



Investor presentation

Neurotech International Limited (ASX: NTI) | 12 July 2018

Neurotech

Agenda

- ✓ Introduction
- ✓ US Clinical Trial results – discussion by Professor Frederick Carrick
- ✓ Neurotech update – Wolfgang Storf
 - Certifications – existing & FDA submission
 - Improved Mente Autism device set for release
 - Distribution network
 - Marketing activities
 - Achievements & milestones
- ✓ Q&A session

US Clinical Trial results

Professor Frederick Carrick – Senior Research Fellow BCMHR in association with University of Cambridge

The full results of a US clinical trial using Mente Autism has been published by medical journal Frontiers in Neurology. <https://bit.ly/2KyZn0n>

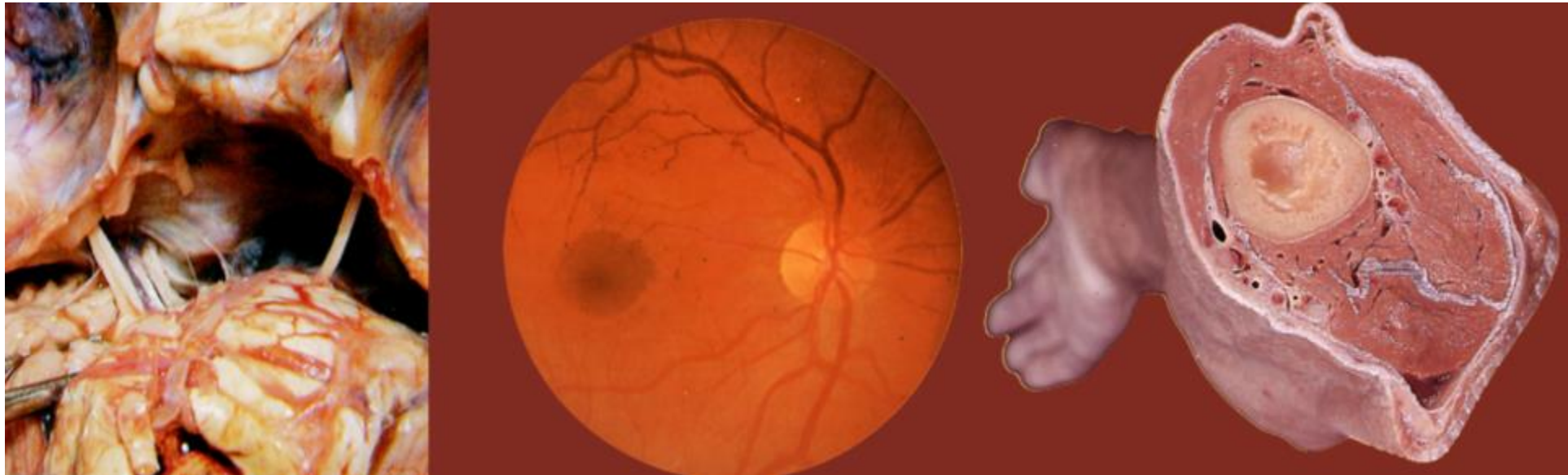
Cerebral Cortex: Its locations, functions & disorders

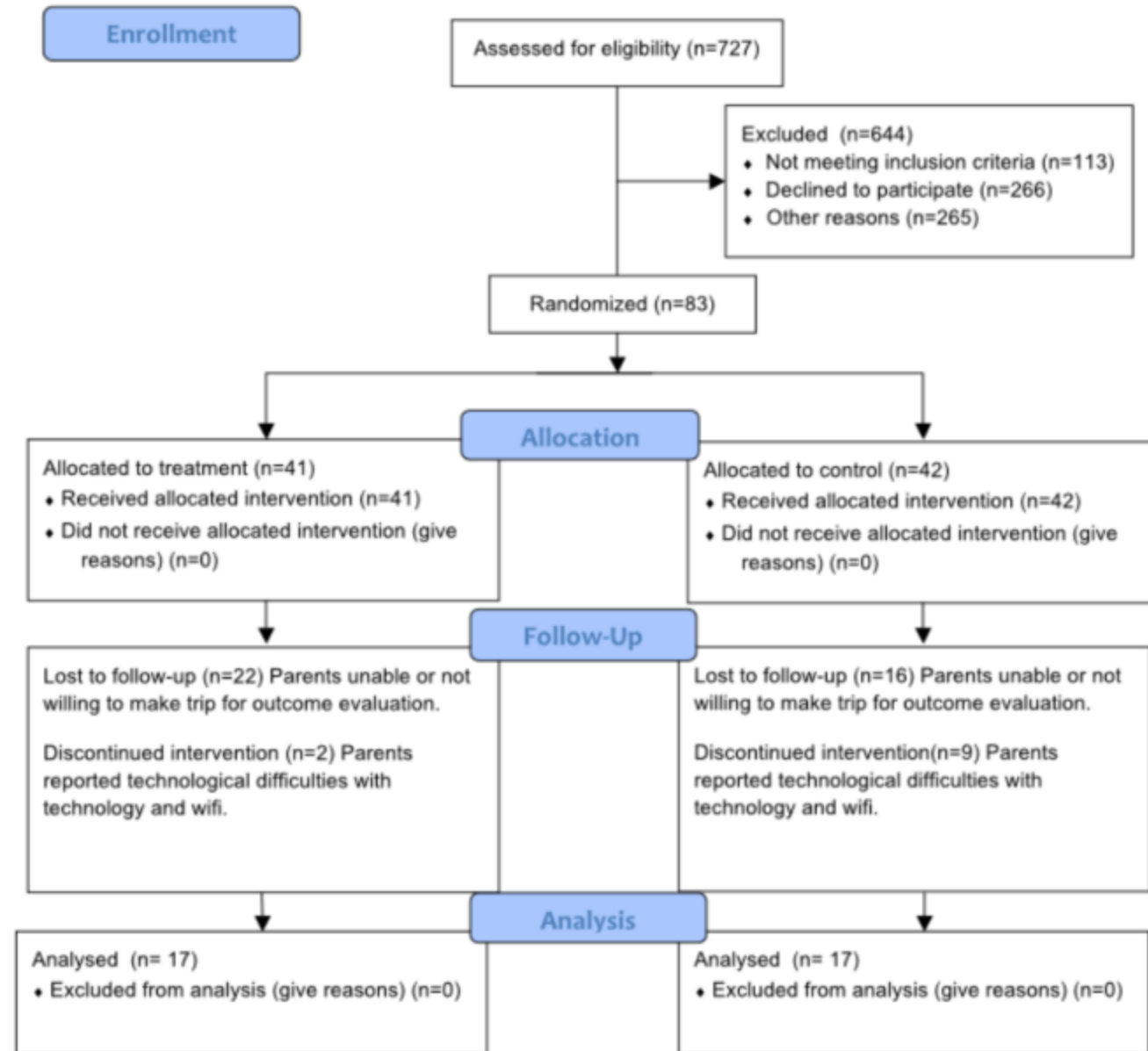
- Major cortical functions of the integrated sensory-motor system are spatial orientation & self motion perception



Cortical functions

- Depend on auditory, vestibular, visual & somatosensory input
- All four systems (auditory, vestibular, visual & somatosensory) provide us with redundant information about the position & motion of the body relative to the external space





Mente Autism study

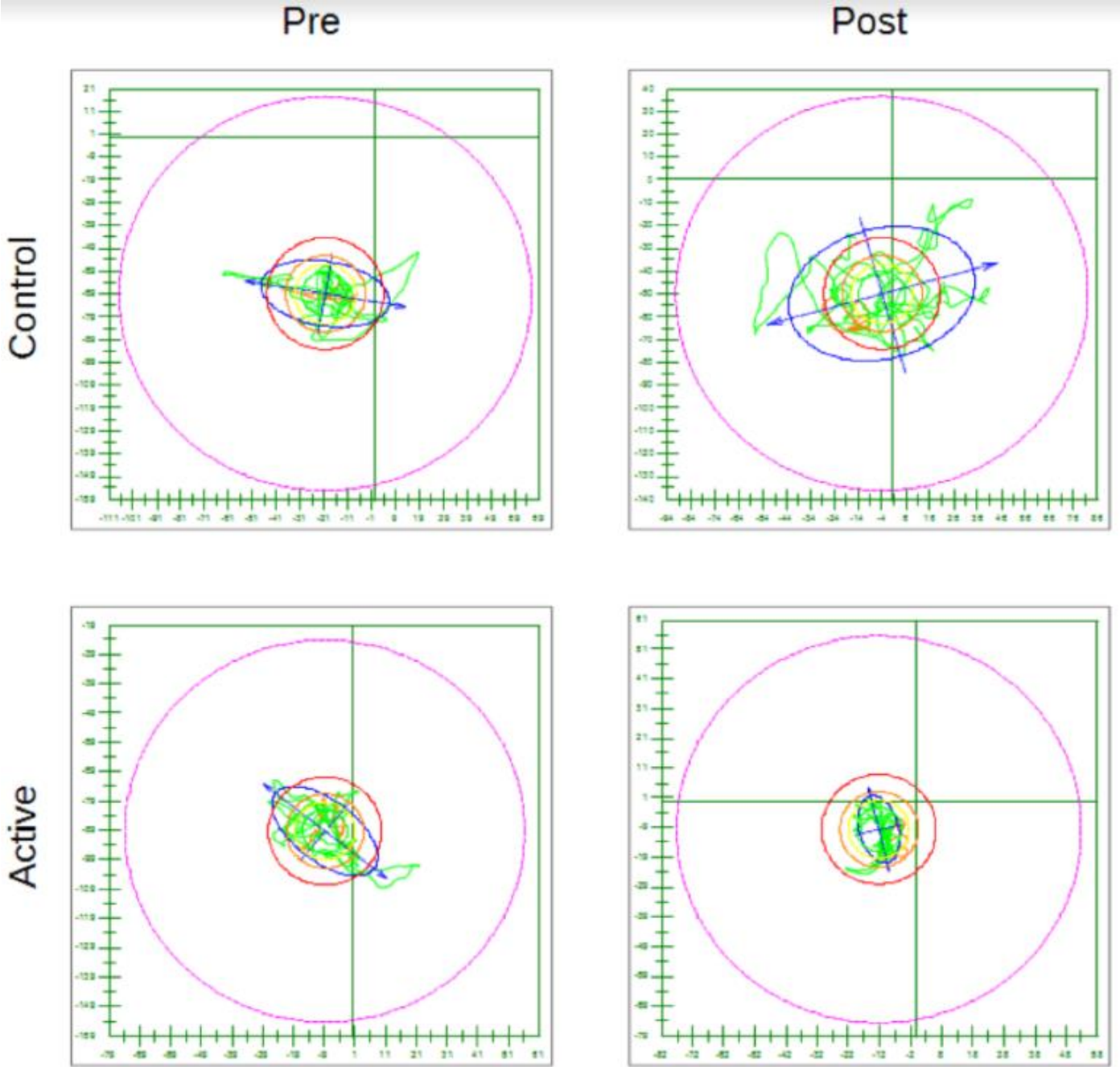






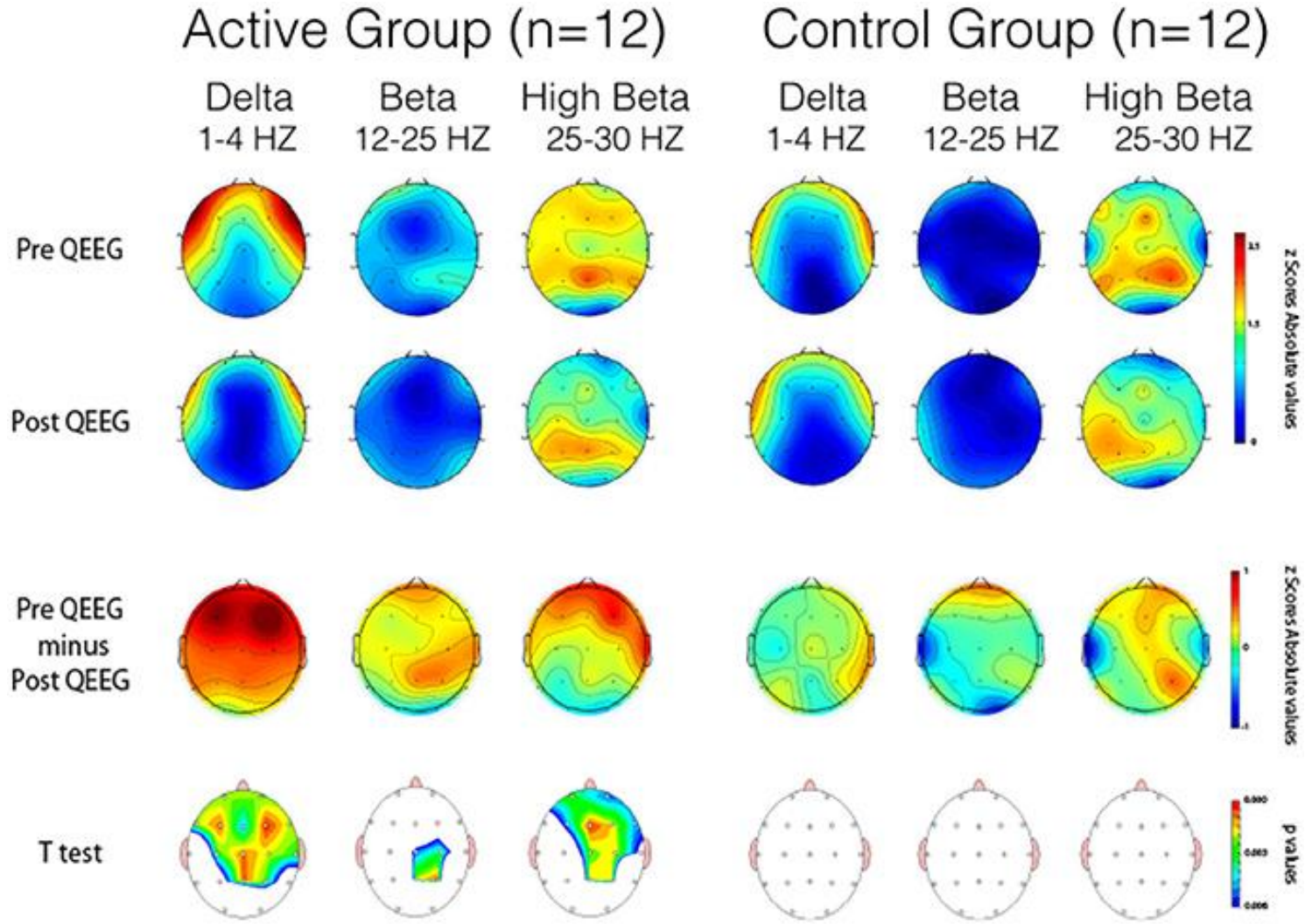


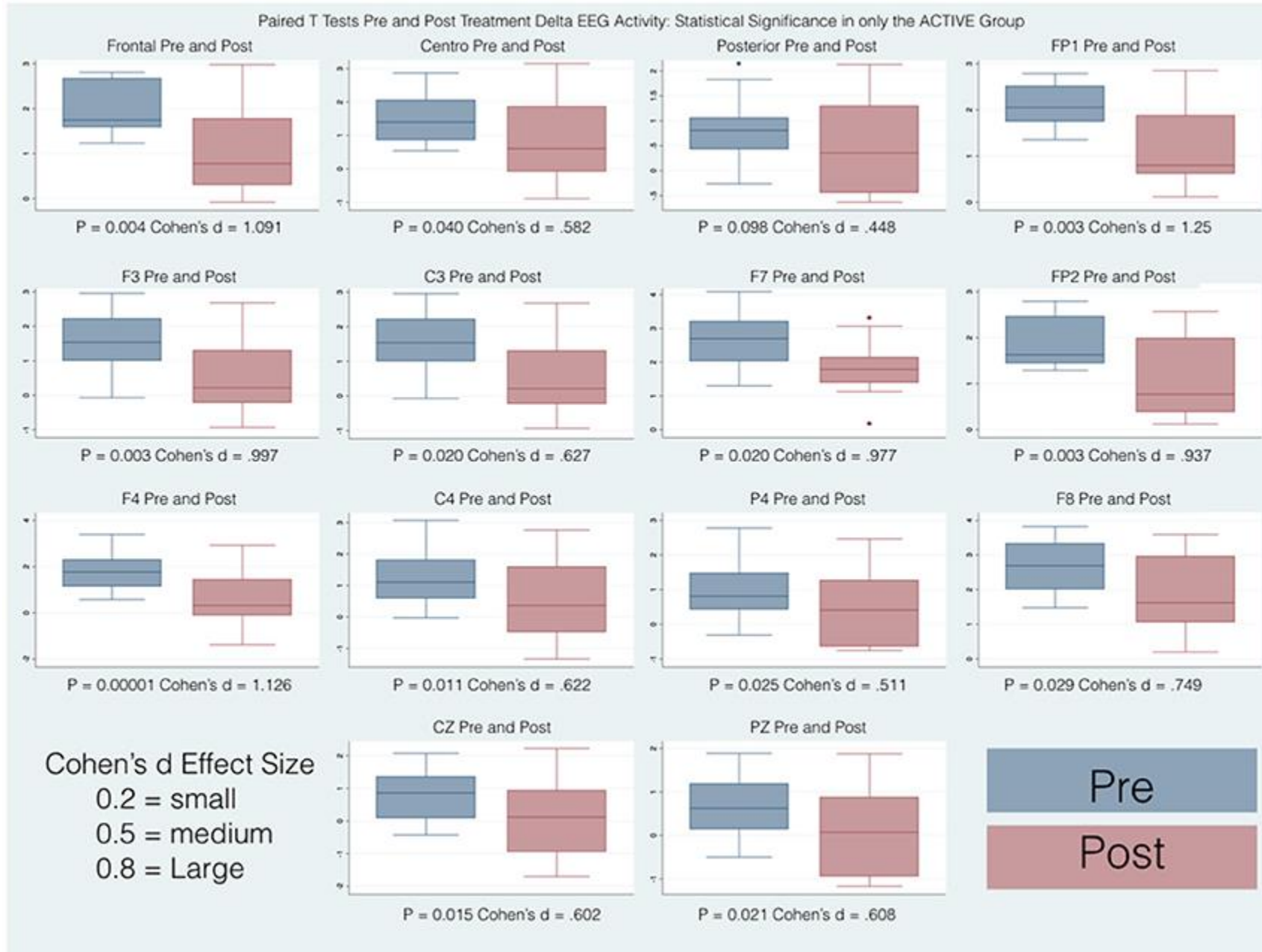








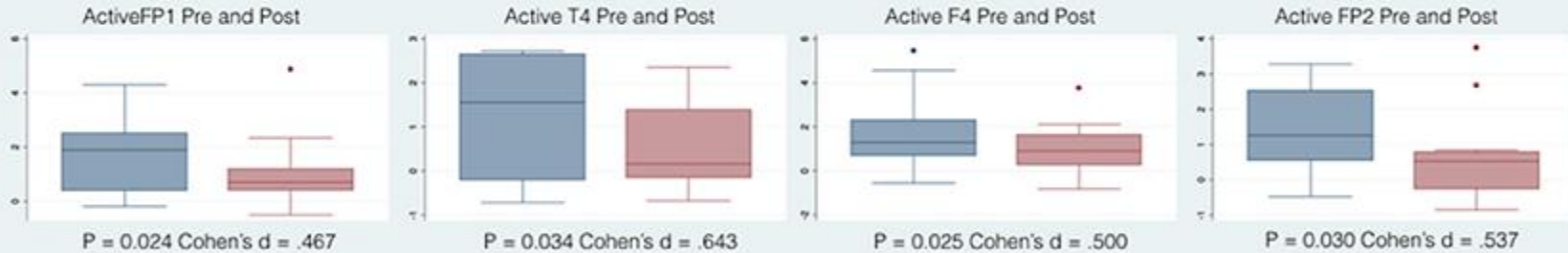




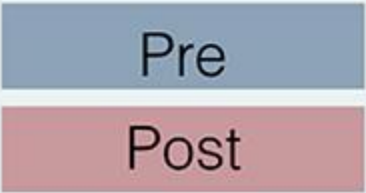
Beta Paired T Tests Pre and Post Treatment EEG Activity: Statistical Significance in Both Groups



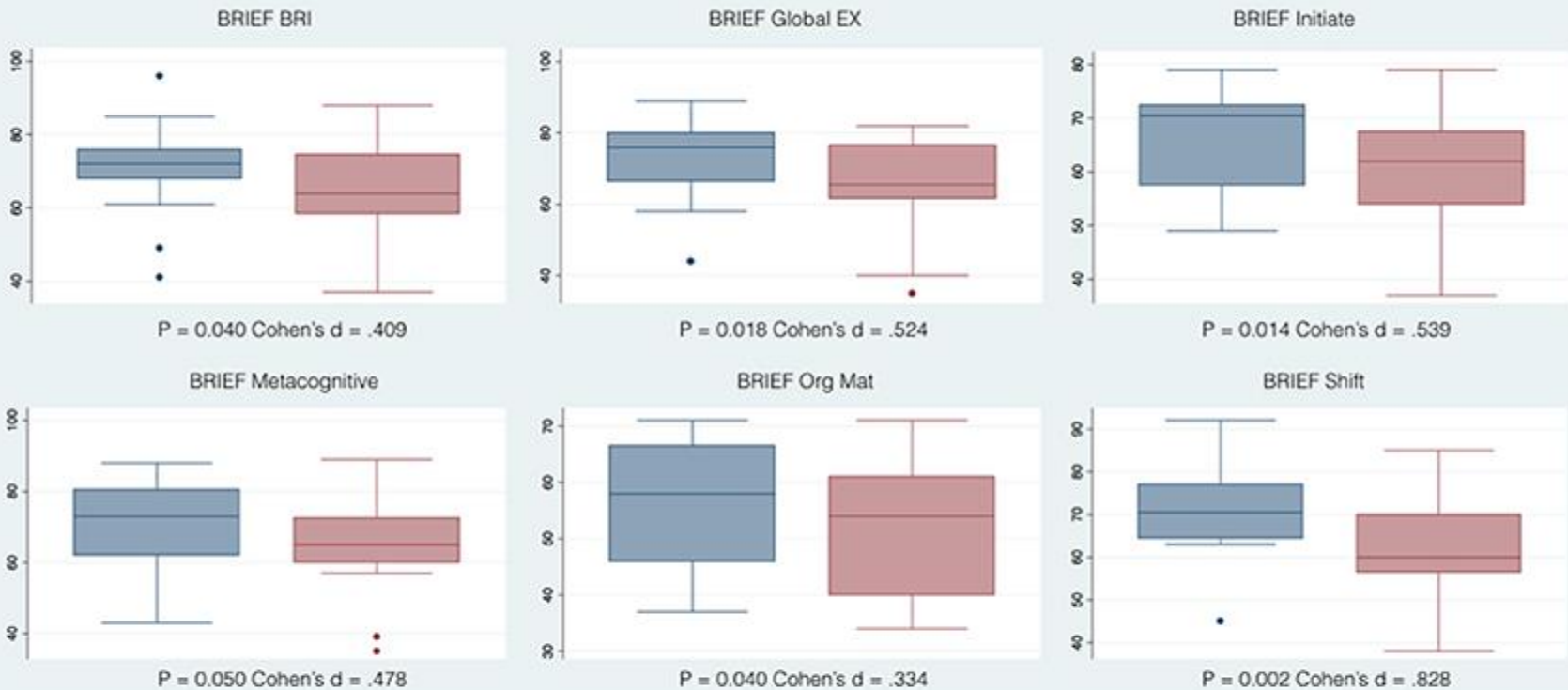
Beta High Paired T Tests Pre and Post Treatment EEG Activity: Statistical Significance in only the ACTIVE Group



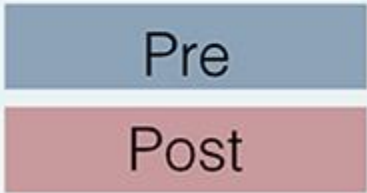
Cohen's d Effect Size
 0.2 = small
 0.5 = medium
 0.8 = Large



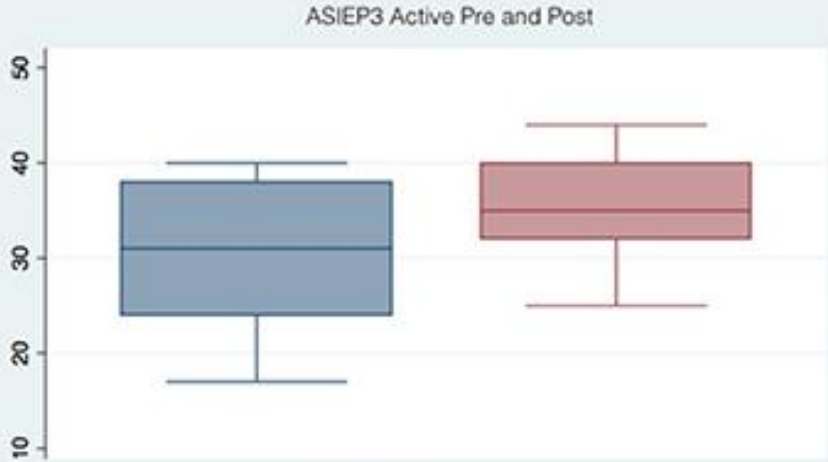
Paired T Tests Pre and Post BRIEF: Statistical Significance in Active Group Only
After Removal of 5 Subjects with Inconsistency scores ≥ 7



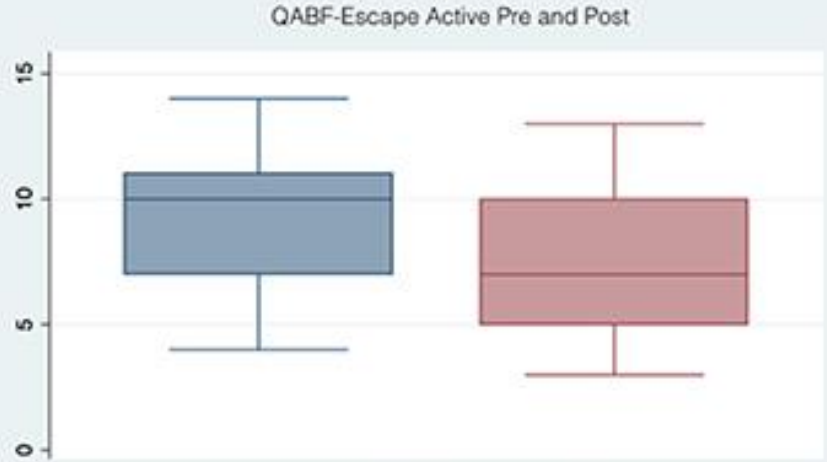
Cohen's d Effect Size
0.2 = small
0.5 = medium
0.8 = Large



Paired T Tests Pre and Post ASIEP3 & QABF-Escape: Statistical Significance in Active Group Only

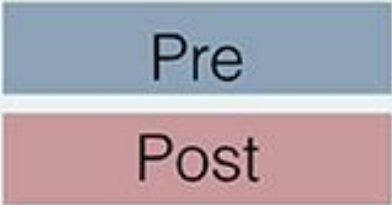


P = 0.001 Cohen's d = .781



P = 0.003 Cohen's d = .626

Cohen's d Effect Size
0.2 = small
0.5 = medium
0.8 = Large



Variable	Group	Delta (1-4 Hz)			Beta (12-25 Hz)			High Beta (25-30 Hz)		
		Pre Mean (Std.Error)	Post Mean (Std.Error)	p value** Partial η^2 Obs.-power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power
Frontal	Controls	1.325 (0.374)	1.301 (0.363)	0.947	0.520 (0.328)	0.313 (0.214)	0.575	1.369 (0.355)	1.088 (0.222)	0.431
	Active	1.977 (0.167)	1.089 (0.287)	0.003 0.555 0.920	0.874 (0.304)	0.587 (0.308)	0.199	1.656 (0.431)	1.107 (0.358)	0.024 0.382 0.662
	p value*	0.126			0.438			0.613		
Central	Controls	1.119 (0.412)	1.061 (0.403)	0.863	0.201 (0.264)	0.415 (0.185)	0.318	1.115 (0.267)	1.352 (0.270)	0.342
	Active	1.511 (0.215)	0.892 (0.377)	0.040 0.329 0.563	0.743 (0.311)	0.445 (0.251)	0.031 0.358 0.617	1.485 (0.414)	1.159 (0.338)	0.146
	p value	0.408			0.197			0.461		
Posterior	Controls	0.474 (0.281)	0.420 (0.273)	0.825	0.367 (0.302)	0.526 (0.237)	0.344	1.499 (0.308)	1.348 (0.319)	0.621
	Active	0.855 (0.190)	0.480 (0.285)	0.098	0.786 (0.319)	0.712 (0.265)	0.651	1.485 (0.388)	1.549 (0.381)	0.810
	p value	0.273			0.351			0.979		

* Assuming equal variances

** Paired differences

Variable	Group	mCTSIB			Hard surface eyes open			Hard surface eyes close			Compliant surface eyes open			Compliant surface eyes closed		
		Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power	Pre Mean (Std.Error)	Post Mean (Std.Error)	p value Partial η^2 Obs. power
95% Conf ML Sway [mm/m]	Controls	60.6 (11.6)	53.9 7.9	0.404	61.1 (17.1)	59.5 (12.3)	0.919	54.6 (13.5)	51.4 (11.8)	0.780	53.7 (10.0)	56.6 (8.7)	0.762	72.9 (12.7)	47.8 (6.2)	0.026 0.273 0.634
	Active	71.4 13.0	48.7 10.1	0.024 0.281 0.652	85.2 (22.0)	42.4 (12.4)	0.013 0.330 0.750	54.5 (14.5)	44.3 (12.1)	0.534	66.7 (14.9)	45.5 (7.9)	0.107	79.1 (13.6)	62.5 (12.2)	0.113
	p value	0.541	0.686		0.394	0.324		0.995	0.676		0.474	0.351		0.742	0.291	
95% Conf AP Sway [mm/m]	Controls	63.7 (12.8)	51.4 (7.9)	0.210	59.2 (13.7)	56.6 (41.4)	0.851	68.3 (19.1)	46.5 (10.2)	0.240	59.0 (13.4)	51.3 (13.3)	0.416	68.4 (11.2)	51.3 (6.2)	0.096
	Active	74.2 (15.2)	47.4 (8.8)	0.049 0.220 0.515	88.6 (25.1)	41.4 (10.4)	0.043 0.232 0.542	61.9 (14.5)	47.0 (11.6)	0.346	60.0 (11.8)	43.0 (7.0)	0.046 0.227 0.530	86.1 (22.3)	58.1 (9.4)	0.213
	p value	0.604	0.733		0.311	0.330		0.791	0.977		0.483	0.545				
95% Conf Max Sway [mm/m]	Controls	74.2 (14.4)	64.1 (9.9)	0.299	70.7 (17.6)	72.3 (13.7)	0.906	73.0 (19.2)	59.0 (12.9)	0.326	69.7 (14.0)	67.9 (13.9)	0.863	83.4 (12.9)	57.3 (6.9)	0.033 0.253 0.589
	Active	89.6 (17.4)	57.9 (11.3)	0.035 0.248 0.579	112.7 (28.6)	51.8 (14.6)	0.015 0.316 0.724	71.4 (16.2)	57.2 (14.0)	0.425	75.8 (16.1)	51.4 (8.3)	0.070	98.4 (23.4)	71.2 (12.4)	0.220
	p value	0.500	0.680		0.221	0.313		0.951	0.925		0.778	0.316		0.577	0.336	
Average Sway Vel [mm/s/m]	Controls	76.6 (18.3)	53.0 (8.8)	0.093	77.2 (19.4)	52.9 (11.0)	0.135	70.5 (25.1)	51.4 (14.5)	0.345	75.0 (20.1)	55.6 (11.4)	0.193	83.7 (16.2)	52.1 (7.1)	0.036 0.247 0.575
	Active	65.4 (13.2)	46.3 (9.2)	0.081	62.1 (18.2)	34.5 (8.6)	0.039 0.239 0.559	50.7 (13.5)	48.6 (14.1)	0.901	60.5 (11.5)	41.7 (7.2)	0.088	88.4 (18.3)	60.5 (14.0)	0.111
	p value	0.624	0.605		0.575	0.196		0.492	0.891		0.535	0.311		0.849	0.596	
95% Conf Ellipse Area [mm ² /m ²]	Controls	5037.4 (1788.9)	3030.6 (920.8)	0.169	5450.3 (2383.4)	3782.0 (1272.2)	0.471	5725.9 (2526.4)	3025.7 (1149.6)	0.247	3722.2 (1467.0)	3070.7 (1384.5)	0.499	5251.0 (1794.5)	2243.9 (656.0)	0.072
	Active	7004.0 (2401.1)	2804.6 (1000.1)	0.050 0.219 0.511	10,443.7 (4815.2)	2218.2 (911.6)	0.077	4680.2 (2437.0)	2917.8 (1213.2)	0.507	4804.0 (1854.9)	2071.7 (550.8)	0.103	8088.2 (3845.1)	4010.8 (1880.7)	0.290
	p value	0.516	0.869		0.360	0.325		0.768	0.949		0.650	0.507		0.509	0.382	

Table 2 – CAPS® Posturography Results – In bold the results that are statistically significant, their partial η^2 and observed power

n total = 34 subjects; n controls = 17 subjects; n active = 17 subjects

mCTSIB = all 4 posturography tests combined

Questionnaire			SRS-2																	
Variable			Social awareness			Social cognition			Social communication			Social motivation			RRB			SCI		
Group			Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*
Pre	Mean (Std.Err)		75.59 (2.585)	76.12 (2.588)	0.034	74.53 (1.851)	72.18 (2.530)	0.223	76.94 (2.200)	76.41 (2.971)	0.507	73.18 (2.686)	70.41 (2.244)	0.251	81.88 (2.488)	79.29 (2.533)	0.782	78.18 (1.879)	76.82 (2.149)	0.127
Post	Mean (Std.Err)		<u>76.18</u> (1.399)	72.47 (2.017)		71.24 (1.917)	70.53 (2.330)		73.71 (2.774)	70.41 (2.244)		70.76 (2.258)	68.18 (2.403)		77.47 (3.131)	75.29 (2.533)		75.35 (1.788)	73.82 (2.459)	
	p-value	Partial	0.846	0.206		0.144	0.525		0.072	0.161		0.182	0.352		0.079	0.174		0.106	0.166	
		η^2 Obs.P																		

Questionnaire			ABC									ATEC							
Variable			Total raw score			Speech / Language communication			Sociability			Sensory / Cognitive awareness			Health / Physical behavior			Total	
Group			Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active
Pre	Mean (Std.Err)		85.76 (350)	89.41 (3.239)	0.462	17.00 (1.683)	18.59 (1.787)	0.014	12.29 (1.686)	14.59 (1.665)	0.639	21.29 (1.233)	20.12 (1.981)	0.122	23.65 (3.280)	23.24 (2.289)	0.276	74.24 (4.96)	76.53 (3.68)
Post	Mean (Std.Err)		85.12 (2.484)	80.59 (2.773)		<u>18.35</u> (1.372)	<u>19.65</u> (1.855)		11.00 (1.663)	10.59 (1.412)		<u>22.88</u> (1.450)	<u>22.53</u> (2.220)		19.76 (3.095)	19.88 (2.009)		72.00 (4.10)	72.65 (3.37)
	p-value	Partial	0.816	0.002		0.057	0.006		0.217	0.022		0.244	0.050		0.004	0.071		0.233	0.164
		η^2 Obs.P		0.460			0.381			0.288			0.219		0.411				
				0.933			0.838			0.665			0.513		0.880				

Questionnaire			QAFB																
Variable			Social attention			Escape			Tangible reinforcement			Physical discomfort			Nonsocial reinforcement			Total	
Group			Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active
Pre	Mean (Std.Err)		5.00 (0.804)	2.82 (0.671)	0.720	7.82 (1.075)	9.24 (0.730)	0.094	8.29 (1.067)	9.24 (0.881)	0.128	5.94 (0.976)	6.65 (1.000)	0.309	8.47 (0.963)	9.94 (0.929)	0.245	35.53 (3.96)	40.88 (2.44)
Post	Mean (Std.Err)		4.65 (0.747)	<u>5.47</u> (0.697)		<u>7.88</u> (0.652)	7.35 (0.727)		7.88 (0.861)	8.00 (1.085)		4.84 (0.656)	5.41 (0.936)		<u>9.06</u> (0.972)	8.24 (0.851)		34.41 (2.59)	34.47 (2.98)
	p-value	Partial	0.455	0.543		0.946	0.003		0.563	0.106		0.329	0.268		0.507	0.035		0.708	0.043
		η^2 Obs.P					0.424									0.249			0.232
							0.896									0.580			0.542

Questionnaire			BRIEF**																	
Variable			Inhibit			Shift			Emotional control			Behavioral regulation index			Initiate			Working memory		
Group			Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	
Pre	Mean (Std.Err)		64.54 (3.155)	68.88 (3.551)	0.969	66.38 (3.666)	71.94 (2.823)	0.394	60.46 (3.854)	64.25 (3.406)	0.056	65.54 (3.762)	70.75 (3.241)	0.234	64.08 (2.971)	66.56 (2.420)	0.326	68.62 (2.571)	72.50 (2.941)	0.950
Post	Mean (Std.Err)		64.54 (3.155)	66.94 (3.740)		63.08 (3.917)	62.38 (2.947)		57.85 (3.561)	59.63 (3.275)		63.92 (2.863)	65.25 (3.483)		63.23 (2.585)	60.63 (3.049)		66.31 (2.929)	66.69 (3.127)	
	p-value	Partial	1.000	0.521		0.185	0.002		0.164	0.080		0.391	0.040		0.546	0.014		0.278	0.059	
		η^2 Obs.P					0.490						0.252			0.341				
							0.943						0.557			0.741				

Variable			Plan/Organize			Organization of materials			Monitor			Metagognition index			Global executive composite		
Group			Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*	Control	Active	p*
Pre	Mean (Std.Err)		66.46 (2.382)	70.88 (3.877)	0.207	53.85 (3.322)	56.00 (2.805)	0.009	65.46 (2.688)	71.31 (2.755)	0.101	66.08 (2.302)	70.75 (3.041)	0.572	67.31 (2.863)	72.19 (2.830)	0.735
Post	Mean (Std.Err)		61.85 (3.048)	65.94 (3.416)		52.62 (3.079)	52.13 (3.000)		65.15 (3.658)	64.81 (3.639)		63.77 (2.920)	64.56 (3.417)		64.92 (3.294)	65.75 (3.290)	
	p-value	Partial	0.164	0.158		0.473	0.040		0.937	0.056		0.245	0.050		0.217	0.018	
		η^2 Obs.P					0.253						0.232			0.322	
							0.559						0.513			0.704	

In bold the results that are statistically significant. In underlined italic the results that are worse POST vs. PRE mCTSIB.

Overview on EEG data

Reductions in delta & beta band with active treatment compared to sham

- Significant statistical p values in active group qEEG only
- In the single case analysis it was shown that the pre & post of active subjects have resulted in normalised values
 - Substantively significant
 - High effect size
 - Not statistically significant controls
- Beta 2/High Beta showed a statistically significant improvement between the two groups (Active vs Sham) in the direction of Beta2 reduction
- This is very much in line with some autism reviews
 - U-shaped profile of abnormal power pattern in autism spectrum disorders

Overview on EEG data

Reductions in delta & beta band with active treatment compared to sham

- Paired t-test were performed within the groups
- The paired t-test between the Active & Sham showed clearly a significant improvement (towards normalisation) of central & temporal delta activity in the Active group (compared to the Control group, in which there was no significant improvement)
- In general, the delta activity changes were statistically significant in the Active group & not the Sham group



Neurotech update

Wolfgang Storf – CEO, Neurotech International

Certifications

The Mente Autism device already has European CE Marking & TGA Registration, thus enabling sales in Europe, Middle East & Australia. The Company will seek to also obtain US FDA clearance for the device.

Current Certifications & Registrations

CE 0426 CE Marking

- Mente Autism & Mente Autism predecessor (Mente 2) both classified as a Class IIa medical device
- Regulated under the European Union Council Medical Device Directive 93/42/EEC



ISO 13485
Certified

- AAT Medical is ISO 13485 certified
- Meets specific requirements & guidelines for a quality management system, to develop & provide products & services, that consistently meet both customer & regulatory requirements
- Updated certification expected Q3 CY2018



TGA
Registration

- Mente Autism is included on the Australian Register of Therapeutic Goods as a biofeedback system in the Medical Device Class IIa category

FDA Submission Process via De-Novo application

- ✓ Pre-submission package filed: Mar 2017
- ✓ Pre-submission meeting: Jun 2017
- ☐ Final submission targeted: Q3 2018
- ☐ FDA clearance targeted: during 2019

Improved Mente Autism device set for release

Complete Mente Autism Kit



Comprising headband, power supply, earphones, sensors, Quickguide, cloud system & ongoing updates.

Sensors, earphones & power supply are available for purchase separately.

What's new in the improved Mente?

Improvements to:

- ✓ wi-fi connectivity
- ✓ synchronisation
- ✓ usability
- ✓ firmware
- ✓ application

Distribution network & marketing activities

- ✓ Direct mailing to contacts
- ✓ Outreach to media & press contacts
- ✓ Social media activity to target potential customers
- ✓ Autism group events
- ✓ Dedicated Mente pages on distributor websites



• Marketing & distribution partner in Australia



Marketing & distribution partner in Italy



• Marketing & distribution partner in Germany & Switzerland



• Marketing & distribution partner in Greece & Cyprus



• Marketing & distribution partner in Austria



• Marketing & distribution partner in Turkey

Spreading awareness of Mente Autism



Houston
5th World Autism Organisation
International Congress **2018**
CLOSING THE GAP



**19TH WORLD CONGRESS
OF PSYCHOPHYSIOLOGY**

Lucca | Italy
September 4 - 8 | 2018



ANSA | APPLIED NEUROSCIENCE
SOCIETY OF AUSTRALASIA

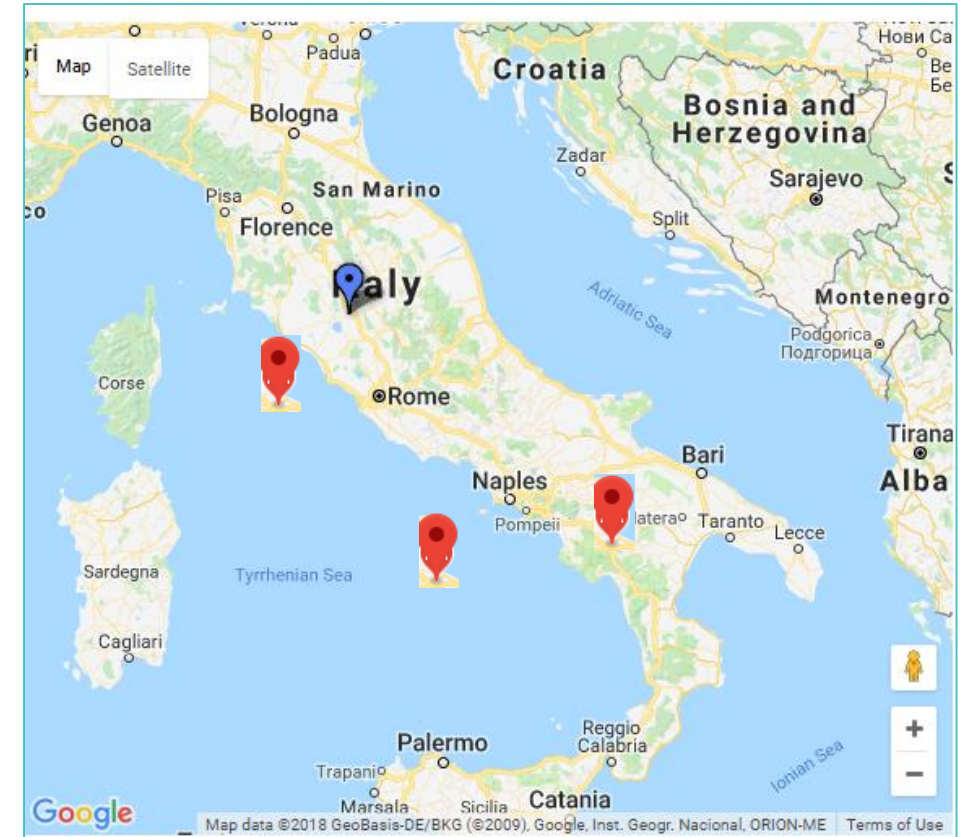


ASfAR 2018 Autism Conference
6-7 December Gold Coast - Australia

Photo credit: Destination Gold Coast

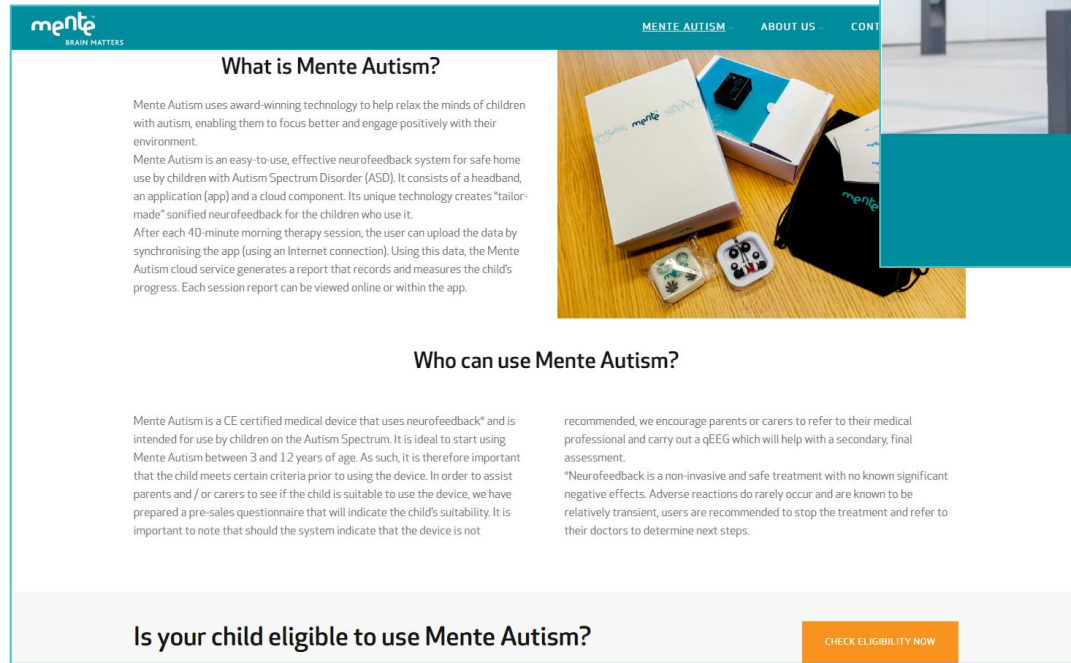
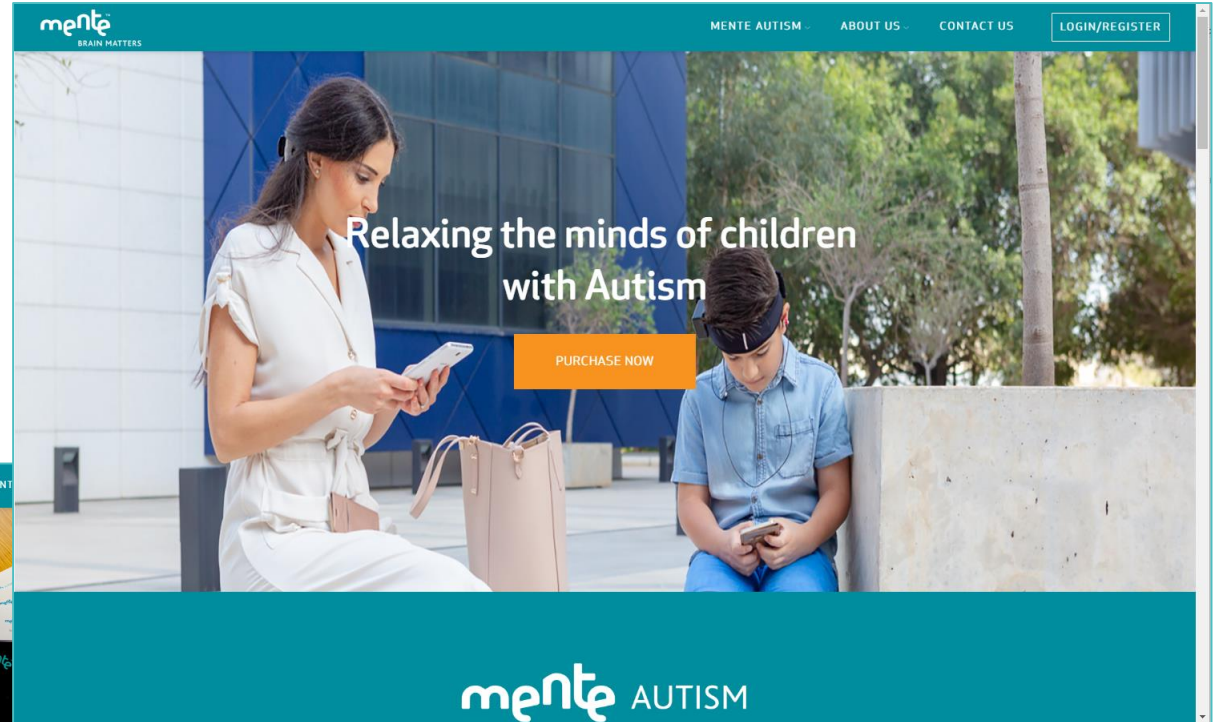
Update: Italian neurofeedback centres

- Series of commercial & marketing activities organised over in Italy (Orvieto, Umbria & Corato, Bari) led by distribution partner Promosalute
- Promosalute have engaged a leading marketing company with the aim of creating a highly targeted online marketing exercise
- Opening of first neurofeedback centres in Italy – Orvieto, Canosa di Puglia & Caserta
- 3 endorsement videos by medical professional, available on the Mente website
- Increasing number of testimonials



Updated Mente Autism website

- ✓ Fresher look with new imagery
- ✓ Direct 'calls to action'
- ✓ Pre-sales assessment to gauge eligibility to use Mente Autism
- ✓ Usability improvements



www.mentetech.com

Key Achievements & Next Milestones

Achievements

Substantial achievements in the last 18 months:

- ✓ **Mar – Sep 2017:** Secured new Austrian, Greece, German & Swiss, Saudi & Australian distributors, renewed Turkey distributorship
- ✓ **Jun 2017:** Australian TGA registration received
- ✓ **Sep 2017:** Outstanding preliminary outcomes received from independent US clinical trial
- ✓ **Dec 2017:** Completion of US clinical trial
- ✓ **July 2018:** Publication of US trial results in peer-reviewed *Frontiers of Neurology*

Looking Forward...

Neurotech is focussed on continuing to let science do the talking, and bringing Mente Autism to the parents & children who need it

- **July 2018:** Start production of improved Mente Autism
- **August 2018:** First shipments of Mente Autism
- **September 2018:** Commence Multi-Center studies in Europe to promote awareness and acceptance
- **Q3 2018:** US FDA submission, **2019:** US FDA clearance
- **Ongoing:** Europe country expansion e.g. UK, Spain, France, Initiate reimbursement application in Germany & Australia, preparing for US market entry

Q&A session

Neurotech

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