

Table S1 Difference analysis of gestational age <30-week subgroup

Variables	MCT/LCT (n=36)	SMOF (n=50)	P
Gestational age at birth (weeks)	28.45 (27.48, 29.10)	28.30 (27.40, 28.58)	0.425
Birth weight (grams)	1,005.00 (900.00, 1,150.00)	1,015.00 (950.00, 1,210.00)	0.566
Duration of parenteral nutrition (days)	29.50 (22.00, 44.50)	22.50 (17.00, 39.00)	0.230
Oxygen therapy time (days)	55.50 (43.75, 85.50)	54.50 (34.25, 72.50)	0.157
Mechanical ventilation time (days)	0.00 (0.00, 5.25)	0.00 (0.00, 2.75)	0.563
Noninvasive ventilation time (days)	35.00 (25.75, 55.00)	44.50 (31.50, 52.75)	0.608
Boys	20 (55.56)	25 (50.00)	0.611
multiple pregnancy	2 (5.56)	7 (14.00)	0.365
Cesarean delivery	29 (80.56)	34 (68.00)	0.194
Postnatal asphyxia	21 (58.33)	21 (42.00)	0.135
Intrauterine distress	12 (33.33)	7 (14.00)	0.033*
SGA	3 (8.33)	0	0.138
Antenatal steroids	31 (86.11)	42 (84.00)	0.787
Premature rupture of membranes	5 (13.89)	17 (34.00)	0.035*
Gestational hypertension	12 (33.33)	19 (38.00)	0.657
Gestational diabetes	1 (2.78)	14 (28.00)	0.002*
Intrauterine infection	2 (5.56)	2 (4.00)	1.000
Breastfeeding	15 (41.67)	43 (86.00)	<0.001*
PDA	16 (44.44)	26 (53.06)	0.432
PS	19 (52.78)	20 (40.00)	0.240
Mechanical ventilation	13 (36.11)	15 (30.00)	0.551
BPD	28 (77.78)	27 (54.00)	0.023*
LOS	4 (11.11)	14 (28.00)	0.058

Data are presented as median (IQR) or n (%). *, statistical significance (P<0.05) in Chi-squared test and Fisher's exact test. BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S2 Logistic analysis of gestational age <30-week subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-1.09	0.49	-2.22	0.026*	0.34 (0.13-0.88)	-2.59	1.76	-1.47	0.141	0.08 (0.00-2.36)
Premature rupture of membranes	-0.02	0.51	-0.04	0.971	0.98 (0.36-2.69)	0.97	2.49	0.39	0.697	2.63 (0.02-344.46)
Intrauterine distress	-0.04	0.54	-0.08	0.935	0.96 (0.33-2.75)	-0.35	1.68	-0.21	0.834	0.70 (0.03-19.08)
Gestational diabetes	-0.87	0.58	-1.51	0.132	0.42 (0.14-1.30)	-0.27	2.79	-0.10	0.924	0.77 (0.00-181.08)
Breastfeeding	-0.25	0.49	-0.52	0.601	0.78 (0.30-2.01)	0.82	1.21	0.67	0.502	2.26 (0.21-24.43)
Gestational age at birth (weeks)	-0.62	0.27	-2.32	0.021*	0.54 (0.32-0.91)	-1.11	0.77	-1.45	0.147	0.33 (0.07-1.48)
Birth weight(grams)	-0.01	0.00	-2.21	0.027*	0.99 (0.99-0.99)	-0.00	0.00	-0.34	0.731	1.00 (0.99-1.00)
Boys	0.25	0.45	0.55	0.583	1.28 (0.53-3.09)	0.50	0.98	0.51	0.613	1.64 (0.24-11.22)
Mechanical ventilation	1.32	0.56	2.36	0.018*	3.74 (1.25-11.19)	1.30	1.96	0.66	0.509	3.66 (0.08-172.11)
Mechanical ventilation time (days)	0.13	0.06	2.00	0.045*	1.14 (1.01-1.29)	0.04	0.18	0.22	0.827	1.04 (0.73-1.49)
LOS	-0.74	0.54	-1.37	0.170	0.48 (0.17-1.37)	-2.63	1.71	-1.54	0.124	0.07 (0.00-2.05)
SGA	0.12	1.25	0.10	0.921	1.13 (0.10-13.01)	1.85	2.31	0.80	0.425	6.33 (0.07-588.68)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	1.28	1.06	1.21	0.225	3.60 (0.45-28.56)	1.27	1.43	0.88	0.377	3.55 (0.21-58.99)
Third	0.26	0.88	0.30	0.766	1.30 (0.23-7.32)	1.09	1.77	0.61	0.539	2.96 (0.09-95.07)

*, statistical significance (P<0.05). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S3 Difference analysis of no-breastfeeding subgroup

Variables	MCT/LCT (n=36)	SMOF (n=15)	P
Gestational age at birth (weeks)	29.20 (28.30, 30.33)	30.00 (27.85, 31.10)	0.702
Birth weight (grams)	1,170.00 (990.00, 1,340.00)	1,260.00 (1,075.00, 1,545.00)	0.193
Duration of parenteral nutrition (days)	23.00 (15.00, 29.00)	21.00 (18.50, 29.00)	0.562
Oxygen therapy time (days)	39.50 (13.00, 58.25)	17.00 (8.00, 43.50)	0.114
Mechanical ventilation time (days)	0.00 (0.00, 0.25)	0.00 (0.00, 0.00)	0.180
Noninvasive ventilation time (days)	24.50 (11.50, 38.50)	16.00 (7.50, 43.50)	0.634
Boys	18 (50.00)	6 (40.00)	0.514
Polyembryony	8 (22.22)	1 (6.67)	0.355
Cesarean delivery	29 (80.56)	12 (80.00)	1.000
Postnatal asphyxia	19 (52.78)	5 (33.33)	0.205
Intrauterine distress	8 (22.22)	0	0.117
SGA	2 (5.56)	0	1.000
Antenatal steroids	30 (83.33)	13 (86.67)	1.000
Premature rupture of membranes	3 (8.33)	2 (13.33)	0.976
Gestational hypertension	14 (38.89)	7 (46.67)	0.607
Gestational diabetes	7 (19.44)	2 (13.33)	0.906
Intrauterine infection	2 (5.56)	1 (6.67)	1.000
PDA	14 (38.89)	6 (40.00)	0.941
PS	15 (41.67)	8 (53.33)	0.446
Mechanical ventilation	9 (25.00)	1 (6.67)	0.265
BPD	18 (50.00)	3 (20.00)	0.047*
LOS	3 (8.33)	3 (20.00)	0.483

Data are presented as median (IQR) or n (%). *, statistical significance ($P < 0.05$) in Chi-squared test and Fisher's exact test. BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S4 Logistic analysis of no-breastfeeding subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-1.39	0.73	-1.91	0.056	0.25 (0.06–1.04)	0.18	1.93	0.09	0.926	1.19 (0.03–52.31)
Boys	0.36	0.57	0.64	0.525	1.44 (0.47–4.41)	0.45	0.90	0.50	0.619	1.56 (0.27–9.05)
SGA	0.37	1.44	0.26	0.797	1.45 (0.09–24.56)	-1.32	1.79	-0.74	0.461	0.27 (0.01–8.96)
LOS	-1.39	1.14	-1.22	0.222	0.25 (0.03–2.32)	-1.87	1.60	-1.17	0.242	0.15 (0.01–3.53)
Mechanical ventilation	0.96	0.72	1.32	0.186	2.60 (0.63–10.71)	0.92	1.82	0.51	0.611	2.52 (0.07–89.00)
Mechanical ventilation time (days)	0.09	0.08	1.18	0.237	1.09 (0.94–1.27)	0.01	0.21	0.03	0.973	1.01 (0.67–1.52)
Gestational age at birth (weeks)	-0.80	0.25	-3.24	0.001*	0.45 (0.28–0.73)	-0.59	0.42	-1.43	0.153	0.55 (0.24–1.25)
Birth weight (grams)	-0.01	0.00	-2.83	0.005*	0.99 (0.99–0.99)	-0.00	0.00	-1.41	0.158	1.00 (0.99–1.00)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	0.74	0.65	1.13	0.258	2.10 (0.58–7.56)	0.33	0.91	0.37	0.715	1.39 (0.23–8.32)
Third	-2.11	1.13	-1.86	0.063	0.12 (0.01–1.12)	-1.85	2.51	-0.74	0.461	0.16 (0.00–21.44)

*, statistical significance ($P < 0.05$). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S5 Difference analysis of breastfeeding subgroup

Variables	MCT/LCT (n=39)	SMOF (n=81)	P
Gestational age at birth (weeks)	30.40 (29.15, 31.10)	29.50 (28.30, 30.60)	0.163
Birth weight (grams)	1,150.00 (980.00, 1,390.00)	1,180.00 (990.00, 1,410.00)	0.564
Duration of parenteral nutrition (days)	27.00 (19.00, 39.00)	20.00 (16.00, 32.00)	0.020*
Oxygen therapy time (days)	36.00 (7.50, 50.50)	32.00 (12.00, 59.00)	0.461
Mechanical ventilation time (days)	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.542
Noninvasive ventilation time (days)	13.00 (6.50, 29.50)	29.00 (11.00, 47.00)	0.016*
Boys	21 (53.85)	49 (60.49)	0.489
Polyembryony	9 (23.08)	12 (14.81)	0.265
Cesarean delivery	35 (89.74)	63 (77.78)	0.113
Postnatal asphyxia	14 (35.90)	33 (40.74)	0.611
Intrauterine distress	12 (30.77)	14 (17.28)	0.093
SGA	6 (15.38)	6 (7.41)	0.299
Antenatal steroid	28 (71.79)	66 (81.48)	0.228
Premature rupture of membranes	5 (12.82)	17 (20.99)	0.279
Gestational hypertension	16 (41.03)	34 (41.98)	0.921
Gestational diabetes	8 (20.51)	29 (35.80)	0.089
Intrauterine infection	4 (10.26)	3 (3.70)	0.308
PDA	11 (28.21)	36 (45.00)	0.079
PS	13 (33.33)	27 (33.33)	1.000
Mechanical ventilation	7 (17.95)	19 (23.46)	0.493
BPD	17 (43.59)	29 (35.80)	0.411
LOS	5 (12.82)	20 (24.69)	0.134

Data are presented as median (IQR) or n (%). *, statistical significance ($P < 0.05$) in Chi-squared test and Fisher's exact test. BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S6 Logistic analysis of breastfeeding subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-0.33	0.40	-0.82	0.412	0.72 (0.33-1.57)	-1.60	3.38	-0.47	0.637	0.20 (0.00-153.88)
Boys	-0.12	0.38	-0.32	0.751	0.89 (0.42-1.87)	0.66	0.66	1.01	0.312	1.94 (0.54-7.03)
Gestational age at birth (weeks)	-0.86	0.17	-5.06	<0.001*	0.42 (0.30-0.59)	0.07	0.38	0.18	0.855	1.07 (0.51-2.23)
Birth weight (grams)	-0.01	0.00	-4.62	<0.001*	0.99 (0.99-0.99)	-0.01	0.00	-2.38	0.017*	0.99 (0.99-0.99)
Duration of parenteral nutrition (days)	0.03	0.01	2.51	0.012*	1.04 (1.01-1.06)	-0.05	0.03	-1.77	0.077	0.95 (0.90-1.01)
Noninvasive ventilation time (days)	0.08	0.01	5.60	<0.001*	1.08 (1.05-1.11)	0.09	0.03	3.31	<0.001*	1.09 (1.04-1.15)
Mechanical ventilation time (days)	0.31	0.10	2.93	0.003*	1.36 (1.11-1.67)	0.54	0.31	1.74	0.082	1.72 (0.93-3.18)
Mechanical ventilation	1.91	0.50	3.83	<0.001*	6.74 (2.54-17.86)	-0.91	1.42	-0.64	0.522	0.40 (0.02-6.54)
SGA	0.15	0.62	0.25	0.802	1.17 (0.35-3.92)	-1.27	1.23	-1.03	0.304	0.28 (0.03-3.14)
LOS	-0.13	0.47	-0.27	0.787	0.88 (0.35-2.20)	-0.02	1.04	-0.02	0.986	0.98 (0.13-7.58)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	-0.71	0.58	-1.22	0.224	0.49 (0.16-1.54)	-1.23	3.34	-0.37	0.712	0.29 (0.00-202.54)
Third	-0.16	0.42	-0.38	0.704	0.85 (0.37-1.95)	-0.35	3.52	-0.10	0.921	0.71 (0.00-693.11)

*, statistical significance ($P < 0.05$). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S7 Difference analysis of no-mechanical ventilation subgroup

Variables	MCT/LCT (n=59)	SMOF (n=76)	P
Gestational age at birth (weeks)	30.30 (29.10, 30.85)	30.00 (28.37, 31.20)	0.724
Birth weight (grams)	1,170.00 (990.00, 1,400.00)	1,240.00 (999.50, 1,490.00)	0.220
Duration of parenteral nutrition (days)	24.00 (17.50, 30.50)	20.00 (16.00, 29.00)	0.178
Oxygen therapy time (days)	27.00 (8.50, 49.50)	25.00 (10.00, 47.25)	0.972
Mechanical ventilation time (days)	13.00 (7.00, 29.50)	20.50 (8.00, 41.50)	0.170
Noninvasive ventilation time (days)	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	
Boys	28 (47.46)	43 (56.58)	0.292
Multiple pregnancy	15 (25.42)	9 (11.84)	0.041*
Cesarean delivery	49 (83.05)	58 (76.32)	0.338
Postnatal asphyxia	25 (42.37)	25 (32.89)	0.258
Intrauterine distress	14 (23.73)	9 (11.84)	0.068
SGA	7 (11.86)	6 (7.89)	0.438
Antenatal steroids	46 (77.97)	60 (78.95)	0.890
Premature rupture of membranes	6 (10.17)	15 (19.74)	0.128
Gestational hypertension	24 (40.68)	32 (42.11)	0.867
Gestational diabetes	14 (23.73)	24 (31.58)	0.314
Intrauterine infection	6 (10.17)	3 (3.95)	0.276
Breastfeeding)	32 (54.24)	62 (81.58)	<0.001*
PDA	18 (30.51)	31 (40.79)	0.218
PS	13 (22.03)	19 (25.00)	0.688
Noninvasive ventilation	58 (98.31)	76 (100.00)	0.437
BPD	23 (38.98)	19 (25.00)	0.082
LOS	7 (11.86)	14 (18.42)	0.297

Data are presented as median (IQR) or n (%). *, statistical significance ($P < 0.05$) in Chi-squared test and Fisher's exact test. BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S8 Logistic analysis of no-mechanical ventilation subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-0.65	0.38	-1.73	0.084	0.52 (0.25-1.09)	-1.92	1.14	-1.69	0.092	0.15 (0.02-1.37)
Breastfeeding	-0.36	0.40	-0.91	0.365	0.70 (0.32-1.52)	0.45	0.61	0.74	0.462	1.57 (0.47-5.24)
Gestational age at birth (weeks)	-0.82	0.16	-5.07	<0.001*	0.44 (0.32-0.61)	-0.81	0.25	-3.18	0.001	0.45 (0.27-0.73)
Birth weight (grams)	-0.01	0.00	-4.72	<0.001*	0.99 (0.99-0.99)	-0.01	0.00	-2.06	0.039	0.99 (0.99-0.99)
Boys	-0.01	0.37	-0.03	0.974	0.99 (0.48-2.05)	0.36	0.50	0.72	0.473	1.44 (0.53-3.86)
Multiple pregnancy	-0.11	0.49	-0.23	0.821	0.89 (0.34-2.35)	0.29	0.69	0.42	0.673	1.34 (0.35-5.17)
SGA	0.72	0.59	1.21	0.225	2.05 (0.64-6.52)	0.69	0.89	0.77	0.440	1.99 (0.35-11.40)
LOS	-0.75	0.59	-1.28	0.202	0.47 (0.15-1.50)	-1.56	0.77	-2.02	0.043	0.21 (0.05-0.95)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	0.15	0.48	0.32	0.753	1.16 (0.46-2.96)	0.62	0.94	0.66	0.511	1.85 (0.29-11.68)
Third	-0.44	0.44	-1.00	0.316	0.65 (0.27-1.52)	1.14	1.24	0.92	0.358	3.13 (0.27-35.76)

*, statistical significance ($P < 0.05$). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S9 Difference analysis of mechanical ventilation subgroup

Variables	MCT/LCT (n=16)	SMOF (n=20)	P
Gestational age at birth (weeks)	28.80 (28.00, 29.33)	28.50 (27.35, 29.57)	0.667
Birth weight (grams)	1,095.00 (952.50, 1,270.00)	1,055.00 (980.00, 1,255.00)	0.987
Duration of parenteral nutrition (days)	28.00 (17.75, 40.75)	33.00 (17.75, 40.25)	0.861
Oxygen therapy time (days)	51.50 (40.50, 95.75)	54.50 (40.00, 78.25)	0.691
Mechanical ventilation time (days)	6.00 (5.00, 11.75)	5.50 (3.00, 12.00)	0.725
Noninvasive ventilation time (days)	30.50 (21.50, 44.75)	42.50 (30.50, 51.25)	0.139
Boys	11 (68.75)	12 (60.00)	0.731
Multiple pregnancy	2 (12.50)	4 (20.00)	0.672
Cesarean delivery	15 (93.75)	17 (85.00)	0.613
Postnatal asphyxia	8 (50.00)	13 (65.00)	0.500
Intrauterine distress	6 (37.50)	5 (25.00)	0.483
SGA	1 (6.25)	0	0.444
Antenatal steroids	12 (75.00)	19 (95.00)	0.149
Premature rupture of membranes	2 (12.50)	4 (20.00)	0.672
Gestational hypertension	6 (37.50)	9 (45.00)	0.741
Gestational diabetes	1 (6.25)	7 (35.00)	0.053
Intrauterine infection	0	1 (5.00)	1.000
Breastfeeding	7 (43.75)	19 (95.00)	0.002*
PDA	7 (43.75)	11 (57.89)	0.505
PS	15 (93.75)	16 (80.00)	0.355
BPD	12 (75.00)	13 (65.00)	0.718
LOS	1 (6.25)	9 (45.00)	0.022*

Data are presented as median (IQR) or n (%). *, statistical significance ($P < 0.05$) in Chi-squared test and Fisher's exact test. BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S10 Logistic analysis of mechanical ventilation subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-0.48	0.74	-0.64	0.519	0.62 (0.14-2.66)	-0.60	3.14	-0.19	0.849	0.55 (0.00-259.07)
Breastfeeding	0.59	0.78	0.76	0.448	1.81 (0.39-8.39)	0.46	1.80	0.25	0.800	1.58 (0.05-53.83)
Gestational age at birth (weeks)	-0.66	0.30	-2.22	0.026*	0.52 (0.29-0.93)	0.13	0.54	0.23	0.815	1.13 (0.40-3.25)
Birth weight (grams)	-0.01	0.00	-2.38	0.018*	0.99 (0.99-0.99)	-0.01	0.00	-1.77	0.077	0.99 (0.99-1.00)
Boys	-0.58	0.79	-0.73	0.467	0.56 (0.12-2.65)	2.10	1.50	1.40	0.161	8.16 (0.43-153.29)
Mechanical ventilation time (days)	0.13	0.08	1.62	0.106	1.14 (0.97-1.33)	0.24	0.15	1.59	0.112	1.28 (0.94-1.73)
SGA	-17.48	2,399.54	-0.01	0.994	0.00 (0.00-Inf)	-20.71	2,399.55	-0.01	0.993	0.00 (0.00-Inf)
LOS	-0.59	0.78	-0.76	0.448	0.55 (0.12-2.56)	-0.73	1.28	-0.57	0.567	0.48 (0.04-5.89)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	-0.99	1.07	-0.93	0.353	0.37 (0.05-3.01)	-1.43	2.06	-0.70	0.486	0.24 (0.00-13.46)
Third	-0.90	0.93	-0.96	0.335	0.41 (0.07-2.53)	-1.29	2.90	-0.45	0.656	0.28 (0.00-80.23)

*, statistical significance ($P < 0.05$). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S11 Difference analysis of birth weight <1,500 g subgroup

Variables	MCT/LCT (n=64)	SMOF (n=77)	P
Gestational age at birth (weeks)	29.50 (28.30, 30.50)	29.00 (28.10, 30.20)	0.221
Birth weight (grams)	1,110.00 (970.00, 1,242.50)	1,100.00 (990.00, 1,280.00)	0.638
Duration of parenteral nutrition (days)	26.00 (18.75, 36.00)	24.00 (17.00, 36.00)	0.342
Oxygen therapy time (days)	42.00 (15.25, 62.75)	40.00 (18.00, 63.00)	0.857
Mechanical ventilation time (days)	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.687
Noninvasive ventilation time (days)	24.50 (9.75, 38.50)	35.00 (16.00, 51.00)	0.023*
Boys	32 (50.00)	39 (50.65)	0.939
Multiple pregnancy	13 (20.31)	10 (12.99)	0.241
Cesarean delivery	54 (84.38)	61 (79.22)	0.432
Postnatal asphyxia	30 (46.88)	32 (41.56)	0.527
Intrauterine distress	19 (29.69)	11 (14.29)	0.026*
SGA	8 (12.50)	6 (7.79)	0.352
Antenatal steroids	52 (81.25)	67 (87.01)	0.348
Premature rupture of membranes	7 (10.94)	18 (23.38)	0.054
Gestational hypertension	26 (40.62)	33 (42.86)	0.789
Gestational diabetes	11 (17.19)	24 (31.17)	0.056
Intrauterine infection	5 (7.81)	4 (5.19)	0.774
Breastfeeding	32 (50.00)	67 (87.01)	<0.001*
PDA	22 (34.38)	35 (46.05)	0.161
PS	24 (37.50)	30 (38.96)	0.859
Mechanical ventilation	13 (20.31)	18 (23.38)	0.662
BPD	35 (54.69)	31 (40.26)	0.087
LOS	6 (9.38)	21 (27.27)	0.007*

Data are presented as median (IQR) or n (%). *, statistical significance (P<0.05). BPD, bronchopulmonary dysplasia; IQR, interquartile range; LOS, late-onset of sepsis; MCT/LCT, medium-long chain triglycerides fat emulsion; PDA, patent ductus arteriosus; PS, pulmonary surfactant; SGA, small for gestational age; SMOF, multi-oil fat emulsion.

Table S12 Logistic analysis of birth weight <1,500 g subgroup

Variables	Univariate analysis					Multivariate analysis				
	β	SE	Z	P	OR (95% CI)	β	SE	Z	P	OR (95% CI)
SMOF	-0.58	0.34	-1.70	0.089	0.56 (0.29–1.09)	-3.59	1.36	-2.63	0.008*	0.03 (0.00–0.40)
Boys	0.32	0.34	0.93	0.351	1.37 (0.71–2.66)	0.64	0.54	1.20	0.230	1.90 (0.67–5.43)
Gestational age at birth (weeks)	-0.69	0.14	-4.80	<0.001*	0.50 (0.38–0.66)	0.01	0.28	0.04	0.967	1.01 (0.58–1.76)
Birth weight(grams)	-0.01	0.00	-4.19	<0.001*	0.99 (0.99–0.99)	-0.00	0.00	-1.08	0.278	1.00 (0.99–1.00)
Breastfeeding	-0.05	0.37	-0.13	0.900	0.95 (0.46–1.97)	0.94	0.70	1.36	0.175	2.57 (0.66–10.03)
Intrauterine distress	0.16	0.41	0.39	0.693	1.18 (0.52–2.64)	-1.01	0.74	-1.37	0.170	0.36 (0.09–1.54)
Noninvasive ventilation time (days)	0.07	0.01	5.72	<0.001*	1.07 (1.05–1.10)	0.08	0.02	4.03	<0.001*	1.09 (1.04–1.13)
Mechanical ventilation	1.95	0.50	3.93	<0.001*	7.01 (2.65–18.52)	1.70	1.10	1.55	0.121	5.47 (0.64–46.89)
Mechanical ventilation time (days)	0.22	0.07	2.95	0.003*	1.24 (1.08–1.44)	0.10	0.14	0.70	0.483	1.10 (0.84–1.45)
SGA	-0.18	0.57	-0.31	0.755	0.84 (0.27–2.55)	-0.83	1.00	-0.83	0.409	0.44 (0.06–3.11)
LOS	-0.50	0.44	-1.13	0.260	0.61 (0.26–1.44)	-1.44	0.73	-1.98	0.047*	0.24 (0.06–0.98)
Time										
First					1.00 (Reference)					1.00 (Reference)
Second	0.00	0.45	0.00	1.000	1.00 (0.41–2.43)	0.88	0.99	0.89	0.374	2.41 (0.35–16.67)
Third	-0.31	0.39	-0.80	0.426	0.74 (0.34–1.57)	1.65	1.31	1.26	0.208	5.19 (0.40–67.36)

*, statistical significance (P<0.05). CI, confidence interval; LOS, late-onset of sepsis; OR, odds ratio; SE, standard error; SGA, small for gestational age; SMOF, multi-oil fat emulsion.