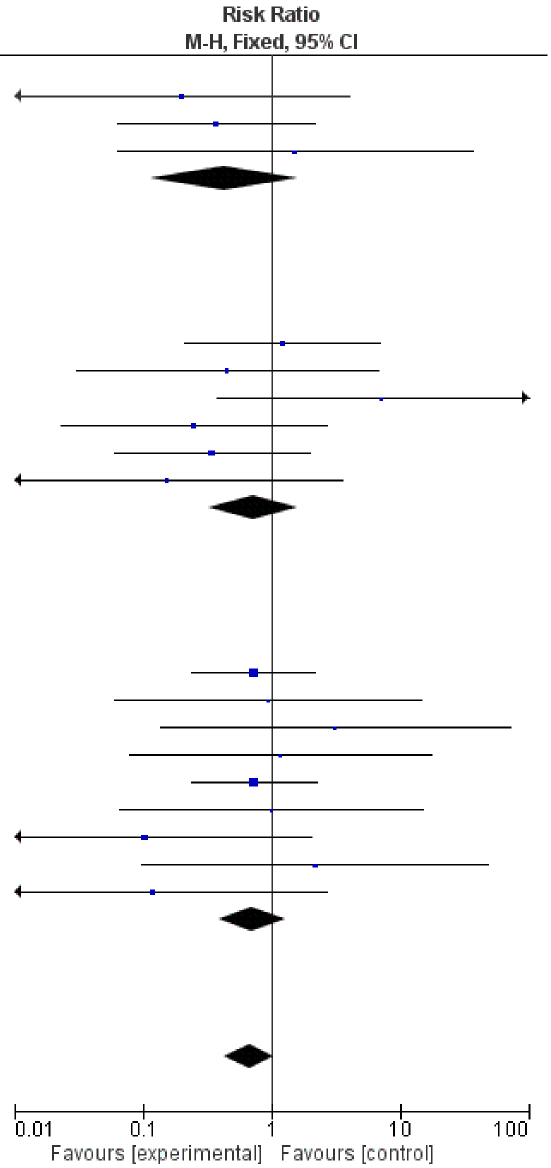
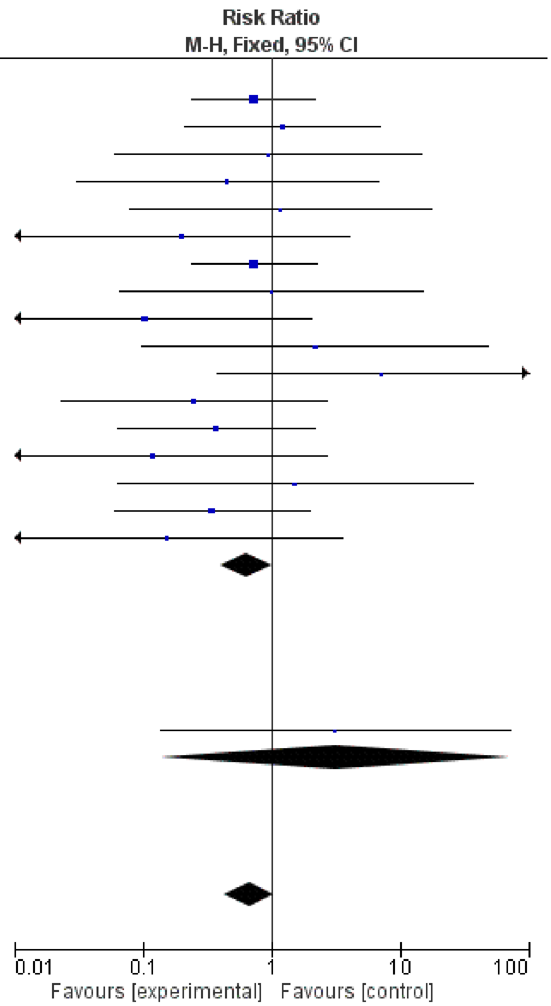
Study or Subgroup	Intervention Events	Intervention Total	Control Events	Control Total	Weight	Risk Ratio M-H, Fixed, 95% CI
1.38.1 time of assessment upto 6 months						
Huikuri 2008	0	40	2	40	5.9%	0.20 [0.01, 4.04]
Tendera 2009	3	160	2	40	7.5%	0.38 [0.06, 2.17]
Traverse 2011	1	58	0	29	1.6%	1.53 [0.06, 36.33]
Subtotal (95% CI)		**258**		**109**	**15.0%**	**0.43 [0.11, 1.59]**
Total events	4		4			
Heterogeneity: Chi² = 0.89, df = 2 (P = 0.64); I² = 0%						
Test for overall effect: Z = 1.27 (P = 0.20)						
1.38.2 time of assessment upto 12 months						
Chodry F 2016	3	55	2	45	5.2%	1.23 [0.21, 7.03]
Grajek 2010	1	31	1	14	3.2%	0.45 [0.03, 6.71]
Roman 2015	3	59	0	61	1.2%	7.23 [0.38, 137.08]
Surder 2016	1	133	2	67	6.3%	0.25 [0.02, 2.73]
Traverse 2018	2	79	3	41	9.3%	0.35 [0.06, 1.99]
Yao 2009 a	0	27	1	12	4.8%	0.15 [0.01, 3.55]
Subtotal (95% CI)		**384**		**240**	**30.0%**	**0.73 [0.33, 1.59]**
Total events	10		9			
Heterogeneity: Chi² = 5.19, df = 5 (P = 0.39); I² = 4%						
Test for overall effect: Z = 0.80 (P = 0.42)						
1.38.3 time of assessment more than 12 months						
Assmus 2014	5	101	7	103	16.3%	0.73 [0.24, 2.22]
Delewi 2015	1	69	1	65	2.4%	0.94 [0.06, 14.75]
Gao 2013	1	19	0	20	1.1%	3.15 [0.14, 72.88]
Haddad 2020	1	17	1	20	2.2%	1.18 [0.08, 17.42]
Mathur A 2020	5	185	7	190	16.3%	0.73 [0.24, 2.27]
Meyer GP 2009	1	30	1	30	2.4%	1.00 [0.07, 15.26]
Naseri 2018	0	51	2	26	7.8%	0.10 [0.01, 2.09]
Penicka 2007	1	14	0	10	1.4%	2.20 [0.10, 49.06]
Traverse 2010	0	30	1	10	5.2%	0.12 [0.01, 2.69]
Subtotal (95% CI)		**516**		**474**	**55.0%**	**0.71 [0.39, 1.30]**
Total events	15		20			
Heterogeneity: Chi² = 4.45, df = 8 (P = 0.81); I² = 0%						
Test for overall effect: Z = 1.12 (P = 0.26)						
Total (95% CI)		**1158**		**823**	**100.0%**	**0.67 [0.43, 1.05]**
Total events	29		33			
Heterogeneity: Chi² = 10.91, df = 17 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.74 (P = 0.08)						
Test for subgroup differences: Chi² = 0.53, df = 2 (P = 0.77), I² = 0%						



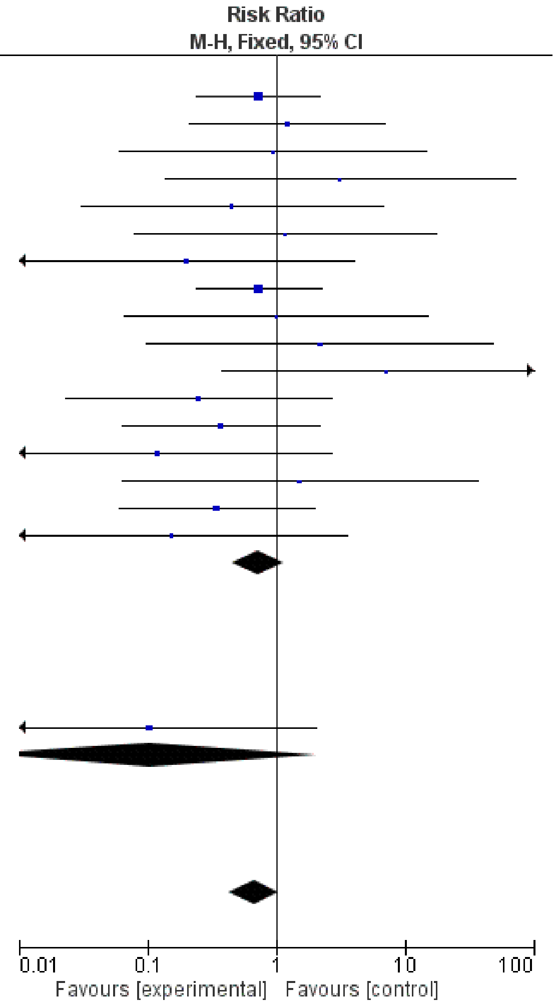
Supplementary Fig. 3A. Thisforestplotdisplays a subgroup analysis comparing the incidence of recurrent-myocardial infarctionstratified by time of assessment.

Study or Subgroup	Intervention Events	Intervention Total	Control Events	Control Total	Weight	Risk Ratio M-H, Fixed, 95% CI
1.39.1 Mononuclear						
Assmus 2014	5	101	7	103	16.3%	0.73 [0.24, 2.22]
Chodry F 2016	3	55	2	45	5.2%	1.23 [0.21, 7.03]
Delewi 2015	1	69	1	65	2.4%	0.94 [0.06, 14.75]
Grajek 2010	1	31	1	14	3.2%	0.45 [0.03, 6.71]
Haddad 2020	1	17	1	20	2.2%	1.18 [0.08, 17.42]
Huikuri 2008	0	40	2	40	5.9%	0.20 [0.01, 4.04]
Mathur A 2020	5	185	7	190	16.3%	0.73 [0.24, 2.27]
Meyer GP 2009	1	30	1	30	2.4%	1.00 [0.07, 15.26]
Naseri 2018	0	51	2	26	7.8%	0.10 [0.01, 2.09]
Penicka 2007	1	14	0	10	1.4%	2.20 [0.10, 49.06]
Roman 2015	3	59	0	61	1.2%	7.23 [0.38, 137.08]
Surder 2016	1	133	2	67	6.3%	0.25 [0.02, 2.73]
Tendera 2009	3	160	2	40	7.5%	0.38 [0.06, 2.17]
Traverse 2010	0	30	1	10	5.2%	0.12 [0.01, 2.69]
Traverse 2011	1	58	0	29	1.6%	1.53 [0.06, 36.33]
Traverse 2018	2	79	3	41	9.3%	0.35 [0.06, 1.99]
Yao 2009 a	0	27	1	12	4.8%	0.15 [0.01, 3.55]
Subtotal (95% CI)		**1139**		**803**	**98.9%**	**0.64 [0.41, 1.01]**
Total events	28		33			
Heterogeneity: Chi² = 9.91, df = 16 (P = 0.87); I² = 0%						
Test for overall effect: Z = 1.90 (P = 0.06)						
1.39.2 Mesenchymal						
Gao 2013	1	19	0	20	1.1%	3.15 [0.14, 72.88]
Subtotal (95% CI)		**19**		**20**	**1.1%**	**3.15 [0.14, 72.88]**
Total events	1		0			
Heterogeneity: Not applicable						
Test for overall effect: Z = 0.72 (P = 0.47)						
Total (95% CI)		**1158**		**823**	**100.0%**	**0.67 [0.43, 1.05]**
Total events	29		33			
Heterogeneity: Chi² = 10.91, df = 17 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.74 (P = 0.08)						
Test for subgroup differences: Chi² = 0.96, df = 1 (P = 0.33), I² = 0%						



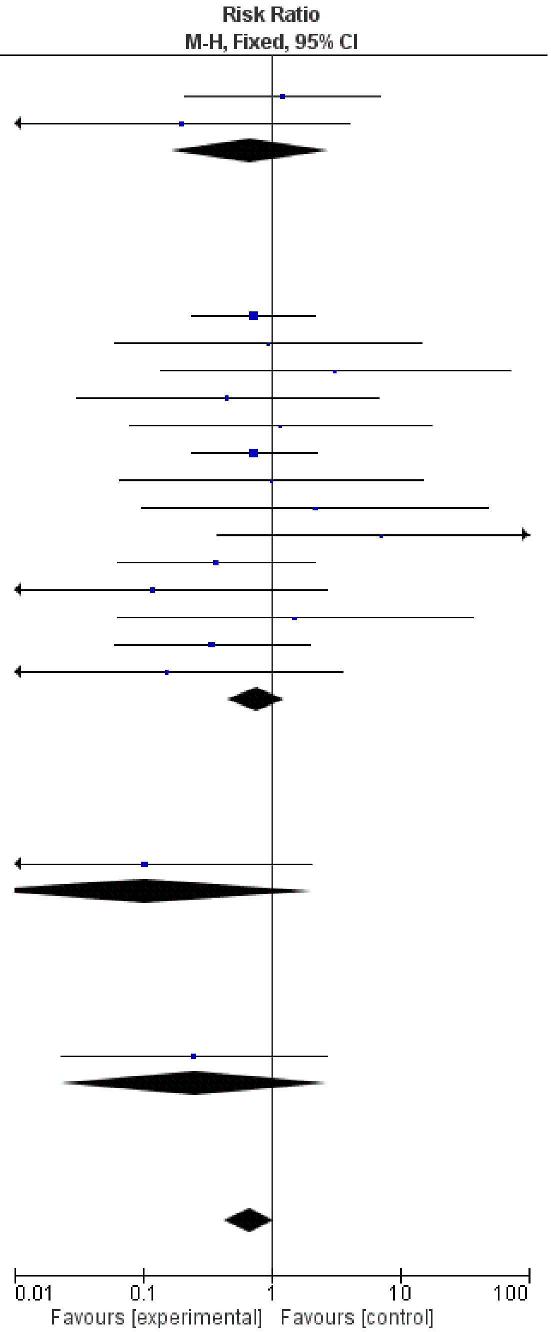
Supplementary Fig. 3B. This forest plot displays a subgroup analysis comparing the incidence of recurrent-myocardial infarction based on the type of cells administered.

Study or Subgroup	Intervention Events	Intervention Total	Control Events	Control Total	Weight	Risk Ratio M-H, Fixed, 95% CI
1.40.1 Intracoronary						
Assmus 2014	5	101	7	103	16.3%	0.73 [0.24, 2.22]
Chodry F 2016	3	55	2	45	5.2%	1.23 [0.21, 7.03]
Delewi 2015	1	69	1	65	2.4%	0.94 [0.06, 14.75]
Gao 2013	1	19	0	20	1.1%	3.15 [0.14, 72.88]
Grajek 2010	1	31	1	14	3.2%	0.45 [0.03, 6.71]
Haddad 2020	1	17	1	20	2.2%	1.18 [0.08, 17.42]
Huikuri 2008	0	40	2	40	5.9%	0.20 [0.01, 4.04]
Mathur A 2020	5	185	7	190	16.3%	0.73 [0.24, 2.27]
Meyer GP 2009	1	30	1	30	2.4%	1.00 [0.07, 15.26]
Penicka 2007	1	14	0	10	1.4%	2.20 [0.10, 49.06]
Roman 2015	3	59	0	61	1.2%	7.23 [0.38, 137.08]
Surder 2016	1	133	2	67	6.3%	0.25 [0.02, 2.73]
Tendera 2009	3	160	2	40	7.5%	0.38 [0.06, 2.17]
Traverse 2010	0	30	1	10	5.2%	0.12 [0.01, 2.69]
Traverse 2011	1	58	0	29	1.6%	1.53 [0.06, 36.33]
Traverse 2018	2	79	3	41	9.3%	0.35 [0.06, 1.99]
Yao 2009 a	0	27	1	12	4.8%	0.15 [0.01, 3.55]
Subtotal (95% CI)		**1107**		**797**	**92.2%**	**0.72 [0.45, 1.14]**
Total events	29		31			
Heterogeneity: Chi² = 9.47, df = 16 (P = 0.89); I² = 0%						
Test for overall effect: Z = 1.40 (P = 0.16)						
1.40.2 direct intramyocardia						
Naseri 2018	0	51	2	26	7.8%	0.10 [0.01, 2.09]
Subtotal (95% CI)		**51**		**26**	**7.8%**	**0.10 [0.01, 2.09]**
Total events	0		2			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.48 (P = 0.14)						
Total (95% CI)		**1158**		**823**	**100.0%**	**0.67 [0.43, 1.05]**
Total events	29		33			
Heterogeneity: Chi² = 10.91, df = 17 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.74 (P = 0.08)						
Test for subgroup differences: Chi² = 1.56, df = 1 (P = 0.21), I² = 36.0%						

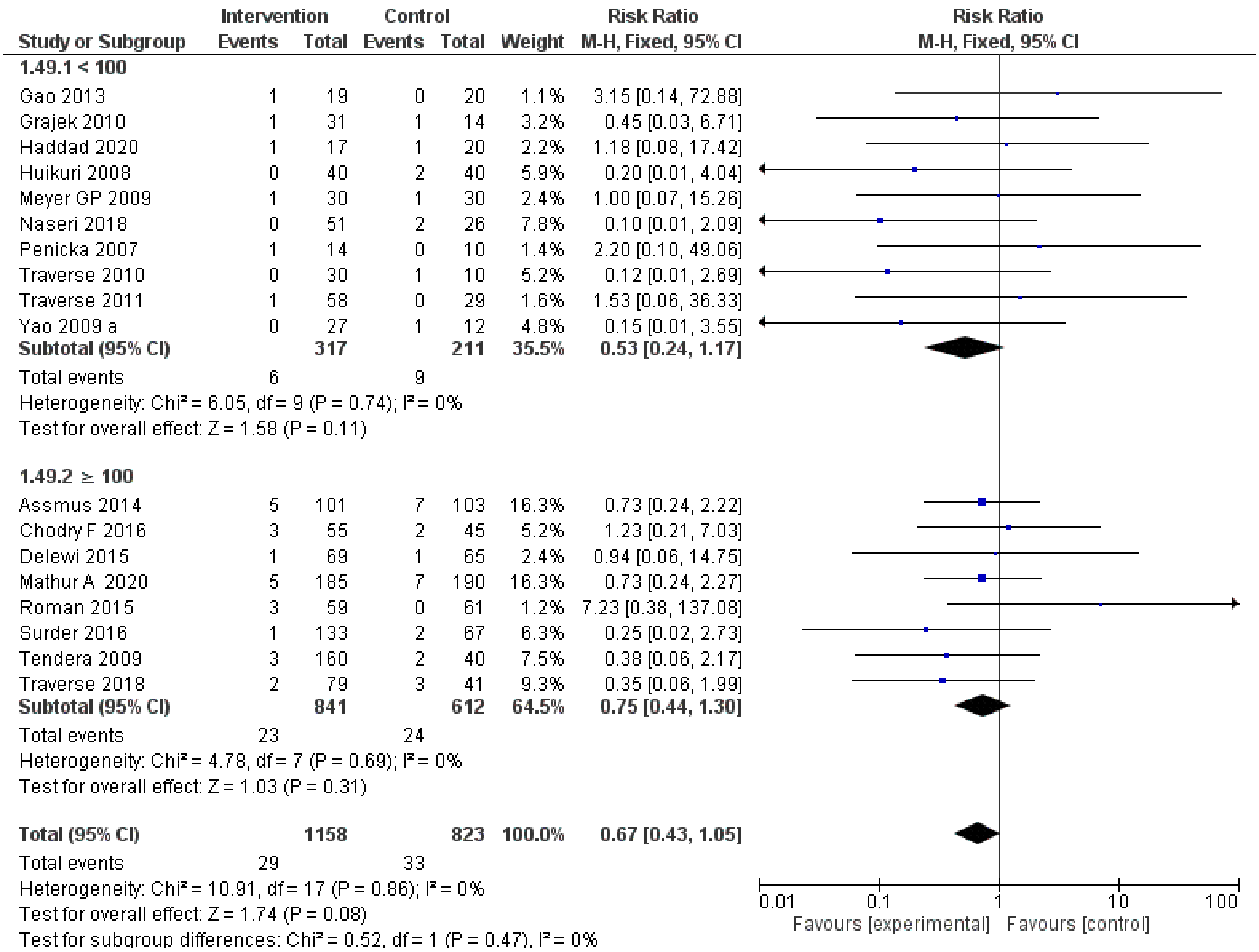


Supplementary Fig. 3C. This forest plot displays a subgroup analysis comparing the incidence of recurrent-myocardial infarction based on route of stem cell administration.

	Intervention		Control			Risk Ratio
Study or Subgroup	**Events**	**Total**	**Events**	**Total**	**Weight**	**M-H, Fixed, 95% CI**
1.42.1 Administration < 24 hours						
Chodry F 2016	3	55	2	45	5.2%	1.23 [0.21, 7.03]
Huikuri 2008	0	40	2	40	5.9%	0.20 [0.01, 4.04]
Subtotal (95% CI)		**95**		**85**	**11.1%**	**0.68 [0.17, 2.75]**
Total events	3		4			
Heterogeneity: Chi² = 1.08, df = 1 (P = 0.30); I² = 7%						
Test for overall effect: Z = 0.54 (P = 0.59)						
1.42.2 Administration 1 - 21 days						
Assmus 2014	5	101	7	103	16.3%	0.73 [0.24, 2.22]
Delewi 2015	1	69	1	65	2.4%	0.94 [0.06, 14.75]
Gao 2013	1	19	0	20	1.1%	3.15 [0.14, 72.88]
Grajek 2010	1	31	1	14	3.2%	0.45 [0.03, 6.71]
Haddad 2020	1	17	1	20	2.2%	1.18 [0.08, 17.42]
Mathur A 2020	5	185	7	190	16.3%	0.73 [0.24, 2.27]
Meyer GP 2009	1	30	1	30	2.4%	1.00 [0.07, 15.26]
Penicka 2007	1	14	0	10	1.4%	2.20 [0.10, 49.06]
Roman 2015	3	59	0	61	1.2%	7.23 [0.38, 137.08]
Tendera 2009	3	160	2	40	7.5%	0.38 [0.06, 2.17]
Traverse 2010	0	30	1	10	5.2%	0.12 [0.01, 2.69]
Traverse 2011	1	58	0	29	1.6%	1.53 [0.06, 36.33]
Traverse 2018	2	79	3	41	9.3%	0.35 [0.06, 1.99]
Yao 2009 a	0	27	1	12	4.8%	0.15 [0.01, 3.55]
Subtotal (95% CI)		**879**		**645**	**74.9%**	**0.76 [0.46, 1.26]**
Total events	25		25			
Heterogeneity: Chi² = 7.76, df = 13 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.05 (P = 0.29)						
1.42.3 not mentioned						
Naseri 2018	0	51	2	26	7.8%	0.10 [0.01, 2.09]
Subtotal (95% CI)		**51**		**26**	**7.8%**	**0.10 [0.01, 2.09]**
Total events	0		2			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.48 (P = 0.14)						
1.42.4 >1 day						
Surder 2016	1	133	2	67	6.3%	0.25 [0.02, 2.73]
Subtotal (95% CI)		**133**		**67**	**6.3%**	**0.25 [0.02, 2.73]**
Total events	1		2			
Heterogeneity: Not applicable						
Test for overall effect: Z = 1.13 (P = 0.26)						
Total (95% CI)		**1158**		**823**	**100.0%**	**0.67 [0.43, 1.05]**
Total events	29		33			
Heterogeneity: Chi² = 10.91, df = 17 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.74 (P = 0.08)						
Test for subgroup differences: Chi² = 2.38, df = 3 (P = 0.50), I² = 0%						

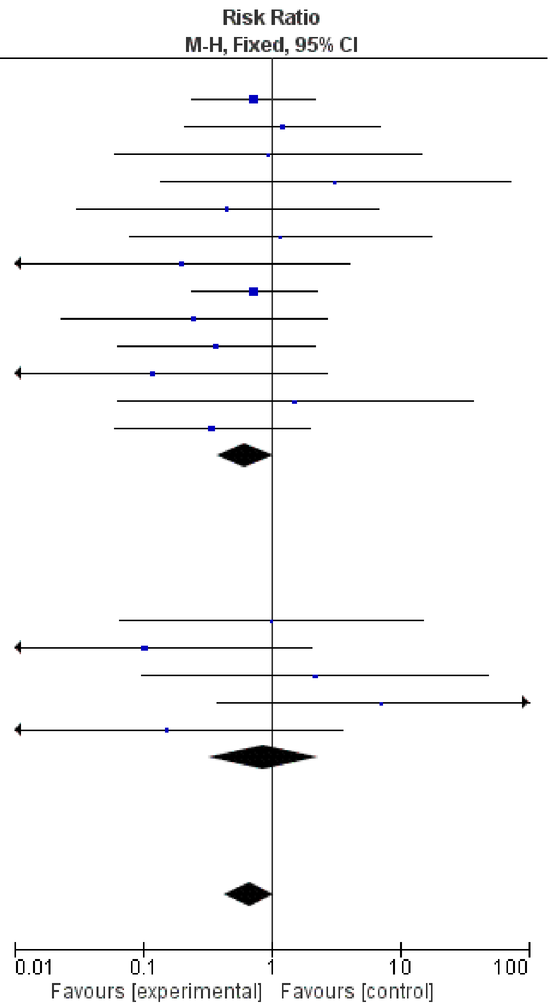


Supplementary Fig. 3D. This forest plot presents a subgroup analysis examining recurrent-myocardial infarction incidence based on the administration time.



Supplementary Fig. 3E. This forest plot presents a subgroup analysis examining recurrent-myocardial infarction incidence based on the sample size.

Study or Subgroup	Intervention Events	Intervention Total	Control Events	Control Total	Weight	Risk Ratio M-H, Fixed, 95% CI
1.57.1 < 500 million						
Assmus 2014	5	101	7	103	16.3%	0.73 [0.24, 2.22]
Chodry F 2016	3	55	2	45	5.2%	1.23 [0.21, 7.03]
Delewi 2015	1	69	1	65	2.4%	0.94 [0.06, 14.75]
Gao 2013	1	19	0	20	1.1%	3.15 [0.14, 72.88]
Grajek 2010	1	31	1	14	3.2%	0.45 [0.03, 6.71]
Haddad 2020	1	17	1	20	2.2%	1.18 [0.08, 17.42]
Huikuri 2008	0	40	2	40	5.9%	0.20 [0.01, 4.04]
Mathur A 2020	5	185	7	190	16.3%	0.73 [0.24, 2.27]
Surder 2016	1	133	2	67	6.3%	0.25 [0.02, 2.73]
Tendera 2009	3	160	2	40	7.5%	0.38 [0.06, 2.17]
Traverse 2010	0	30	1	10	5.2%	0.12 [0.01, 2.69]
Traverse 2011	1	58	0	29	1.6%	1.53 [0.06, 36.33]
Traverse 2018	2	79	3	41	9.3%	0.35 [0.06, 1.99]
Subtotal (95% CI)		**977**		**684**	**82.5%**	**0.63 [0.38, 1.04]**
Total events	24		29			
Heterogeneity: Chi² = 5.36, df = 12 (P = 0.94); I² = 0%						
Test for overall effect: Z = 1.80 (P = 0.07)						
1.57.2 > 500 million						
Meyer GP 2009	1	30	1	30	2.4%	1.00 [0.07, 15.26]
Naseri 2018	0	51	2	26	7.8%	0.10 [0.01, 2.09]
Penicka 2007	1	14	0	10	1.4%	2.20 [0.10, 49.06]
Roman 2015	3	59	0	61	1.2%	7.23 [0.38, 137.08]
Yao 2009 a	0	27	1	12	4.8%	0.15 [0.01, 3.55]
Subtotal (95% CI)		**181**		**139**	**17.5%**	**0.88 [0.33, 2.33]**
Total events	5		4			
Heterogeneity: Chi² = 5.44, df = 4 (P = 0.24); I² = 26%						
Test for overall effect: Z = 0.27 (P = 0.79)						
Total (95% CI)		**1158**		**823**	**100.0%**	**0.67 [0.43, 1.05]**
Total events	29		33			
Heterogeneity: Chi² = 10.91, df = 17 (P = 0.86); I² = 0%						
Test for overall effect: Z = 1.74 (P = 0.08)						
Test for subgroup differences: Chi² = 0.35, df = 1 (P = 0.56), I² = 0%						



Supplementary Fig. 3F. This forest plot presents a subgroup analysis examining recurrent-myocardial infarction incidence based on the dose administered.