## **Supplementary results**

Repeated measure ANOVA in patients with FHD showed a significant effect of the main factor STIMULATION INTENSITY ( $F_{5,60}$ =33.83, P<0.001), indicating increasing MEP amplitudes with higher stimulation intensities. However, there were no significant effects for the main factors SESSION ( $F_{1,12}$ =0.07, P=0.79), TIME ( $F_{2,24}$ =0.51, P=0.60) and for the interactions terms: SESSION x TIME ( $F_{2,24}$ =0.34, P=0.71), SESSION x STIMULATION INTENSITY ( $F_{5,60}$ =1.01, P=0.41), TIME x STIMULATION INTENSITY ( $F_{10,120}$ =1.17, P=0.31) and SESSION x TIME x STIMULATION INTENSITY ( $F_{10,120}$ =0.84, P=0.58).

Repeated measure ANOVA in patients with CD showed a significant effect of the main factor STIMULATION INTENSITY ( $F_{5,60}$ =34.92, P<0.001), indicating increasing MEP amplitudes with higher stimulation intensities. The analysis also showed a significant effects for the main factors SESSION ( $F_{1,12}$ =5.24, P=0.04), indicating lower MEP values in the real cTBS session, in comparison to the sham cTBS session and for the interactions SESSION x TIME ( $F_{2,24}$ =3.42, P=0.04) and SESSION x TIME x STIMULATION INTENSITY ( $F_{10,120}$ =2.45, P=0.01), indicating lower MEP values after real cTBS but not after sham cTBS. Finally, the analysis revealed no significant effect for the main factor TIME ( $F_{2,24}$ =1.19, P=0.32) and for the interactions terms SESSION x STIMULATION INTENSITY ( $F_{10,120}$ =0.66, P=0.75)

Repeated measure ANOVA in HS showed a significant effect of the main factor STIMULATION INTENSITY ( $F_{5,60}$ =42.69, P<0.001), indicating increasing MEP amplitudes with higher stimulation intensities. The analysis also showed a significant effects for the main factors TIME ( $F_{2,24}$ =4.65, P=0.01), indicating lower MEP values in the Post 1

measurement time point in comparison to the baseline measures. The significant interactions SESSION x TIME ( $F_{2,24}$ =9.35, P<0.001) and SESSION x TIME x STIMULATION INTENSITY ( $F_{10,120}$ =2.89, P=0.002), indicated lower MEP values after real cTBS but not after sham cTBS. Finally, the analysis revealed no significant effect for the main factor SESSION ( $F_{1,12}$ =2.54, P=0.13) and for the interactions terms SESSION x STIMULATION INTENSITY ( $F_{5,60}$ =1.14, P=0.34) and TIME x STIMULATION INTENSITY ( $F_{10,120}$ =1.74, P=0.07).