



WFUMB/ISUOG Statement on the Safe Use of Doppler Ultrasound During 11-14 week scans (or earlier in pregnancy)

1. Pulsed Doppler (spectral, power and color flow imaging) ultrasound should not be used routinely.
2. Pulsed Doppler ultrasound may be used for clinical indications such as to refine risks for trisomies.
3. When performing Doppler ultrasound, the displayed Thermal Index (TI) should be less than or equal to 1.0 and exposure time should be kept as short as possible (usually no longer than 5-10 minutes) and not exceed 60 minutes.
4. When using Doppler ultrasound for research, teaching and training purposes, the displayed TI should be less than or equal to 1.0 and exposure time should be kept as short as possible (usually no longer than 5-10 minutes) and not exceed 60 minutes. Informed consent should be obtained.
5. In educational settings, discussion of first trimester pulsed or color Doppler should be accompanied by information on safety and bioeffects (e.g. TI, exposure times, and how to reduce the output power).
6. When scanning maternal uterine arteries in the first trimester, there are unlikely to be any fetal safety implications as long as the embryo/fetus lies outside the Doppler ultrasound beam.

Approved by WFUMB Administrative Council, October 2015. This text is identical to that in the statement published by AFSUMB, AIUM, BMUS, EFSUMB and JSUMB.