=1363): comparison with MR CLEAN intervention and control arms. Adjustments were made for age, sex, baseline NIHSS, collateral status and pre-stroke mRS.

	MR CLEAN Registry vs MR CLEAN intervention		MR CLEAN Registry vs MR CLEAN control	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
mRS at 90 days	1.02 (0.80 to 1.29)	1.31 (1.02 to 1.68)	1.47 (1.18 to 1.83)	1.90 (1.50 to 2.41)
mRS 0-1 at 90 days	1.78 (1.17 to 2.72)	1.93 (1.23 to 3.01)	3.66 (2.17 to 6.18)	3.87 (2.25 to 6.65)
mRS 0-2 at 90 days	1.26 (0.94 to 1.70)	1.63 (1.17 to 2.28)	2.59 (1.87 to 3.60)	3.48 (2.43 to 5.00)
Successful Reperfusion (eTICI 2B-3)	0.95 (0.70 to 1.29)	0.98 (0.72 to 1.34)	NA	NA
	Beta	Beta	Beta	Beta
NIHSS after 24-48 hours	2.32 (1.12 to 3.51)	1.02 (-0.13 to 2.17)	4.93 (3.80 to 6.05)	3.19 (2.10 to 4.28)

Supplementary Table S4. Primary outcome in the MR CLEAN Registry (n=1488): comparison with MR CLEAN intervention and control arms. Adjustments were made for age, sex, baseline NIHSS, collateral status, pre-stroke mRS, IV alteplase treatment and systolic blood pressure.

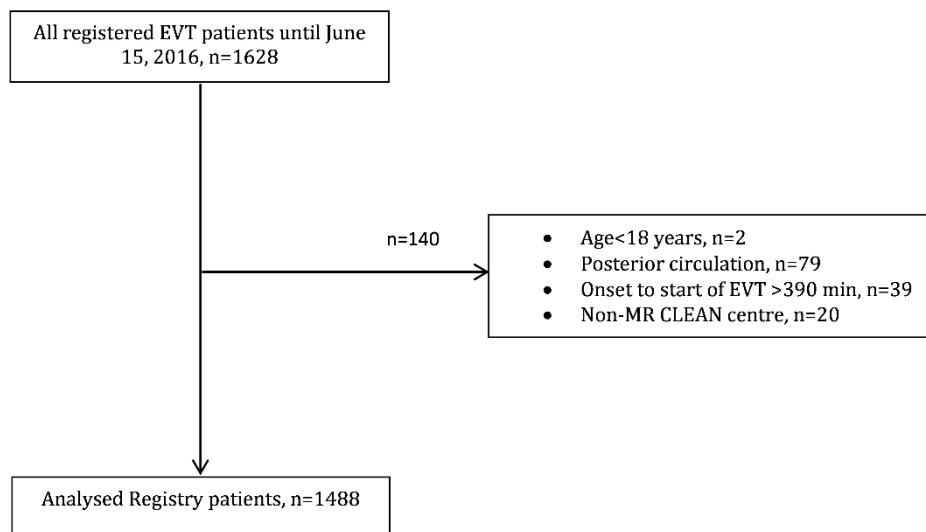|	**MR CLEAN Registry vs MR CLEAN intervention** Adjusted OR (95% CI)	**MR CLEAN Registry vs MR CLEAN control** Adjusted OR (95% CI)
mRS at 90 days	1.30 (1.02 to 1.67)	1.85 (1.46 to 2.34)

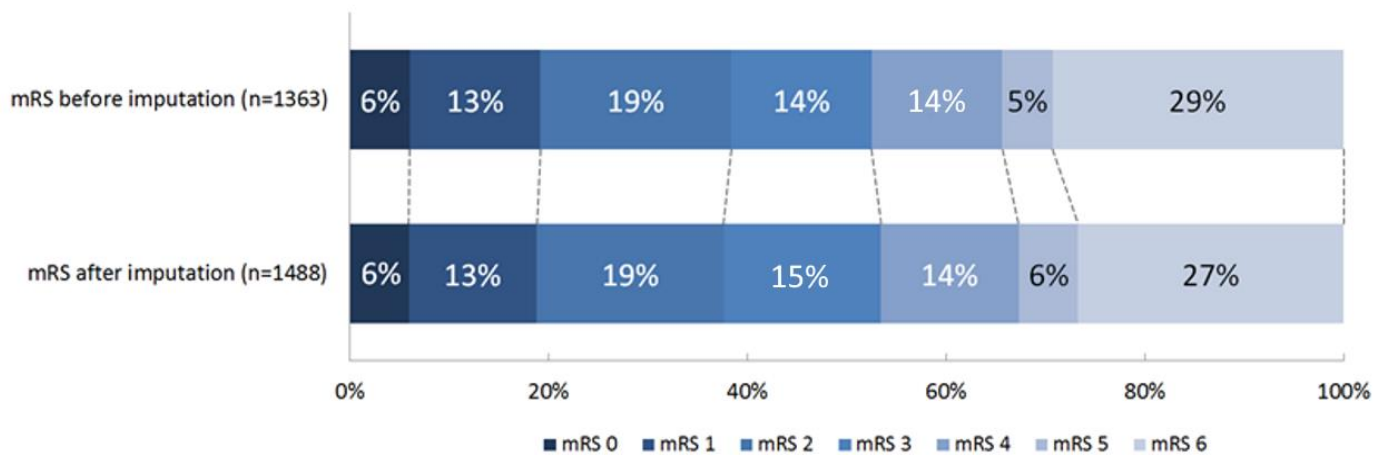**Figure S1.** Flowchart of MR CLEAN Registry patients selected for core analysis.

Figure S2. Modified Rankin scale score (mRS) before multiple imputation compared to the mRS after multiple imputation. Any mRS score of 0 to 5 assessed within 30 days was treated as missing and replaced by multiple imputation.