Table 1. Characteristics of the mother, newborn, delivery, and clinical parameters.

Clinical Characteristics	Population (N=96)
Mothers' age, years, mean (SD)	32.3 (6.2)
Vaginal birth n, (%)	52 (54.1)
Spontaneous onset of labor, (%)	38 (39.5)
Epidural analgesia, n, (%)	64 (66.6)
Instrumental delivery, n, (%)	14 (14.5)
Antenatal steroids newborn $\leq 33^{+6}$ weeks, n, (%)	11 (73.3)
Gestational age, weeks, median (Q1, Q3)	35 (34,36)
Gestational age, weeks, % of total	
32	5 (5.2)
33	10 (10.4)
34	24 (25.0)
35	27 (28,1)
36	30 (31.2)
Delayed cord clamping, seconds, mean (SD)	70 (27.1)
Birthweight, g, mean (SD)	2294.8 (397.2)
Sex male, n, %	51 (53.1)
Apgar score 1 min, mean (Q1, Q3)	9 (9 ,10)
Apgar score 5 min, mean (Q1, Q3)	10 (10, 10)

Table 2. Median peripheral oxygen saturation (SpO$_2$) in moderate and late preterm (MLPT) neonates with and without immediate Kangaroo Mother Care (iKMC) during the first 10 minutes of life.

| | Median peripheral oxygen saturation (SpO$_2$) | | | |
| | NO Immediate Kangaroo Mother Care | | YES Immediate Kangaroo Mother Care | |
Time (s)	Median SpO2 (%)	IQR 95% CI	Median SpO2 (%)	IQR 95% CI
120	70.98	(63.23 – 77. 67)	76.25	(66.18 – 84.05)
180	77.54	(71.11 – 82.89)	83.20	(75.18 – 89.01)
240	84.11	(79.05 – 88.13)	88.36	(82.26 – 92.55)
300	88.91	(87.05 – 91.85)	92.00	(87.50 – 94.97)
360	91.93	(88.95 – 94.16)	94.23	(90.82 – 96.43)
420	93.77	(91.28–95.58)	95.13	(92.00 – 97.08)
480	94.44	(92.17 – 96.07)	96.05	(93.56 – 97.61)
540	95.51	(93.58 – 96.88)	96.83	(94.75 – 98.10)
600	95.66	(93.70 – 97.03)	96.93	(94.86 – 98.19)

SpO$_2$ values are presented as percentages (%), along with their respective interquartile ranges (IQR) and 95% confidence intervals (95% CI).

Table 3. Median heart rate (HR) in moderate and late preterm (MLPT) neonates with and without immediate Kangaroo Mother Care (iKMC) during the first 10 minutes of life.

	Median heart rate (HR)			
	NO Immediate Kangaroo Mother Care (NO iKMC)		**Immediate Kangaroo Mother Care (YES iKMC)**	
Time (s)	Median HR	IQR 95% CI	Median HR	IQR 95% CI
120	90.10	(87.74 – 98.46)	102.19	(89.91 – 117.46)
180	98.26	(87.42 – 109.11)	113.35	(98.43 – 128.27)
240	109.43	(98.97 – 119.88)	124.51	(109.84 – 139.18)
300	120.08	(109.88 – 130.28)	135.17	(120.65 – 149.68)
360	127.66	(117.58– 137.74)	142.75	(128.28 – 157.21)
420	130.13	(120.03 – 140.23)	145.21	(130.71 – 159.71)
480	129.52	(119.28 – 139.77)	144.61	(129.98 – 159.24)
540	128.40	(117.88 – 138.94)	143.49	(128.64 – 158.35)
600	127.29	(116.35 – 138.24)	142.38	(127.21 – 157.55)

HR values are presented in beats per minute (bpm), along with their respective interquartile ranges (IQR) and 95% confidence intervals (95% CI).

Table 4. Neonatal body temperatures in moderate and late preterm (MLPT) neonates with and without immediate Kangaroo Mother Care (iKMC) at different time points after birth.

Variable	iKMC Yes (n=45)	Non. iKMC (n=51)	p-valor	Diferencia (IC 95%)
Temp at 2-3 min after birth	36.05 ± 0.96	35.83 ± 0.96	**0.041**	+0.22°C [0.01, 0.43]
Temp at 5 min of life	36.38 ± 0.60	36.11 ± 0.68	**0.018**	+0.27°C [0.05, 0.49]
Temp at 10 min of life	36.62 ± 0.52	36.30 ± 0.66	**0.003**	+0.32°C [0.12, 0.52]
Temp at admission/end	36.55 ± 0.47	36.28 ± 0.52	**0.009**	+0.27°C [0.07, 0.47]

Temperature values are presented as means ± standard deviations (SD), along with *p*-values and 95% confidence intervals (95% CI) for the mean differences between groups.

Supplemental Table 1: Perinatal and clinical characteristics of moderate and late preterm (MLPT) neonates who were (Yes iKMC, n=45) or not (No iKMC, n=51) subjected to immediate Kangaroo Care in the delivery room.

	"Yes iKMC" Group (n=45)	"No iKMC" Group (n=51)	P- value
Gestational age (weeks), (Q1 -Q3)	35.1 (34.7 -35.5)	34.9 (34.4 – 35.4)	0.416
Birth weight (g), mean ± SD	2345.6 ± 352.8	2250.4 ± 492.3	0.2751
Apgar 5', median (Q1,Q3)	9 (9,10)	10 (9,10)	0.4172
Apgar 10', median (Q1,Q3)	10 (10 -10)	10 (10 -10)	0.0551
Arterial pH, mean ± SD	7.24 ± 0.08	7.27 ± 0.07	0.0552
Venous pH, mean ± SD	7.30 ± 0.06	7.33 ± 0.07	0.0582
Sex, female, n(%)	19 (42.2)	23 (45.1%)	0.8971