Background and aims B-type natriuretic peptide (BNP) and N-terminal-pro-BNP (NTproBNP) have been shown to correlate with the size of patent ductus arteriosus (PDA) in preterm infants. We investigated whether BNP or NTproBNP is more accurate for assessment of a PDA.

Methods Prospective observational study. Preterm infants born.

Results 60 infants were recruited, 58 had complete datasets. The cohort’s mean (SD) gestational age was 27.3 (2.2) weeks and had a mean (SD) birth weight of 1032 (315) grams. 46 (79.3%) infants had a PDA with a mean (SD) PDA diameter of 3.2 (0.9) mm. Median (IQR) BNP levels: 486.5 (219–793.5) pg/ml for infants with PDA, 190 (95.5–514.5) pg/ml for infants without PDA. Median (IQR) NTproBNP levels: 10858.5 (6319–42108) pg/ml for infants with PDA, and 7488 (3363–14227.5) pg/ml for infants without PDA. Both BNP and NTproBNP showed a significant correlation with PDA size in this cohort; BNP R = 0.35 (p = 0.0066); NTproBNP R = 0.31 (p = 0.018).

Conclusion BNP and NTproBNP were closely correlated to PDA size. Both markers were useful for assessment of PDA size in this cohort of very preterm infants.