

## Appendix 4. Overall Results

**Table 1. Primary Outcome: Major Adverse Cardiac Events (MACE)**

Treatment	Primary Prevention or Mixed (Primary + Secondary)	MACE Definition	Systematic Review (Author, Year)	RCTs included	Sample Size (n)	Outcome Measured at (weeks)	Point Estimate (OR, RR, HR)	95% CI	Random or fixed effects analysis?	I <sup>2</sup>
<b>Bile acid sequestrants (BAS)</b>										
<b>BAS</b>	Primary	“definite coronary heart disease death and/or nonfatal myocardial infarction”	RCT: Lipid Research Clinics Program, 1984	1	3806	386	RR 0.83*	0.67-1.01	N/A	N/A
<b>BAS</b>	Secondary	“death, myocardial infarction, coronary artery disease progression or both MI and progression”	RCT: Brensike, 1984	1	143	261	OR 0.60	0.30-1.21	N/A	N/A
<b>BAS</b>	Mixed	“total cardiac events- deaths, non, fatal MI, coronary surgery, angioplasty, and stroke”	RCT: Watts, 1992	1	53	170	RR 0.35*	0.04-3.12	N/A	N/A
<b>Ezetimibe</b>										

<b>Ezetimibe</b>	Mixed	“Varied between studies, with coronary revascularization included in most studies”	Hong, 2018	6	18921	48-288	RR 0.93	0.89-0.99	Random	0.9%
<b>Ezetimibe</b>	Mixed	composite of coronary heart death, nonfatal MI, stroke or coronary revascularization	Toyota, 2019	4	20688	NR	OR 0.90	0.85-0.96	Random	35%
<b>Ezetimibe</b>	Mixed	CV death non-fatal MI, non-fatal stroke, hospitalization for unstable angina or coronary revascularisation	Zhan, 2018	10	21727	52-312	RR 0.94	0.90-0.98	Fixed	0%
<b>Fibrates</b>										
<b>Fibrates</b>	Primary	“Combined CVD death, non-fatal MI, non-fatal stroke”	Jakob, 2016	6	16135	104-261	RR 0.84	0.74-0.96	Fixed	0%
<b>Fibrates</b>	Secondary	“Composite outcome of non-fatal stroke, non-fatal MI and vascular death”	Wang, 2015	12	16064	271	RR 0.88	0.81-0.97	Random	45%
<b>Niacin</b>										

<b>Niacin</b>	Mixed	“Overall deaths from coronary heart disease, nonfatal myocardial infarction, hospitalization for angina, stroke, revascularization procedures”	D’Andrea, 2019	17	10295	NR	RR 0.88	0.76- 1.01	Random	45%
<b>Niacin</b>	Mixed	“Total CVD”	Jenkins 2021	4	29254	NR	RR 0.97	0.91-1.03	Random	55%
<b>Omega 3s (EPA+DHA)</b>										
<b>Omega 3s</b>	Mixed	“Major vascular events (first occurrence nonfatal MI, death caused by CHD, nonfatal or fatal stroke, any revascularization procedure”	Aung, 2018	9	59195	NR	RR 0.98	0.94-1.02	NR	NR
<b>Omega 3s</b>	Mixed	NR	Casula, 2020	13	54011	NR	OR 0.96	0.88-1.04	NR	NR
<b>Omega 3s</b>	Mixed	NR	Khan, 2021	13	107714	NR	RR 0.99	0.95-1.02	Random	NR
<b>EPA only</b>										
<b>EPA</b>	Mixed	NR	Khan, 2021	4	27305	NR	RR 0.78	0.72-0.85	Random	NR
<b>PCSK9 inhibitors</b>										
<b>PCSK9 Inhibitors</b>	Mixed	“CV death, nonfatal MI, and nonfatal stroke”	AlTurki, 2019	22	NR	NR	OR 0.82	0.77-0.87	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	“CV Events”	Bai, 2018	11	38226	NR	RR 0.86	0.81-0.92	Fixed	0%

<b>PCSK9 Inhibitors</b>	Mixed	“Cardiovascular event incidence”	Casula, 2019	20	60878	NR	OR 0.83	0.78-0.87	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	“CV mortality, nonfatal MI, nonfatal stroke”	Dicembrini, 2019	27	84233	NR	OR 0.83	0.78-0.88	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	“CV death, non-fatal MI, and non-fatal stroke”	Du, 2019	31	92736	12-146	RR 0.84	0.79-0.89	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	NR	Ghadban, 2017	6	62776	NR	RR 0.81	0.70-0.93	Random	56%
<b>PCSK9 Inhibitors</b>	Mixed	NR	Khan, 2022	5	80732	26-146	RR 0.84	0.76-0.92	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	“CV death, stroke and MI”	Ma, 2021	20	86845	NR	RR 0.83	0.79-0.88	Fixed	9%
<b>PCSK9 Inhibitors</b>	Mixed	“CV death, nonfatal MI, nonfatal stroke”	Monami, 2019	3	47208	NR	OR 0.78	0.71-0.85	Random	37%
<b>PCSK9 Inhibitors</b>	Mixed	“Major CV Events”	Mu, 2020	15	NR	NR	RR 0.87	0.83-0.91	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	“Coronary heart death, non-fatal MI, stroke, or coronary revascularization”	Toyota, 2019	7	54677	NR	OR 0.81	0.73-0.90	Random	37%
<b>PCSK9 Inhibitors</b>	Mixed	Based on the individual trial definitions	Turgeon, 2018	21	59852	NR	RR 0.83	0.78-0.88	Fixed	2%
<b>PCSK9 Inhibitors</b>	Mixed	“CV Events”	Wang, 2021	13	24803	NR	RR 0.89	0.83-0.95	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	“Adjudicated CV events”	Zhao, 2020	8	49227	NR	RR 0.87	0.83-0.91	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	“CV Events”	Zhao, 2019	NR	62714	NR	OR 0.79	0.68-0.92	Random	NR

<b>PCSK9 Inhibitors</b>	Mixed	“Positively adjudicated CV events (composite of all-cause mortality, CV death, MI, stroke, revascularization, or hospitalization for unstable angina”	Zhu, 2019	15	35011	NR	RR 0.87	0.81-0.93	Random	0%
<b>Statins</b>										
<b>Statins</b>	Primary	“Any coronary heart events” (angina, MI, coronary revascularization, CHD death)	Li, 2019	8	37395	52-276	RR 0.73	0.68-0.78	Fixed	0%
<b>Statins</b>	Mixed	“Coronary Artery Disease”	Ponce, 2019	10	24728	NR	RR 0.71	0.63-0.80	Random	52%
<b>Statins</b>	Primary	“All CHD events” – 13 outcomes, see PDF (pg 3), excludes stroke	Sandwith, 2021	13	88876	NR	RR 0.78	0.71-0.85	Random	71%
<b>Statins</b>	Primary	Primary endpoint for each RCT (Appendix pg 21)	Singh, 2020	11	58504	NR	RR 0.71	0.62-0.82	Random	55%
<b>Statins</b>	Primary	“Fatal and non-fatal CVD”	Taylor, 2013	9	23805	NR	RR 0.75	0.70-0.81	Fixed	31%
<b>Statins</b>	Primary	“Non-fatal stroke, unstable angina,	Yebyo, 2013	23	NR	NR	RR 0.74	0.67-0.81	Random	49.5%

		non-fatal MI and CV death”								
<b>Statins</b>	Mixed	“CV events” (not defined in paper)	Zhao, 2019	NR	139233	NR	OR 0.80	0.76-0.85	Random	NR

BAS: Bile Acid Sequestrants; \*Calculated by PEER team at [https://www.medcalc.org/calc/relative\\_risk.php](https://www.medcalc.org/calc/relative_risk.php); RCT: Randomized Controlled Trial; n: Total sample size in meta-analysis; OR: Odds Ratio; RR: Risk Ratio; HR= Hazard Ratio; CI: Confidence Interval; I<sup>2</sup>: indicates the level of heterogeneity; CVD: Cardiovascular Disease; NR: Not Reported; ACS: Acute coronary syndrome; US

**Table 2. Secondary Outcome: Cardiovascular Mortality**

Treatment	Primary Prevention or Mixed (Primary + Secondary)	Systematic Review (Author, Year)	RCTs included	Sample Size (n)	Outcome Measured at (weeks)	Point Estimate (OR, RR, HR)	95% CI	Random or fixed effects analysis?	I <sup>2</sup>
<b>Bile acid sequestrants (BAS)</b>									
<b>BAS</b>	Primary	RCT: Lipids Research Clinics Program, 1984	1	3806	386	RR 0.79*	0.49-1.26	N/A	N/A
<b>BAS</b>	Mixed-MEN	RCT: Dorr, 1978	1	1094	52-157	RR 0.46*	0.23-0.92	N/A	N/A
<b>BAS</b>	Mixed-WOMEN	RCT: Dorr, 1978	1	1184	52-157	RR 1.08*	0.44-2.63	N/A	N/A
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	Mixed	Toyota, 2019	3	18967	NR	OR 1.00	0.89-1.13	Random	0%
<b>Ezetimibe</b>	Mixed	Zhan, 2018	6	19457	52-312	RR 1.00	0.89-1.12	Fixed	0%
<b>Fibrates</b>									
<b>Fibrates</b>	Secondary	Wang, 2015	10	13653	282	RR 0.95	0.86-1.05	Fixed	11%
<b>Niacin</b>									
<b>Niacin</b>	Mixed	D'Andrea, 2019	16	35652	NR	RR 0.98	0.90-1.07	Random	0%
<b>Niacin</b>	Mixed	Garg, 2017	9	9236	NR	RR 0.91	0.81-1.02	Random	0.1%
<b>Niacin</b>	Mixed	Jenkins, 2021	2	3581	NR	RR 1.14	0.75-1.73	Random	0%
<b>Niacin</b>	Mixed	Riaz, 2019	4	32733	NR	RR 0.99	0.89-1.09	Random	NR
<b>Niacin</b>	Mixed	Schandelmaier, 2017	5	32966	52-260	RR 1.02	0.93-1.12	Random	0%
<b>Omega 3s</b>									
<b>Omega 3s</b>	Mixed	Cabiddu, 2020	11	100609	NR	RR 0.94	0.89-0.99	NR	0%
<b>Omega 3s</b>	Mixed	Hu, 2019	11	100599	NR	RR 0.93	0.88-0.99	Fixed	0.2%
<b>Omega 3s</b>	Mixed	Khan, 2021	22	116452	NR	RR 0.94	0.89-0.99	Random	NR

<b>Omega 3s</b>	Mixed	Kim, 2020	13	NR	52-385	RR 0.93	0.88-0.99	Random	10%
<b>Omega 3s</b>	Mixed	Xie, 2021	8	49872	NR	RR 0.93	0.88-0.99	Fixed	0%
<b>EPA only</b>									
<b>EPA</b>	Mixed	Khan, 2021	3	27062	NR	RR 0.82	0.68-0.99	Random	NR
<b>EPA</b>	Mixed	Kim, 2020	1	8159	NR	RR 0.82	0.67-0.99	NR	NR
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	Mixed	AlTurki, 2019	13	NR	NR	OR 0.95	0.84-1.07	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Bai, 2018	7	36476	NR	RR 1.00	0.84-1.18	Fixed	5.2%
<b>PCSK9 Inhibitors</b>	Mixed	Casula, 2019	10	57306	NR	OR 0.94	0.83-1.07	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Chaiyasothi, 2019	11	85021	NR	RR 0.97	0.86-1.08	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Dicembrini, 2019	36	85521	NR	OR 0.97	0.86-1.09	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Du, 2019	57	96709	12-146	RR 0.95	0.85-1.07	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Ghadban, 2017	6	62776	NR	RR 0.98	0.78-1.22	Random	15%
<b>PCSK9 Inhibitors</b>	Mixed	Guedeney, 2019	NR	64707	8-208	RR 0.94	0.84-1.06	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Karatasakis, 2017	34	44701	NR	OR 1.01	0.85-1.19	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2022	5	80732	26-146	RR 0.95	0.80-1.12	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2019	9	83318	NR	RR 0.95	0.85-1.07	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Ma, 2021	13	84639	NR	RR 0.96	0.86-1.07	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Mu, 2020	6	NR	NR	RR 0.93	0.79-1.11	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Qin, 2021	7	57436	NR	RR 0.95	0.84-1.07	Fixed	2.5%
<b>PCSK9 Inhibitors</b>	Mixed	Toyota, 2019	6	53709	NR	OR 0.92	0.73-1.15	Random	47%
<b>PCSK9 Inhibitors</b>	Mixed	Turgeon, 2018	19	58021	NR	RR 0.95	0.84-1.07	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Wang, 2021	4	20570	NR	RR 0.87	0.74-1.04	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2020	6	48060	NR	RR 0.96	0.85-1.08	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2019	NR	63501	NR	OR 0.99	0.87-1.13	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Zhu, 2019	12	64323	NR	RR 1.01	0.87-1.18	Random	0%
<b>Statins</b>									
<b>Statins</b>	Mixed	Kim, 2020	27	97648	52-317	RR 0.86	0.80-0.92	Random	37.2%
<b>Statins</b>	Primary	Cai, 2021	22	95959	230	OR 0.83	0.76-0.91	Fixed	27%
<b>Statins</b>	Primary	Li, 2019	6	38935	NR	RR 0.85	0.74-0.99	Fixed	22%



<b>Statins</b>	Mixed	Ponce, 2019	12	35955	52-346	RR 0.85	0.76-0.96	Fixed	49.3%
<b>Statins</b>	Primary	Singh, 2020	8	54515	99-291	RR 0.90	0.78-1.04	Random	0%
<b>Statins</b>	Primary	Taylor, 2013	5	34012	NR	RR 0.83	0.72-0.96	Fixed	0%
<b>Statins</b>	Primary	Yebyo, 2019	15	NR	NR	RR 0.80	0.71-0.91	Random	35.3%
<b>Statins</b>	Mixed	Zhao, 2019	NR	134059	NR	OR 0.83	0.75-0.92	Random	NR

BAS: Bile Acid Sequestrants; \*Calculated by PEER team at [https://www.medcalc.org/calc/relative\\_risk.php](https://www.medcalc.org/calc/relative_risk.php); RCT: Randomized Controlled Trial; n: Total sample size in meta-analysis; OR: Odds Ratio; RR: Risk Ratio; CI: Confidence Interval; I<sup>2</sup>: indicates the level of heterogeneity; NR= Not Reported

**Table 3. Secondary Outcome: All-Cause Mortality**

Treatment	Primary Prevention or Mixed (Primary + Secondary)	Systematic Review (Author, Year)	RCTs included	Sample Size (n)	Outcome Measured at (weeks)	Point Estimate (OR, RR, HR)	95% CI	Random or fixed effects analysis?	I <sup>2</sup>
<b>Bile acid sequestrants (BAS)</b>									
<b>BAS</b>	Primary	RCT: Lipids Research Clinics Program, 1984	1	3806	386	RR 0.95*	0.69-1.32	N/A	N/A
<b>BAS</b>	Mixed-MEN	RCT: Dorr, 1978	1	1094	52-157	RR 0.63*	0.35-1.14	N/A	N/A
<b>BAS</b>	Mixed-WOMEN	RCT: Dorr, 1978	1	1184	52-157	RR 0.92*	0.50-1.69	N/A	N/A
<b>BAS</b>	Mixed	RCT: Watts, 1992	1	53	170	RR 0.35*	0.01-8.12	N/A	N/A
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	Mixed	Toyota, 2019	3	19968	NR	OR 0.88	0.62-1.27	Random	54%
<b>Ezetimibe</b>	Mixed	Zhan, 2018	8	21222	52-312	RR 0.98	0.91-1.05	Fixed	0%
<b>Fibrates</b>									
<b>Fibrates</b>	Primary	Jakob, 2016	5	8471	52-261	RR 1.01	0.81-1.26	Fixed	0%
<b>Fibrates</b>	Mixed	Keene, 2014	19	45935	261	OR 0.98	0.89-1.08	Random	33%
<b>Fibrates</b>	Secondary	Wang, 2015	10	13653	282	RR 0.98	0.91-1.06	Fixed	23%
<b>Niacin</b>									
<b>Niacin</b>	Mixed	Garg, 2017	11	34810	NR	RR 0.99	0.88-1.12	Random	31%
<b>Niacin</b>	Mixed	Jenkins, 2021	4	29195	NR	RR 1.04	0.95-1.14	Random	16%
<b>Niacin</b>	Mixed	Riaz, 2019	5	33305	NR	RR 1.04	0.97-1.12	Random	NR
<b>Niacin</b>	Mixed	Schandelmaier, 2017	12	35543	26-260	RR 1.05	0.97-1.12	Random	0%
<b>Omega 3s</b>									
<b>Omega 3s</b>	Mixed	Khan, 2021	21	113921	NR	RR 0.98	0.93-1.03	Random	NR

<b>Omega 3s</b>	Mixed	Kim, 2020	17	NR	52-385	RR 0.97	0.94-1.00	Random	2.2%
<b>EPA Only</b>									
<b>EPA</b>	Mixed	Khan, 2021	3	27062	NR	RR 0.96	0.85-1.10	NR	NR
<b>EPA</b>	Mixed	Kim, 2020	2	26804	NR	RR 0.98	0.81-1.18	NR	6%
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	Mixed	AlTurki, 2019	17	NR	NR	OR 0.91	0.78-1.06	Random	21%
<b>PCSK9 Inhibitors</b>	Mixed	Bai, 2018	NR	NR	NR	RR 1.00	0.89-1.14	NR	NR
<b>PCSK9 Inhibitors</b>	Mixed	Casula, 2019	13	59504	NR	OR 0.93	0.85-1.03	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Chaiyasothi, 2019	12	84092	NR	RR 0.94	0.82-1.06	Random	13.8%
<b>PCSK9 Inhibitors</b>	Mixed	Cordero, 2020	6	81696	NR	OR 0.95	0.86-1.04	NR	55.1%
<b>PCSK9 Inhibitors</b>	Mixed	Dicembrini, 2019	38	85230	NR	OR 0.94	0.84-1.04	Random	3%
<b>PCSK9 Inhibitors</b>	Mixed	Du, 2019	57	96427	12-146	RR 0.93	0.84-1.03	Random	3%
<b>PCSK9 Inhibitors</b>	Mixed	Ghadban, 2017	6	62776	NR	RR 1.01	0.86-1.20	Random	21%
<b>PCSK9 Inhibitors</b>	Mixed	Guedeney, 2019	NR	66478	8-208	RR 0.89	0.75-1.04	Random	13%
<b>PCSK9 Inhibitors</b>	Mixed	Karatasakis, 2017	35	45503	NR	OR 0.71	0.47-1.09	Random	18%
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2022	5	80732	26-146	RR 0.91	0.75-1.10	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2019	9	83318	NR	RR 0.94	0.81-1.09	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Monami, 2019	3	1234	NR	OR 0.43	0.14-1.29	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Mu, 2020	13	NR	NR	RR 0.88	0.72-1.07	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Toyota, 2019	7	54677	NR	OR 0.87	0.69-1.10	Random	53%
<b>PCSK9 Inhibitors</b>	Mixed	Turgeon, 2018	23	60724	NR	RR 0.93	0.85-1.02	Fixed	19%
<b>PCSK9 Inhibitors</b>	Mixed	Wang, 2021	13	24773	NR	RR 0.80	0.66-0.96	Fixed	11%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2020	8	49227	NR	RR 0.95	0.86-1.05	Fixed	22%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2019	NR	60169	NR	OR 0.87	0.71-1.07	Random	NR
<b>Statins</b>									
<b>Statins</b>	Mixed	Byrne, 2022	19	132763	NR	RR 0.91	0.86-0.95	Random	52%
<b>Statins</b>	Mixed	Kim, 2020	30	138877	52-317	RR 0.90	0.86-0.94	Random	43.8%
<b>Statins</b>	Primary	Li, 2019	9	53656	52-276	RR 0.88	0.76-1.01	Random	58%
<b>Statins</b>	Mixed	Ponce, 2019	17	47083	52-346	RR 0.92	0.87-0.97	Random	20%
<b>Statins</b>	Primary	Sandwith, 2021	13	88876	NR	RR 0.93	0.89-0.97	Fixed	6%

<b>Statins</b>	Primary	Singh, 2020	11	58504	99-291	RR 0.92	0.83-1.02	Random	25%
<b>Statins</b>	Primary	Taylor, 2013	13	48060	260	OR 0.86	0.79-0.94	Fixed	0%
<b>Statins</b>	Primary	Yebyo, 2019	24	NR	NR	RR 0.89	0.85-0.93	Random	0%
<b>Statins</b>	Mixed	Zhao, 2019	NR	143995	NR	OR 0.91	0.86-0.96	Random	0%

BAS: Bile Acid Sequestrants; \*Calculated by PEER team at [https://www.medcalc.org/calc/relative\\_risk.php](https://www.medcalc.org/calc/relative_risk.php); RCT: Randomized Controlled Trial; n: Total sample size in meta-analysis; OR: Odds Ratio; RR: Risk Ratio; CI: Confidence Interval; I<sup>2</sup>: indicates the level of heterogeneity; NR= Not Reported

**Table 4. Secondary Outcome: Myocardial Infarction**

Treatment	Primary Prevention or Mixed (Primary + Secondary)	Systematic Review (Author, Year)	RCTs included	Sample Size (n)	Outcome Measured at (weeks)	Point Estimate (OR, RR, HR)	95% CI	Random or fixed effects analysis?	I <sup>2</sup>
<b>NON-FATAL MYOCARDIAL INFARCTION</b>									
<b>Bile acid sequestrants (BAS)</b>									
BAS	Primary	RCT: Lipid Research Clinics Program, 1984	1	3806	386	RR 0.82*	0.66-1.03	N/A	N/A
BAS	Mixed	RCT: Watts, 1992	1	53	170	RR 1.04*	0.07-15.75	N/A	N/A
<b>Ezetimibe</b>									
Ezetimibe	Mixed	Zhan, 2018	6	21145	52-312	RR 0.88	0.81-0.95	Fixed	0%
<b>Fibrates</b>									
Fibrates	Mixed	Keene, 2014	18	45445	261	OR 0.80	0.74-0.87	Random	1%
<b>Niacin</b>									
Niacin	Mixed	Garg, 2017	9	34251	NR	RR 0.85	0.73-1.0	Random	29%
Niacin	Mixed	Schandelmaier, 2017	4	33164	NR	RR 0.91	0.77-1.07	Random	53%
<b>Omega 3s</b>									
Omega 3s	Mixed	Aung, 2018	9	59195	NR	RR 0.98	0.90-1.07	NR	NR
Omega 3s	Mixed	Khan, 2021	17	98549	NR	RR 0.92	0.85-1.00	Random	NR
<b>EPA Only</b>									
EPA	Mixed	Khan, 2021	3	27062	NR	RR 0.72	0.62-0.84	Random	NR
<b>PCSK9 Inhibitors</b>									
PCSK9 Inhibitors	Mixed	Chaiyasothi, 2019	12	83463	NR	RR 0.81	0.72-0.92	Random	28.4%
PCSK9 Inhibitors	Mixed	Dicembrini, 2019	34	80449	NR	OR 0.80	0.73-0.89	Random	9%

<b>PCSK9 Inhibitors</b>	Mixed	Du, 2019	41	90605	12-146	RR 0.83	0.74-0.93	Random	12%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2020	4	20405	NR	RR 0.86	0.78-0.96	Fixed	0%
<b>Statins</b>									
<b>Statins</b>	Primary	Li, 2019	8	41191	NR	RR 0.60	0.51-0.69	Fixed	14%
<b>Statins</b>	Primary	Yebyo, 2019	16	NR	NR	RR 0.62	0.53-0.72	Random	31%
<b>FATAL MYOCARDIAL INFARCTION</b>									
<b>Bile acid sequestrants (BAS)</b>									
<b>BAS</b>	Mixed- MEN	RCT: Dorr, 1978	1	1094	52-157	RR 0.06*	0.00-1.01	N/A	N/A
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Fibrates</b>									
<b>Fibrates</b>	Mixed	Keene, 2014	17	45422	261	OR 0.92	0.81-1.04	Random	16%
<b>Niacin</b>									
<b>Niacin</b>	Mixed	Garg, 2017	4	33543	NR	RR 0.93	0.78-1.10	Random	55%
<b>Niacin</b>	Mixed	Jenkins, 2021	2	29087	NR	RR 1.04	0.90-1.21	Random	0%
<b>Niacin</b>	Mixed	Schandelmaier, 2017	6	33336	NR	RR 1.01	0.91-1.11	Random	0%
<b>Omega-3s</b>									
<b>Omega-3s</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>EPA only</b>									
<b>EPA</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Statins</b>									
<b>Statins</b>	Mixed	Kim, 2020	8	NR	NR	RR 0.73	0.57-0.93	Random	17.6%
<b>Statins</b>	Primary	Li, 2019	3	10975	NR	RR 0.49	0.24-0.98	Fixed	0%
<b>Statins</b>	Primary	Yebyo, 2019	6	NR	NR	RR 0.72	0.50-1.03	Random	0%
<b>MYOCARDIAL INFARCTION (ALL)</b>									
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	Mixed	Toyota, 2019	3	20585	NR	OR 0.86	0.79-0.95	Random	0%
<b>Fibrates</b>									
<b>Fibrates</b>	Primary	Jakob, 2016	6	16135	104-261	RR 0.79	0.68-0.92	Fixed	24%

<b>Fibrates</b>	Secondary	Wang, 2015	10	13942	277	RR 0.86	0.8-0.93	Fixed	24%
<b>Niacin</b>									
<b>Niacin</b>	Mixed	D'Andrea, 2019	16	35642	NR	RR 0.87	0.74-1.02	Random	22%
<b>Niacin</b>	Mixed	Jenkins, 2021	4	30196	NR	RR 0.96	0.85-1.08	Random	0%
<b>Niacin</b>	Mixed	Riaz, 2019	6	37175	NR	RR 0.89	0.74-1.07	Random	NR
<b>Niacin</b>	Mixed	Schandelmaier, 2017	9	34829	NR	RR 0.93	0.87-1.00	Random	0%
<b>Omega 3s</b>									
<b>Omega 3s</b>	Mixed	Casula, 2020	12	53711	NR	OR 0.88	0.74-1.04	NR	NR
<b>EPA only</b>									
<b>EPA</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	Mixed	AlTurki, 2019	21	NR	NR	OR 0.80	0.65-0.91	Random	20%
<b>PCSK9 Inhibitors</b>	Mixed	Bai, 2018	8	36691	NR	RR 0.73	0.65-0.82	Fixed	3.9%
<b>PCSK9 Inhibitors</b>	Mixed	Casula, 2019	13	52899	NR	OR 0.78	0.72-0.84	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Cordero, 2020	6	81696	NR	RR 0.81	0.76-0.87	NR	51.3%
<b>PCSK9 Inhibitors</b>	Mixed	Dicembrini, 2019	34	36734	NR	OR 0.55	0.49-0.61	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Ghadban, 2017	6	62776	NR	RR 0.78	0.63-0.97	Random	54%
<b>PCSK9 Inhibitors</b>	Mixed	Guedeney, 2019	NR	61784	8-208	RR 0.80	0.74-0.86	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Karatasakis, 2017	23	41932	NR	OR 0.72	0.64-0.81	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2022	5	80732	26-146	RR 0.80	0.69-0.93	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2019	9	83318	NR	RR 0.83	0.71-0.98	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Ma, 2021	18	86020	NR	RR 0.81	0.76-0.87	Fixed	23%
<b>PCSK9 Inhibitors</b>	Mixed	Mu, 2020	10	NR	NR	RR 0.78	0.67-0.92	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Toyota, 2019	7	54677	NR	OR 0.77	0.66-0.88	Random	29%
<b>PCSK9 Inhibitors</b>	Mixed	Turgeon, 2018	19	59059	NR	RR 0.80	0.74-0.86	Fixed	11%
<b>PCSK9 Inhibitors</b>	Mixed	Zhu, 2019	12	64368	NR	RR 0.78	0.71-0.86	Random	37.5%
<b>Statins</b>									
<b>Statins</b>	Mixed	Byrne, 2022	18	121190	NR	RR 0.71	0.66-0.78	Random	36%

<b>Statins</b>	Primary	Cai, 2021	22	95148	229	OR 0.72	0.66-0.78	Fixed	33%
<b>Statins</b>	Mixed	Ponce, 2019	10	17856	226-346	RR 0.66	0.56-0.78	Random	37%
<b>Statins</b>	Primary	Singh, 2020	6	50784	NR	RR 0.56	0.47-0.67	Random	0%

BAS: Bile Acid Sequestrants; \*Calculated by PEER team at [https://www.medcalc.org/calc/relative\\_risk.php](https://www.medcalc.org/calc/relative_risk.php); RCT: Randomized Controlled Trial; n: Total sample size in meta-analysis; OR: Odds Ratio; RR: Risk Ratio; CI: Confidence Interval; I<sup>2</sup>: indicates the level of heterogeneity; NR= Not Reported



**Table 5. Secondary Outcome: Stroke**

Treatment	Primary Prevention or Mixed (Primary + Secondary)	Systematic Review (Author, Year)	RCTs included	Sample Size (n)	Outcome Measure d at (weeks)	Point Estimate (OR, RR, HR)	95% CI	Random or fixed effects analysis?	I <sup>2</sup>
<b>NON-FATAL STROKE</b>									
<b>BAS</b>									
<b>BAS</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	Mixed	Zhan, 2018	6	21205	52-312	RR 0.83	0.71-0.97	Fixed	0%
<b>Fibrates</b>									
<b>Fibrates</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Niacin</b>									
<b>Niacin</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Omega 3s</b>									
<b>Omega 3s</b>	Mixed	Khan, 2021	6	56987	NR	RR 1.16	1.00-1.34	Random	NR
<b>EPA only</b>									
<b>EPA</b>	Mixed	Khan, 2021	2	8417	NR	RR 0.71	0.54-0.94	Random	N/A
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	Mixed	Dicembrini, 2019	33	80487	NR	OR 0.73	0.63-0.84	Random	0%
<b>Statins</b>									
<b>Statins</b>	Primary	Taylor, 2013	5	28097	NR	RR 0.69	0.58-0.83	Fixed	0%
<b>Statins</b>	Primary	Yebyo, 2019	16	NR	NR	RR 0.84	0.76-0.92	Random	0%
<b>FATAL STROKE</b>									
<b>BAS</b>									
<b>BAS</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Ezetimibe</b>									

<b>Ezetimibe</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Fibrates</b>									
<b>Fibrates</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Niacin</b>									
<b>Niacin</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Omega 3s</b>									
<b>Omega 3s</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>EPA only</b>									
<b>EPA</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>Statins</b>									
<b>Statins</b>	Mixed	Kim, 2020	12	NR	NR	RR 1.11	0.87-1.41	Random	40.1%
<b>Statins</b>	Primary	Taylor, 2013	3	27238	NR	RR 0.63	0.18-2.23	Random	68%
<b>Statins</b>	Primary	Yebyo, 2019	6	NR	NR	RR 0.79	0.53-1.18	Random	0%
<b>STROKE (ALL)</b>									
<b>Bile acid sequestrants (BAS)</b>									
<b>BAS</b>	Primary	RCT: Lipid Research Clinics Program, 1984	1	3086	386	RR 1.21	0.60-2.45	NA	NA
<b>BAS</b>	Mixed	RCT: Watts, 1992	1	53	170	RR 1.04	0.02-50.43	NA	NA
<b>Ezetimibe</b>									
<b>Ezetimibe</b>	Mixed	Toyota, 2019	3	20585	NR	OR 0.86	0.74-1.00	Random	0%
<b>Fibrates</b>									
<b>Fibrates</b>	Mixed	Keene, 2014	13	43188	261	OR 1.01	0.90-1.13	Random	1%
<b>Fibrates</b>	Secondary	Wang, 2015	6	11719	282	RR 1.03	0.91-1.16	Fixed	11%
<b>Niacin</b>									
<b>Niacin</b>	Mixed	D'Andrea, 2019	11	34875	NR	OR 0.95	0.85-1.06	Fixed	35%

<b>Niacin</b>	Mixed	Garg, 2017	5	30428	NR	RR 0.89	0.72-1.10	Random	34%
<b>Niacin</b>	Mixed	Jenkins, 2021	4	30196	NR	RR 1.01	0.90-1.14	Random	37%
<b>Niacin</b>	Mixed	Riaz, 2019	5	34104	NR	RR 0.92	0.70-1.21	Random	NR
<b>Niacin</b>	Mixed	Schandelmaier, 2017	7	33661	NR	RR 0.95	0.74-1.22	Random	42%
<b>Omega-3s</b>									
<b>Omega-3s</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>EPA only</b>									
<b>EPA</b>	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>PCSK9 Inhibitors</b>									
<b>PCSK9 Inhibitors</b>	Mixed	AlTurki, 2019	12	NR	NR	OR 0.75	0.65-0.85	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Bai, 2018	7	36476	NR	RR 0.81	0.68-0.96	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Bajaj, 2018	11	37613	NR	RR 0.77	0.64-0.93	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Casula, 2019	7	50792	NR	OR 0.77	0.67-0.89	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Chaiyasothi, 2019	11	87605	NR	RR 0.74	0.65-0.85	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Cordero, 2020	6	80764	NR	RR 0.77	0.67-0.88	NR	10%
<b>PCSK9 Inhibitors</b>	Mixed	Dicembrini, 2019	34	34793	NR	OR 0.80	0.67-0.96	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Du, 2019	35	94408	12-146	RR 0.75	0.65-0.85	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Ghadban, 2017	6	62776	NR	RR 0.74	0.64-0.87	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Guedeney, 2019	NR	60328	8-208	RR 0.78	0.67-0.89	Random	0%

<b>PCSK9 Inhibitors</b>	Mixed	Karatasakis, 2017	23	42748	NR	OR 0.80	0.67-0.96	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2022	3	48829	NR	RR 0.75	0.64-0.88	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Khan, 2019	9	82417	NR	RR 0.75	0.66-0.86	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Ma, 2021	12	83406	NR	RR 0.75	0.66-0.86	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Mu, 2020	7	NR	NR	RR 0.77	0.67-0.89	Random	NR
<b>PCSK9 Inhibitors</b>	Mixed	Qin, 2021	6	55095	NR	RR 0.77	0.67-0.88	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Toyota, 2019	6	54461	NR	OR 0.77	0.67-0.89	Random	0%
<b>PCSK9 Inhibitors</b>	Mixed	Turgeon, 2018	17	57355	NR	RR 0.78	0.67-0.90	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Zhao, 2020	4	47001	NR	RR 0.75	0.64-0.87	Fixed	0%
<b>PCSK9 Inhibitors</b>	Mixed	Zhu, 2019	9	63745	NR	RR 0.76	0.65-0.89	Random	0%
<b>Statins</b>									
<b>Statins</b>	Mixed	Byrne, 2022	18	131086	NR	RR 0.86	0.78-0.95	Random	49%
<b>Statins</b>	Primary	Cai, 2021	17	78473	244	OR 0.80	0.72-0.89	Fixed	20%
<b>Statins</b>	Mixed	Milionis, 2020	4	35622	104-276	RR 0.70	0.60-0.82	Fixed	20%
<b>Statins</b>	Mixed	Ponce, 2019	12	39918	168-288	RR 0.80	0.70-0.91	Random	41.4%
<b>Statins</b>	Primary	Singh, 2020	9	57754	NR	RR 0.78	0.63-0.96	Random	47%
<b>Statins</b>	Primary	Taylor, 2013	10	40295	NR	RR 0.78	0.68-0.89	Fixed	26%

BAS: Bile Acid Sequestrants; \*Calculated by PEER team at [https://www.medcalc.org/calc/relative\\_risk.php](https://www.medcalc.org/calc/relative_risk.php); RCT: Randomized Controlled Trial; n: Total sample size in meta-analysis; OR: Odds Ratio; RR: Risk Ratio; CI: Confidence Interval; I<sup>2</sup>: indicates the level of heterogeneity; NR= Not Reported

