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PCCS Triglycerides QI programme

Guidelines and treatment

Professor Ahmet Fuat

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Declarations:

Honoraria and/or expenses received from the following pharmaceutical companies for attending conferences and advisory boards, and delivering educational lectures: Alere, Amgen, AstraZeneca, Bayer, Bristol-Myers Squibb, Boehringer Ingelheim, Daiichi Sankyo, Edwards Medical, Eli Lilly, GlaxoSmithKline, Merck Sharp & Dohme, Novartis, Pfizer, Roche, Roche Diagnostics, Sanofi and Servier.

NICE HF and ESC MI guidelines committee member and co-author, NICE HTA adviser, NICE HF QOF indicators GPSI adviser, RCP, RCGP, BSC, BSH and BHF advice, PHE/CV leadership forum member.

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Contents

- National and international guidance on use of icosapent ethyl for raised TG
- Clinical trial data on icosapent ethyl
- Indication for use of icosapent ethyl including dosing and considerations when prescribing
- Case study example

CVD, cardiovascular disease; TG, triglycerides.

AAC guidelines: TG

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TG concentration	Action
> 20 mmol/L	Refer to lipid clinic for urgent specialist review if not a result of excess alcohol or poor glycaemic control. At risk of acute pancreatitis.
10–20 mmol/L	Repeat the TG measurement with a fasting test (after an interval of 5 days, but within 2 weeks) and review for potential secondary causes of hyperlipidaemia. Seek specialist advice if the TG concentration remains > 10 mmol/litre. At risk of acute pancreatitis.
4.5–9.9 mmol/L	If non-fasting triglycerides are greater than 4.5 mmol/L, repeat with a fasting TG measurement. Be aware that the CVD risk may be underestimated by risk assessment tools, optimise the management of other CVD risk factors present and seek specialist advice if non HDL-C concentration is > 7.5 mmol/litre.

AAC, Accelerated Access Collaborative; CVD, cardiovascular disease; non HDL-C, non high-density lipoprotein cholesterol; TG, triglycerides.

Adapted from: Khatib R and Neely D on behalf of the AAC Clinical Subgroup. Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD. Available at: https://www.england.nhs.uk/aac/publication/summary-of-national-guidance-for-lipid-management/. Accessed December 2024.

NICE TA guidance on icosapent ethyl (TA805)

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1.1 Icosapent ethyl is recommended as an option for reducing the risk of cardiovascular events in adults. It is recommended if they have a high risk of cardiovascular events and raised fasting triglycerides (1.7 mmol/ litre or above) and are taking statins, but only if they have:

- established cardiovascular disease (secondary prevention), defined as a history of any of the following:
  - acute coronary syndrome (such as myocardial infarction or unstable angina needing hospitalisation)
  - Coronary or other arterial revascularisation procedures
  - Coronary heart disease
  - Ischaemic stroke
  - Peripheral arterial disease, and
- low-density lipoprotein cholesterol (LDL-C) levels above 1.04 mmol/litre and below or equal to 2.60 mmol/litre.

NICE, National Institute for Health and Care Excellence; TA, technology appraisal.

NICE. Icosapent ethyl with statin therapy for reducing the risk of cardiovascular events in people with raised triglycerides [TA805]. Available at: https://www.nice.org.uk/guidance/ta805. Accessed January 2025.

Icosapent ethyl is accepted for restricted use within NHS Scotland (SMC2602)

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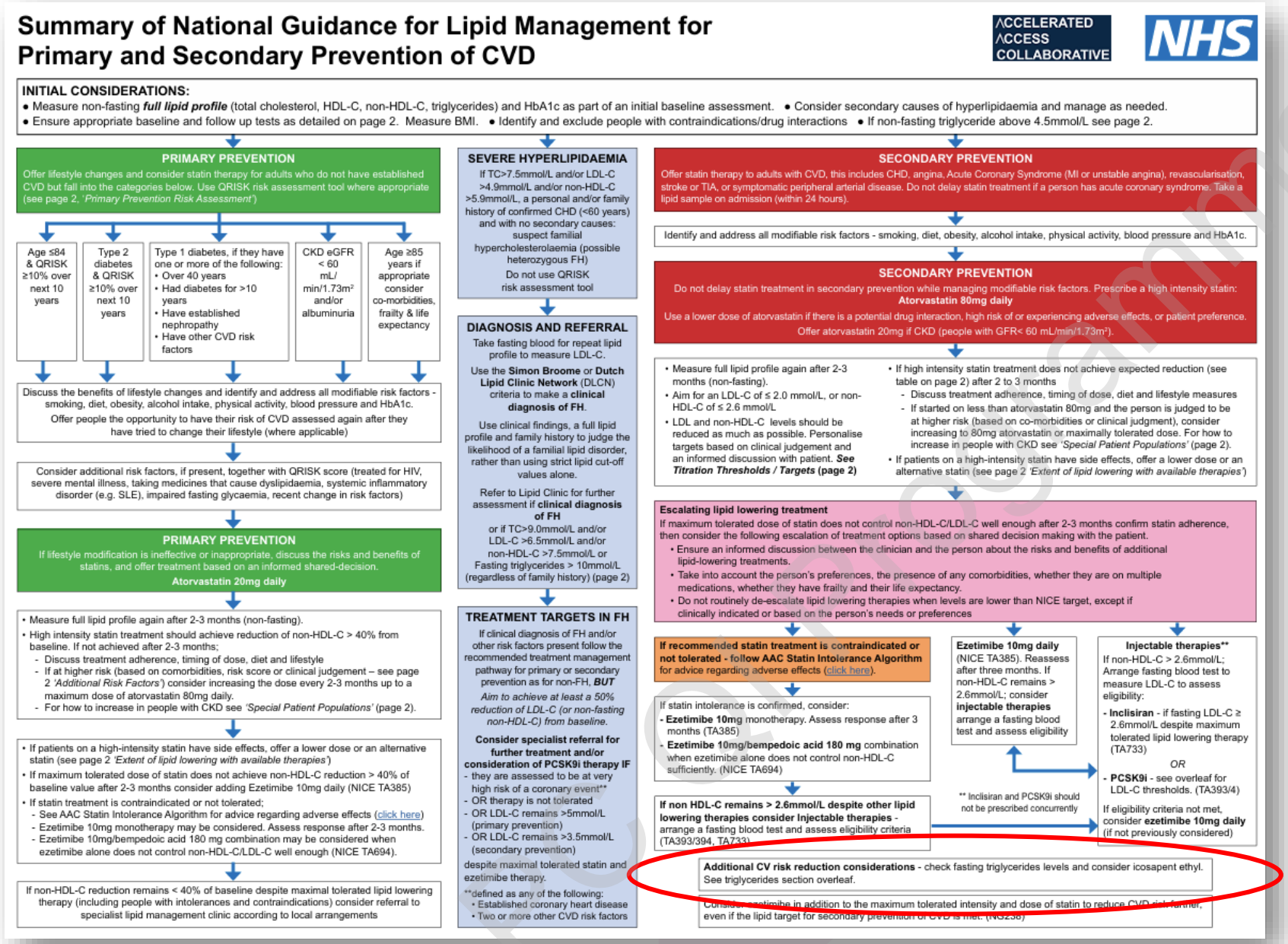
SMC restriction:
Use as secondary prevention in patients treated with a stable dose of statins, low-density lipoprotein (LDL) cholesterol levels >1.04mmol/L and ≤2.60mmol/L, raised fasting triglycerides (≥1.7mmol/L) and with established cardiovascular disease defined as a history of any of the following:

- Acute coronary syndrome (ACS) (such as myocardial infarction (MI) or unstable angina needing hospitalisation)
- Coronary or other arterial revascularisation procedures
- Coronary heart disease
- Ischaemic stroke
- Peripheral arterial disease

This advice applies only in the context of an approved NHS Scotland Patient Access Scheme (PAS) arrangement delivering the cost-effectiveness results upon which the decision was based, or a PAS/ list price that is equivalent or lower.

NHS, National Health Service; SMC, Scottish Medicines Consortium.
SMC. icosapent ethyl (Vazkepa). Available at: https://scottishmedicines.org.uk/medicines-advice/icosapent-ethyl-vazkepa-ft-resub-smc2602/. Accessed January 2025.



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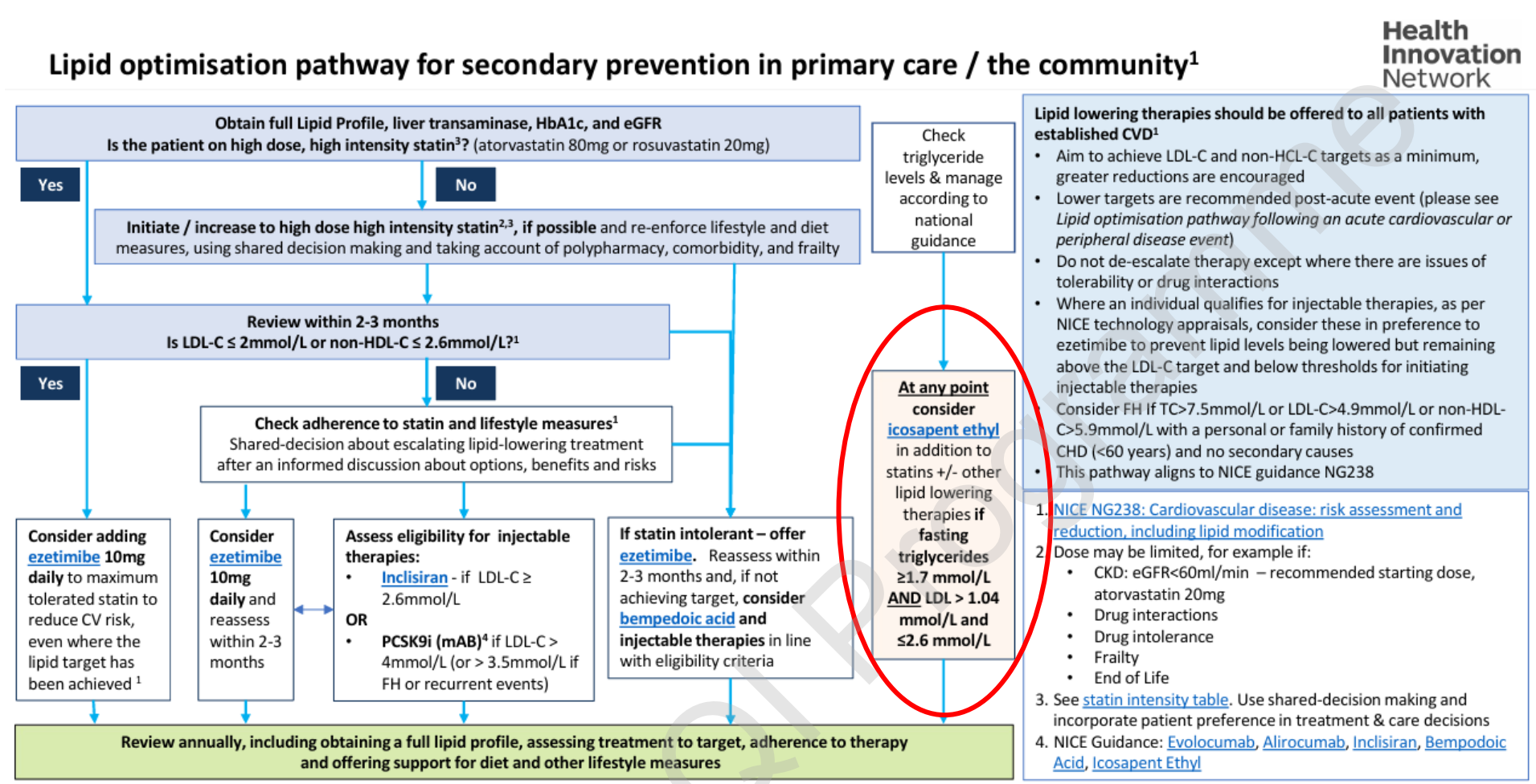
AAC recommend icosapent ethyl for CV risk reduction

AAC, Accelerated Access Collaborative; CV, cardiovascular.

Khatib R and Neely D on behalf of the AAC Clinical Subgroup. Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD. Available at: https://www.england.nhs.uk/aac/publication/summary-of-national-guidance-for-lipid-management/. Accessed January 2025.



HIN guidance recommends icosapent ethyl for raised TG and LDL

HIN, Health Innovation Network, LDL, low-density lipoprotein; TG, triglycerides.
Health Innovation Network. Lipid management pathways: Lipid optimisation pathway for secondary prevention in primary care/the community. Available at: https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/lipid-management-and-familial-hypercholesterolemia/lipid-management-pathways/. Accessed January 2025.

ESC recommendations for treating hypertriglyceridaemia[1]

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Recommendations	Class[a]	Level[b]
Statin treatment is recommended as the first drug of choice to reduce CVD risk in high-risk individuals with hypertriglyceridaemia [TG levels > 2.3 mmol/L (> 200 mg/dL)].	I	B
In high-risk (or above) patients with TG levels between 1.5–5.6 mmol/L (135–499 mg/dL) despite statin treatment, n-3 PUFAs (icosapent ethyl 2 x 2g/day) should be considered in combination with a statin.*	IIa	B
In primary prevention patients who are at LDL-C goal with TG levels > 2.3 mmol/L (> 200 mg/dL), fenofibrate or bezafibrate may be considered in combination with statins.	IIb	B
In high-risk patients who are at LDL-C goal with TG levels > 2.3 mmol/L (> 200 mg/dL), fenofibrate or bezafibrate may be considered in combination with statins.	IIb	C

There is no goal for CV disease prevention, but TG < 1.7 mmol/L (< 150 mg/dL) indicates lower risk and higher levels indicate a need to look for other risk factors.

*Please note, in the UK:[2]

- Icosapent ethyl is indicated to reduce the risk of CV events in adult statin-treated patients at high CV risk with elevated TG (≥ 150 mg/dL [≥ 1.7 mmol/L]) and established CVD or diabetes, and at least one other CV risk factor
- It is available as 998 mg capsules, with a recommended dose of 2 x 998 mg BD

[a]Class of recommendation. [b]Level of evidence.

BD, twice daily; CV, cardiovascular; CVD, cardiovascular disease; ESC, European Society of Cardiology; LDL-C, low-density lipoprotein cholesterol; PUFAs, polyunsaturated fatty acids; TG, triglycerides; UK, United Kingdom.

1. Mach F, et al. Eur Heart J 2020;41:111–188; 2. Vazkepa SmPC.

ESC guidance also recommends icosapent ethyl for patients with ACS

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2023 ESC Guidelines for the management of acute coronary syndromes[1]

Icosapent ethyl 2 g BD can be used in combination with a statin in patients with ACS and TG levels of 1.5–5.6 mmol/L (135–499 mg/dL) despite statin treatment.*

*Please note, in the UK:[2]

- Icosapent ethyl is indicated to reduce the risk of CV events in adult statin-treated patients at high CV risk with elevated TG (≥ 150 mg/dL [≥ 1.7 mmol/L]) and established CVD or diabetes, and at least one other CV risk factor
- It is available as 998 mg capsules, with a recommended dose of 2 x 998 mg BD

ACS, acute coronary syndrome; BD, twice daily; CV, cardiovascular; CVD, cardiovascular disease; ESC, European Society of Cardiology; TG, triglycerides; UK, United Kingdom.

1. Byrne RA, et al. Eur Heart J 2023;00:1–107; 2. Vazkepa SmPC.

Guideline recommendations for use of icosapent ethyl in patients with diabetes

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2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes[1†]

If TGs remain elevated even with a statin-based regimen, icosapent ethyl, a stable ester of eicosapentaenoic acid, might be preferred over other omega–3 fatty acids at the dose of 2 g BD due to its favourable impact on CV outcomes reported in the REDUCE-IT trial.*

2023 AACE Consensus Statement: Comprehensive T2D Management Algorithm[2]

Icosapent ethyl should be considered if TG levels are > 135 mg/dL (> 1.5 mmol/L) in persons with T2D and with established ASCVD or ≥ 2 additional traditional CVD risk factors.*

ADA Standards of Care in Diabetes 2024[3]

In individuals with ASCVD or other CV risk factors on a statin with controlled LDL-C but elevated TG (135–499 mg/dL [1.5–5.6 mmol/L]), the addition of icosapent ethyl can be considered to reduce CV risk.*

*Please note, in the UK:[4]

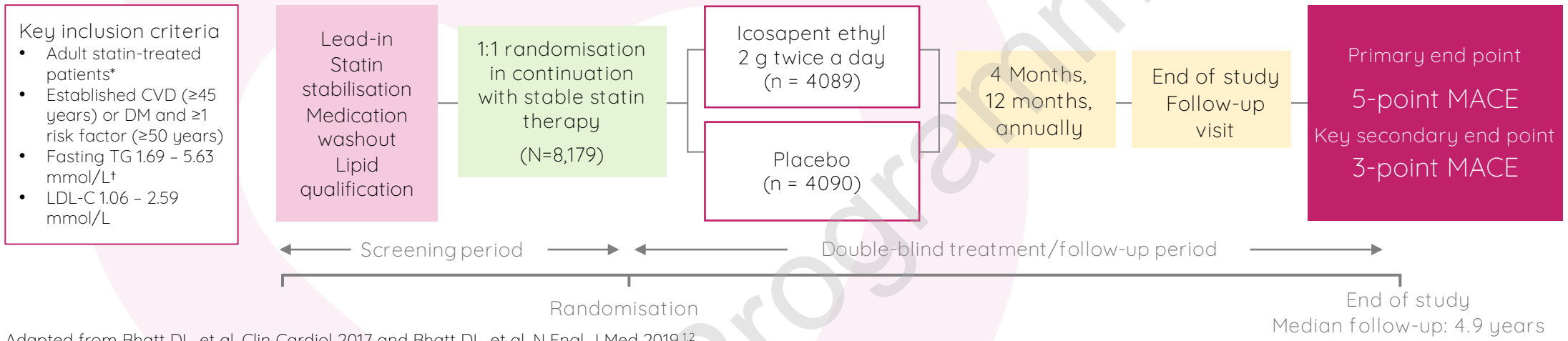
- Icosapent ethyl is indicated to reduce the risk of CV events in adult statin-treated patients at high CV risk with elevated TG (≥ 150 mg/dL [≥ 1.7 mmol/L]) and established CVD or diabetes, and at least one other CV risk factor
- It is available as 998 mg capsules, with a recommended dose of 2 x 998 mg BD

†Vazkepa is indicated for CV risk reduction in eligible patients and not lipid-lowering as this guideline may suggest.

AACE, American Association of Clinical Endocrinology; ADA, American Diabetes Association; ASCVD, atherosclerotic cardiovascular disease; BD, twice daily; CV, cardiovascular; CVD, cardiovascular disease; ESC, European Society of Cardiology; LDL-C, low-density lipoprotein cholesterol; REDUCE-IT, Reduction of Cardiovascular Events with Icosapent Ethyl–Intervention Trial; TG, triglycerides; T2D, type 2 diabetes; UK, United Kingdom.

1. Marx N, et al. Eur Heart J 2023;44:4043–4140; 2. Samson SL, et al. Endocrine Practice 2023;29:305–340; 3. American Diabetes Association Professional Practice Committee. 10. Cardiovascular disease and risk management: Standards of Care in Diabetes-2024. Diabetes Care 2024;47(Suppl. 1);S179–S218; 4. Vazkepa SmPC.

REDUCE-IT: Study design



Adapted from Bhatt DL, et al. Clin Cardiol 2017 and Bhatt DL, et al. N Engl J Med 2019.[1,2]

5-point MACE was defined as a composite of: nonfatal MI, nonfatal stroke, CV death, unstable angina, or coronary revascularisation.[1,2]

3-point MACE was defined as a composite of: nonfatal MI, nonfatal stroke, and CV death.[1,2]

71% of enrolled patients were secondary prevention[2]

*Patients were also receiving additional standard of care medication, including but not limited to antihypertensive, antiplatelet, ACEi or ARB, beta blockers.[4]
†Due to the variability of TG, a 10% allowance existed in the initial protocol, which permitted patients to be enrolled with qualifying TGs ≥1.5 mmol/L.[2,3]
ACEi, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; CV, cardiovascular; CVD, cardiovascular disease; DM, diabetes mellitus; LDL-C, low-density lipoprotein cholesterol; MACE, major adverse cardiovascular event; MI, myocardial infarction; TG, triglycerides.

1. Bhatt DL, et al. Clin Cardiol 2017;40:138–148; 2. Bhatt DL, et al. N Engl J Med 2019;380:11–22; 3. Bhatt DL, et al. N Engl J Med 2019;380:11–22 – Supplementary appendix; 4. Vazkepa SmPC.

Statistically significant relative reductions in the risk of 5-point and 3-point MACE vs placebo[1]

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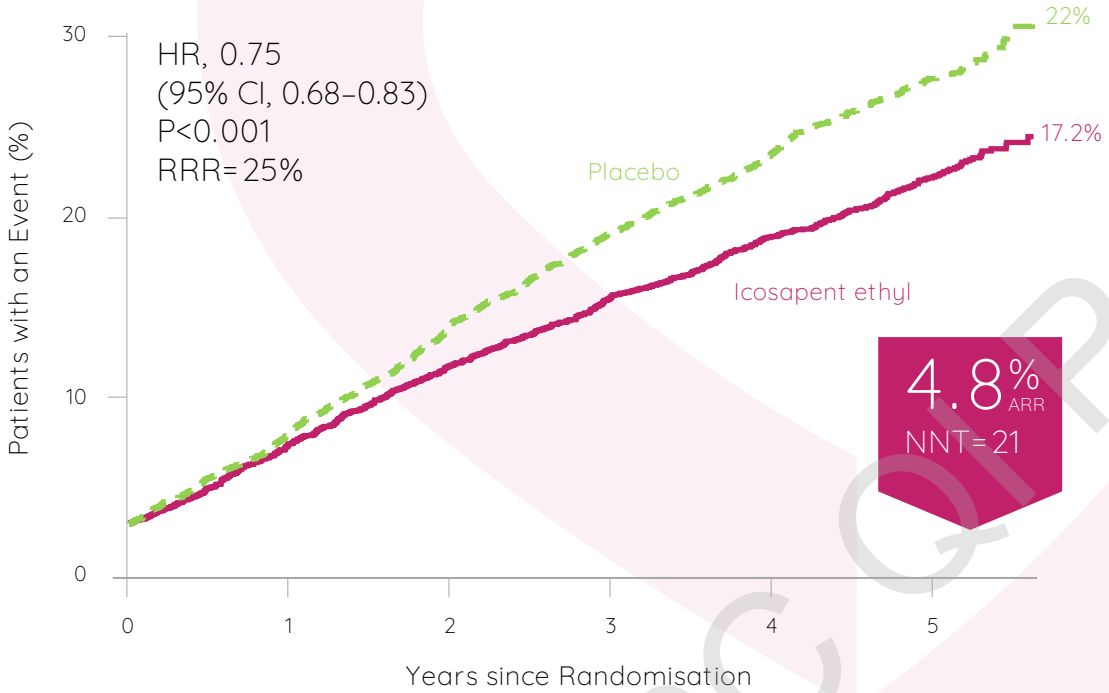
All patients were on background statin therapy[1]

Primary composite endpoint

5-point MACE: CV death, MI, stroke, coronary revascularisation, unstable angina

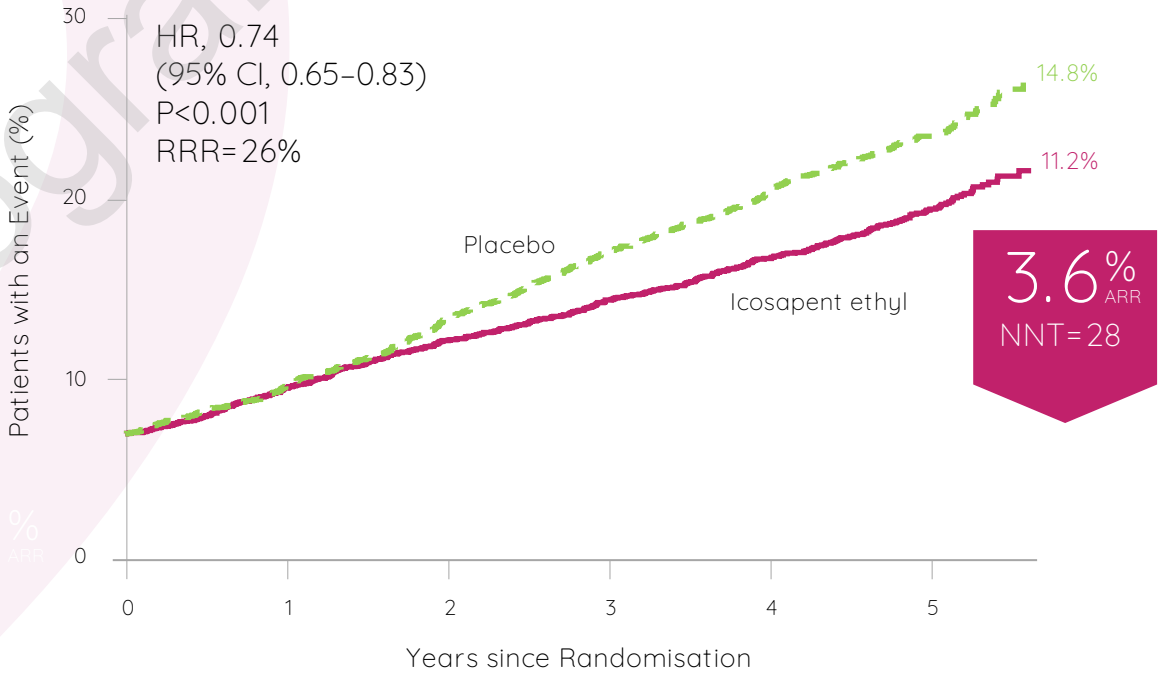


No. at Risk						
Placebo	4,090	3,743	3,327	2,807	2,347	1,358
Icosapent ethyl	4,089	3,787	3,431	2,951	2,503	1,430

Adapted from Bhatt DL, et al. N Engl J Med 2019.[1]

Key secondary composite endpoint

3-point MACE: CV death, MI, stroke



No. at Risk						
Placebo	4,090	3,837	3,500	3,002	2,542	1,487
Icosapent ethyl	4,089	3,861	3,565	3,115	2,681	1,562

Adapted from Bhatt DL, et al. N Engl J Med 2019.[1]

ARR, absolute risk reduction; CI, confidence interval; CV, cardiovascular; HR, hazard ratio; MACE, major adverse cardiovascular event; MI, myocardial infarction; NNT, number needed to treat; RRR, relative risk reduction.

1. Bhatt DL, et al. N Engl J Med 2019;380:11–22.

Statistically significant reductions in the rates of all hierarchically tested endpoints up to death from any cause vs placebo[1]

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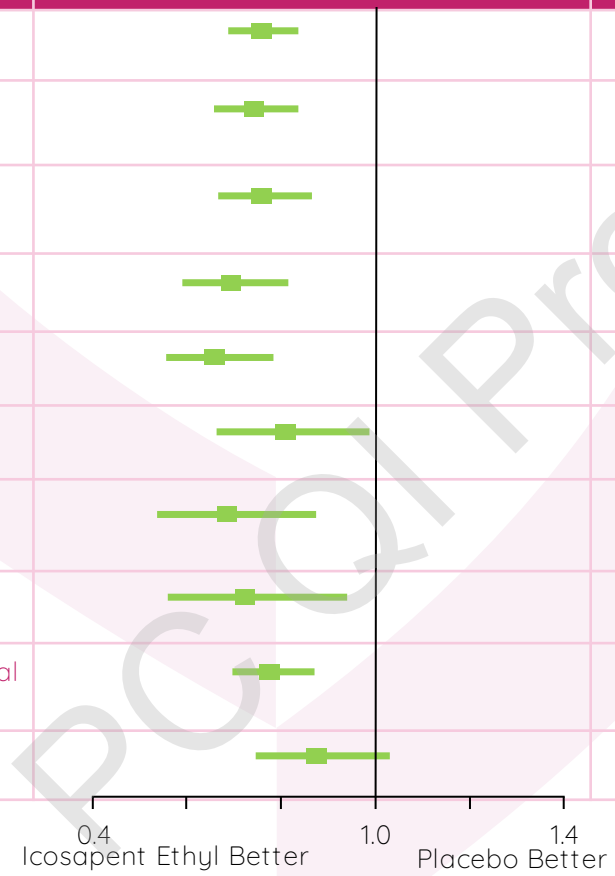
Endpoint	HR (95% CI)	Icosapent Ethyl (N=4089) n (%)	Placebo (N=4090) n (%)	HR (95% CI)	RRR	ARR	P-value
Primary Composite		705 (17.2%)	901 (22.0%)	0.75 (0.68–0.83)	25%▼	4.8%	<0.001
Key Secondary Composite		459 (11.2%)	606 (14.8%)	0.74 (0.65–0.83)	26%▼	3.6%	<0.001
Cardiovascular death or nonfatal MI		392 (9.6%)	507 (12.4%)	0.75 (0.66–0.86)	25%▼	2.8%	<0.001
Fatal or nonfatal MI		250 (6.1%)	355 (8.7%)	0.69 (0.58–0.81)	31%▼	2.6%	<0.001
Urgent or emergent revascularisation		216 (5.3%)	321 (7.8%)	0.65 (0.55–0.78)	35%▼	2.6%	<0.001
Cardiovascular death		174 (4.3%)	213 (5.2%)	0.80 (0.66–0.98)	20%▼	1.0%	0.03
Hospitalisation for unstable angina		108 (2.6%)	157 (3.8%)	0.68 (0.53–0.87)	32%▼	1.2%	0.002
Fatal or nonfatal stroke		98 (2.4%)	134 (3.3%)	0.72 (0.55–0.93)	28%▼	0.9%	0.01
Death from any cause, nonfatal MI, or nonfatal stroke		549 (13.4%)	690 (16.9%)	0.77 (0.69–0.86)	23%▼	3.4%	<0.001
Death from any cause		274 (6.7%)	310 (7.6%)	0.87 (0.74–1.02)	–	–	–



Adapted from Bhatt DL, et al. N Engl J Med 2019.[1]

ARR, absolute risk reduction; CI, confidence interval; HR, hazard ratio; MI, myocardial infarction; RRR, relative risk reduction. 1. Bhatt DL, et al. N Engl J Med 2019;380:11–22.

Icosapent ethyl reduced total primary endpoint events* vs placebo[1]

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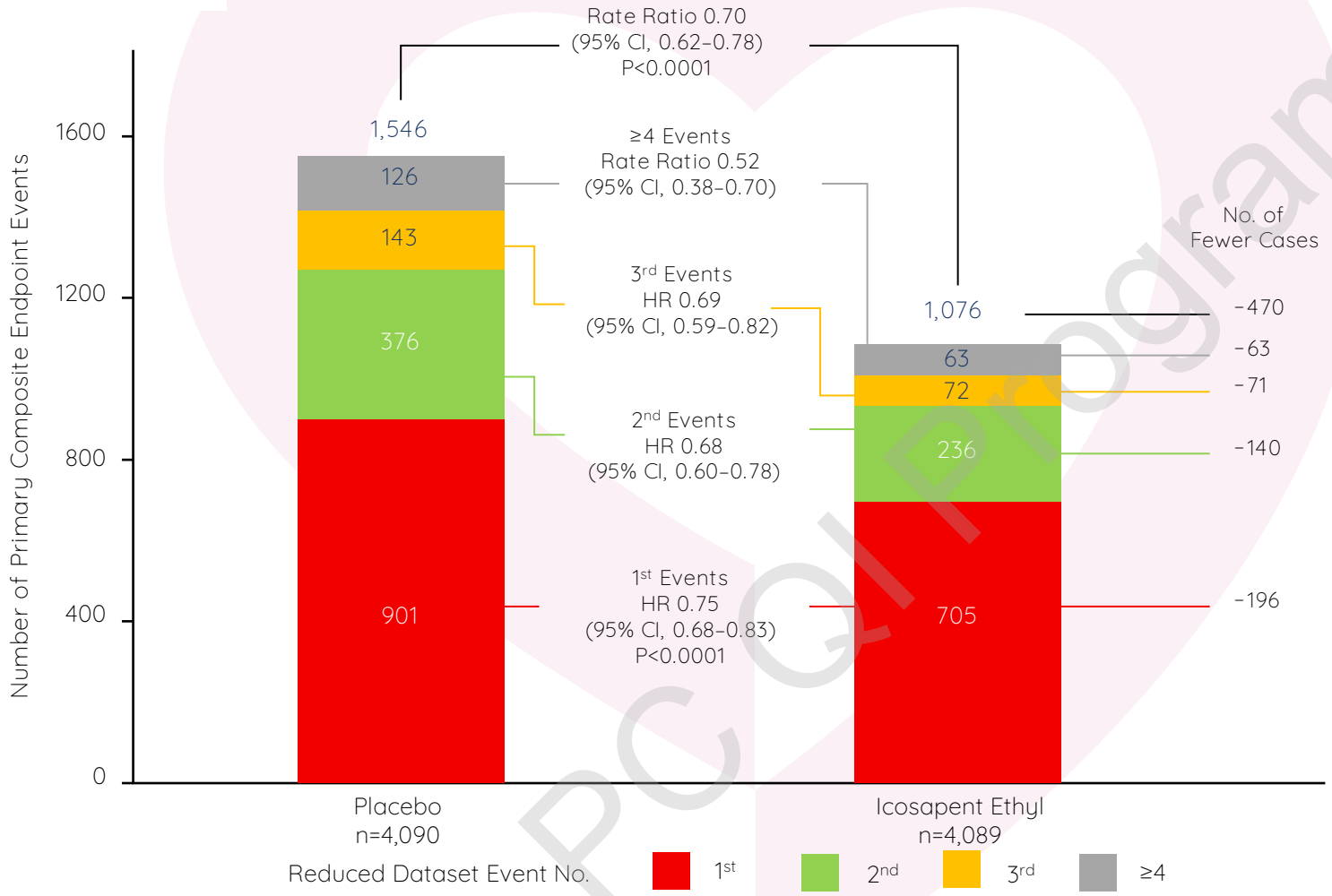

Relative to placebo, icosapent ethyl reduced:

- First events by 25%
- Second events by 32%
- Third events by 31%
- Fourth or more events by 48%[1]

For every 1,000 patients treated with icosapent ethyl for 5 years, approximately 159 total primary endpoint events could be prevented.[1]

*CV death, nonfatal myocardial infarction, nonfatal stroke, coronary revascularisation, or unstable angina requiring hospitalisation.
CI, confidence interval; HR, hazard ratio. 1. Bhatt DL, et al. J Am Coll Cardiol 2019;73(22):2791–2802.

Adapted from Bhatt DL, et al. J Am Coll Cardiol 2019.[1]

Icosapent ethyl is generally well tolerated[1]

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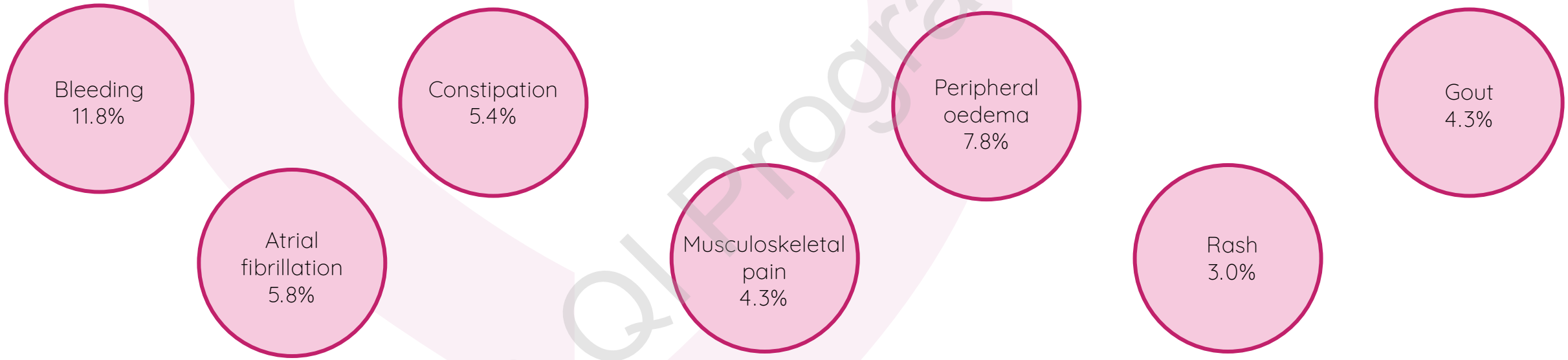
The most frequently reported adverse reactions associated with icosapent ethyl were:



In REDUCE-IT:
A larger percentage of patients in the icosapent ethyl arm than in the placebo arm were hospitalised for AF or atrial flutter (3.1% vs. 2.1%, p=0.004).
Serious bleeding events occurred in 2.7% of the patients in the icosapent ethyl arm and in 2.1% in the placebo arm (p=0.06)[2]

AF, atrial fibrillation.

1. Vazkepa SmPC; 2. Bhatt DL, et al. N Engl J Med 2019;380:11–22.

Post-hoc sub-group analysis of REDUCE-IT demonstrated benefits of icosapent ethyl in patients with recent ACS

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Patients with recent ACS (< 12 months) are at very high risk of future CV events and receive intensive antithrombotic therapy.
840/8179 (10.3%) patients in REDUCE-IT had recent ACS < 12 months before randomisation.

Recent ACS was defined as MI or unstable angina within 12 months before randomisation.

Characteristics	
Median age	59.5 years
Male gender	76.9%
Diabetes	36.9%
Statin therapy	99.9%
Antiplatelet therapy	95.8%
DAPT	69.5%
Oral anticoagulant	6.4%
Anticoagulant + Antiplatelet	4.6%

In patients with recent ACS (< 12 months) before randomisation (n=840)

Icosapent ethyl reduced the incidence of the first primary composite outcome by

37%

(ARR 9.3%, NNT 11)
(HR 0.63; 95% CI 0.48–0.84; p=0.002)

Safety profile:

- Total bleeding or bleeding-related serious AE did not differ between treatment arms (6.9% with icosapent ethyl vs. 8.1% with placebo) p=0.60
- The percentage of hospitalisations for AF or atrial flutter was higher in the icosapent than placebo arm (4.8% vs. 1.7% respectively) p=0.01

Icosapent ethyl dramatically reduced the risk of ischaemic events in high-risk, statin-treated patients with recent ACS (< 12 months), without excess bleeding.
This supports early initiation of icosapent ethyl in REDUCE-IT-eligible patients after ACS.

*The primary outcome was a composite of CV death, non-fatal MI, non-fatal stroke, coronary revascularisation, or hospitalisation for unstable angina.

ACS, acute coronary syndrome; AE, adverse events; AF, atrial fibrillation; ARR, absolute risk reduction; CI, confidence interval; CV, cardiovascular; DAPT, dual antiplatelet therapy; HR, hazard ratio; MI, myocardial infarction; NNT, number needed to treat. Sayah N, et al. Eur Heart J 2024;45:1173–1176.

Icosapent ethyl indication

Icosapent ethyl is indicated to reduce the risk of cardiovascular events in adult statin-treated patients at high cardiovascular risk with elevated triglycerides (≥ 150 mg/dL [≥ 1.7 mmol/L]) and

- established cardiovascular disease, or
- diabetes, and at least one other cardiovascular risk factor.

Vazkepa SmPC.

Icosapent ethyl is a prodrug that is absorbed in the small intestine[1–3]

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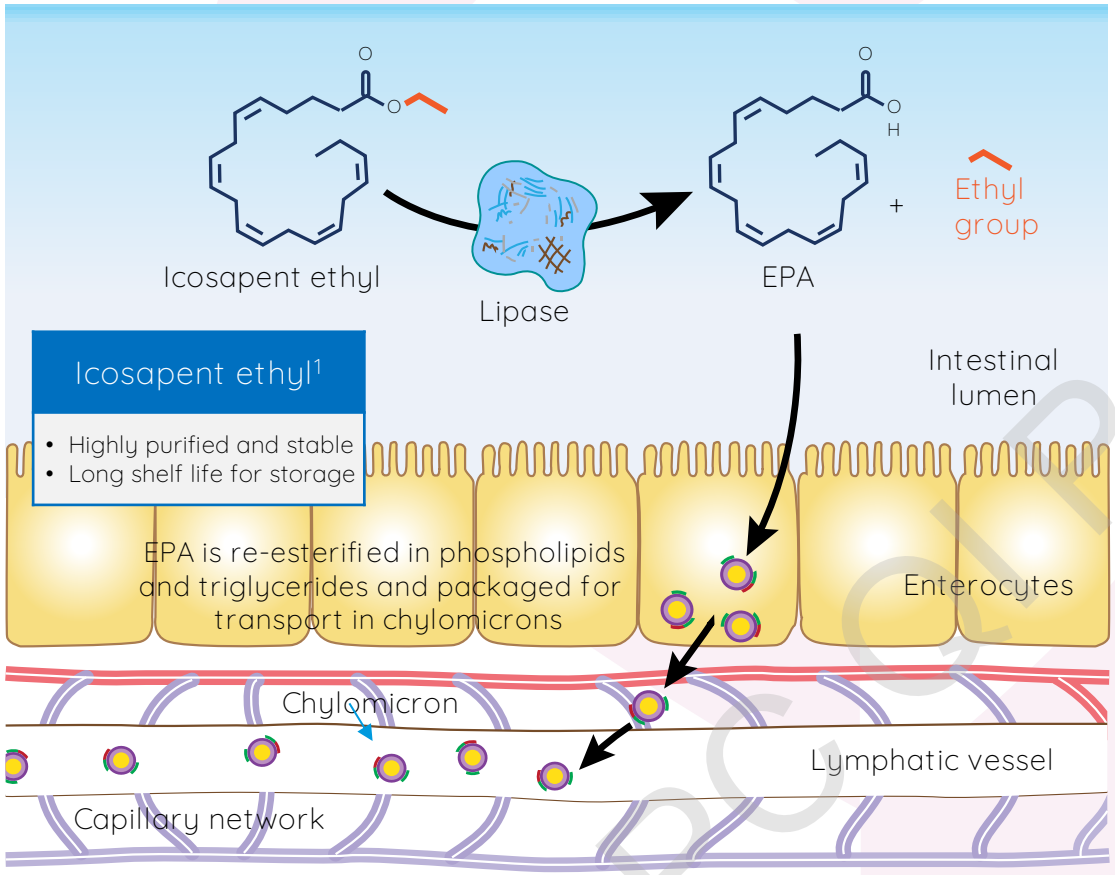
Intestinal processing and absorption of icosapent ethyl[1]



Adapted from Wang X, et al. Curr Diab Rep 2020.[1]

- Benefits of icosapent ethyl over other omega 3 formulations:[1,2]
  - Ability to produce highly purified substance
  - Stable
  - Long shelf life
- Icosapent ethyl is de-esterified to EPA in the small intestine and absorbed[1,3]
- Once absorbed, EPA is transported in the blood inside chylomicrons[1]
- Peak plasma concentrations of EPA ~5 hours[3]
- At steady-state, 99% of unesterified EPA is bound to plasma proteins[3]
- Plasma elimination of EPA: $t_{1/2}$=89 hours[3]
- Elimination is by hepatic metabolism[3]
- EPA does not undergo renal excretion[3]

EPA, eicosapentaenoic acid; $t_{1/2}$, half-life.

1. Wang X, et al. Curr Diab Rep 2020;20(11):65; 2. Brinton EA, et al. Lipids Health Dis 2017;16(1):23; 3. Vazkepa SmPC.

Icosapent ethyl has a multi-factorial mechanism of action[1–3]

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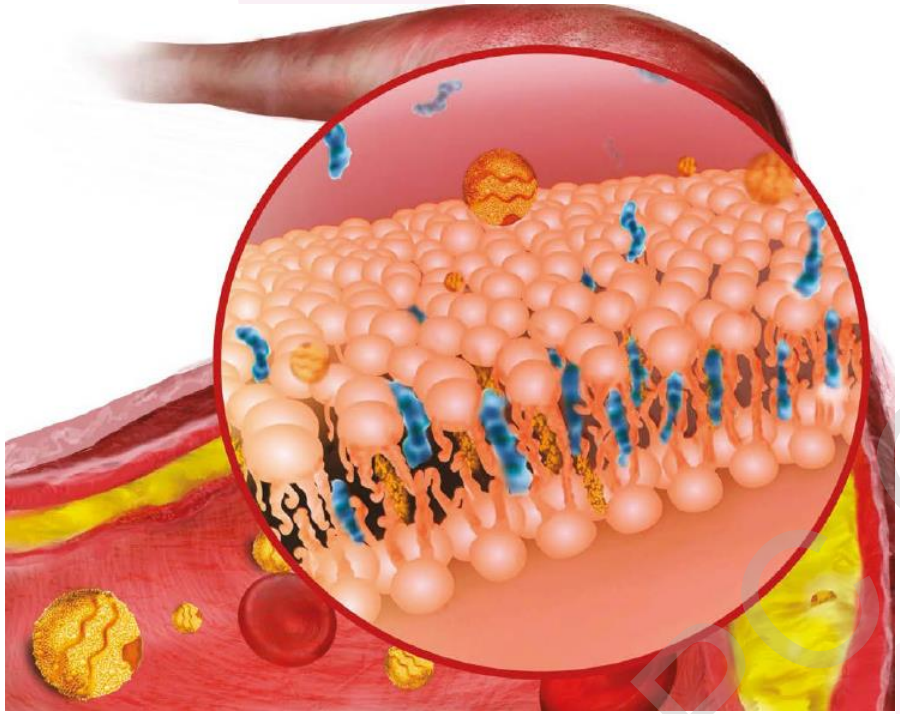
- Eicosapentaenoic acid may have beneficial effects on multiple atherosclerotic processes[1,2]
- The mechanisms of action contributing to reduction of cardiovascular events with icosapent ethyl are not completely understood[3]



The mechanisms of action of icosapent ethyl are likely multi-factorial including:[3]

- Increased fibrous cap thickness/stability
- Anti-inflammatory and antioxidant effects
- Reduction of macrophage accumulation
- Improved endothelial function
- Improved lipoprotein profile with reduction of triglyceride-rich lipoproteins
- Antiplatelet effects

- Each of these mechanisms can beneficially alter the development, progression, and stabilisation of atherosclerotic plaque, as well as the implications of plaque rupture. Preclinical and clinical studies support such benefits with EPA[3]
- The direct clinical meaning of individual findings is not clear[3]

EPA, eicosapentaenoic acid.

1. Mason RP. Curr Atheroscler Rep 2019;21(1):2; 2. Borow KM, et al. Atherosclerosis 2015;242(1):357–366; 3. Vazkepa SmPC.

Dosing guidance

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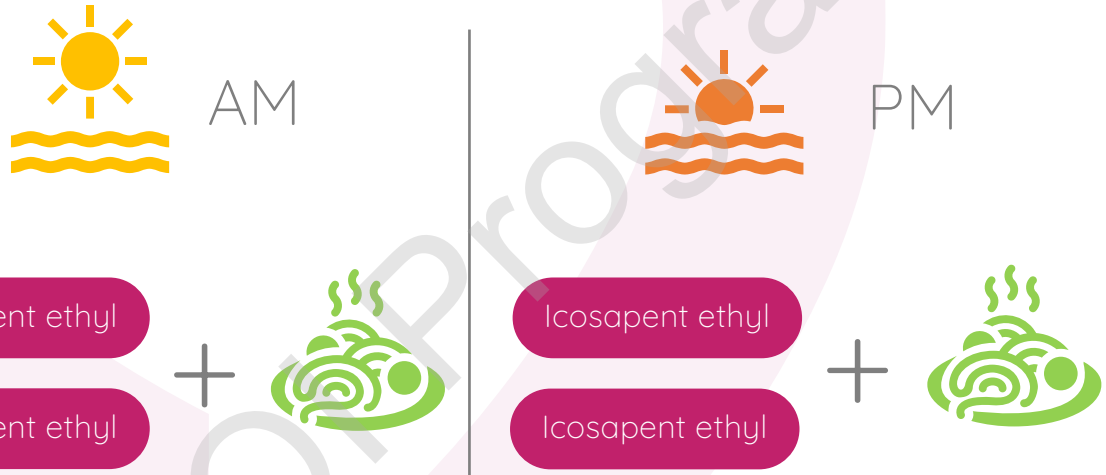
Icosapent ethyl is available as 998 mg capsules to be taken orally:

Daily dose: TWO CAPSULES TWICE DAILY

With or following a meal



ELDERLY

no dose adjustment necessary based on age

RENAL IMPAIRMENT

no dose reduction is recommended

HEPATIC IMPAIRMENT

no dose reduction is recommended

AM, morning; PM, evening.
Vazkepa SmPC.

Special warnings

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Atrial fibrillation or flutter

Patients, particularly those with a relevant medical history, should be monitored for clinical evidence of AF or atrial flutter (e.g., dyspnoea, palpitations, syncope/dizziness, chest discomfort, change in BP, or irregular pulse). Electrocardiographic evaluation should be performed when clinically indicated.

Bleeding

Patients taking icosapent ethyl with antithrombotic agents, i.e., antiplatelet agents, including acetylsalicylic acid, and/or anticoagulants, may be at increased risk of bleeding and should be monitored periodically.

Hepatic impairment

In patients with hepatic impairment ALT and AST should be monitored as clinically indicated before the start of treatment and at appropriate intervals during treatment.

Allergies to fish and/or shellfish

Icosapent ethyl should be used with caution in patients with known hypersensitivity to fish and/or shellfish.

!

Other patients who should not take icosapent ethyl:

- Patients with hereditary fructose intolerance
- Patients allergic to soya or peanut

Always refer to the Summary of Product Characteristics prior to prescribing.

AF, atrial fibrillation; ALT, alanine aminotransferase; AST, aspartate aminotransferase; BP, blood pressure.

Vazkepa SmPC.

NICE guidance on other omega 3 fatty acids

Primary Care Cardiovascular Society

Empowering primary care to deliver the best in cardiovascular health

Omega 3 fatty acid compounds:

1.12.5 Do not offer omega 3 fatty acid compounds to prevent CVD.

Icosapent ethyl is an exception to this if used as described in NICE's technology appraisal guidance on icosapent ethyl with statin therapy for reducing the risk of cardiovascular events in people with raised triglycerides.

1.12.6 Tell people that there is no evidence that omega 3 fatty acid compounds help to prevent CVD, except use of icosapent ethyl as described in NICE's technology appraisal guidance on icosapent ethyl with statin therapy.

CVD, cardiovascular disease; NICE, National Institute for Health and Care Excellence.

NICE. Cardiovascular disease: risk assessment and reduction, including lipid modification [NG238]. Available at: https://www.nice.org.uk/guidance/ng238. Accessed January 2025.

Case study

Primary Care Cardiovascular Society

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Female, 67 years
Medical history:

- NSTEMI
- T2DM
- Mixed Hyperlipidaemia
- Hypothyroidism
- CKD3a

Current medication:

- Atorvastatin 80 mg
- Ezetimibe 10 mg
- Aspirin 75 mg
- Bisoprolol 10 mg
- Ramipril 10 mg
- GTN spray PRN
- Metformin MR 1g daily
- Dapagliflozin 10 mg
- Levothyroxine 100 mcg

Please refer to the respective SmPCs of these therapies for full information.

Lab results
March 2023:

- TC 4.0
- LDL-C 1.7
- HDL-C 1.5
- non-HDL-C 2.5
- TGs 4.1
- HbA1c 54
- TSH 2.8
- eGFR 55

CKD, chronic kidney disease; eGFR, estimated glomerular filtration rate; GTN, glyceryl trinitrate; HbA1c, glycated haemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; MR, modified release; NSTEMI, non-ST-elevation myocardial infarction; PRN, when required; SmPCs, Summary of Product Characteristics; TC, total cholesterol; TGs, triglycerides; TSH, thyroid stimulating hormone; T2DM, type 2 diabetes mellitus.
Fictional case study for educational purposes only.

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- Levothyroxine 100 mcg

Please refer to the respective SmPCs of these therapies for full information.

- Discussed results – good diet, BMI 29.9
- Agreed to start:
  icosapent ethyl 998 mg 2 BD

Lab results
March 2023:

- TC 4.0
- LDL-C 1.7
- HDL-C 1.5
- non-HDL-C 2.5
- TGs 4.1
- HbA1c 54
- TSH 2.8
- eGFR 55

June 2023:

- TC 3.9
- LDL-C 1.6
- HDL-C 1.4
- non-HDL-C 2.5
- TGs 2.4
- HbA1c 55
- TSH 2.4
- eGFR 56

CKD, chronic kidney disease; eGFR, estimated glomerular filtration rate; GTN, glyceryl trinitrate; HbA1c, glycated haemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; MR, modified release; NSTEMI, non-ST-elevation myocardial infarction; PRN, when required; SmPCs, Summary of Product Characteristics; TC, total cholesterol; TGs, triglycerides; TSH, thyroid stimulating hormone; T2DM, type 2 diabetes mellitus.
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Summary

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- Icosapent ethyl is recommended for managing raised TG by various national and international guidelines[1–4]
  - NICE, AAC, HIN, ESC
- In patients with elevated TG levels despite the use of statins, the risk of ischaemic events, including CV death was significantly lower among patients treated with icosapent ethyl than those who received placebo in the REDUCE-IT trial[5]
- The daily dose of icosapent ethyl is two 998 mg capsules, orally, twice daily[6]
- Care should be taken when considering prescribing icosapent ethyl in patients:[6]
  - With atrial fibrillation or flutter
  - Taking antithrombotic agents
  - With hepatic impairment
  - With allergies to fish and/or shellfish

AAC, Accelerated Access Collaborative; CV, cardiovascular; ESC, European Society of Cardiology; HIN, Health Innovation Network; NICE, National Institute for Health and Care Excellence; TG, triglycerides.

1. NICE. Icosapent ethyl with statin therapy for reducing the risk of cardiovascular events in people with raised triglycerides [TA805]. Available at: https://www.nice.org.uk/guidance/ta805. Accessed January 2025; 2. Khatib R and Neely D on behalf of the AAC Clinical Subgroup. Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD. Available at: https://www.england.nhs.uk/aac/publication/summary-of-national-guidance-for-lipid-management/. Accessed January 2025; 3. Health Innovation Network. Lipid management pathways: Lipid optimisation pathway for secondary prevention in primary care/the community. Available at: https://thehealthinnovationnetwork.co.uk/programmes/cardiovascular-disease/lipid-management-and-familial-hypercholesterolemia/lipid-management-pathways/. Accessed January 2025; 4. Mach F, et al. Eur Heart J 2020;41:111–188; 5. Bhatt DL, et al. N Engl J Med 2019;380:11–22; 6. Vazkepa SmPC.