

**Supplementary Table 3. Two-way ANOVA results for HbT-based BHI**

| Channel | F-value   | df1 | df2 | p-value (uncorrected) | p-value (FWE) | p-value (FDR) |
|---------|-----------|-----|-----|-----------------------|---------------|---------------|
| 01      | 3.436     | 1   | 20  | 0.079                 | >0.99         | 0.393         |
| 02      | 3.845     | 1   | 16  | 0.068                 | >0.99         | 0.393         |
| 03      | 2.121     | 1   | 16  | 0.165                 | >0.99         | 0.502         |
| 04      | 0.0002474 | 1   | 20  | 0.988                 | >0.99         | 0.993         |
| 05      | 0.224     | 1   | 19  | 0.642                 | >0.99         | 0.934         |
| 06      | 4.454     | 1   | 18  | 0.049*                | 0.736         | 0.393         |
| 07      | 0.169     | 1   | 20  | 0.685                 | >0.99         | 0.934         |
| 08      | 0.002     | 1   | 15  | 0.97                  | >0.99         | 0.993         |
| 09      | 1.049     | 1   | 18  | 0.319                 | >0.99         | 0.684         |
| 10      | 9e-05     | 1   | 19  | 0.993                 | >0.99         | 0.993         |
| 11      | 0.563     | 1   | 21  | 0.461                 | >0.99         | 0.815         |
| 12      | 0.502     | 1   | 16  | 0.489                 | >0.99         | 0.815         |
| 13      | 2.081     | 1   | 17  | 0.167                 | >0.99         | 0.502         |
| 14      | 1.638     | 1   | 18  | 0.217                 | >0.99         | 0.542         |
| 15      | 0.044     | 1   | 13  | 0.837                 | >0.99         | 0.993         |

Asterisk indicates a statistically significant (\*p<0.05; uncorrected).

ANOVA, analysis of variance; HbT, total hemoglobin; BHI, breath-holding index; df, degrees of freedom; FWE, family-wise error; FDR, false discovery rate.