THE LANCET

Supplementary appendix

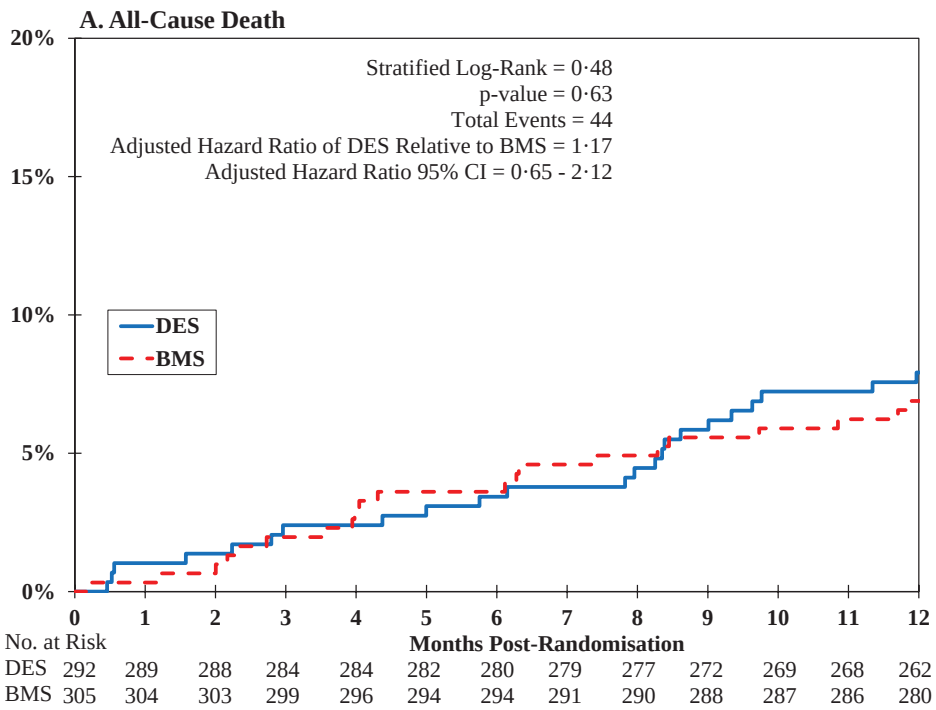
This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

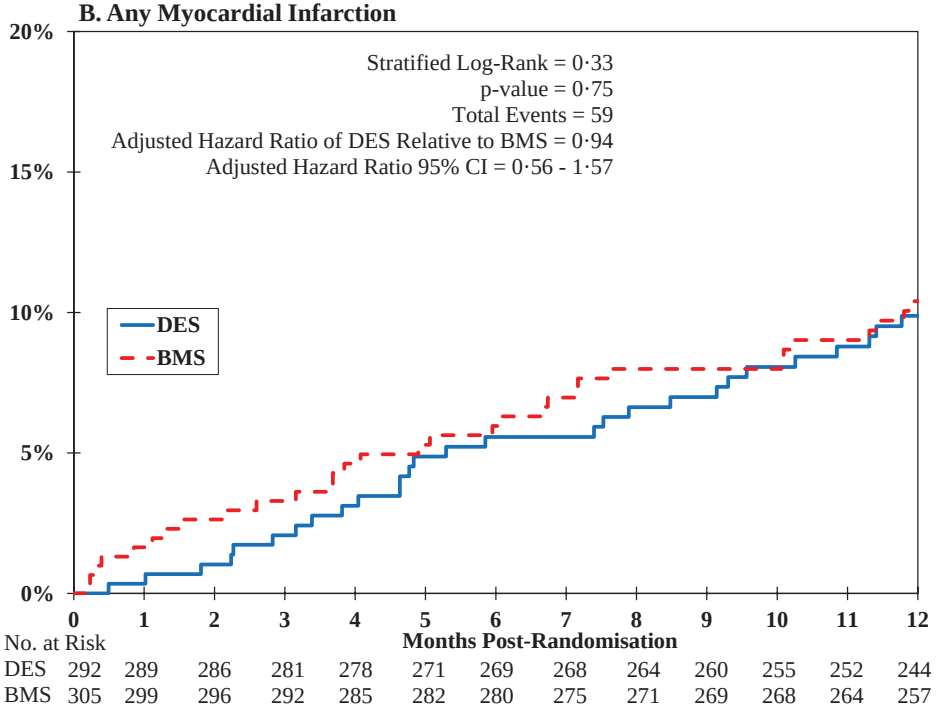
Supplement to: Brilakis ES, Edson R, Bhatt DL, et al. Drug-eluting stents versus bare-metal stents in saphenous vein grafts: a double-blind, randomised trial. *Lancet* 2018; published online May 11. http://dx.doi.org/10.1016/S0140-6736(18)30801-8.

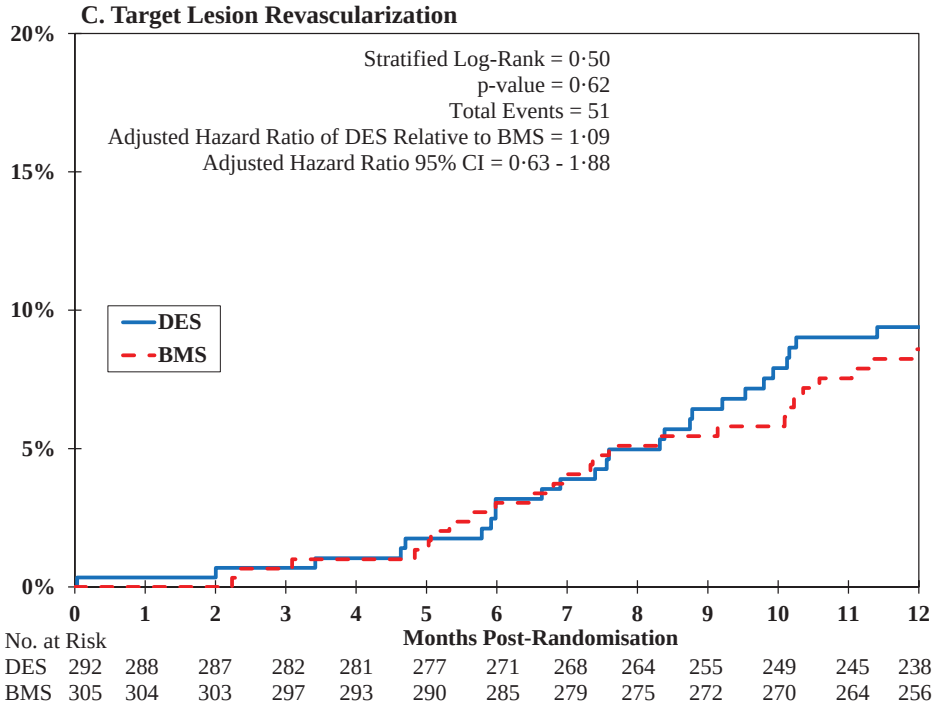
Supplementary figures

Figure S1. Additional clinical outcomes at 12 months.

Cumulative incidence curves for patients who received drug-eluting stents and those who received bare metal stents for all-cause death (panel A), any myocardial infarction (panel B), target lesion revascularization (panel C), and definite or probable stent thrombosis (panel D).


A. All-Cause Death
Stratified Log-Rank = 0·48
p-value = 0·63
Total Events = 44
Adjusted Hazard Ratio of DES Relative to BMS = 1·17
Adjusted Hazard Ratio 95% CI = 0·65 - 2·12
DES
BMS
20%
15%
10%
5%
0%
0 1 2 3 4 5 6 7 8 9 10 11 12
Months Post-Randomisation
No. at Risk
DES 292 289 288 284 284 282 280 279 277 272 269 268 262
BMS 305 304 303 299 296 294 294 291 290 288 287 286 280


B. Any Myocardial Infarction
Stratified Log-Rank = 0·33
p-value = 0·75
Total Events = 59
Adjusted Hazard Ratio of DES Relative to BMS = 0·94
Adjusted Hazard Ratio 95% CI = 0·56 - 1·57
DES
BMS
20%
15%
10%
5%
0%
0 1 2 3 4 5 6 7 8 9 10 11 12
Months Post-Randomisation
No. at Risk
DES 292 289 286 281 278 271 269 268 264 260 255 252 244
BMS 305 299 296 292 285 282 280 275 271 269 268 264 257


C. Target Lesion Revascularization
Stratified Log-Rank = 0·50
p-value = 0·62
Total Events = 51
Adjusted Hazard Ratio of DES Relative to BMS = 1·09
Adjusted Hazard Ratio 95% CI = 0·63 - 1·88
DES
BMS
20%
15%
10%
5%
0%
0 1 2 3 4 5 6 7 8 9 10 11 12
Months Post-Randomisation
No. at Risk
DES 292 288 287 282 281 277 271 268 264 255 249 245 238
BMS 305 304 303 297 293 290 285 279 275 272 270 264 256

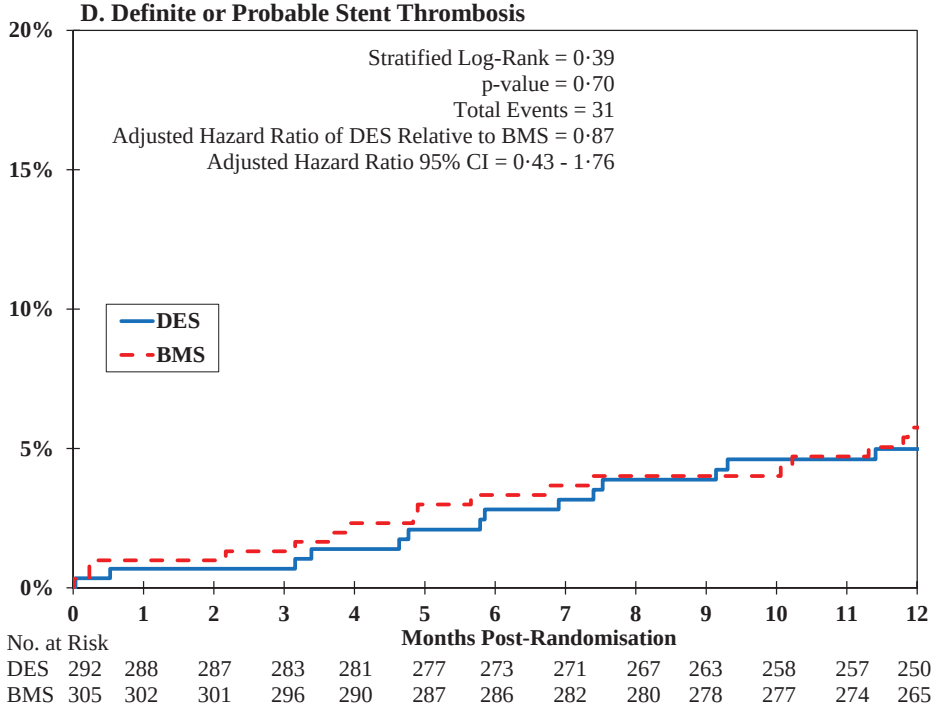
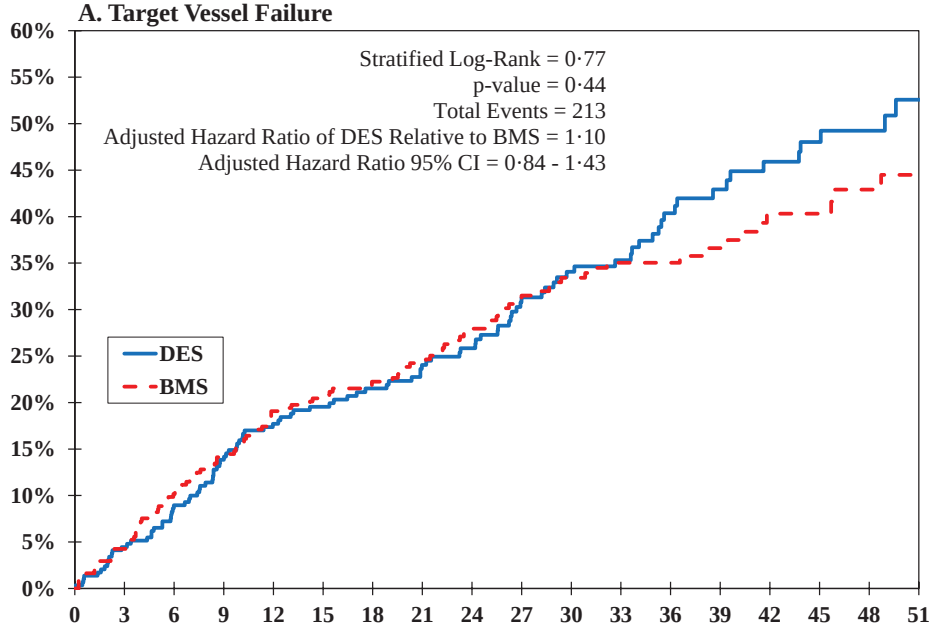

D. Definite or Probable Stent Thrombosis
Stratified Log-Rank = 0·39
p-value = 0·70
Total Events = 31
Adjusted Hazard Ratio of DES Relative to BMS = 0·87
Adjusted Hazard Ratio 95% CI = 0·43 - 1·76
DES
BMS
20%
15%
10%
5%
0%
0 1 2 3 4 5 6 7 8 9 10 11 12
Months Post-Randomisation
No. at Risk
DES 292 288 287 283 281 277 273 271 267 263 258 257 250
BMS 305 302 301 296 290 287 286 282 280 278 277 274 265

Figure S2. Clinical outcomes during the entire duration of follow-up.

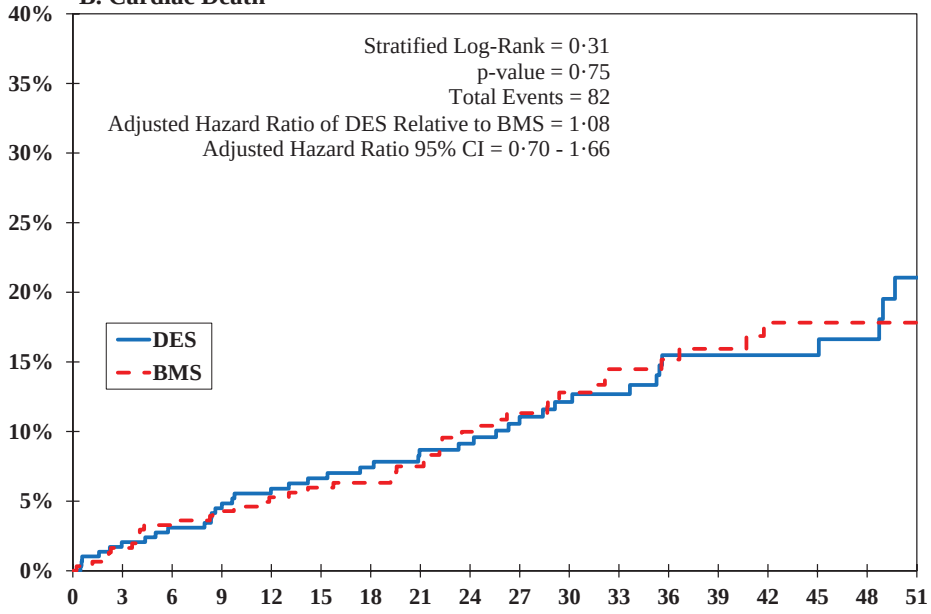
Cumulative incidence curves for patients who received drug-eluting stents and those who received bare metal stents for target vessel failure (composite outcome of cardiac death, target vessel myocardial infarction, or target vessel revascularization, panel A), cardiac death (panel B), target vessel myocardial infarction (panel C), and target vessel revascularization (panel D).

A. Target Vessel Failure



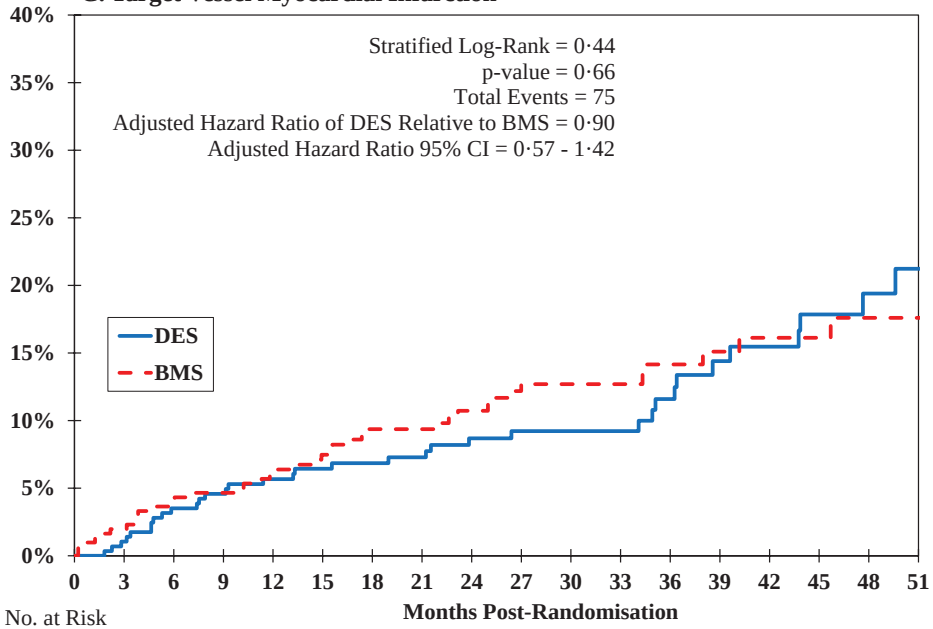
No. at Risk																		
DES	292	277	263	245	229	213	194	175	158	131	114	97	78	58	52	43	33	24
BMS	305	292	274	260	241	225	206	187	168	149	134	109	91	74	61	46	38	22

B. Cardiac Death



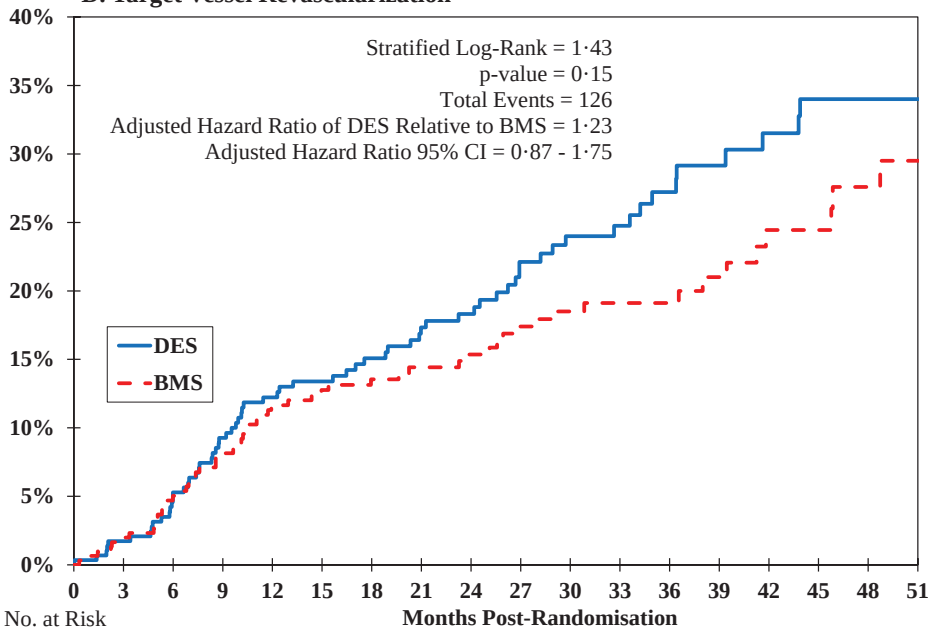
No. at Risk																		
DES	292	284	280	272	262	248	229	213	198	177	158	138	116	93	85	73	61	44
BMS	305	299	294	288	280	266	249	228	208	189	173	142	118	96	84	66	57	37

C. Target Vessel Myocardial Infarction



No. at Risk																		
DES	292	282	273	264	251	236	219	203	186	164	146	126	103	80	72	62	51	38
BMS	305	295	285	278	265	250	230	210	190	171	154	129	104	86	75	57	48	32

D. Target Vessel Revascularization

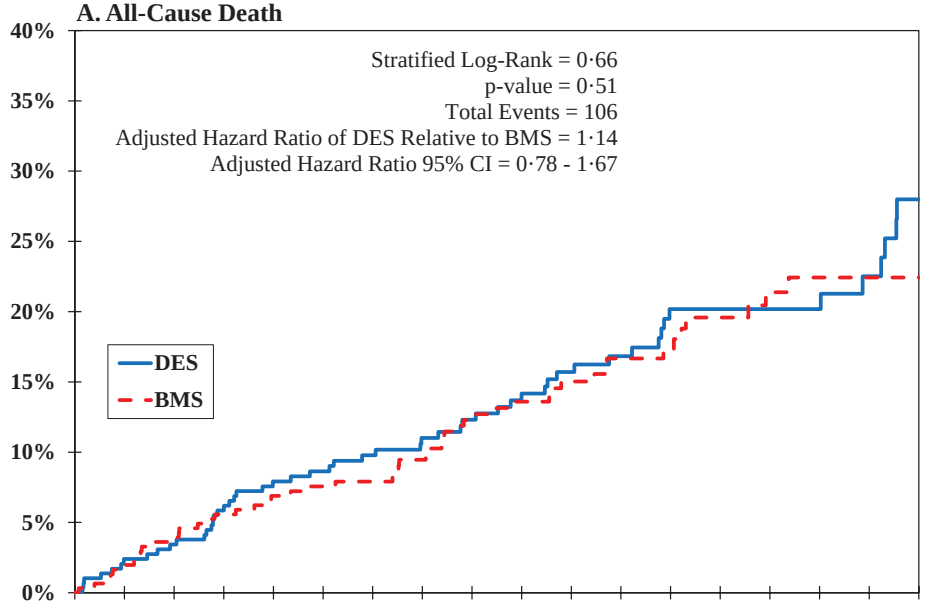


No. at Risk																		
DES	292	279	265	247	230	215	196	177	160	133	116	99	80	61	56	47	37	27
BMS	305	294	279	265	247	231	213	193	174	156	139	113	95	76	63	48	40	24

Figure S3. Additional clinical outcomes during the entire duration of follow-up.

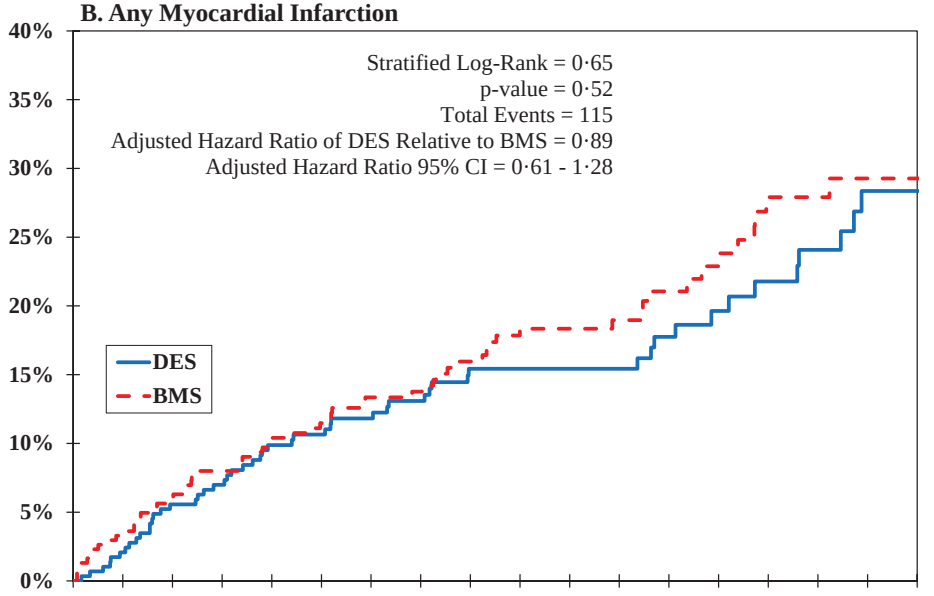
Cumulative incidence curves for patients who received drug-eluting stents and those who received bare metal stents for all-cause death (panel A), any myocardial infarction (panel B), target lesion revascularization (panel C), and definite or probable stent thrombosis (panel D).

A. All-Cause Death



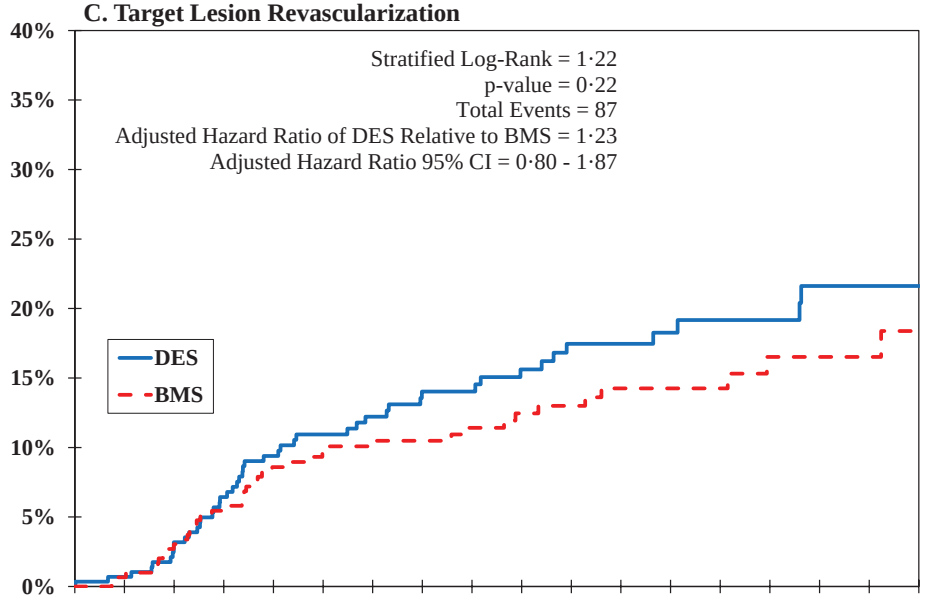
No. at Risk																		
DES	292	284	280	272	262	248	229	213	198	177	158	138	116	93	85	73	61	44
BMS	305	299	294	288	280	266	249	228	208	189	172	142	118	96	84	66	57	37

B. Any Myocardial Infarction



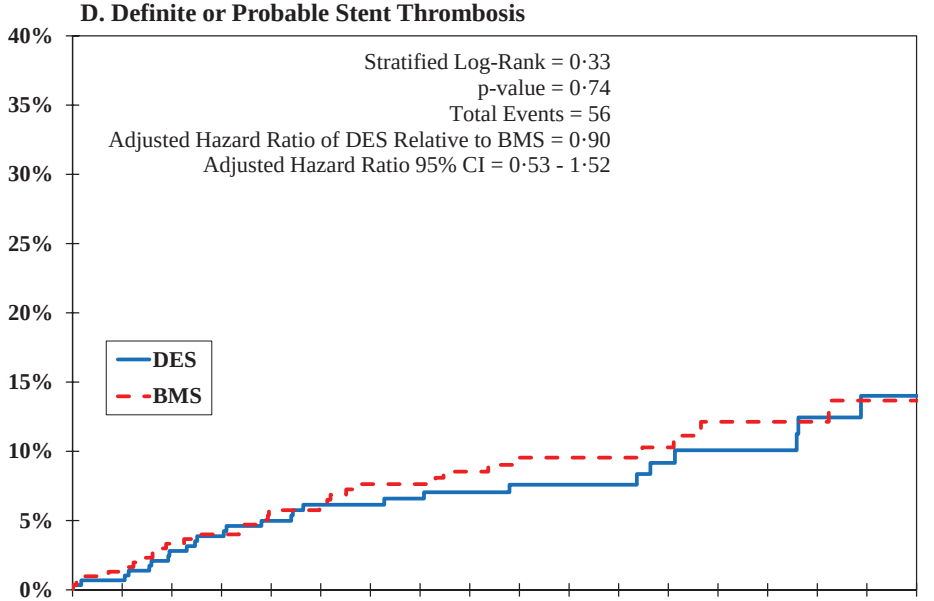
No. at Risk																		
DES	292	281	269	260	244	230	211	193	174	155	138	119	99	77	69	60	47	36
BMS	305	292	280	269	257	242	222	202	183	166	152	125	99	81	68	53	44	30

C. Target Lesion Revascularization



No. at Risk																		
DES	292	282	271	255	238	222	202	184	169	146	129	113	95	73	67	57	47	35
BMS	305	297	285	272	256	240	222	203	181	165	148	121	100	82	69	54	47	30

D. Definite or Probable Stent Thrombosis



No. at Risk																		
DES	292	283	273	263	250	235	219	202	186	165	148	128	105	84	78	66	54	40
BMS	305	296	286	278	265	252	232	211	192	174	158	131	107	86	75	57	49	33

Supplementary Tables

Supplementary Table S1. Types of stents used in study patients.

Stent	DES (n = 292)	BMS (n = 305)
Drug-eluting stent		
Everolimus-eluting, n (%)		
Absorb, n (%)	0 (0%)	0 (0%)
Promus, n (%)	66 (23%)	1 (0%)
Synergy, n (%)	0 (0%)	0 (0%)
Xience, n (%)	121 (41%)	4 (1%)
Zotarolimus-eluting, n (%)		
Endeavor, n (%)	14 (5%)	0 (0%)
Resolute, n (%)	77 (26%)	3 (1%)
Sirolimus-eluting, n (%)		
Cypher, n (%)	0 (0%)	0 (0%)
Paclitaxel-eluting, n (%)		
Ion, n (%)	5 (2%)	0 (0%)
Taxus, n (%)	2 (1%)	0 (0%)
Name Unknown, n (%)	1 (0%)	0 (0%)
Bare metal stent		
Driver, n (%)	0 (0%)	3 (1%)
Integrity, n (%)	1 (0%)	152 (50%)
Multilink Vision, Ultra, or 8, n (%)	0 (0%)	123 (40%)
Rebel, n (%)	1 (0%)	6 (2%)
Veriflex (formerly Liberte), n (%)	0 (0%)	11 (4%)
Type unknown, n (%)	0 (0%)	7 (2%)

Supplementary Table S2. Target vessel failure by treatment group at 12 months and over the entire duration of follow-up for various subgroups.*

Length of Follow-up and Subgroup	DES (n = 292)	BMS (n = 305)	Adjusted Hazard Ratio (95% Confidence Interval)	P-Value^	Log-Rank Statistic	Number of Events	Interaction P-Value
12 MONTHS							
Diabetes : No	17/120 (14%)	22/119 (18%)	0·72 (0·38, 1·37)	0·36	0·91	39	0·35
Yes	34/172 (20%)	36/186 (19%)	1·05 (0·66, 1·67)	0·85	0·19	70	
Number of target SVG lesions: 1	42/243 (17%)	45/259 (17%)	1·01 (0·67, 1·54)	0·96	0·05	87	0·31
2	9/49 (18%)	13/46 (28%)	0·61 (0·25, 1·48)	0·32	0·99	22	
Most recent graft age (years): <13·5	23/135 (17%)	28/164 (17%)	0·99 (0·57, 1·72)	0·97	0·04	51	0·68
≥13·5	28/156 (18%)	29/139 (21%)	0·85 (0·50, 1·43)	0·55	0·60	57	
Minimum stent diameter (mm): 2·25 to < 3·0	12/50 (24%)	10/63 (16%)	1·68 (0·72, 3·93)	0·21	1·26	22	0·56
3·0 to < 3·5	13/71 (18%)	17/65 (26%)	0·72 (0·35, 1·48)	0·58	0·56	30	
3·5 to < 4·0	13/89 (15%)	17/92 (18%)	0·80 (0·39, 1·64)	0·56	0·58	30	
4·0 or more	13/78 (17%)	13/83 (16%)	1·06 (0·49, 2·29)	0·88	0·15	26	
Total stent length (mm): <20	21/137 (15%)	20/156 (13%)	1·23 (0·67, 2·27)	0·38	0·87	41	0·26
≥20	30/151 (20%)	37/147 (25%)	0·79 (0·49, 1·28)	0·37	0·89	67	
Recipient vessel: LAD	17/60 (28%)	15/69 (22%)	1·42 (0·71, 2·85)	0·33	0·98	32	0·47
Circumflex	19/112 (17%)	27/124 (22%)	0·78 (0·43, 1·41)	0·41	0·83	46	
RCA	15/117 (13%)	15/111 (14%)	0·87 (0·42, 1·81)	0·82	0·22	30	
Target lesion location: Aortic/Ostial	14/64 (22%)	20/81 (25%)	0·88 (0·44, 1·74)	0·74	0·33	34	0·89
Body	34/195 (17%)	33/193 (17%)	0·99 (0·61, 1·60)	0·96	0·05	67	
Distal Anastomosis	3/30 (10%)	4/30 (13%)	0·61 (0·13, 2·79)	0·59	0·53	7	
Baseline use of antiplatelet medications: No	20/121 (17%)	27/137 (20%)	0·84 (0·47, 1·51)	0·62	0·49	47	0·78
Yes	31/171 (18%)	31/168 (18%)	0·99 (0·60, 1·63)	0·98	0·03	62	
ACS status: No	21/137 (15%)	25/136 (18%)	0·80 (0·45, 1·43)	0·56	0·58	46	0·63
Yes	30/155 (19%)	33/169 (20%)	1·00 (0·61, 1·64)	0·99	0·01	63	

Length of Follow-up and Subgroup	DES (n = 292)	BMS (n = 305)	Adjusted Hazard Ratio (95% Confidence Interval)	P-Value^	Log-Rank Statistic	Number of Events	Interaction P-Value
ALL FOLLOW-UP							
Diabetes : No	43/120 (36%)	38/119 (32%)	1·13 (0·73, 1·77)	0·54	0·62	81	0·99
Yes	65/172 (38%)	67/186 (36%)	1·09 (0·78, 1·54)	0·62	0·50	132	
Number of target SVG lesions: 1	89/243 (37%)	83/259 (32%)	1·20 (0·89, 1·62)	0·25	1·15	172	0·19
2	19/49 (39%)	22/46 (48%)	0·78 (0·41, 1·48)	0·53	0·63	41	
Most recent graft age (years): <13·5	51/135 (38%)	54/164 (33%)	1·21 (0·82, 1·77)	0·28	1·08	105	0·40
≥13·5	56/156 (36%)	49/139 (35%)	0·96 (0·65, 1·41)	0·82	0·23	105	
Minimum stent diameter (mm): 2·25 to < 3·0	21/50 (42%)	22/63 (35%)	1·37 (0·75, 2·50)	0·31	1·01	43	0·71
3·0 to < 3·5	24/71 (34%)	26/65 (40%)	0·87 (0·50, 1·51)	0·80	0·25	50	
3·5 to < 4·0	33/89 (37%)	30/92 (33%)	1·14 (0·70, 1·87)	0·52	0·65	63	
4·0 or more	29/78 (37%)	25/83 (30%)	1·23 (0·72, 2·11)	0·56	0·59	54	
Total stent length (mm): <20	44/137 (32%)	42/156 (27%)	1·26 (0·83, 1·93)	0·18	1·35	86	0·45
≥20	63/151 (42%)	61/147 (41%)	1·03 (0·73, 1·47)	0·73	0·34	124	
Recipient vessel: LAD	25/60 (42%)	22/69 (32%)	1·34 (0·75, 2·38)	0·38	0·88	47	0·63
Circumflex	39/112 (35%)	48/124 (39%)	0·96 (0·63, 1·47)	0·97	0·04	87	
RCA	44/117 (38%)	34/111 (31%)	1·21 (0·76, 1·90)	0·36	0·91	78	
Target lesion location: Aortic/Ostial	22/64 (34%)	28/81 (35%)	0·95 (0·54, 1·68)	0·97	0·04	50	0·51
Body	75/195 (38%)	70/193 (36%)	1·12 (0·81, 1·56)	0·37	0·90	145	
Distal Anastomosis	11/30 (37%)	6/30 (20%)	1·73 (0·63, 4·71)	0·29	1·05	17	
Baseline use of antiplatelet medications: No	38/121 (31%)	43/137 (31%)	0·99 (0·64, 1·54)	0·998	0·0022	81	0·76
Yes	70/171 (41%)	62/168 (37%)	1·13 (0·80, 1·59)	0·53	0·63	132	
ACS status: No	43/137 (31%)	44/136 (32%)	0·87 (0·57, 1·33)	0·63	0·49	87	0·31
Yes	65/155 (42%)	61/169 (36%)	1·23 (0·87, 1·75)	0·26	1·12	126	

*All subgroup analyses except age of most recent SVG were prespecified in the protocol.

^ P-value and adjusted hazard ratio statistics are from the stratified log-rank test which accounts for randomisation being stratified by both diabetes status and number of target SVG lesions for all subgroups except diabetes status (stratified only by number of target SVG lesions) and number of target SVG lesion (stratified only by diabetes status)

ACS, acute coronary syndrome; BMS, bare metal stent; DES, drug-eluting stent; LAD, left anterior descending artery; RCA, right coronary artery; SVG, saphenous vein graft

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