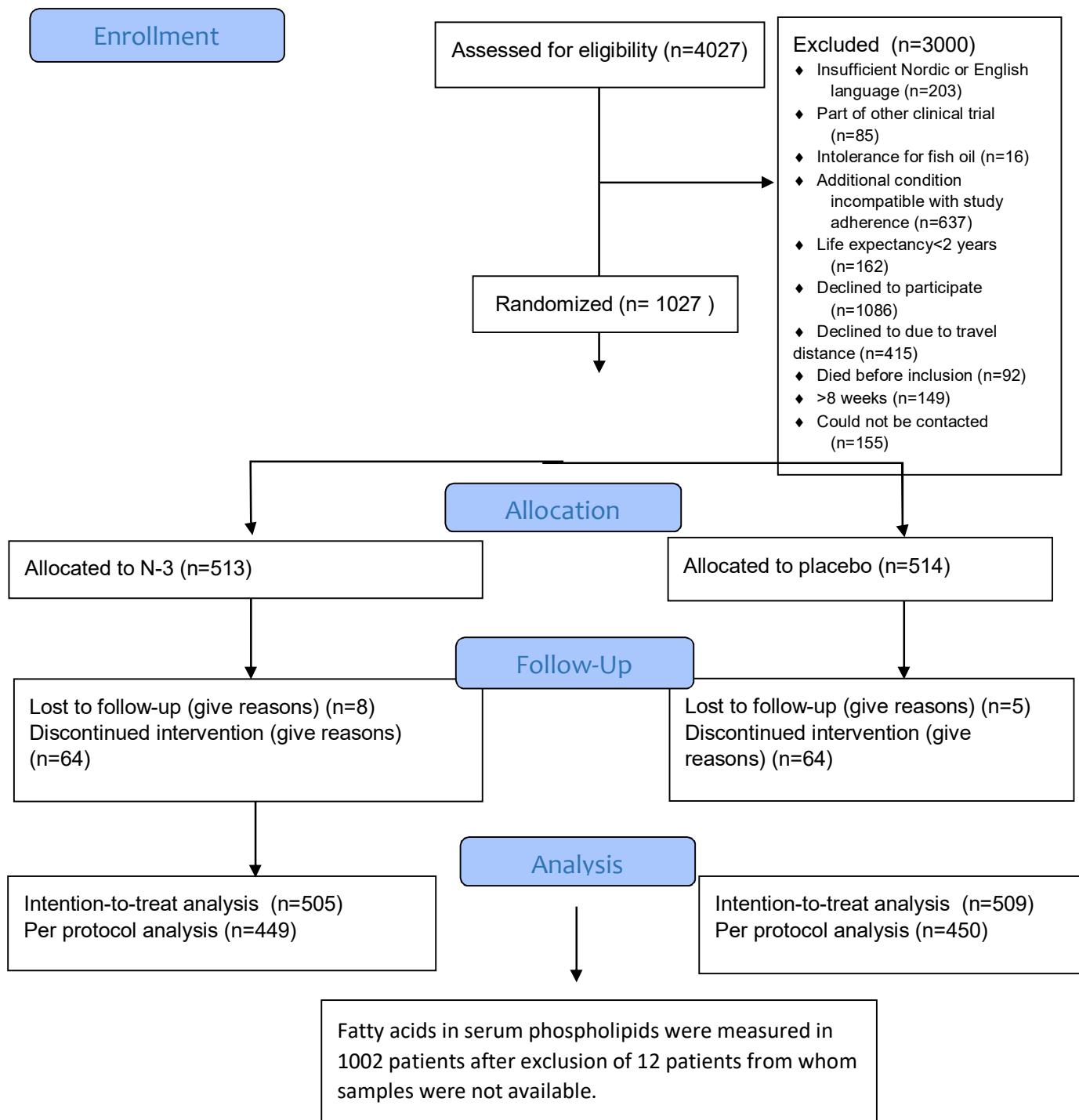


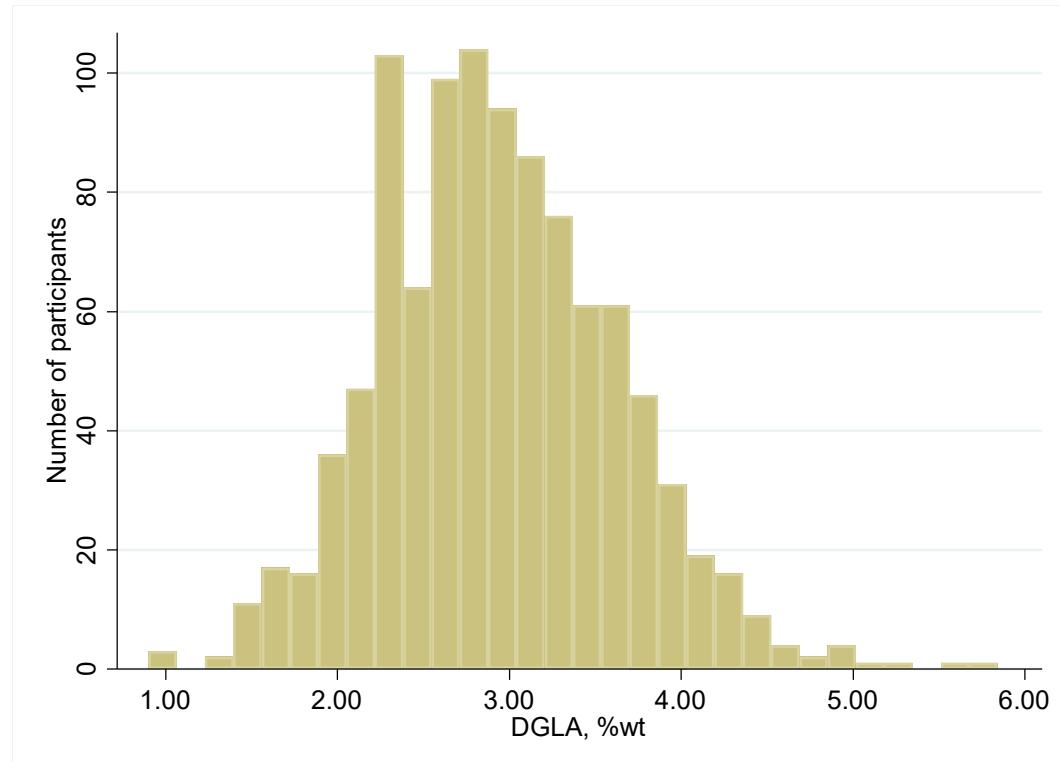
Supplementary Figure S1

CONSORT 2010 Flow Diagram



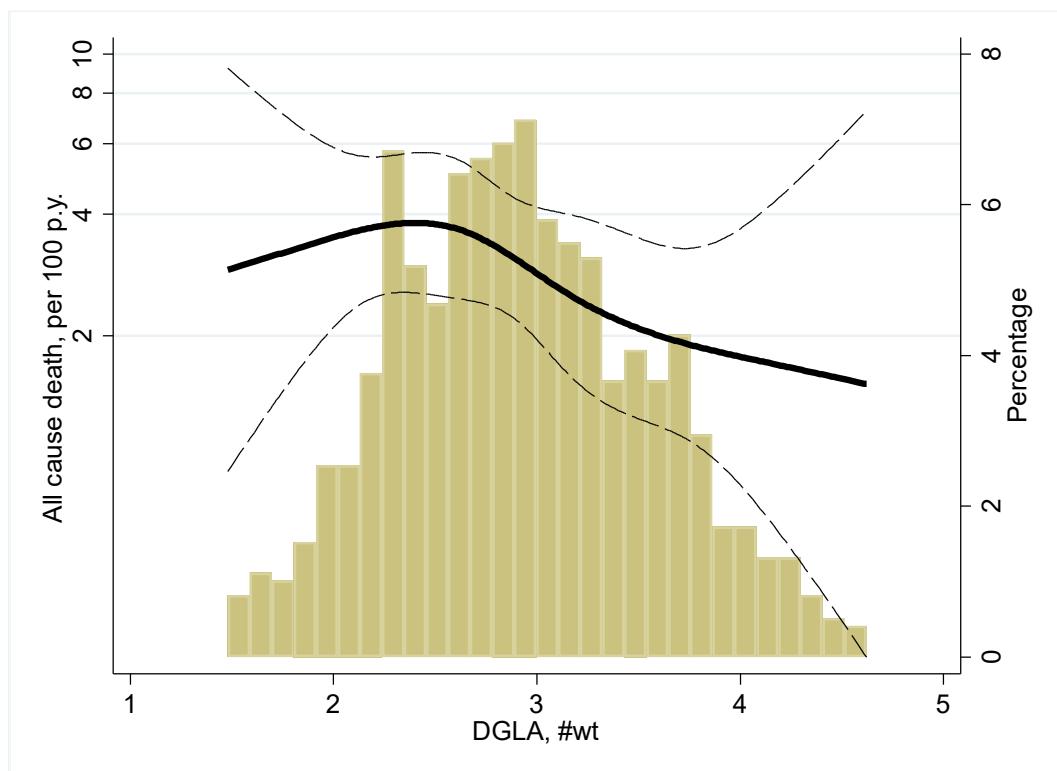
Supplementary Figure S2

Histogram showing the baseline distribution of DGLA measured in serum phospholipids, reported as percent of total fatty acids in 1002 patients in OMEMI.



Supplementary Figure S3

Restricted cubic spline showing the relationship between DGLA (x-axis) and all-cause mortality (y-axis). P for non-linearity = 0.59



Supplementary Table S1. Endpoints by quartiles of linoleic acid (LA).

	LA	LA	LA	LA	P-value
Total patient no:	Q1	Q2	Q3	Q4	for trend
n=1002	n=251	n=251	n=250	n=250	
MACE	46 (18.3%)	54 (21.5%)	54 (21.6%)	54 (21.4%)	0.39
AMI	21 (8.4 %)	18 (7.2 %)	21 (8.4 %)	18 (7.2 %)	0.76
Revasc	17 (6.8%)	22 (8.8%)	18 (7.2%)	20 (8.0%)	0.78
Stroke	6 (2.4 %)	7 (2.8 %)	10 (4.0 %)	9 (3.6 %)	0.33
HF	12 (4.8 %)	11 (4.4 %)	9 (3.6 %)	13 (5.2 %)	0.94
Death	13 (5.2 %)	14 (5.6 %)	14 (5.6 %)	14 (5.6 %)	0.84

LA = Linoleic Acid. MACE = Major Adverse Clinical Events (nonfatal MI, unscheduled coronary revascularization, stroke, all-cause death, or hospitalization for new or worsened heart failure). AMI = Acute Myocardial Infarction. Revasc = Revascularization (percutaneous coronary intervention or coronary artery bypass grafting). HF = Heart Failure. P-values for trends across the quartiles.

Supplementary Table S2. Endpoints by quartiles of gamma linolenic acid (GLA)

	GLA	GLA	GLA	GLA	P-value
Total patient no:	Q1	Q2	Q3	Q4	for trend
n=1002	n=280	n=258	n=264	n=200	
MACE	59 (21.1%)	58 (22.5%)	49 (18.6%)	42 (21.0%)	0.68
AMI	17 (6.1 %)	22 (8.5 %)	19 (7.2 %)	20 (10.0 %)	0.19
Revasc	19 (6.8%)	23 (8.9%)	18 (6.8%)	17 (8.5%)	0.71
Stroke	15 (5.4 %)	10 (3.9 %)	4 (1.5 %)	3 (1.5 %)	0.005
HF	11 (3.9 %)	10 (3.9 %)	8 (3.0 %)	16 (8.0 %)	0.10
Death	17 (6.1 %)	14 (5.4 %)	15 (5.7 %)	9 (4.5 %)	0.52

LA=Gamma Linolenic Acid. MACE = Major Adverse Clinical Events (nonfatal MI, unscheduled coronary revascularization, stroke, all-cause death, or hospitalization for new or worsened heart failure). AMI = Acute Myocardial Infarction. Revasc = Revascularization (percutaneous coronary intervention or coronary artery bypass grafting). HF = Heart Failure. P-values for trends across the quartiles.

Supplementary Table S3. Endpoints by quartiles of arachidonic acid (AA).

Total patient no: n=1002	AA Q1 n=253	AA Q2 n=248	AA Q3 n=255	AA Q4 n=246	P-value for trend
MACE	61 (24.1%)	41 (16.5%)	48 (18.8%)	58 (23.6%)	0.97
AMI	17 (6.7 %)	15 (6.0 %)	18 (7.1 %)	28 (11.4 %)	0.05
Revasc	21 (8.3%)	16 (6.5%)	16 (6.3%)	24 (9.8%)	0.59
Stroke	11 (4.3 %)	5 (2.0 %)	10 (3.9 %)	5 (2.0 %)	0.35
HF	13 (5.1 %)	13 (5.2 %)	10 (3.9 %)	9 (3.7 %)	0.33
Death	16 (6.3 %)	13 (5.2 %)	9 (3.5 %)	17 (6.9 %)	0.99

AA= Arachidonic Acid. MACE = Major Adverse Clinical Events (nonfatal MI, unscheduled coronary revascularization, stroke, all-cause death, or hospitalization for new or worsened heart failure). AMI = Acute Myocardial Infarction. Revasc = Revascularization (percutaneous coronary intervention or coronary artery bypass grafting). HF = Heart Failure. P-values for trends across the quartiles.