Reply

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We would like to thank Drs Matias and Montenegro for their comments and careful reading of our article. We agree with some of the comments and wish to elaborate here where clarification is necessary. The authors performed several elegant studies on the thesis of cardiac dysfunction/insufficiency and abnormal DV flow to elucidate the rationale behind increased NT and these publications merit citation [1–4]. We fully agree that the question of outcome of euploid fetuses with normal and enlarged nuchal translucency and abnormal DV flow is of paramount importance to further improve parental counseling and an observational study on these data together with long-term outcome is currently being performed at our center.

The systems operate at power outputs of $<100 \text{ mW/cm}^2$ spatial peak-temporal average in both imaging and Doppler modes and measurements were performed according to the principle of ALARA (as low as reasonably achievable). For the Doppler measurement of the ductus venosus, a technique similar to that described by Montenegro and Matias and co-workers was employed [5]. Briefly, a right ventral mid-sagittal plane was obtained during fe-

tal quiescence and the ductus venosus was identified by color Doppler imaging. The pulsed Doppler gate was placed in the distal portion of the umbilical sinus. Care was taken to avoid contamination from the intrahepatic portion of the umbilical vein, the left hepatic vein and the inferior vena cava. A sample size of 1–2 mm was used for the Doppler measurement. For each measurement, at least three consecutive ideal Doppler waveforms with an insonation angle $<30^\circ$ were obtained. The total examination time for ductus venosus blood flow assessment was limited to 5 min in every case. An average of three consecutive high-quality flow velocity waveforms with the highest velocities and of similar appearance with a high-pass filter set to the minimum of 100 Hz were used. The actual cut-off frequencies for the high-pass filter varied depending on the control setting (pulse repetition frequency) used, so that the high-pass filter was automatically calculated and adjusted when the pulse repetition frequency was changed.

We thank Drs Matias and Montenegro for their observations and comments and the journal for the opportunity to respond.

References

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