

Date: March 2015

Results of RBM device testing of newborn baby temperature measurement in different temperature ranges and in different settings of St John's Medical College Hospital, Bangalore (2015)

(a) Normal temperature range (above 35.5°C) in neonatal ICU setting

Experiment date	Newborn SI No.	No of temp readings	Temp_device (Tdev)	Temp_probe (Tp)		Tdev-Tp diff
09-02-2015	1	12	36.62	36.57		0.05
11-02-2015	2	12	35.78	36.56		-0.78
12-02-2015	3	12	35.66	36.34		-0.68
18-02-2015	4	12	36.24	36.64		-0.4
Average			36.08	36.53		-0.45

(b) Temperature range around 33°C for a baby undergoing therapeutic cooling for birth asphyxia in neonatal ICU setting

Experiment date	Newborn SI No.	No of temp readings	Temp_device (Tdev)	Temp_probe (Tp)		Tdev-Tp diff
25-03-2015	5	12	33.10	33.15		0.05

(c) Temperature range around 34°C for a baby undergoing re-warming after therapeutic cooling for birth asphyxia in neonatal ICU setting

Experiment date	Newborn SI No.	No of temp readings	Temp_device (Tdev)	Temp_probe (Tp)		Tdev-Tp diff
27-03-2015	5	12	33.95	33.92		0.03

Temp_device (Tdev) = temperature acc to RBM device

Temp_probe (Tp) = temperature acc to the NICU radiant warmer probe

Tdev-Tp diff = difference in temperature b/n the two thermometers (values >0.5° difference marked in red)

(d) Temperature readings in the early morning time (b/n 4.00 to 5.00 a:m) for a well-baby in the postnatal ward with mother

Experiment date	Newborn SI No.	No of temp readings	Temp_device (Tdev)	Temp_digital (Tdig)		Tdev-Tdig diff
26-03-2015	1	12	36.61	36.61		0.00
27-03-2015	2	12	37.00	36.82		0.18
27-03-2015	3	12	37.00	36.79		0.21
Average			36.87	36.74		0.13