

Supplementary Table II Adjusted risk ratios (95% CI) of clinical outcomes per initiated treatment cycle for every 1 increase in serum fatty acid concentrations in 100 women, restricting the analysis to the first fresh cycle only.

Serum fatty acids	Implantation	Clinical pregnancy	Live birth
	RR ¹ (95% CI) per 1% increase in serum concentration		
18:3 ω-3 ALA	0.64 (0.30, 1.40)	0.51 (0.21, 1.23)	0.39 (0.13, 1.22)
20:5 ω-3 EPA	1.08 (0.79, 1.50)	1.12 (0.78, 1.59)	1.16 (0.76, 1.77)
22:5 ω-3 DPA	0.96 (0.25, 3.65)	0.89 (0.20, 3.87)	1.22 (0.21, 7.06)
22:6 ω-3 DHA	1.11 (0.91, 1.34)	1.06 (0.86, 1.31)	1.15 (0.88, 1.50)
Long chain ²	1.04 (0.9, 1.19)	1.06 (0.93, 1.21)	1.10 (0.93, 1.31)
ω-3 PUFA ²	1.05 (0.93, 1.19)	1.04 (0.91, 1.19)	1.10 (0.92, 1.30)
18:2 ω-6 LA	0.98 (0.94, 1.04)	1.01 (0.96, 1.07)	0.97 (0.89, 1.04)
20:4 ω-6 AA	1.05 (0.94, 1.18)	1.12 (1.00, 1.27)	1.11 (0.95, 1.29)
ω-6 PUFA	1.00 (0.95, 1.04)	1.03 (0.98, 1.08)	1.00 (0.94, 1.07)
Ratio of ω-6 to ω-3 ²	1.03 (0.86, 1.24)	1.06 (0.82, 1.35)	1.03 (0.80, 1.34)
Ratio of LA to ALA ²	1.00 (0.96, 1.04)	1.00 (0.96, 1.04)	1.01 (0.96, 1.07)
Total PUFA	1.00 (0.96, 1.04)	1.03 (0.98, 1.09)	1.02 (0.95, 1.09)

AA, arachidonic acid; ALA, alpha linolenic acid; DHA, decosahexaenoic acid; DPA, docosapentaenoic acid; EPA, eicosapentaenoic acid; LA, linoleic acid, PUFA, polyunsaturated fatty acids; RR, risk ratio.

¹Adjusted for age, BMI, smoking status, moderate-to-vigorous physical activity, use of multivitamins and history of live birth.

²All the *P* values >0.05 in these tables, including AA and clinical pregnancy (*P* = 0.06).