

**Supplemental Table 1:** Baseline Demographics, Preoperative Characteristics & Surgical Details

Parameter	MG Group (n=65)	Control Group (n=65)	p-value	Statistical Test
Age (years)	58.1 ± 10.3	59.0 ± 9.7	0.61	Independent t-test
Male Sex	45 (69.2%)	48 (73.8%)	0.55	Chi-square
Weight (kg)	77.2 ± 12.5	76.5 ± 11.9	0.73	Mann-Whitney U
Diabetes Mellitus	28 (43.1%)	25 (38.5%)	0.58	Chi-square
Hypertension	50 (76.9%)	53 (81.5%)	0.52	Chi-square
Preoperative EF (%)	52.5 ± 7.9	51.0 ± 7.4	0.29	Welch's t-test
Preoperative Creatinine (mg/dL)	1.1 ± 0.3	1.0 ± 0.2	0.41	Mann-Whitney U
HbA1c (%) (6.2% missing)	7.0 ± 1.6	6.8 ± 1.4	0.43	ANCOVA (adjusted for age)
<b>Surgery Type</b>			<b>0.68</b>	<b>Chi-square</b>
- CABG	50 (76.9%)	53 (81.5%)		
- AVR	8 (12.3%)	6 (9.2%)		
- MVR	5 (7.7%)	4 (6.2%)		
- Combined (CABG+Valve)	2 (3.1%)	2 (3.1%)		
<b>Cardiopulmonary Bypass Time (min)</b>	113 ± 34	119 ± 39	0.38	Welch's t-test
<b>Aortic Cross-Clamp Time (min)</b>	68 ± 22	72 ± 26	0.35	
<b>Preop Beta-Blockers</b>	51 (78.5%)	52 (80.0%)	0.82	
<b>Preop Statins</b>	49 (75.4%)	48 (73.8%)	0.84	
CABG: Coronary artery bypass grafting; AVR: Aortic valve replacement; MVR: Mitral valve replacement.				

**Supplemental Table 2:** Missing Data & Sensitivity Analysis

<b>Parameter</b>	<b>MG Group</b> <b>Missing</b>	<b>Control Group</b> <b>Missing</b>	<b>Impact Assessment</b>
HA1C	4/65 (6.2%)	4/65 (6.2%)	Minimal bias; results robust to imputation.
Graft Details	6/65 (9.2%)	6/65 (9.2%)	Mixed-effects models accommodated missingness.

Supplemental figure 1

**CONSORT 2010 Flow Diagram**

