

## CORD BLOOD (UCB) AND 24 HOURS POSTNATAL (PN-24) REFERENCE VALUES OF B-TYPE NATRIURETIC PEPTIDE (BNP) AMONG ELECTIVE CS (ECS) BORN HEALTHY FULL TERM (FT) NEONATES

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**Background:** The fetal to neonatal transition is accompanied by lung expansion and lung fluid clearance soon after birth. BNP reference values are available mostly for preterm infants. BNP synthesized predominantly in the cardiac ventricle play an important role in the regulation of ECF volume and postnatal circulatory adaptation. Neonates born via ECS are at higher risk for postnatal transitional failure states like TTN. Reference values of BNPs among healthy FT born via ECS (not in labor) have not been reported.

**Aims:** To determine the reference values of BNP from UCB and PN-24 plasma samples among ECS born FTs.

**Methods:** IRB approved prospective study, n=66 Eligibility: FTs born via ECS. BNP assay was done using commercial kit (Triage BNP test) on UCB and PN-24 samples. Maternal and infant birth characteristics collected.

**Results:** Shapiro Wilk's test was used to test the normal distribution of quantitative variable. Median and interquartile range of BNP values are shown below

	UCB		PN-24 hours	
	Median(pg/mL)	25-75%ile	Median(pg/mL)	25-75%ile
Male (31)	5.1	2~9	87.5	46.5~196
Female (35)	5.4	2~9	56.1	29.9~99.8

[Table 1]

UCB levels are not related to BW and gender. Gender difference was significant in PN-24 levels.

**Conclusions:** Our preliminary data for the reference value range of UCB and PN-24 BNP levels in healthy FTs born via ECS showed expected increase after birth. These reference values are essential to facilitate the use of these markers in neonatal transition failure states.