

Figure 1: Schematic diagram of maternal-foetal ISUOG Phantom, the position of the thermocouples is indicated by the white dots.

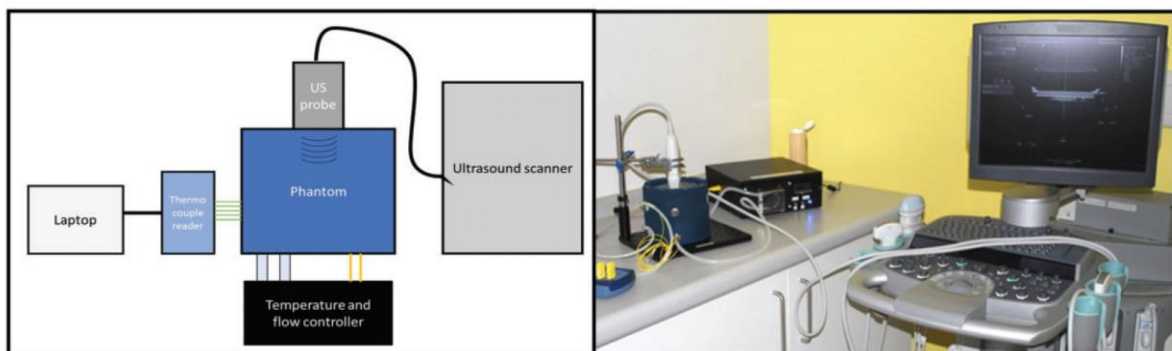


Figure 2. Schematic (left) and photograph (right) of maternal-foetal ISUOG phantom setup.

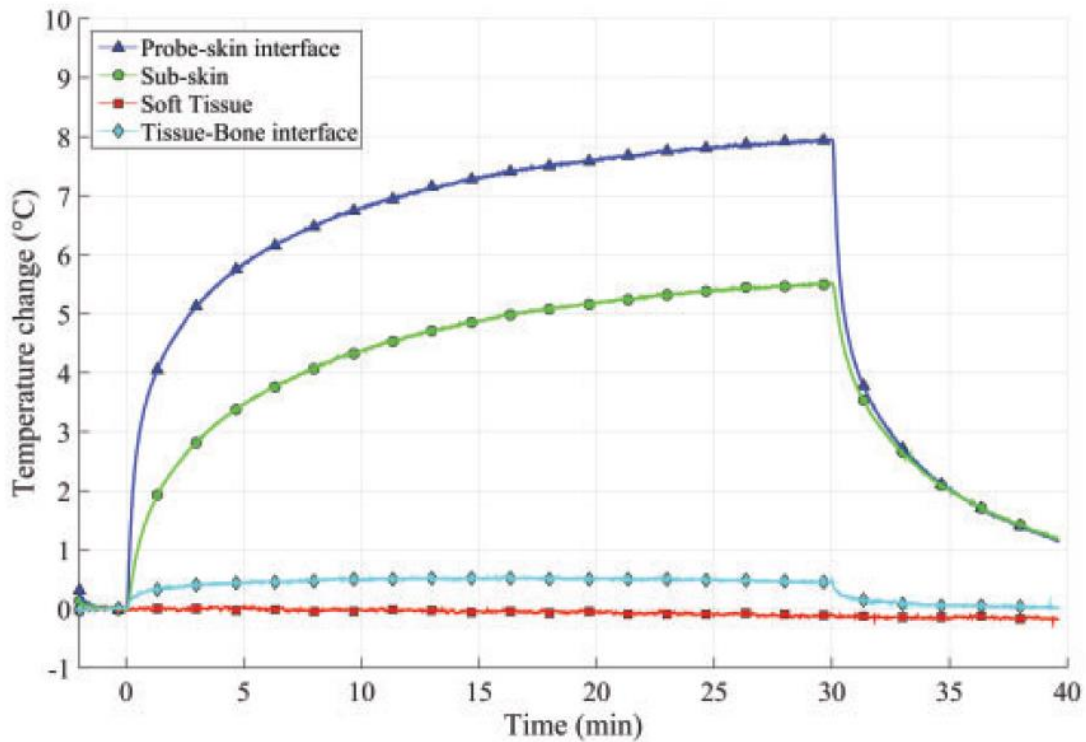


Figure 3. Temperature changes during a 30-minute exposure for the four thermocouples using the 9 MHz transducer in PW Doppler mode.

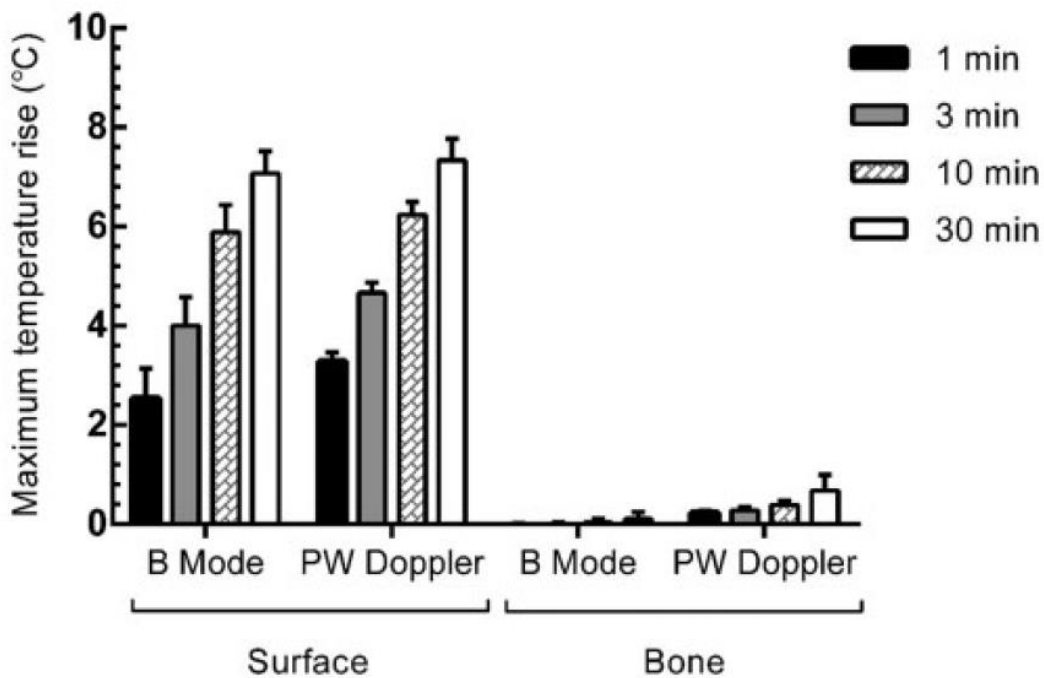


Figure 4. Results of the study of effect of exposure duration on maximum temperature achieved at the skin surface and at the bone–soft tissue interface for the different modes using the 9 MHz linear transducer. PW: pulsed wave.

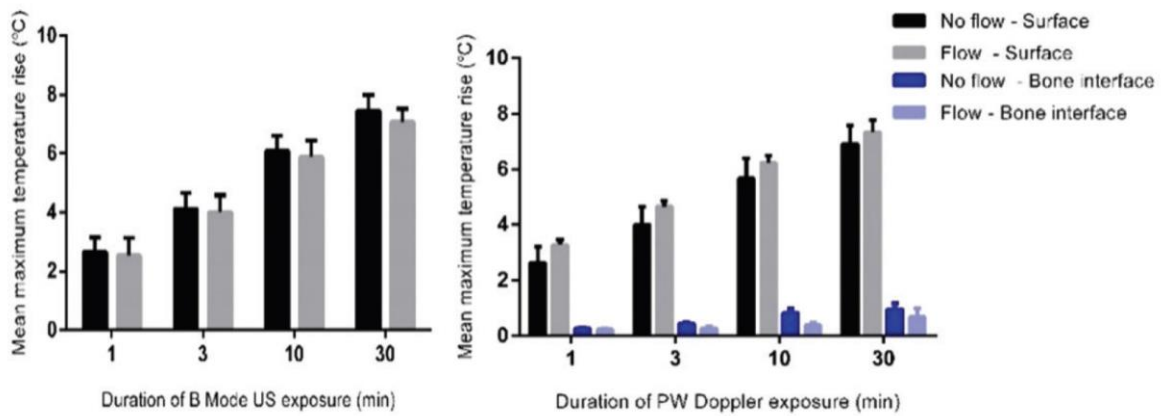


Figure 5. The effect of flow on the temperature rise at the ISUOG phantom surface (n¼3) following exposure to B Mode (left) and PW Doppler (right) for different exposure times. The values for the tissue–bone interface have been omitted for B-mode. PW: pulsed wave.

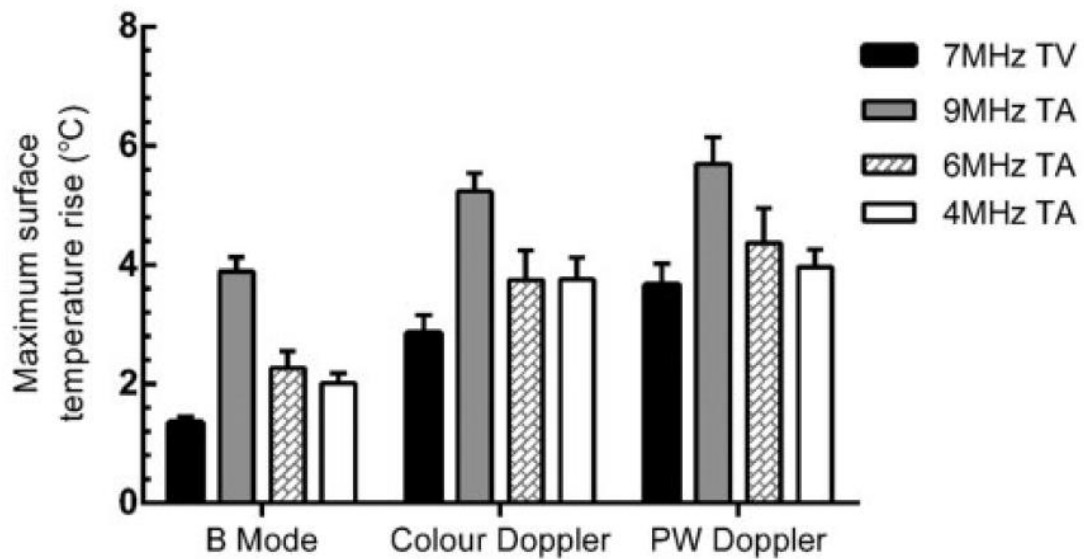


Figure 6. Temperature changes at the phantom surface (n¼3) for three different TA transducers and one TV transducer. TA: transabdominal; TV: transvaginal; PW: pulsed wave.

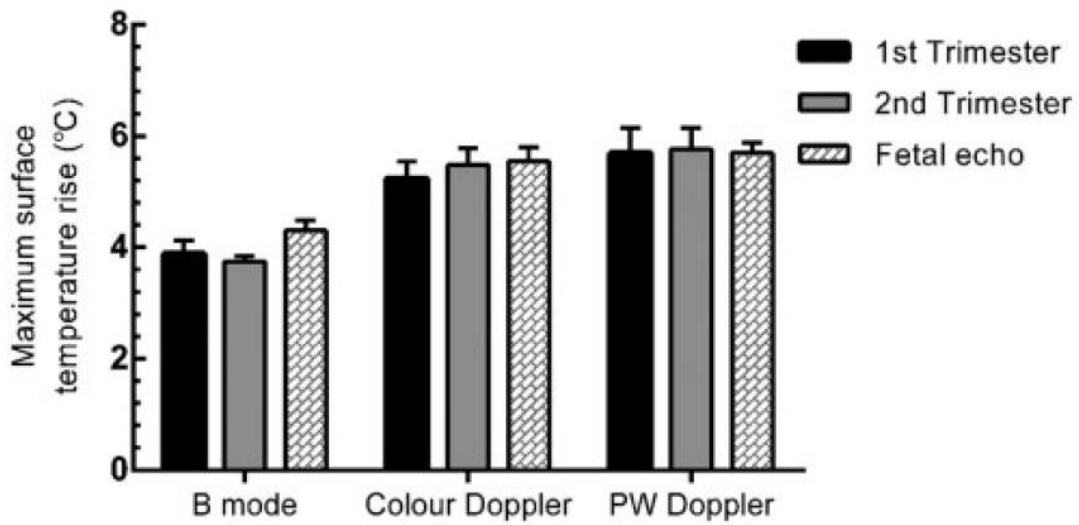


Figure 7. The effect of different pre-sets on the US-induced temperature rise at the transducer–skin interface (n=3). PW: pulsed wave

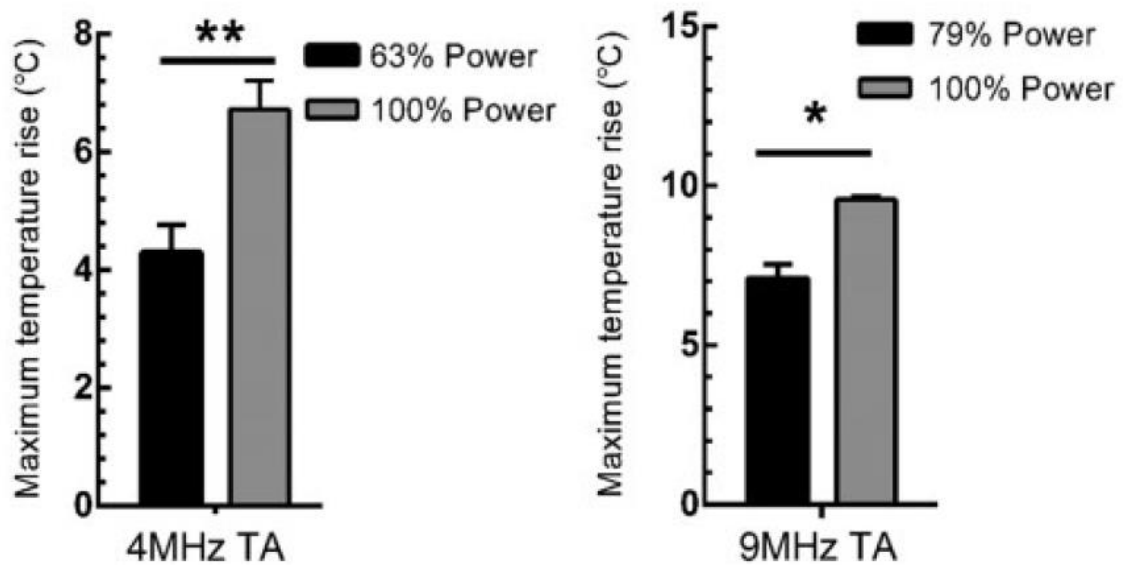


Figure 8. The effect of power on the US-induced temperature rise at the ISUOG phantom transducer–skin mimic interface (n=3) for the 4 MHz (left) and 9 MHz transducers (right).

TA: transabdominal.