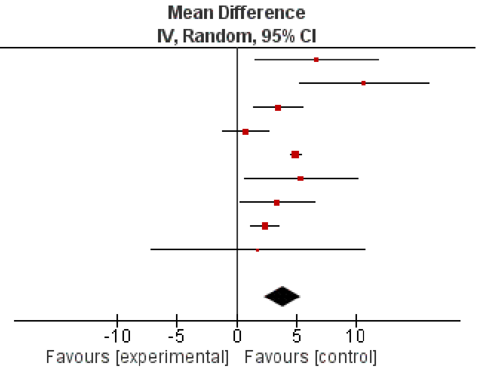
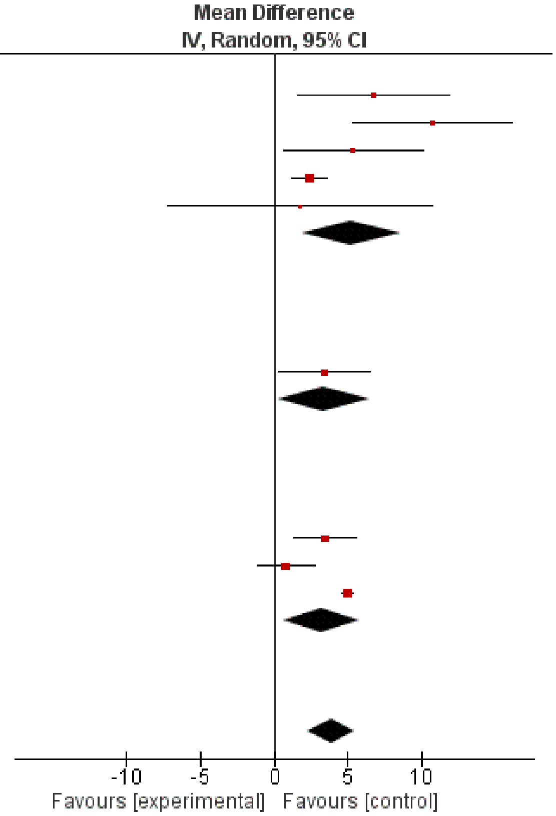
Study or Subgroup	Mean Difference	SE	Intervention Total	Control Total	Weight	Mean Difference IV, Random, 95% CI
Attar 2023 a	6.72	2.6482	20	12	6.3%	6.72 [1.53, 11.91]
Attar 2023 b	10.72	2.7723	20	13	5.9%	10.72 [5.29, 16.15]
Cao 2009	3.5	1.0714	41	45	14.6%	3.50 [1.40, 5.60]
Gao 2013	0.8	0.9897	19	20	15.2%	0.80 [-1.14, 2.74]
Gao 2015	5	0.201	57	55	19.5%	5.00 [4.61, 5.39]
Huikuri 2008	5.4	2.4269	39	38	7.0%	5.40 [0.64, 10.16]
Kim SH 2018	3.4	1.5934	14	12	11.1%	3.40 [0.28, 6.52]
Lee 2014	2.4	0.5989	30	28	17.8%	2.40 [1.23, 3.57]
Srimahachota S 2011	1.8	4.5871	11	12	2.6%	1.80 [-7.19, 10.79]
Total (95% CI)			**251**	**235**	**100.0%**	**3.89 [2.32, 5.46]**

Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%
Test for overall effect: Z = 4.85 (P < 0.00001)



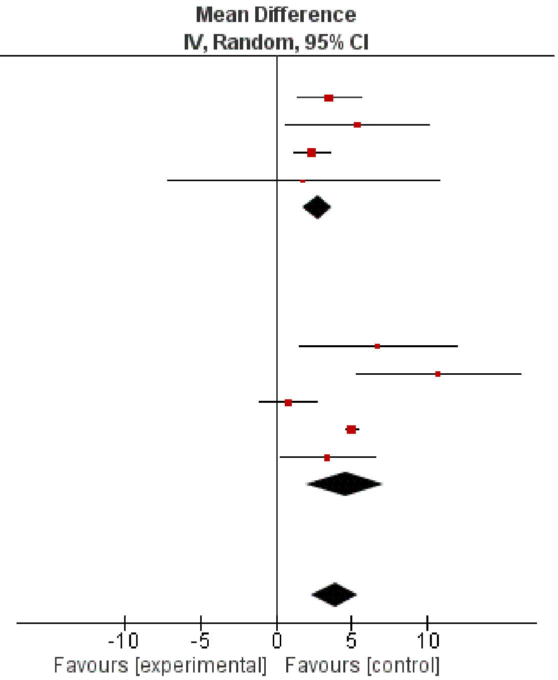
Supplementary Fig. 8A. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control. LVEF was assessed using echocardiography.

Study or Subgroup	Mean Difference	SE	Weight	Mean Difference IV, Random, 95% CI
1.2.1 time of assessment upto 6 months				
Attar 2023 a	6.72	2.6482	6.3%	6.72 [1.53, 11.91]
Attar 2023 b	10.72	2.7723	5.9%	10.72 [5.29, 16.15]
Huikuri 2008	5.4	2.4269	7.0%	5.40 [0.64, 10.16]
Lee 2014	2.4	0.5989	17.8%	2.40 [1.23, 3.57]
Srimahachota S 2011	1.8	4.5871	2.6%	1.80 [-7.19, 10.79]
Subtotal (95% CI)			**39.6%**	**5.27 [1.89, 8.66]**
Heterogeneity: Tau² = 8.76; Chi² = 11.76, df = 4 (P = 0.02); I² = 66%				
Test for overall effect: Z = 3.05 (P = 0.002)				
1.2.2 time of assessment upto 12 months				
Kim SH 2018	3.4	1.5934	11.1%	3.40 [0.28, 6.52]
Subtotal (95% CI)			**11.1%**	**3.40 [0.28, 6.52]**
Heterogeneity: Not applicable				
Test for overall effect: Z = 2.13 (P = 0.03)				
1.2.3 ime of assessment more than 12 months				
Cao 2009	3.5	1.0714	14.6%	3.50 [1.40, 5.60]
Gao 2013	0.8	0.9897	15.2%	0.80 [-1.14, 2.74]
Gao 2015	5	0.201	19.5%	5.00 [4.61, 5.39]
Subtotal (95% CI)			**49.3%**	**3.22 [0.59, 5.84]**
Heterogeneity: Tau² = 4.69; Chi² = 18.79, df = 2 (P < 0.0001); I² = 89%				
Test for overall effect: Z = 2.40 (P = 0.02)				
Total (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Test for subgroup differences: Chi² = 0.98, df = 2 (P = 0.61), I² = 0%				



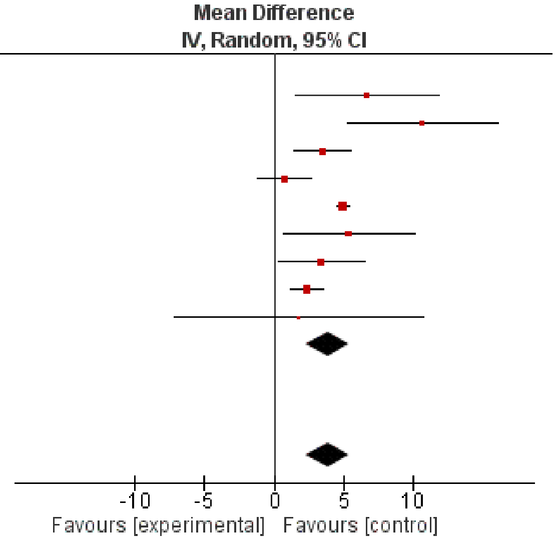
Supplementary Fig. 8B. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by time of assessment. LVEF was measured using echocardiography.

Study or Subgroup	Mean Difference	SE	Weight	Mean Difference IV, Random, 95% CI
1.3.1 Mononuclear				
Cao 2009	3.5	1.0714	14.6%	3.50 [1.40, 5.60]
Huikuri 2008	5.4	2.4269	7.0%	5.40 [0.64, 10.16]
Lee 2014	2.4	0.5989	17.8%	2.40 [1.23, 3.57]
Srimahachota S 2011	1.8	4.5871	2.6%	1.80 [-7.19, 10.79]
Subtotal (95% CI)			**42.1%**	**2.77 [1.78, 3.77]**
Heterogeneity: Tau² = 0.00; Chi² = 2.07, df = 3 (P = 0.56); I² = 0%				
Test for overall effect: Z = 5.46 (P < 0.00001)				
1.3.2 Mesenchymal				
Attar 2023 a	6.72	2.6482	6.3%	6.72 [1.53, 11.91]
Attar 2023 b	10.72	2.7723	5.9%	10.72 [5.29, 16.15]
Gao 2013	0.8	0.9897	15.2%	0.80 [-1.14, 2.74]
Gao 2015	5	0.201	19.5%	5.00 [4.61, 5.39]
Kim SH 2018	3.4	1.5934	11.1%	3.40 [0.28, 6.52]
Subtotal (95% CI)			**57.9%**	**4.58 [2.01, 7.15]**
Heterogeneity: Tau² = 5.93; Chi² = 23.11, df = 4 (P = 0.0001); I² = 83%				
Test for overall effect: Z = 3.49 (P = 0.0005)				
Total (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Test for subgroup differences: Chi² = 1.65, df = 1 (P = 0.20), I² = 39.5%				

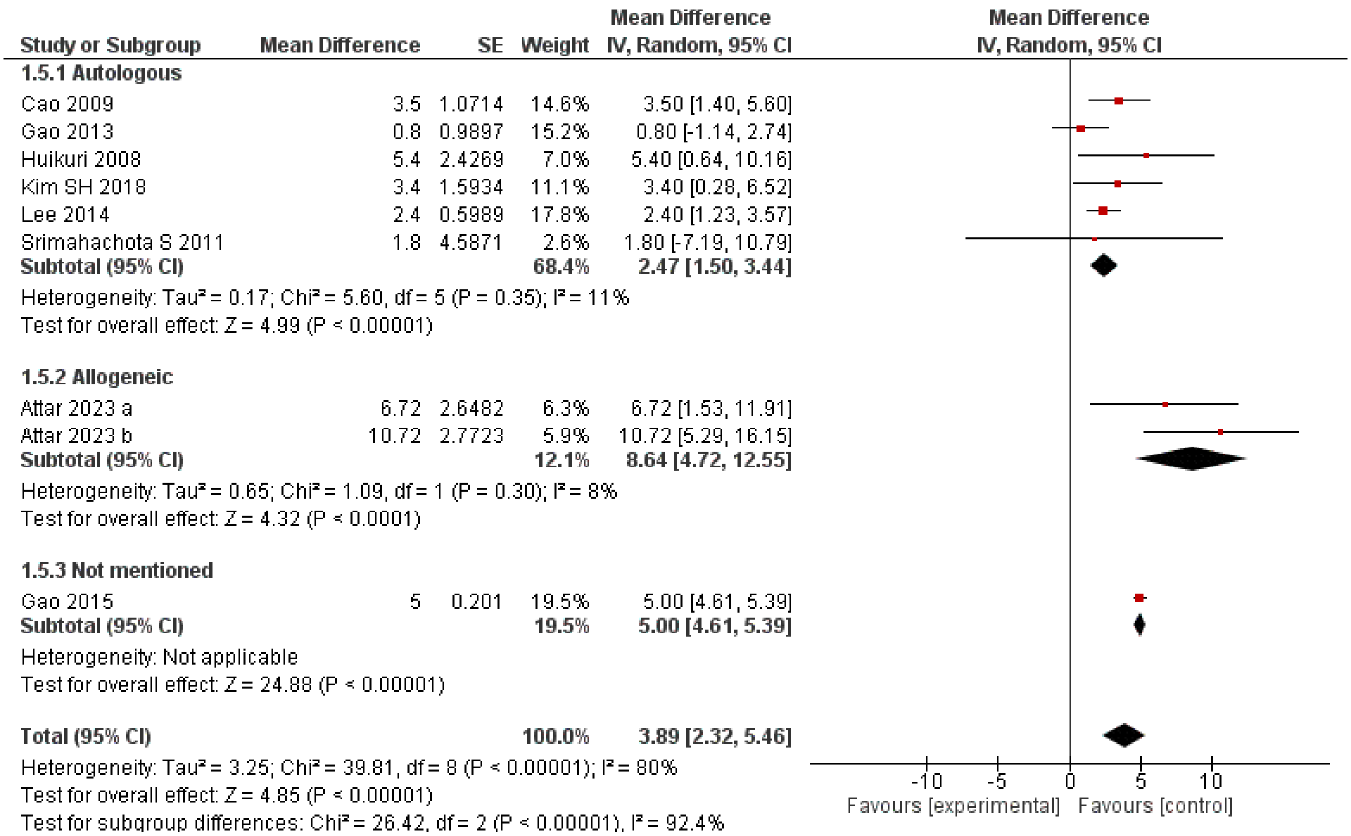


Supplementary Fig. 8C. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by type of cells administered. LVEF was measured using echocardiography.

Study or Subgroup	Mean Difference	SE	Weight	Mean Difference IV, Random, 95% CI
1.4.1 intracoronary				
Attar 2023 a	6.72	2.6482	6.3%	6.72 [1.53, 11.91]
Attar 2023 b	10.72	2.7723	5.9%	10.72 [5.29, 16.15]
Cao 2009	3.5	1.0714	14.6%	3.50 [1.40, 5.60]
Gao 2013	0.8	0.9897	15.2%	0.80 [-1.14, 2.74]
Gao 2015	5	0.201	19.5%	5.00 [4.61, 5.39]
Huikuri 2008	5.4	2.4269	7.0%	5.40 [0.64, 10.16]
Kim SH 2018	3.4	1.5934	11.1%	3.40 [0.28, 6.52]
Lee 2014	2.4	0.5989	17.8%	2.40 [1.23, 3.57]
Srimahachota S 2011	1.8	4.5871	2.6%	1.80 [-7.19, 10.79]
Subtotal (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Total (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Test for subgroup differences: Not applicable				

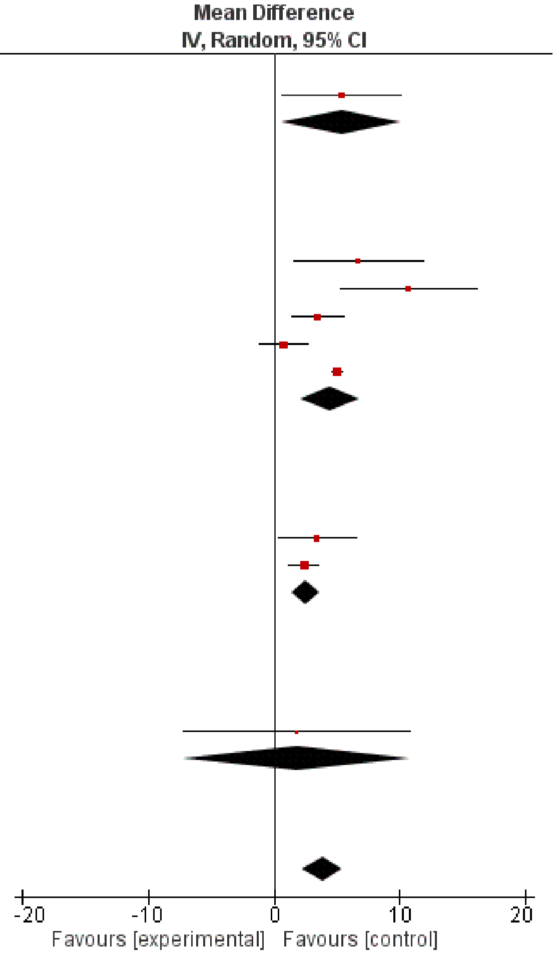


Supplementary Fig. 8D. Forest plot illustrates the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by route of administration. LVEF was measured using echocardiography.



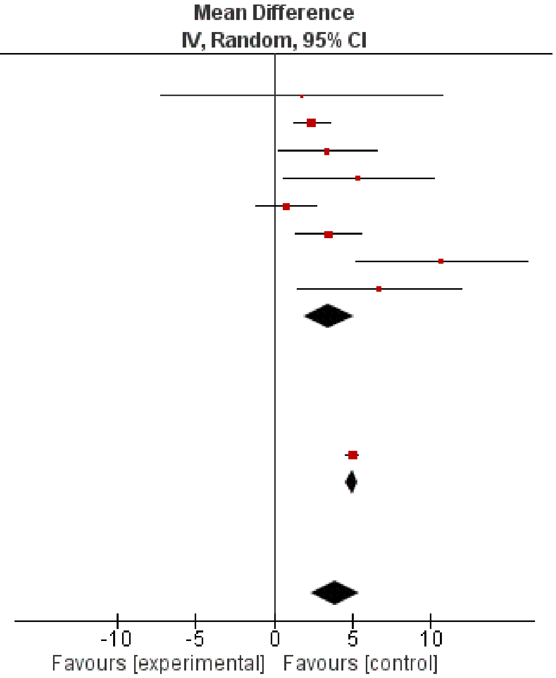
Supplementary Fig. 8E. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by autologous vs allogeneic stem cells. LVEF was measured using echocardiography.

Study or Subgroup	Mean Difference	SE	Weight	Mean Difference IV, Random, 95% CI
1.6.1 Administration < 24 hoursgroup				
Huikuri 2008	5.4	2.4269	7.0%	5.40 [0.64, 10.16]
Subtotal (95% CI)			**7.0%**	**5.40 [0.64, 10.16]**
Heterogeneity: Not applicable				
Test for overall effect: Z = 2.23 (P = 0.03)				
1.6.2 Administration 1 - 21 days				
Attar 2023 a	6.72	2.6482	6.3%	6.72 [1.53, 11.91]
Attar 2023 b	10.72	2.7723	5.9%	10.72 [5.29, 16.15]
Cao 2009	3.5	1.0714	14.6%	3.50 [1.40, 5.60]
Gao 2013	0.8	0.9897	15.2%	0.80 [-1.14, 2.74]
Gao 2015	5	0.201	19.5%	5.00 [4.61, 5.39]
Subtotal (95% CI)			**61.4%**	**4.48 [2.15, 6.81]**
Heterogeneity: Tau² = 4.86; Chi² = 23.86, df = 4 (P < 0.0001); I² = 83%				
Test for overall effect: Z = 3.76 (P = 0.0002)				
1.6.3 Administration > 21 days				
Kim SH 2018	3.4	1.5934	11.1%	3.40 [0.28, 6.52]
Lee 2014	2.4	0.5989	17.8%	2.40 [1.23, 3.57]
Subtotal (95% CI)			**28.9%**	**2.52 [1.43, 3.62]**
Heterogeneity: Tau² = 0.00; Chi² = 0.35, df = 1 (P = 0.56); I² = 0%				
Test for overall effect: Z = 4.50 (P < 0.00001)				
1.6.4 Not mentioned				
Srimahachota S 2011	1.8	4.5871	2.6%	1.80 [-7.19, 10.79]
Subtotal (95% CI)			**2.6%**	**1.80 [-7.19, 10.79]**
Heterogeneity: Not applicable				
Test for overall effect: Z = 0.39 (P = 0.69)				
Total (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Test for subgroup differences: Chi² = 3.31, df = 3 (P = 0.35), I² = 9.3%				



Supplementary Fig. 8F. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by the administration time. LVEF was measured using echocardiography.

Study or Subgroup	Mean Difference	SE	Weight	Mean Difference IV, Random, 95% CI
1.43.1 < 100				
Srimahachota S 2011	1.8	4.5871	2.6%	1.80 [-7.19, 10.79]
Lee 2014	2.4	0.5989	17.8%	2.40 [1.23, 3.57]
Kim SH 2018	3.4	1.5934	11.1%	3.40 [0.28, 6.52]
Huikuri 2008	5.4	2.4269	7.0%	5.40 [0.64, 10.16]
Gao 2013	0.8	0.9897	15.2%	0.80 [-1.14, 2.74]
Cao 2009	3.5	1.0714	14.6%	3.50 [1.40, 5.60]
Attar 2023 b	10.72	2.7723	5.9%	10.72 [5.29, 16.15]
Attar 2023 a	6.72	2.6482	6.3%	6.72 [1.53, 11.91]
Subtotal (95% CI)			**80.5%**	**3.52 [1.90, 5.14]**
Heterogeneity: Tau² = 2.53; Chi² = 16.63, df = 7 (P = 0.02); I² = 58%				
Test for overall effect: Z = 4.26 (P < 0.0001)				
1.43.2 ≥ 100				
Gao 2015	5	0.201	19.5%	5.00 [4.61, 5.39]
Subtotal (95% CI)			**19.5%**	**5.00 [4.61, 5.39]**
Heterogeneity: Not applicable				
Test for overall effect: Z = 24.88 (P < 0.00001)				
Total (95% CI)			**100.0%**	**3.89 [2.32, 5.46]**
Heterogeneity: Tau² = 3.25; Chi² = 39.81, df = 8 (P < 0.00001); I² = 80%				
Test for overall effect: Z = 4.85 (P < 0.00001)				
Test for subgroup differences: Chi² = 3.03, df = 1 (P = 0.08), I² = 67.0%				



Supplementary Fig. 8G. Forest plot illustrating the efficacy of stem cell therapy on the change in left ventricular ejection fraction (LVEF) from baseline, compared with control, stratified by the sample size. LVEF was measured using echocardiography.