# Appendix 3: Supplementary tables

#### Table A-Study characteristics

The characteristics and quality assessment in terms of Cochrane risk of bias assessment of included RCTs

Trial	DAPT Group	DAPT Regimen	Mean age, years	Mate(%)	ACS(%)	Diabetes(%)	Time of randomization	Stent type	Random sequence generation (selection ias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
OPTIMA-C	6 months	Aspirin (100mg/d) +	62.8	478(70.0)	344(50.4)	199(29.1)	At index PCI	BES/ZES	+	+	+	+	+	+	?
NCT03056118, South Korea	12 months	clopidogrel (75mg/d)	64.4	464(67.8)	348(50.9)	203(29.7)				•		•	•		
I-LOVE-IT 2	6 months	Aspirin (100mg/d) +	60.4	611(67.2)	752(82.7)	211(23.2)	At index PCI	BP-SES		_	2	2		-	
NCT01681381, China	12 months	clopidogrel (75mg/d)	60	632(68.7)	744(80.9)	203(22.1)			Ŧ		•	•	Ť	Ŧ	
IVUS-XPL study	6 months	Aspirin (100mg/d) +	63	470(67.2)	343(49.1)	249(35.6)	At index PCI	EES	Т	Т	?			?	_
NCT01308281, South Korea	12 months	clopidogrel (75mg/d)	64	494(70.5)	343(48.9)	257(36.7)			т	т	·	т	т	·	
ISAR-SAFE	6 months	Aspirin (81-200mg/d) +	67.2	1661(83.2)	794(39.8)	495(24.8)	6(-1/+2)months	PES/SES/EES/				2			2
NCT00661206, worldwide	12 months	clopidogrel (75mg/d)	67.2	1612(80.5)	807(40.3)	484(24.2)	after PCI	ZES/BES/BMS	+	+	+	:	+	+	•
SECURITY	6 months	Aspirin + clopidogrel (75mg/d)	64.9	529(77.6)	213(31.2)	206(30.2)	At index PCI	ZES/BES/EES			2	2	2		
NCT00944333, worldwide	12 months		65.5	551(76.8)	229(31.9)	223(31.1)			+	+	:	:	:	+	-
OPTIMIZE	3 months	Aspirin (100-200mg/d) +	61.3	992(64.5)	494(31.6)	554(35.4)	At index PCI	ZES							
NCT01113372, Brazil	12 months	clopidogrel (75mg/d)	61.9	982(63.1)	502(32.3)	549(35.3)			+	+	+	+	+	+	
EXCELLENT	6 months	Aspirin (100-200mg/d) +	63	470(65.1)	369(51.1)	272(37.7)	At index PCI	EES/SES			2				2
NCT00698607, South Korea	12 months	clopidogrel (75mg/d)	62.4	461(63.9)	375(52.0)	278(38.6)			Ŧ	Ŧ	•		Ŧ	Ŧ	•

RESET	3 months	Aspirin (100mg/d) +	62.4	682(64.4)	588(55.6)	316(29.9)	At index PCI	ZES/SES/EES			2	2			2
NCT01145079, South Korea	12 months	clopidogrel (75mg/d)	62.4	665(62.9)	568(53.6)	305(28.8)			+	+	:	:	+	+	:
SMART-DATE	6 months	Aspirin (100mg/d) +	62.0	1016(74.9)	1357(100)	365(26.9)	At index PCI	EES/ZES/BES				2			2
NCT01701453, South Korea	12.6-18 months	clopidogrel (75mg/d) /prasugrel	62.2	1028(75.9)	1355(100)	379(28.1)			+	+	+	:	+	+	:
		(10 mg/d) / ticagrelor (90mg													
		twice per day)													
NIPPON	6 months	Aspirin (81-162mg/d) +	67.4	1304(78.8)	619(37.4)	527(31.9)	At index PCI	BES			2	2			
NCT01514227, Japan	18 months	clopidogrel (75mg/d) /ticlopidine	67.2	1312(79.4)	635(38.4)	552(33.4)			+	+	•	•	+	+	+
		(200mg/d)													
ITALIC	6 months	Aspirin + clopidogrel	61.6	750(81.0)	400(43.2)	336(36.3)	6 months after	EES		2	2	2			
NCT01476020, France	24 months	(75mg/d)/prasugrel (10mg/d) /	61.5	733(79.3)	406(43.9)	349(37.8)	PCI		+	•	•	•	+	+	
		ticagrelor (90mg twice per day)													
PRODIGY	6 months	Aspirin (80-160mg/d) +	67.9	747(76.0)	733(74.6)	233(23.7)	30 days after	EES/PES/ZES/			2		2		2
NCT00611286, Italy	24 months	clopidogrel (75mg/d)	67.8	764(77.4)	702(71.1)	244(24.7)	PCI	BMS	+	+	÷	+	•	+	÷
OPTIDUAL	12 months	Aspirin (75-160mg/d) +	64.2	547(79.3)	262(38.0)	222(32.2)	12±3 months	SES/PES/ZES/			2		-		2
NCT00822536, France	48 months	clopidogrel (75mg/d)	64.1	568(81.7)	239(34.4)	213(30.6)	after PCI	EES	+	+	:	+	+	+	:
DAPT Study	12 months	Aspirin (75-162mg/d) +	61.6	3657(74.0)	2103(42.6)	1481(30.0)	12 months after	EES/PES/ZES/	2	2					
NCT00977938, worldwide	30 months	clopidogrel (75mg/d) / prasugrel	61.8	3778(75.3)	2148(42.8)	1556(31.0)	PCI	SES	:	•	+		+	+	
		(10 or 5mg/d)													
DES LATE	12 months	Aspirin(100-200mg/d) +	62.3	1749(69.6)	1551(61.7)	709(28.2)	12-18 months	SES/PES/ZES/		2					2
NCT01186146, South Korea	36 months	clopidogrel (75mg/d)	62.5	1749(69.1)	1512(59.7)	709(28.0)	after PCI	EES/others	+	:	_	_	+	+	:
ARCTIC-Interruption	12 months	Aspirin + clopidogrel	64	503(80.6)	167(26.8)	222(35.6)	12 months after	First /second				2			2
NCT00827411, France	18-30 months	(75-150mg/d) / purasugrel (10	64	508(80.0)	156(24.6)	198(31.1)	PCI	generation	+	+	+	÷	+	+	÷
		mg/d)						DES							

REAL-ZEST LATE	12 months	Aspirin (100-200mg/d) +	61.9	933(69.4)	844(62.8)	364(27.1)	12 months after	SES/PES/ZES/						2
NCT00484926+NCT00590174, South Korea	36 months	clopidogrel (75mg/d)	62.0	950(70.0)	843(62.1)	340(25.1)	PCI	other	+	+	_	+	+	1

Trial	Cardiac death	Myocardial infarction	Definite or	Stroke
			probable ST	
OPTIMA-C	ARC criteria <sup>1</sup> .	ARC criteria <sup>1</sup> .	ARC criteria <sup>1</sup> .	ARC criteria <sup>1</sup> .
(Lee <i>et al.</i> 2018)				
I-LOVE-IT 2	Any death due to an evident cardiac	ARC criteria <sup>2</sup> .	NA	NA
(Han <i>et al</i> . 2016)	cause, any death related to PCI,			
	unknown causes <sup>2</sup> .			
IVUS-XPL study	All deaths were considered cardiac	The presence of consistent clinical symptoms, ECG changes, or abnormal imaging	ARC criteria <sup>3</sup> .	Detected by the occurrence of a new neurological
(Hong et al.2016)	deaths unless a definite noncardiac	findings, combined with a creatine kinase myocardial band fraction increase greater		deficit, was confirmed using a neurological
	cause could be established <sup>3</sup> .	than ULN or an increase in troponin T or troponin I to >99th percentile of the		examination and imaging studies <sup>3</sup> .
		ULN <sup>3</sup> .		
ISAR-SAFE		New Q-waves on the electrocardiography(ECG) distinct from the baseline ECG,	ARC criteria <sup>3</sup> .	Acute neurological event of at least 24 hours of
(Schulz-Schupke et al. 2015)		felt to have occurred during study follow-up. ST-segment elevation (>1 mm in 2		without evidence supporting any alternative
		contiguous leads) accompanied by ischemic chest pain lasting for >20minutes or		explanation. Diagnosis of stroke requires
		hemodynamic decompensation(online Appendix) <sup>4</sup> .		confirmation by computed tomography or
				magnetic resonance imaging or pathological
				confirmation <sup>4</sup> .
SECURITY	Including any death without a	Cardiac enzyme elevation (troponin	ARC criteria <sup>6</sup> .	Any new neurological deficit lasting >24 h
(Colombo <i>et al</i> . 2014)	non-cardiac cause <sup>o</sup> .	T/I or creatine kinase-myocardial band) above the		associated with neuroimaging evidence (computed
		outh associated with at least 1 ischemic symptom: development of 0 waves on the ECC:		tomography or magnetic resonance imaging)°.
		ECG changes indicative of ischemia or coronary artery intervention <sup>6</sup> .		
OPTIMIZE	Any unknown causes of death or	Classified as Q wave (new pathological Q waves in 2 or more continuous ECG	ARC criteria <sup>7</sup> .	Acute neurological event with duration $\geq 24$
(Feres et al. 2013)	death that cannot be clearly	leads) or non-Q wave, and: Periprocedural-within 48 hours post-PCI with		hours with confirmation by either computed
	attributed to a non-cardiac cause	baseline biomarker <uln (upper="" ckmb="" in="" limit="" normal),="" of="" or="" rise="" troponin="">3</uln>		tomography or magnetic resonance imaging or
	will be considered cardiac <sup>7</sup> .	times ULN. (For CABG related: baseline biomarker <uln, ckmb="" in="" or<="" rise="" td=""><td></td><td>pathological confirmation<sup>7</sup>.</td></uln,>		pathological confirmation <sup>7</sup> .
		troponin >5 times ULN, and new Q wave/LBBB or new native or graft vessel		
		occlusion or loss of viable myocardium); Spontaneous—CK-MB or		
		samples and >20% increase 3 to 6 hours post-intervention as compared to baseline		
		samples and 2015 increase 5 to 5 notifs post intervention as compared to baseline samples <sup>7</sup> .		
EXCELLENT	All deaths were considered cardiac	During the first 48 hours after PCI, defined as an increase of cardiac enzyme	ARC criteria <sup>8</sup> .	Detected by the occurrence of a new neurological
(Gwon et al. 2012)	unless a definite noncardiac cause	(creatine kinase-MB fraction or troponin T/troponin I) 3 times above the ULN in		deficit, was confirmed by a neurologist and on

## Table B1-Definition of clinical endpoints of the included RCTs

	could be established <sup>8</sup> .	stable patients; In patients with elevated baseline levels of cardiac enzyme, myocardial infarction was defined as a subsequent increase of >2-fold from baseline values; After the first 48hours, myocardial infarction was defined as the presence of clinical signs of MI combined with a creatine kinase-MB fraction or troponin T/troponin I increase higher than ULN <sup>8</sup> .		Imaging <sup>8</sup> .
RESET (Kim <i>et al.</i> 2012)		Presence of clinical symptoms, ECG change or abnormal imaging findings of MI combined with an increase in creatine kinase myocardial band fraction to greater than three times the ULN or troponin-T/troponin-I more than the 99th percentile of the ULN, unrelated to an interventional procedure (online Appendix) <sup>9</sup> .	ARC criteria <sup>9</sup> .	A sudden onset of vertigo, numbness, aphasia, or dysarthria resulting from vascular lesions of the brain, including hemorrhage, embolism, thrombosis, or rupturing aneurysm(online Appendix) <sup>9</sup> .
SMART-DATE (Hahn <i>et al.</i> 2018)	All deaths were considered cardiac unless a definite non-cardiac cause could be established <sup>10</sup> .	Elevated cardiac enzymes (cardiac troponin or myocardial band fraction of creatine kinase) above the upper reference limit with ischaemic symptoms or electrocardiography findings indicative of ischaemia that was not related to the index procedure <sup>10</sup> .	ARC criteria <sup>10</sup> .	any non-convulsive focal or global neurological deficit of abrupt onset lasting more than 24 h or leading to death, which was caused by ischaemia or haemorrhage within the brain <sup>10</sup> .
NIPPON (Nakamura <i>et al.</i> 2017)		<ol> <li>Periprocedural: A serum CK-MB level exceeding the ULN should not be considered as new MI, but as MI at registration;, a serum troponin or serum CK-MB level exceeding 3 times the ULN within 48 hours after PCI; a serum troponin or serum CK-MB level exceeding 5 times the ULN within 72 hours after CABG; and a new Q-wave, left bundle block, new occlusion of the native vessel or graft, or reduction of viable myocardium on diagnostic imaging.</li> <li>Spontaneous: When myocardial enzymes are at or above the ULN, it should be considered as MI at registration, and when the serum level of troponin or CK-MB exceeds ULN more than 48 hours after PCI or within 72 hours after CABG.</li> <li>Re-infarction: Blood levels of biomarkers measured twice after the onset of MI are stable or decrease and the values at 3 to 6 hours after PCI show a &gt; 20% increase compared with those obtained at index PCI<sup>11</sup>.</li> </ol>	ARC criteria <sup>11</sup> .	Occurrence of cerebral infarction (ischemic stroke) or cerebral hemorrhage or subarachnoid hemorrhage (hemorrhagic stroke). Stroke was defined as the sudden onset of vertigo, numbness, dysphasia, weakness, visual field defects, dysarthria or other focal neurological deficits due to vascular lesions of the brain such as hemorrhage, embolism, thrombosis, or ruptured aneurysm <sup>11</sup> .
ITALIC (Didier <i>et al.</i> 2017)	All deaths unless an unequivocal non-cardiac cause could be established <sup>12</sup> .	Q-wave MI was defined by recurrence of symptoms and/or development of new pathological Q waves in 2 or more contiguous leads with elevated creatine kinase (CK), CK-MB, or troponin levels.; Non–Q-wave MI was defined by >2-fold CK elevation with elevated CK-MB or troponin without new pathological Q waves <sup>12</sup> .	ARC criteria <sup>12</sup> .	Acute new neurological deficit ending in death or lasting longer than 24 h, diagnosed as stroke by a physician <sup>12</sup> .
PRODIGY (Valgimigli <i>et al.</i> 2012)		New pathologic Q waves or CK-MB or troponin I/T elevation above the upper limit of normal, accompanied by ischemic symptoms and/or ECG changes <sup>13</sup> .	ARC criteria <sup>14</sup> .	Detected by the occurrence of a new neurological deficit, was confirmed by a neurologist and on imaging, whereas the occurrence of a transient ischemic attack required hospitalization and clinical confirmation by a neurologist <sup>14</sup> .
OPTIDUAL (Helft et al. 2015)		Presence of clinical or ECG changes consistent with myocardial ischaemia in the setting of increased cardiac biomarkers above ULN in accordance with the	ARC criteria <sup>15</sup> .	Acute episode of neurologic dysfunction attributed to a central nervous system vascular cause. Stroke

		universal definition(details were provided in online appendix) <sup>15</sup> .		should be documented by imaging. Evidence obtained from autopsy can confirm the diagnosis <sup>15</sup> .
DAPT Study (Mauri <i>et al.</i> 2014)	Any death due to immediate cardiac cause. Unwitnessed death and death of unknown cause will be classified as cardiac death <sup>16</sup> .	The categories includes peri-procedual PCI, peri-procedual CABG, spontaneous, silent, sudden death, and reinfarction, more details were provided in the online appendix of the original article <sup>16</sup> .	ARC criteria <sup>16</sup> .	Sudden onset of vertigo, numbness, dysphasia, weakness, visual field defects, dysarthria or other focal neurological deficits due to vascular lesions of the brain such as hemorrhage, embolism, thrombosis, or rupturing aneurysm that either: 1. persists more than 24 hours or results in death in less than 24 hours; 2. persists <24 hours duration if the following treatments were used: a. pharmacologic, i.e. thrombolytic drug administration, or b. non-pharmacologic, i.e. neuro- interventional procedure (e.g. intracranial angioplasty); 3. persists <24 hours but has neuro-radiological (MRI or CT) diagnostic changes suggestive of acute tissue injury <sup>16</sup> .
DES LATE (Lee et al. 2014)	All deaths were considered to have resulted from cardiac causes unless an unequivocal noncardiac cause could be established <sup>17</sup> .	ARC criteria <sup>17</sup> .	ARC criteria* <sup>17</sup> .	Detected by the occurrence of a new neurological deficit, was confirmed by a neurologist and imaging <sup>17</sup> .
ARCTIC-Interruption (Collet et al. 2014)		(i) In patients with elevated biomarkers before PCI, positive diagnosis of reinfarction is made when all of the following criteria are present: documentation that troponin level (or CK in the absence of CPK-MB) was decreasing; (2) troponin (or CPK-MB) measured 6 hours after PCI is N3×ULN; (3) peak troponin (or CPK-MB) level measured within 24 hours after the event is elevated by at least 50% above the previous level. (ii) In patients in whom biomarkers are normal or have returned to normal prior to PCI, periprocedural MI is defined when troponin (or CPKMB) measured 6 hours after PCI is N3× ULN. Measurements of biomarkers are requested before and 6 hours after PCI and at discharge <sup>18</sup> .	ARC criteria* <sup>18</sup> .	NA
REAL-ZEST LATE (Park et al. 2010)	All deaths were considered to be from cardiac causes unless an unequivocal noncardiac cause could be established <sup>19</sup> .	Universal definition of myocardial infarction <sup>1920</sup> .	ARC criteria <sup>*19</sup> .	Detected by the occurrence of a new neurologic deficit, was confirmed by a neurologist and on imaging <sup>19</sup> .

\*Definite stent thrombosis only.

NA refers to that though the endpoint was listed in the paper, the concrete definition was not available.

The blank represented no results were provided in original articles or the definition of the result might incur unacceptable bias.

Trial	Major bleeding	Any bleeding	Net adverse clinical events
OPTIMA-C	TIMI major bleeding		
(Lee et al. 2018)			
I-LOVE-IT 2	BARC type≥3 bleeding.	BARC criteria.	A composite of all-cause death, all MI, stroke and BARC type≥3
(Han et al. 2016)			bleeding.
IVUS-XPL study	TIMI Major bleeding.		A composite of cardiac death, myocardial infarction, stroke, or
(Hong et al.2016)			TIMI major bleeding.
ISAR-SAFE	TIMI major bleeding.	BARC criteria.	A composite of death, MI ,stent thrombosis(ST), stroke or TIMI
(Schulz-Schupke et al. 2015)			major bleeding
SECURITY	BARC 3 or 5 type bleeding.	BARC criteria.	A composite of cardiac death, MI, stroke, definite or probable
(Colombo et al. 2014)			ST, and BARC 3 or 5 bleeding.
OPTIMIZE	Incorporated modified major REPLACE-2 and severe or	Major bleeding plus bleeding events that did not meet	A composite of death, myocardial infarction, stroke and major
(Feres et al. 2013)	life-threatening GUSTO criteria <sup>7</sup> .	criteria for either major or severe or life-threatening bleeding according to modified major REPLACE-2 and	bleeding.
		severe or life- threatening GUSTO criteria <sup>7</sup> .	
EXCELLENT	TIMI Major bleeding.	TIMI criteria.	A composite of death, MI, stroke, ST, and TIMI major bleeding.
(Gwon et al. 2012)			
RESET	TIMI Major bleeding.	TIMI criteria.	
(Kim et al. 2012)			
SMART-DATE	BARC type 3-5 bleeding.	BARC type 2–5 bleeding.	
(Hahn et al. 2018)			
NIPPON	BARC 3 or 5 type bleeding.		A composite of all-cause mortality, myocardial infarction, stroke,
(Nakamura et al. 2017)			and REPLACE-2 major bleeding.
ITALIC	TIMI Major bleeding.		
(Didier et al. 2017)			
PRODIGY	TIMI Major bleeding.	BARC criteria.	
(Valgimigli et al. 2012)			
OPTIDUAL	TIMI major bleeding.	BARC criteria.	A composite of all-cause mortality, non-fatal myocardial
(Helft et al. 2015)			infarction, stroke, and TIMI major bleeding.
DAPT Study	GUSTO severe bleeding.	BARC criteria.	
(Mauri et al. 2014)			

## Table B2-Definition of clinical endpoints of the included RCTs

DES LATE	TIMI Major bleeding.		A composite of cardiac death, myocardial infarction, stroke,
(Lee et al. 2014)			stent thrombosis and TIMI major bleeding.
ARCTIC-Interruption	STEEPLE major bleeding.	STEEPLE criteria.	
(Collet et al. 2014)			
REAL-ZEST LATE	TIMI Major bleeding.		
(Park et al. 2010)			

GUSTO refers to The Global Use of Strategies to Open Occluded Arteries; ARC refers to Academic Research Consortium; STEEPLE refers to Enoxaparin versus Unfractionated Heparin in

Elective Percutaneous Coronary Intervention; REPLACE refers to Randomized Evaluation of PCI Linking Angiomax to Reduced Clinical Events; TIMI refers to thrombolysis in Myocardial

Infarction; BARC refers to Bleeding Academic Research Consortium.

NA refers to that though the endpoint was listed in the paper, the concrete definition was not available.

The blank represented no results were provided in original articles or the definition of the result might incur unacceptable bias.

Endpoints	Comparison		Direct			indirect			Network		Heterogeneity	Consis	tency
		OR	LL	UL	OR	LL	UL	OR	LL	UL	T <sup>2</sup>	Global P>X <sup>2</sup>	Local P>z
All-cause death	Long-term vs Short-term	1.04	0.80	1.33	1.51	1.05	2.17	1.18	0.93	1.49	0	0.092	0.094
	Standard-term vs Short-term	1.24	0.93	1.65	0.85	0.61	1.18	1.08	0.82	1.43	0	0.001	
	Long-term vs Standard-term	1.22	0.98	1.52	0.84	0.57	1.23	1.09	0.85	1.39	0		
Cardiac death	Long-term vs Short-term	1.27	0.73	2.20	1.29	0.78	2.16	1.28	0.88	1.86	0	0.956	0.955
	Standard-term vs Short-term	1.13	0.75	1.69	1.11	0.59	2.09	1.12	0.80	1.58	0		
	Long-term vs Standard-term	1.15	0.84	1.57	1.12	0.57	2.22	1.14	0.86	1.52	0		
Non-cardiac death	Long-term vs Short-term	1.28	0.71	2.30	2.18	1.16	4.11	1.63	1.03	2.59	0.018	0.226	0.185
	Standard-term vs Short-term	1.28	0.75	2.17	0.75	0.35	1.59	1.09	0.67	1.77	0.018		
	Long-term vs Standard-term	1.71	1.14	2.57	1.00	0.47	2.14	1.50	1.00	2.26	0.019		
Major bleeding	Long-term vs Short-term	1.62	1.06	2.46	2.11	1.21	3.67	1.78	1.27	2.49	0	0.458	0.600
	Standard-term vs Short-term	1.42	0.92	2.20	1.09	0.64	1.88	1.28	0.91	1.80	0		
	Long-term vs Standard-term	1.48	1.05	2.09	1.14	0.62	2.09	1.39	1.03	1.87	0		
Any bleeding	Long-term vs Short-term	1.82	1.10	3.01	2.64	1.47	4.77	2.13	1.46	3.10	0.290	0.346	0.390
	Standard-term vs Short-term	1.51	1.05	2.18	1.04	0.52	2.07	1.39	1.01	1.92	0.290		
	Long-term vs Standard-term	1.75	1.10	2.80	1.21	0.65	2.25	1.53	1.06	2.22	0.290		
Myocardial infarction	Long-term vs Short-term	0.70	0.46	1.07	0.55	0.34	0.88	0.63	0.46	0.86	0.173	0.464	0.113
	Standard-term vs Short-term	0.87	0.64	1.17	1.12	0.61	2.04	0.92	0.70	1.21	0.173		
	Long-term vs Standard-term	0.63	0.43	0.91	0.81	0.48	1.36	0.68	0.51	0.92	0.173		
Definite or probable ST	Long-term vs Short-term	0.70	0.39	1.25	0.39	0.17	0.90	0.57	0.34	0.95	0.271	0.271	0.088
	Standard-term vs Short-term	0.83	0.47	1.47	1.50	0.61	3.65	0.98	0.59	1.64	0.271	-	
	Long-term vs Standard-term	0.47	0.25	0.89	0.84	0.37	1.88	0.58	0.34	0.98	0.271		
Stroke	Long-term vs Short-term	1.21	0.78	1.87	0.90	0.52	1.54	1.08	0.77	1.51	0	0.397	0.397
	Standard-term vs Short-term	0.93	0.60	1.44	1.25	0.73	2.14	1.04	0.74	1.47	0		
	Long-term vs Standard-term	0.97	0.71	1.33	1.31	0.71	2.42	1.03	0.78	1.37	0		
Net adverse clinical events	Long-term vs Short-term	0.70	0.41	1.19	0.95	0.70	1.30	0.88	0.67	1.15	0	0.328	0.328
	Standard-term vs Short-term	0.94	0.78	1.12	0.69	0.38	1.24	0.91	0.77	1.08	0		
	Long-term vs Standard-term	1.02	0.79	1.31	0.75	0.43	1.31	0.97	0.77	1.22	0		

Table C1-Assessment of heterogeneity and consistency, for all endpoints in the study group with long-term arm as >12 months DAPT

Endpoints	Comparison		Direct		indirect			Network		Heterogeneity	Consis	tency	
		OR	LL	UL	OR	LL	UL	OR	LL	UL	T <sup>2</sup>	Global P>X <sup>2</sup>	Local P>z
All-cause death	Long-term vs Short-term	1.00	0.72	1.39	1.51	1.03	2.21	1.20	0.90	1.59	0.082	0.107	0.113
	Standard-term vs Short-term	1.25	0.90	1.74	0.83	0.54	1.27	1.12	0.83	1.50	0.082		
	Long-term vs Standard-term	1.21	0.91	1.60	0.80	0.50	1.28	1.07	0.82	1.40	0.082		
Cardiac death	Long-term vs Short-term	1.00	0.29	3.47	1.29	0.78	2.16	1.25	0.78	2.00	0	0.709	0.709
	Standard-term vs Short-term	1.13	0.75	1.69	0.87	0.24	3.15	1.10	0.75	1.62	0		
	Long-term vs Standard-term	1.15	0.84	1.57	0.89	0.24	3.28	1.13	0.83	1.53	0		
Non-cardiac death	Long-term vs Short-term	2.53	0.98	6.55	2.18	1.16	4.10	2.28	1.35	3.86	0	0.800	0.842
	Standard-term vs Short-term	1.28	0.76	2.13	1.48	0.53	4.10	1.31	0.83	2.07	0		
	Long-term vs Standard-term	1.71	1.18	2.48	1.98	0.67	5.84	1.74	1.23	2.47	0		
Major bleeding	Long-term vs Short-term	1.61	1.01	2.55	2.11	1.21	3.67	1.79	1.26	2.56	0	0.462	0.643
	Standard-term vs Short-term	1.42	0.92	2.20	1.08	0.61	1.93	1.29	0.91	1.82	0		
	Long-term vs Standard-term	1.48	1.05	2.09	1.13	0.60	2.13	1.39	1.03	1.88	0		
Any bleeding	Long-term vs Short-term	2.23	1.07	4.66	2.65	1.43	4.91	2.46	1.61	3.77	0.311	0.725	0.789
	Standard-term vs Short-term	1.52	1.04	2.22	1.28	0.53	3.10	1.46	1.06	2.02	0.311		
	Long-term vs Standard-term	1.75	1.07	2.85	1.47	0.64	3.37	1.68	1.15	2.47	0.311		
Myocardial infarction	Long-term vs Short-term	0.85	0.55	1.32	0.52	0.33	0.84	0.67	0.48	0.94	0.126	0.159	0.027
	Standard-term vs Short-term	0.87	0.66	1.14	1.40	0.76	2.58	0.95	0.71	1.26	0.126		
	Long-term vs Standard-term	0.61	0.42	0.88	0.98	0.58	1.65	0.71	0.52	0.96	0.126		
Definite or probable ST	Long-term vs Short-term	0.71	0.32	1.56	0.41	0.17	0.98	0.55	0.30	1.00	0.319	0.368	0.193
	Standard-term vs Short-term	0.83	0.46	1.50	1.45	0.50	4.21	0.95	0.55	1.63	0.319		
	Long-term vs Standard-term	0.49	0.25	0.95	0.85	0.32	2.28	0.58	0.33	1.02	0.319		
Stroke	Long-term vs Short-term	1.03	0.75	2.10	0.90	0.52	1.54	1.07	0.74	1.56	0	0.372	0.372
	Standard-term vs Short-term	0.93	0.60	1.44	1.30	0.71	2.37	1.04	0.73	1.48	0		
	Long-term vs Standard-term	0.97	0.71	1.33	1.36	0.69	2.67	1.03	0.77	1.37	0		
Net adverse clinical events	Long-term vs Short-term	0.70	0.41	1.19	0.95	0.70	1.30	0.88	0.67	1.15	0	0.328	0.328
	Standard-term vs Short-term	0.94	0.78	1.12	0.69	0.38	1.24	0.91	0.77	1.08	0		
	Long-term vs Standard-term	1.02	0.79	1.31	0.75	0.43	1.31	0.97	0.77	1.22	0		

Table C2-Assessment of heterogeneity and consistency, for all endpoints in the study group with long-term arm as ≥18 months DAPT

Table D-Assessment of Bayesian random effects model fit and inconsistency, for all endpoints in the study group with long-term arm as ≥18 months DAPT

Endpoints		Model fit		Node-splitting inconsistency <i>P</i> -values						
	Data points	Total residual variance <sup>1</sup>	DIC <sup>2</sup>	Standard-term vs Short-term	Long-term vs Short-term	Long-term vs Standard-term				
All-cause death	32	31.4	54.0	0.176	0.179	0.187				
Cardiac death	20	15.9	29.3	0.678	0.684	0.677				
Non-cardiac death	20	15.2	28.7	0.814	0.803	0.821				
Major bleeding	32	33.6	54.7	0.530	0.532	0.521				
Any bleeding	20	20.4	36.8	0.684	0.685	0.681				
Myocardial infarction	32	29.5	52.2	0.279	0.282	0.266				
Definite or probable ST	32	32.9	56.4	0.410	0.423	0.414				
Stroke	32	29.7	50.1	0.798	0.766	0.782				
Net adverse clinical events	18	15.3	28.0	0.429	0.427	0.419				

<sup>1</sup>Once total residual variance approximated the number of data points, it means a good model fit; <sup>2</sup>DIC refers to deviance information criterion, lower values of DIC are better.

Table E- GRADE quality of evidence and anticipated absolute effects of all endpoints. Long-term arm in this study group was >12 months DAPT.

Endpoints	Direct evidence	Indirect evidence	Network meta-analysis					
	Quality of evidence	Quality of evidence	Quality of evidence	Antic	ipated absolute effects			
				Risk with shorter DAPT	Risk difference with longer DAPT			
		Long-te	rm vs Short-term					
All-cause death	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>3,4</sup>	Moderate	27 per 1,000	5 more per 1,000 (2 fewer to 13 more)			
Cardiac death	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,3,4</sup>	Moderate	13 per 1,000	4 more per 1,000 (2 fewer to 11 more)			
Non-cardiac death	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>3,4</sup>	Moderate	13 per 1,000	8 more per 1,000 (0 fewer to 20 more)			
Major bleeding	$\oplus \oplus \oplus \oplus$ High	$\oplus \oplus \oplus \ominus$ Moderate <sup>4</sup>	High	9 per 1,000	7 more per 1,000 (2 more to 12 more)			
Any bleeding	$\oplus \oplus \oplus \ominus$ Moderate <sup>2</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>2,3,4</sup>	Moderate	53 per 1,000	53 more per 1,000 (23 more to 95 more)			
Myocardial infarction	$\oplus \oplus \ominus \ominus$ Low <sup>1,2</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>2,3,4</sup>	Low	12 per 1,000	4 fewer per 1,000 (6 fewer to 2 fewer)			
Definite or probable ST	$\oplus \oplus \ominus \ominus$ Low <sup>1,2</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>2,4</sup>	Low	5 per 1,000	2 fewer per 1,000 (4 fewer to 0 fewer)			
Stroke	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	9 per 1,000	1 more per 1,000 (2 fewer to 5 more)			
Net adverse clinical events	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	15 per 1,000	2 fewer per 1,000 (5 fewer to 2 more)			
		Standard-	term vs Short term					
All-cause death	$\oplus \oplus \ominus \ominus$ Low <sup>1,3</sup>	$\oplus \oplus \ominus \ominus$ Low <sup>1,4</sup>	Low	13 per 1,000	1 more per 1,000 (2 fewer to 5 more)			
Cardiac death	$\oplus \oplus \ominus \ominus$ Low <sup>1,3</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Low	10 per 1,000	1 more per 1,000 (2 fewer to 6 more)			
Non-cardiac death	$\oplus \oplus \ominus \ominus$ Low <sup>1,3</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Low	7 per 1,000	1 more per 1,000 (2 fewer to 5 more)			
Major bleeding	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	6 per 1,000	2 more per 1,000 (1 fewer to 5 more)			
Any bleeding	$\oplus \oplus \ominus \ominus$ Low <sup>2,3</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,2,3,4</sup>	Low	26 per 1,000	28 more per 1,000 (11 more to 50 more)			
Myocardial infarction	$\oplus \oplus \ominus \ominus$ Low <sup>1,2</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,2,3,4</sup>	Low	14 per 1,000	1 fewer per 1,000 (4 fewer to 3 more)			
Definite or probable ST	$\oplus \oplus \ominus \ominus$ Low <sup>1,2</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,2,4</sup>	Low	3 per 1,000	0 fewer per 1,000 (1 fewer to 2 more)			
Stroke	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	5 per 1,000	0 fewer per 1,000 (1 fewer to 2 more)			
Net adverse clinical events	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	37 per 1,000	3 fewer per 1,000 (8 fewer to 3 more)			
		Long-tern	n vs Standard-term					
All-cause death	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,3,4</sup>	Moderate	18 per 1,000	2 more per 1,000 (3 fewer to 7 more)			
Cardiac death	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,3,4</sup>	Moderate	10 per 1,000	1 more per 1,000 (1 fewer to 5 more)			
Non-cardiac death	$\oplus \oplus \oplus \oplus$ High	$\bigoplus \ominus \ominus \ominus$ Very low <sup>1,3,4</sup>	High	9 per 1,000	4 more per 1,000 (0 fewer to 11 more)			
Major bleeding	$\oplus \oplus \oplus \oplus$ High	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	High	8 per 1,000	3 more per 1,000 (0 fewer to 7 more)			
Any bleeding	$\bigoplus \bigoplus \overline{\ominus \ominus} \operatorname{Low}^{2,3}$	$\bigoplus \ominus \ominus \ominus $ Very low <sup>1,2,3,4</sup>	Low	46 per 1,000	23 more per 1,000 (3 more to 51 more)			
Myocardial infarction	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>2,3</sup>	$\bigoplus \ominus \ominus \ominus \forall Very low^{1,2,4}$	Low	14 per 1,000	5 fewer per 1,000 (7 fewer to 1 fewer)			
Definite or probable ST	$\bigoplus \bigoplus \bigoplus \bigoplus Moderate^2$	$\bigoplus \ominus \ominus \ominus \forall$ Very low <sup>1,2,4</sup>	Moderate	3 per 1,000	1 fewer per 1,000 (2 fewer to 0 fewer)			
Stroke	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \bigoplus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	8 per 1,000	0 fewer per 1,000 (2 fewer to 3 more)			
Net adverse clinical events	$\oplus \oplus \oplus \ominus$ Moderate <sup>1</sup>	$\bigoplus \ominus \ominus \ominus$ Low <sup>1,4</sup>	Moderate	40 per 1,000	1 fewer per 1,000 (9 fewer to 8 more)			

<sup>1</sup> Serious imprecision since 95% confidence interval includes null effect; <sup>2</sup>Serious inconsistency when 0.16<τ<sup>2</sup><0.36; <sup>3</sup>Strongly suspected publication bias when funnel plot is not symmetrical; <sup>4</sup>Serious indirectness because of indirect comparisons.

#### **References:**

- 1. Lee BK, Kim JS, Lee OH, et al. Safety of six-month dual antiplatelet therapy after second-generation drug-eluting stent implantation: OPTIMA-C Randomised Clinical Trial and OCT Substudy. *EuroIntervention : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology* 2018;13(16):1923-30. doi: 10.4244/eij-d-17-00792 [published Online First: 2017/11/07]
- 2. Han Y, Xu B, Jing Q, et al. A randomized comparison of novel biodegradable polymer- and durable polymer-coated cobalt-chromium sirolimus-eluting stents. JACC Cardiovascular interventions 2014;7(12):1352-60. doi: 10.1016/j.jcin.2014.09.001 [published Online First: 2014/12/03]
- 3. Hong SJ, Shin DH, Kim JS, et al. 6-Month Versus 12-Month Dual-Antiplatelet Therapy Following Long Everolimus-Eluting Stent Implantation: The IVUS-XPL Randomized Clinical Trial. JACC Cardiovascular interventions 2016;9(14):1438-46. doi: 10.1016/j.jcin.2016.04.036 [published Online First: 2016/05/24]
- 4. Byrne RA, Schulz S, Mehilli J, et al. Rationale and design of a randomized, double-blind, placebo-controlled trial of 6 versus 12 months clopidogrel therapy after implantation of a drug-eluting stent: The Intracoronary Stenting and Antithrombotic Regimen: Safety And EFficacy of 6 Months Dual Antiplatelet Therapy After Drug-Eluting Stenting (ISAR-SAFE) study. American heart journal 2009;157(4):620-4.e2. doi: 10.1016/j.ahj.2008.12.019 [published Online First: 2009/04/01]
- 5. Schulz-Schupke S, Byrne RA, Ten Berg JM, et al. ISAR-SAFE: a randomized, double-blind, placebo-controlled trial of 6 vs. 12 months of clopidogrel therapy after drug-eluting stenting. *Eur Heart J* 2015;36(20):1252-63. doi: 10.1093/eurheartj/ehu523
- 6. Colombo A, Chieffo A, Frasheri A, et al. Second-generation drug-eluting stent implantation followed by 6- versus 12-month dual antiplatelet therapy: the SECURITY randomized clinical trial. J Am Coll Cardiol 2014;64(20):2086-97. doi: 10.1016/j.jacc.2014.09.008 [published Online First: 2014/09/23]
- 7. Feres F, Costa RA, Bhatt DL, et al. Optimized duration of clopidogrel therapy following treatment with the Endeavor zotarolimus-eluting stent in real-world clinical practice (OPTIMIZE) trial: rationale and design of a large-scale, randomized, multicenter study. *American heart journal* 2012;164(6):810-6.e3. doi: 10.1016/j.ahj.2012.09.009
   [published Online First: 2012/12/01]
- 8. Gwon HC, Hahn JY, Park KW, et al. Six-month versus 12-month dual antiplatelet therapy after implantation of drug-eluting stents: the Efficacy of Xience/Promus Versus Cypher to Reduce Late Loss After Stenting (EXCELLENT) randomized, multicenter study. *Circulation* 2012;125(3):505-13. doi: 10.1161/circulationaha.111.059022

- 9. Kim B, Hong M, Shin D, et al. A new strategy for discontinuation of dual antiplatelet therapy: the RESET Trial (REal Safety and Efficacy of 3-month dual antiplatelet Therapy following Endeavor zotarolimus-eluting stent implantation). Journal of the american college of cardiology 2012; 60(15). http://onlinelibrary.wiley.com/o/cochrane/clcentral/articles/809/CN-00878809/frame.html.
- 10. Hahn JY, Song YB, Oh JH, et al. 6-month versus 12-month or longer dual antiplatelet therapy after percutaneous coronary intervention in patients with acute coronary syndrome (SMART-DATE): a randomised, open-label, non-inferiority trial. *Lancet* 2018;391(10127):1274-84. doi: 10.1016/s0140-6736(18)30493-8 [published Online First: 2018/03/17]
- 11. Nakamura M, Iijima R, Ako J, et al. Dual Antiplatelet Therapy for 6 Versus 18 Months After Biodegradable Polymer Drug-Eluting Stent Implantation. *JACC Cardiovascular interventions* 2017;10(12):1189-98. doi: 10.1016/j.jcin.2017.04.019 [published Online First: 2017/06/24]
- 12. Gilard M, Barragan P, Noryani AAL, et al. 6- versus 24-month dual antiplatelet therapy after implantation of drug-eluting stents in patients nonresistant to aspirin: the randomized, multicenter ITALIC trial. *J Am Coll Cardiol* 2015;65(8):777-86. doi: 10.1016/j.jacc.2014.11.008 [published Online First: 2014/12/03]
- 13. Valgimigli M, Campo G, Percoco G, et al. Randomized comparison of 6- versus 24-month clopidogrel therapy after balancing anti-intimal hyperplasia stent potency in all-comer patients undergoing percutaneous coronary intervention Design and rationale for the PROlonging Dual-antiplatelet treatment after Grading stent-induced Intimal hyperplasia study (PRODIGY). *American heart journal* 2010;160(5):804-11. doi: 10.1016/j.ahj.2010.07.034 [published Online First: 2010/11/26]
- 14. Valgimigli M, Campo G, Monti M, et al. Short- versus long-term duration of dual-antiplatelet therapy after coronary stenting: a randomized multicenter trial. *Circulation* 2012;125(16):2015-26. doi: 10.1161/circulationaha.111.071589 [published Online First: 2012/03/23]
- 15. Helft G, Steg PG, Le Feuvre C, et al. Stopping or continuing clopidogrel 12 months after drug-eluting stent placement: the OPTIDUAL randomized trial. *Eur Heart J* 2016;37(4):365-74. doi: 10.1093/eurheartj/ehv481 [published Online First: 2015/09/14]
- 16. Mauri L, Kereiakes DJ, Yeh RW, et al. Twelve or 30 months of dual antiplatelet therapy after drug-eluting stents. *The New England journal of medicine* 2014;371(23):2155-66. doi: 10.1056/NEJMoa1409312 [published Online First: 2014/11/18]
- 17. Lee CW, Ahn JM, Park DW, et al. Optimal duration of dual antiplatelet therapy after drug-eluting stent implantation: a randomized, controlled trial. *Circulation* 2014;129(3):304-12. doi: 10.1161/circulationaha.113.003303 [published Online First: 2013/10/08]
- 18. Collet JP, Cayla G, Cuisset T, et al. Randomized comparison of platelet function monitoring to adjust antiplatelet therapy versus standard of care: rationale and design of the assessment with a double randomization of (1) a fixed dose versus a monitoring-guided dose of aspirin and clopidogrel after DES implantation, and (2) treatment interruption versus continuation, 1 year after stenting (ARCTIC) study. *American heart journal* 2011;161(1):5-12.e5. doi: 10.1016/j.ahj.2010.09.029 [published Online First: 2010/12/21]

- 19. Park SJ, Park DW, Kim YH, et al. Duration of dual antiplatelet therapy after implantation of drug-eluting stents. *The New England journal of medicine* 2010;362(15):1374-82. doi: 10.1056/NEJMoa1001266 [published Online First: 2010/03/17]
- 20. Thygesen K, Alpert JS, White HD, et al. Universal definition of myocardial infarction. *Circulation* 2007;116(22):2634-53. doi: 10.1161/circulationaha.107.187397 [published Online First: 2007/10/24]