

---

Supplemental Table S1. The processing duration for each MA correction method. The durations required for the processing of 41.5 minutes of data recorded in 8 channels (8 HbO and 8 HbR) sampled at 10 Hz. The analysis was run with HOMER3 on a PC with a Windows 10 operating system and an intel® core™ i5-7500 @3.4 GHz processor.

Method	Processing time (Sec)
Uncorrected	-
RLOESS	690 $\pm$ 6
WCBSI	65 $\pm$ 0.2
Wavelet	62 $\pm$ 0.2
splineSG	21 $\pm$ 0.3
PCA	17 $\pm$ 0.5
spline	17 $\pm$ 0.4
tPCA	16 $\pm$ 0.5
CBSI	16 $\pm$ 0.5