

Additional file 3. Statistical results of the ANOVA on the fEEG and fNIRS brain parameters for the paced-reaching task.

A.	GROUP	HEMISPHERE	HAND	CONDITION	
<i>fEEG</i>					
	Alpha ERD	F (1, 23) = 0.00, p = .997, $\eta^2_p = .00$	F (1, 23) = 0.08, p = .770, $\eta^2_p = .00$	F (1, 23) = 0.29, p = .145, $\eta^2_p = .09$	F (1, 23) = 0.49, p = .492, $\eta^2_p = .02$
	Beta ERD	F (1, 23) = 2.81, p = .107, $\eta^2_p = .11$	F (1, 23) = 0.02, p = .896, $\eta^2_p = .00$	F (1, 23) = 0.01, p = .922, $\eta^2_p = .00$	F (1, 23) = 0.12, p = .734, $\eta^2_p = .01$
	Alpha ERS	F (1, 16) = 8.62, p = .010, $\eta^2_p = .35$	F (1, 16) = 52.21, p = .000, $\eta^2_p = .77$	F (1, 16) = 0.06, p = .809, $\eta^2_p = .00$	F (1, 16) = 0.01, p = .927, $\eta^2_p = .00$
	Beta ERS	F (1, 21) = 5.44, p = .030, $\eta^2_p = .21$	F (1, 21) = 2.46, p = .132, $\eta^2_p = .11$	F (1, 21) = 0.25, p = .621, $\eta^2_p = .01$	F (1, 21) = 1.24, p = .278, $\eta^2_p = .06$
<i>fNIRS</i>					
	ΔHbO_2 peak	F (1, 36) = 5.93, p = .020, $\eta^2_p = .14$	F (1, 36) = 1.45, p = .016, $\eta^2_p = .15$	F (1, 36) = 2.98, p = .093, $\eta^2_p = .07$	F (1, 36) = 1.49, p = .231, $\eta^2_p = .04$
B.	GROUP x HEMISPHERE	GROUP x HAND	GROUP x CONDITION	HAND x CONDITION	
<i>fEEG</i>					
	Alpha ERD	F (1, 23) = 0.50, p = .828, $\eta^2_p = .02$	F (1, 23) = 0.08, p = .776, $\eta^2_p = .00$	F (1, 23) = 0.05, p = .828, $\eta^2_p = .06$	F (1, 23) = 0.23, p = .634, $\eta^2_p = .01$
	Beta ERD	F (1, 23) = 4.98, p = .036, $\eta^2_p = .18$	F (1, 23) = 0.05, p = .831, $\eta^2_p = .00$	F (1, 23) = 0.82, p = .376, $\eta^2_p = .00$	F (1, 23) = 0.08, p = .786, $\eta^2_p = .00$
	Alpha ERS	F (1, 16) = 4.53, p = .049, $\eta^2_p = .22$	F (1, 16) = 0.39, p = .539, $\eta^2_p = .02$	F (1, 16) = 0.39, p = .541, $\eta^2_p = .02$	F (1, 16) = 0.15, p = .704, $\eta^2_p = .00$
	Beta ERS	F (1, 21) = 1.83, p = .191, $\eta^2_p = .08$	F (1, 21) = 1.36, p = .257, $\eta^2_p = .06$	F (1, 21) = 2.80, p = .109, $\eta^2_p = .12$	F (1, 21) = 8.80, p = .007, $\eta^2_p = .29$
<i>fNIRS</i>					
	ΔHbO_2 peak	F (1, 36) = 1.98, p = .168, $\eta^2_p = .05$	F (1, 36) = 4.51, p = .041, $\eta^2_p = .11$	F (1, 36) = 1.52, p = .699, $\eta^2_p = .00$	F (1, 36) = 2.72, p = .108, $\eta^2_p = .07$
	HAND x HEMISPHERE	HEMISPHERE x CONDITION			
<i>fEEG</i>					
	Alpha ERD	F (1, 23) = 1.57, p = .223, $\eta^2_p = .06$	F (1, 23) = 0.59, p = .451, $\eta^2_p = .02$		
	Beta ERD	F (1, 23) = 1.04, p = .320, $\eta^2_p = .00$	F (1, 23) = 0.07, p = .796, $\eta^2_p = .00$		
	Alpha ERS	F (1, 16) = 6.28, p = .023, $\eta^2_p = .28$	F (1, 16) = 0.11, p = .746, $\eta^2_p = .01$		
	Beta ERS	F (1, 21) = 6.80, p = .020, $\eta^2_p = .23$	F (1, 21) = 0.05, p = .831, $\eta^2_p = .00$		
<i>fNIRS</i>					
	ΔHbO_2 peak	F (1, 36) = 0.05, p = .823, $\eta^2_p = .00$	F (1, 36) = 0.77, p = .387, $\eta^2_p = .02$		

A. Effects of Group (Old healthy vs Stroke), Hemisphere (Contralateral vs Ipsilateral) and Hand (Dominant / Non-paretic vs Non-dominant / Paretic) on the fNIRS and fEEG parameters on the paced-reaching task and **B.** Two levels interactions of the model. In bold, results with $p < .05$ and $\eta^2_p > .0$