

**Assessment by Ultrasound of the
degree of venous dilatation,
comparison between venodilation
by Airglove™ versus Warm Water
Immersion (WWI)**

HLS/PSAWAHS/18/168

30th April 2019

Statistical analysis and sample size calculations

This study enrolled 34 participants, a minimum sample size of 24 was required for 90% power, $\alpha = 0.05$ and the ideal anticipated Cohen's "d" effect size of 0.833, calculated using the "pwr.T.test" module in R version 3.60^{9 10}. Mean venodilation by WWI and AirGlove™ for input into the "pwr.T.test" script was determined from previous pilot studies carried out at the Sir Geraint Evans Wales Heart Research Institute, Cardiff. All statistical analysis was carried out with SPSS ver.25 (IBM Corp), SciPy module (ver 1.3) for Python (ver 3.7.2) and R version 3.60 with $P < 0.05$ considered as statistically significant.