

The western blotting results of the tests for normality and variance homogeneity

### Figure 2 A. Synaptophysin

Test for normal distribution

Shapiro-Wilk test

W	0.9575	0.9349
P value	0.8002	0.6187
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=12.96, df=10
How big is the difference?	
Mean of column A	28.21
Mean of column B	6.258
Difference between means (B - A) $\pm$ SEM	-21.95 $\pm$ 1.694
95% confidence interval	-25.73 to -18.18
R squared (eta squared)	0.9438
F test to compare variances	
F, DFn, Dfd	1.585, 5, 5
P value	0.6255
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 A. GFAP

Test for normal distribution

Shapiro-Wilk test

W	0.9631	0.8820
P value	0.8434	0.2782
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	

P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=11.73, df=10
How big is the difference?	
Mean of column A	11.31
Mean of column B	28.26
Difference between means (B - A) ± SEM	16.95 ± 1.445
95% confidence interval	13.73 to 20.17
R squared (eta squared)	0.9322
F test to compare variances	
F, DFn, Dfd	6.064, 5, 5
P value	0.0698
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

## Figure 2 A. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9732	0.9355
P value	0.9134	0.6228
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX PFC P14
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.4625
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.7640, df=10
How big is the difference?	
Mean of column A	15.39
Mean of column B	16.22
Difference between means (B - A) ± SEM	0.8283 ± 1.084
95% confidence interval	-1.587 to 3.244
R squared (eta squared)	0.05515
F test to compare variances	
F, DFn, Dfd	2.049, 5, 5
P value	0.4500
P value summary	ns

Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 A. NeuN

Test for normal distribution		
Shapiro-Wilk test		
W	0.9041	0.9910
P value	0.3988	0.9916
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	NeuN PFC P14
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different ( $P < 0.05$ )?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8.853, df=10
How big is the difference?	
Mean of column A	19.48
Mean of column B	12.92
Difference between means (B - A) $\pm$ SEM	-6.558 $\pm$ 0.7408
95% confidence interval	-8.208 to -4.907
R squared (eta squared)	0.8868
F test to compare variances	
F, DFn, Dfd	1.853, 5, 5
P value	0.5149
P value summary	ns
Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2, C. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.9373	0.9576
P value	0.6373	0.8013
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP PFC Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=9.087, df=10
How big is the difference?	
Mean of column A	15.10
Mean of column B	21.65
Difference between means (B - A) $\pm$ SEM	6.553 $\pm$ 0.7211
95% confidence interval	4.947 to 8.160
R squared (eta squared)	0.8920
F test to compare variances	
F, DFn, Dfd	1.573, 5, 5
P value	0.6312
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 C. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9436	0.9426
P value	0.6883	0.6801
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX PFC Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0576
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=2.144, df=10
How big is the difference?	
Mean of column A	19.82
Mean of column B	18.49
Difference between means (B - A) $\pm$ SEM	-1.325 $\pm$ 0.6179
95% confidence interval	-2.702 to 0.05176

R squared (eta squared)	0.3150
F test to compare variances	
F, DFn, Dfd	4.077, 5, 5
P value	0.1491
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 C. NeuN

Test for normal distribution  
Shapiro-Wilk test  
W  
P value  
Passed normality test (alpha=0.05)?  
P value summary  
Number of values

0.9426	0.9696
0.6801	0.8896
Yes	Yes
ns	ns
6	6

Table Analyzed  
Column B  
vs.  
Column A  
Unpaired t test  
P value  
P value summary  
Significantly different (P < 0.05)?  
One- or two-tailed P value?  
t, df  
How big is the difference?  
Mean of column A  
Mean of column B  
Difference between means (B - A)  $\pm$  SEM  
95% confidence interval  
R squared (eta squared)  
F test to compare variances  
F, DFn, Dfd  
P value  
P value summary  
Significantly different (P < 0.05)?  
Data analyzed  
Sample size, column A  
Sample size, column B

NeuN PFC Post14  
PostVPA  
vs.  
Control  
  
0.0537  
ns  
No  
Two-tailed  
t=2.186, df=10  
  
11.65  
10.43  
-1.228  $\pm$  0.5618  
-2.480 to 0.02343  
0.3234  
  
3.923, 5, 5  
0.1599  
ns  
No  
  
6  
6

### Figure 2 C. Synaptophysin

Test for normal distribution  
Shapiro-Wilk test  
W

0.9021	0.8990
--------	--------

P value	0.3867	0.3682
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	SYP PFC Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0001
P value summary	***
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=6.019, df=10
How big is the difference?	
Mean of column A	13.98
Mean of column B	10.13
Difference between means (B - A) $\pm$ SEM	-3.843 $\pm$ 0.6385
95% confidence interval	-5.266 to -2.421
R squared (eta squared)	0.7837
F test to compare variances	
F, DFn, Dfd	1.334, 5, 5
P value	0.7596
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

## Figure 2 E. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.8976	0.9555
P value	0.3597	0.7842
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP PFC P21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8.229, df=10

How big is the difference?	
Mean of column A	11.48
Mean of column B	20.67
Difference between means (B - A) $\pm$ SEM	9.189 $\pm$ 1.117
95% confidence interval	6.701 to 11.68
R squared (eta squared)	0.8713
F test to compare variances	
F, DFn, Dfd	4.062, 5, 5
P value	0.1502
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 E. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.8037	0.9353
P value	0.0635	0.6219
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX PFC P21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0718
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=2.013, df=10
How big is the difference?	
Mean of column A	17.81
Mean of column B	15.19
Difference between means (B - A) $\pm$ SEM	-2.613 $\pm$ 1.298
95% confidence interval	-5.505 to 0.2791
R squared (eta squared)	0.2884
F test to compare variances	
F, DFn, Dfd	2.318, 5, 5
P value	0.3777
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 E. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.9770	0.8860
P value	0.9358	0.2975
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

NeuN PFC P21

Column B

PreVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

<0.0001

P value summary

\*\*\*\*

Significantly different (P < 0.05)?

Yes

One- or two-tailed P value?

Two-tailed

t, df

t=24.25, df=10

How big is the difference?

Mean of column A

25.36

Mean of column B

8.549

Difference between means (B - A)  $\pm$  SEM

-16.81  $\pm$  0.6932

95% confidence interval

-18.36 to -15.27

R squared (eta squared)

0.9833

F test to compare variances

F, DFn, Dfd

1.929, 5, 5

P value

0.4881

P value summary

ns

Significantly different (P < 0.05)?

No

Data analyzed

Sample size, column A

6

Sample size, column B

6

### Figure 2 E. Synaptophysin

Test for normal distribution

Shapiro-Wilk test

W	0.9128	0.9068
P value	0.4550	0.4154
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

SYP PFC P21

Column B

PreVPA

vs.

vs.

Column A

Control

Unpaired t test



P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=12.40, df=10
How big is the difference?	
Mean of column A	23.87
Mean of column B	9.679
Difference between means (B - A) ± SEM	-14.19 ± 1.144
95% confidence interval	-16.74 to -11.64
R squared (eta squared)	0.9389
F test to compare variances	
F, DFn, Dfd	1.696, 5, 5
P value	0.5761
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

## Figure 2 G. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.9655	0.9054
P value	0.8609	0.4067
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP PFC Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=20.786, df=10
How big is the difference?	
Mean of column A	10.530
Mean of column B	24.207
Difference between means (B - A) ± SEM	13.677 ± 0.65797
95% confidence interval	12.211 to 15.143
R squared (eta squared)	0.97738
F test to compare variances	
F, DFn, Dfd	4.5709, 5, 5
P value	0.1208
P value summary	ns

Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 G. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.8394	0.9734
P value	0.1290	0.9146
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX PFC Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.8221
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.2309, df=10
How big is the difference?	
Mean of column A	14.14
Mean of column B	13.97
Difference between means (B - A) $\pm$ SEM	-0.1683 $\pm$ 0.7291
95% confidence interval	-1.793 to 1.456
R squared (eta squared)	0.005302
F test to compare variances	
F, DF <sub>n</sub> , Df <sub>d</sub>	1.842, 5, 5
P value	0.5189
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 2 G. NeuN

Test for normal distribution		
Shapiro-Wilk test		
W	0.8131	0.8539
P value	0.0768	0.1693
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	NeuN PFC Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.1125
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.740, df=10
How big is the difference?	
Mean of column A	12.59
Mean of column B	13.96
Difference between means (B - A) $\pm$ SEM	1.375 $\pm$ 0.7903
95% confidence interval	-0.3859 to 3.136
R squared (eta squared)	0.2324
F test to compare variances	
F, DFn, Dfd	3.347, 5, 5
P value	0.2109
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

## Figure 2 G. Synaptophysin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9217	0.9718
P value	0.5179	0.9044
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	SYP PFC Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8.207, df=10
How big is the difference?	
Mean of column A	20.81
Mean of column B	10.82
Difference between means (B - A) $\pm$ SEM	-9.988 $\pm$ 1.217
95% confidence interval	-12.70 to -7.277

R squared (eta squared)	0.8707
F test to compare variances	
F, DFn, Dfd	1.299, 5, 5
P value	0.7808
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 A. GFAP

Test for normal distribution

Shapiro-Wilk test

W	0.9935	0.9357
P value	0.9960	0.6249
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value

P value summary

Significantly different (P < 0.05)?

One- or two-tailed P value?

t, df

How big is the difference?

Mean of column A

Mean of column B

Difference between means (B - A)  $\pm$  SEM

95% confidence interval

R squared (eta squared)

F test to compare variances

F, DFn, Dfd

P value

P value summary

Significantly different (P < 0.05)?

Data analyzed

Sample size, column A

Sample size, column B

GFAP HIP P14

PreVPA

vs.

Control

0.0867

ns

No

Two-tailed

t=1.899, df=10

26.19

24.73

-1.462  $\pm$  0.7695

-3.176 to 0.2531

0.2651

2.159, 5, 5

0.4181

ns

No

6

6

### Figure 3 A. Doublecortin

Test for normal distribution

Shapiro-Wilk test

W	0.9442	0.9629
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P value	0.6934	0.8421
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	DCX HIP P14	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0597	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=2.123, df=10	
How big is the difference?		
Mean of column A	17.17	
Mean of column B	15.84	
Difference between means (B - A) $\pm$ SEM	-1.333 $\pm$ 0.6280	
95% confidence interval	-2.732 to 0.06608	
R squared (eta squared)	0.3107	
F test to compare variances		
F, DFn, Dfd	1.481, 5, 5	
P value	0.6768	
P value summary	ns	
Significantly different (P < 0.05)?	No	
Data analyzed		
Sample size, column A	6	
Sample size, column B	6	

### Figure 3 A. NeuN

Test for normal distribution		
Shapiro-Wilk test		
W	0.9115	0.9811
P value	0.4464	0.9569
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	NeuN HIP P14	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.8093	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=0.2478, df=10	

How big is the difference?	
Mean of column A	14.95
Mean of column B	14.81
Difference between means (B - A) $\pm$ SEM	-0.1477 $\pm$ 0.5958
95% confidence interval	-1.475 to 1.180
R squared (eta squared)	0.006105
F test to compare variances	
F, DFn, Dfd	1.193, 5, 5
P value	0.8513
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 A. Synaptophysin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9588	0.9648
P value	0.8108	0.8559
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	SYP HIP P14
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0564
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=2.157, df=10
How big is the difference?	
Mean of column A	16.65
Mean of column B	15.74
Difference between means (B - A) $\pm$ SEM	-0.9098 $\pm$ 0.4218
95% confidence interval	-1.850 to 0.03006
R squared (eta squared)	0.3175
F test to compare variances	
F, DFn, Dfd	1.368, 5, 5
P value	0.7393
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 C. GFAP

Test for normal distribution

Shapiro-Wilk test

W	0.8292	0.9429
P value	0.1058	0.6828
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

GFAP HIP Post14

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.0023

P value summary

\*\*

Significantly different (P < 0.05)?

Yes

One- or two-tailed P value?

Two-tailed

t, df

t=4.050, df=10

How big is the difference?

Mean of column A

16.36

Mean of column B

19.94

Difference between means (B - A)  $\pm$  SEM

3.587  $\pm$  0.8855

95% confidence interval

1.614 to 5.560

R squared (eta squared)

0.6213

F test to compare variances

F, DFn, Dfd

1.168, 5, 5

P value

0.8689

P value summary

ns

Significantly different (P < 0.05)?

No

Data analyzed

Sample size, column A

6

Sample size, column B

6

### Figure 3 C. Doublecortin

Test for normal distribution

Shapiro-Wilk test

W	0.9328	0.9310
P value	0.6016	0.5875
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

DCX HIP Post14

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value	0.9739
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.03356, df=10
How big is the difference?	
Mean of column A	22.08
Mean of column B	22.05
Difference between means (B - A) ± SEM	-0.03333 ± 0.9932
95% confidence interval	-2.246 to 2.180
R squared (eta squared)	0.0001126
F test to compare variances	
F, DFn, Dfd	1.684, 5, 5
P value	0.5813
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 C. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.9192	0.8942
P value	0.4998	0.3405
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value

P value summary

Significantly different (P < 0.05)?

One- or two-tailed P value?

t, df

How big is the difference?

Mean of column A

Mean of column B

Difference between means (B - A) ± SEM

95% confidence interval

R squared (eta squared)

F test to compare variances

F, DFn, Dfd

P value

P value summary

NeuN HIP Post14

PostVPA

vs.

Control

<0.0001

\*\*\*\*

Yes

Two-tailed

t=10.95, df=10

7.686

15.14

7.455 ± 0.6808

5.938 to 8.972

0.9230

1.201, 5, 5

0.8457

ns



Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 C. Synaptophysin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9406	0.9031
P value	0.6637	0.3929
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	SYP HIP Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.6790
P value summary	ns
Significantly different ( $P < 0.05$ )?	No
One- or two-tailed P value?	Two-tailed
t, df	$t=0.4262$ , $df=10$
How big is the difference?	
Mean of column A	17.31
Mean of column B	17.00
Difference between means ( $B - A$ ) $\pm$ SEM	$-0.3033 \pm 0.7117$
95% confidence interval	-1.889 to 1.282
R squared (eta squared)	0.01784
F test to compare variances	
F, DFn, Dfd	2.100, 5, 5
P value	0.4349
P value summary	ns
Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 E. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.9511	0.8569
P value	0.7494	0.1788
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP HIP P21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0029
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.913, df=10
How big is the difference?	
Mean of column A	17.89
Mean of column B	15.43
Difference between means (B - A) $\pm$ SEM	-2.461 $\pm$ 0.6290
95% confidence interval	-3.863 to -1.060
R squared (eta squared)	0.6049
F test to compare variances	
F, DFn, Dfd	1.030, 5, 5
P value	0.9753
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 E. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.8722	0.9412
P value	0.2352	0.6688
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX HIP P21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0003
P value summary	***
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=5.482, df=10
How big is the difference?	
Mean of column A	18.43
Mean of column B	13.75
Difference between means (B - A) $\pm$ SEM	-4.682 $\pm$ 0.8542
95% confidence interval	-6.586 to -2.779

R squared (eta squared)	0.7503
F test to compare variances	
F, DFn, Dfd	3.132, 5, 5
P value	0.2359
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 E. NeuN

Test for normal distribution		
Shapiro-Wilk test		
W	0.8745	0.9477
P value	0.2447	0.7220
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	NeuN HIP Pre21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0028
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.935, df=10
How big is the difference?	
Mean of column A	11.76
Mean of column B	15.22
Difference between means (B - A) $\pm$ SEM	3.460 $\pm$ 0.8794
95% confidence interval	1.501 to 5.419
R squared (eta squared)	0.6075
F test to compare variances	
F, DFn, Dfd	1.564, 5, 5
P value	0.6356
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 E. Synaptophysin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9031	0.9174

P value	0.3926	0.4870
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	SYP HIP P21
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=15.48, df=10
How big is the difference?	
Mean of column A	8.272
Mean of column B	18.04
Difference between means (B - A) $\pm$ SEM	9.768 $\pm$ 0.6310
95% confidence interval	8.362 to 11.17
R squared (eta squared)	0.9599
F test to compare variances	
F, DFn, Dfd	1.397, 5, 5
P value	0.7228
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 G. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.9578	0.9288
P value	0.8026	0.5709
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP HIP Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8.169, df=10

How big is the difference?	
Mean of column A	27.52
Mean of column B	19.97
Difference between means (B - A) $\pm$ SEM	-7.545 $\pm$ 0.9236
95% confidence interval	-9.603 to -5.487
R squared (eta squared)	0.8697
F test to compare variances	
F, DFn, Dfd	1.944, 5, 5
P value	0.4832
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 G. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.8493	0.9561
P value	0.1554	0.7889
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX HIP Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0003
P value summary	***
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=5.438, df=10
How big is the difference?	
Mean of column A	19.32
Mean of column B	13.80
Difference between means (B - A) $\pm$ SEM	-5.517 $\pm$ 1.014
95% confidence interval	-7.777 to -3.256
R squared (eta squared)	0.7473
F test to compare variances	
F, DFn, Dfd	2.549, 5, 5
P value	0.3276
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

### Figure 3 G. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.9687	0.8469
P value	0.8838	0.1486
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

NeuN HIP Post21

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.3401

P value summary

ns

Significantly different (P < 0.05)?

No

One- or two-tailed P value?

Two-tailed

t, df

t=1.002, df=10

How big is the difference?

Mean of column A

13.05

Mean of column B

13.58

Difference between means (B - A)  $\pm$  SEM

0.5367  $\pm$  0.5358

95% confidence interval

-0.6571 to 1.730

R squared (eta squared)

0.09119

F test to compare variances

F, DFn, Dfd

1.024, 5, 5

P value

0.9798

P value summary

ns

Significantly different (P < 0.05)?

No

Data analyzed

Sample size, column A

6

Sample size, column B

6

### Figure 3 G. Synaptophysin

Test for normal distribution

Shapiro-Wilk test

W	0.9394	0.8784
P value	0.6542	0.2616
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

SYP HIP Post21

Column B

Data Set-B

vs.

vs.

Column A

Data Set-A

Unpaired t test

P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=7.352, df=10
How big is the difference?	
Mean of column A	12.64
Mean of column B	20.67
Difference between means (B - A) ± SEM	8.025 ± 1.091
95% confidence interval	5.593 to 10.46
R squared (eta squared)	0.8439
F test to compare variances	
F, DFn, Dfd	1.999, 5, 5
P value	0.4654
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 A. GFAP

Test for normal distribution

Shapiro-Wilk test

W	0.9672	0.9725
P value	0.8728	0.9085
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value	<0.0001
---------	---------

P value summary	****
-----------------	------

Significantly different (P < 0.05)?	Yes
-------------------------------------	-----

One- or two-tailed P value?	Two-tailed
-----------------------------	------------

t, df	t=12.32, df=10
-------	----------------

How big is the difference?

Mean of column A	7.694
------------------	-------

Mean of column B	20.01
------------------	-------

Difference between means (B - A) ± SEM	12.31 ± 0.9991
--	----------------

95% confidence interval	10.09 to 14.54
-------------------------	----------------

R squared (eta squared)	0.9382
-------------------------	--------

F test to compare variances

F, DFn, Dfd	5.253, 5, 5
-------------	-------------

P value	0.0927
---------	--------

P value summary	ns
-----------------	----

Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 A. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9505	0.7983
P value	0.7443	0.0567
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX BO P14
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.1657
P value summary	ns
Significantly different ( $P < 0.05$ )?	No
One- or two-tailed P value?	Two-tailed
t, df	$t=1.495$ , $df=10$
How big is the difference?	
Mean of column A	10.78
Mean of column B	12.00
Difference between means ( $B - A$ ) $\pm$ SEM	$1.220 \pm 0.8159$
95% confidence interval	-0.5979 to 3.038
R squared (eta squared)	0.1827
F test to compare variances	
F, DFn, Dfd	2.444, 5, 5
P value	0.3490
P value summary	ns
Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 A. NeuN

Test for normal distribution		
Shapiro-Wilk test		
W	0.8189	0.8753
P value	0.0864	0.2481
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6



Table Analyzed	NeuN BO P14
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.3929
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.8928, df=10
How big is the difference?	
Mean of column A	16.04
Mean of column B	15.33
Difference between means (B - A) $\pm$ SEM	-0.7133 $\pm$ 0.7990
95% confidence interval	-2.494 to 1.067
R squared (eta squared)	0.07383
F test to compare variances	
F, DFn, Dfd	1.582, 5, 5
P value	0.6268
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 C. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.9109	0.9845
P value	0.4423	0.9717
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP BO Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=19.80, df=10
How big is the difference?	
Mean of column A	9.540
Mean of column B	19.99
Difference between means (B - A) $\pm$ SEM	10.45 $\pm$ 0.5278
95% confidence interval	9.276 to 11.63

R squared (eta squared)	0.9751
F test to compare variances	
F, DFn, Dfd	1.630, 5, 5
P value	0.6050
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 C. Doublecortin

Test for normal distribution

Shapiro-Wilk test

W	0.9249	0.8359
P value	0.5413	0.1204
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value

P value summary

Significantly different (P < 0.05)?

One- or two-tailed P value?

t, df

How big is the difference?

Mean of column A

Mean of column B

Difference between means (B - A)  $\pm$  SEM

95% confidence interval

R squared (eta squared)

F test to compare variances

F, DFn, Dfd

P value

P value summary

Significantly different (P < 0.05)?

Data analyzed

Sample size, column A

Sample size, column B

DCX BO Post14

PostVPA

vs.

Control

0.6693

ns

No

Two-tailed

t=0.4400, df=10

16.30

15.88

-0.4190  $\pm$  0.9523

-2.541 to 1.703

0.01899

3.168, 5, 5

0.2314

ns

No

6

6

#### Figure 4 C. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.8761	0.9661
---	--------	--------

P value	0.2514	0.8650
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	NeuN BO Post14
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.5188
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.6688, df=10
How big is the difference?	
Mean of column A	10.20
Mean of column B	9.642
Difference between means (B - A) $\pm$ SEM	-0.5533 $\pm$ 0.8274
95% confidence interval	-2.397 to 1.290
R squared (eta squared)	0.04281
F test to compare variances	
F, DF <sub>n</sub> , Df <sub>d</sub>	2.223, 5, 5
P value	0.4013
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 E. GFAP

Test for normal distribution		
Shapiro-Wilk test		
W	0.8925	0.8499
P value	0.3315	0.1571
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	GFAP BO P21
Column B	Data Set-B
vs.	vs.
Column A	Data Set-A
Unpaired t test	
P value	0.9911
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed

t, df	t=0.01145, df=10
How big is the difference?	
Mean of column A	15.59
Mean of column B	15.59
Difference between means (B - A) $\pm$ SEM	-0.007667 $\pm$ 0.6694
95% confidence interval	-1.499 to 1.484
R squared (eta squared)	1.312e-005
F test to compare variances	
F, DFn, Dfd	1.348, 5, 5
P value	0.7510
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 E. Doublecortin

Test for normal distribution

Shapiro-Wilk test

W	0.9074	0.9516
P value	0.4197	0.7529
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value

P value summary

Significantly different (P < 0.05)?

One- or two-tailed P value?

t, df

How big is the difference?

Mean of column A

Mean of column B

Difference between means (B - A)  $\pm$  SEM

95% confidence interval

R squared (eta squared)

F test to compare variances

F, DFn, Dfd

P value

P value summary

Significantly different (P < 0.05)?

Data analyzed

Sample size, column A

Sample size, column B

DCX BO P21

PreVPA

vs.

Control

<0.0001

\*\*\*\*

Yes

Two-tailed

t=10.12, df=10

21.52

11.12

-10.40  $\pm$  1.027

-12.68 to -8.108

0.9111

8.534, 5, 5

0.0344

\*

Yes

6

6

#### Figure 4 E. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.9157	0.9449
P value	0.4752	0.6989
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

NeuN BO P21

Column B

PreVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.2083

P value summary

ns

Significantly different (P < 0.05)?

No

One- or two-tailed P value?

Two-tailed

t, df

t=1.345, df=10

How big is the difference?

Mean of column A

16.84

Mean of column B

15.65

Difference between means (B - A)  $\pm$  SEM

-1.188  $\pm$  0.8830

95% confidence interval

-3.155 to 0.7797

R squared (eta squared)

0.1532

F test to compare variances

F, DFn, Dfd

2.902, 5, 5

P value

0.2672

P value summary

ns

Significantly different (P < 0.05)?

No

Data analyzed

Sample size, column A

6

Sample size, column B

6

#### Figure 4 G. GFAP

Test for normal distribution

Shapiro-Wilk test

W	0.9578	0.8638
P value	0.8029	0.2024
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

GFAP BO Post21

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=14.53, df=10
How big is the difference?	
Mean of column A	11.17
Mean of column B	24.63
Difference between means (B - A) ± SEM	13.45 ± 0.9258
95% confidence interval	11.39 to 15.52
R squared (eta squared)	0.9548
F test to compare variances	
F, DFn, Dfd	25.06, 5, 5
P value	0.0030
P value summary	**
Significantly different (P < 0.05)?	Yes
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 G. Doublecortin

Test for normal distribution		
Shapiro-Wilk test		
W	0.9593	0.9705
P value	0.8140	0.8956
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed	DCX BO Post21
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=6.952, df=10
How big is the difference?	
Mean of column A	19.66
Mean of column B	12.84
Difference between means (B - A) ± SEM	-6.820 ± 0.9809
95% confidence interval	-9.005 to -4.634
R squared (eta squared)	0.8286
F test to compare variances	
F, DFn, Dfd	3.849, 5, 5
P value	0.1654
P value summary	ns

Significantly different ( $P < 0.05$ )?	No
Data analyzed	
Sample size, column A	6
Sample size, column B	6

#### Figure 4 G. NeuN

Test for normal distribution

Shapiro-Wilk test

W	0.7981	0.9366
P value	0.0565	0.6322
Passed normality test ( $\alpha=0.05$ )?	Yes	Yes
P value summary	ns	ns
Number of values	6	6

Table Analyzed

Column B

vs.

Column A

Unpaired t test

P value

P value summary

Significantly different ( $P < 0.05$ )?

One- or two-tailed P value?

t, df

How big is the difference?

Mean of column A

Mean of column B

Difference between means ( $B - A$ )  $\pm$  SEM

95% confidence interval

R squared (eta squared)

F test to compare variances

F, DFn, Dfd

P value

P value summary

Significantly different ( $P < 0.05$ )?

Data analyzed

Sample size, column A

Sample size, column B

NeuN BO Post21

PostVPA

vs.

Control

0.6943

ns

No

Two-tailed

$t=0.4046$ ,  $df=10$

14.97

14.56

$-0.4143 \pm 1.024$

$-2.696$  to  $1.868$

0.01610

8.597, 5, 5

0.0339

\*

Yes

6

6

## The ELISA results of the tests for normality and variance homogeneity

### Figure 2 B, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9745	0.8323
P value	0.9214	0.1124
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	PFC BDNF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.6849	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=0.4178, df=10	
How big is the difference?		
Mean of column A	127.6	
Mean of column B	135.1	
Difference between means (B - A) ± SEM	7.528 ± 18.02	
95% confidence interval	-32.62 to 47.67	
R squared (eta squared)	0.01716	
F test to compare variances		
F, DFn, Dfd	1.975, 5, 5	
P value	0.4730	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 2 B, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9882	0.8969
P value	0.9730	0.3561
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	6
Table Analyzed	PFC NT3 P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0254	
P value summary	*	
Significantly different (P < 0.05)?	Yes	



One- or two-tailed P value?	Two-tailed
t, df	t=2.676, df=9
How big is the difference?	
Mean of column A	49.84
Mean of column B	37.25
Difference between means (B - A) $\pm$ SEM	-12.60 $\pm$ 4.707
95% confidence interval	-23.24 to -1.948
R squared (eta squared)	0.4431
F test to compare variances	
F, DFn, Dfd	1.495, 5, 4
P value	0.7179
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 2 B, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8705	0.9705
P value	0.2282	0.8955
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	PFC IGFP14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0540	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=2.183, df=10	
How big is the difference?		
Mean of column A	279.0	
Mean of column B	186.8	
Difference between means (B - A) $\pm$ SEM	-92.20 $\pm$ 42.23	
95% confidence interval	-186.3 to 1.907	
R squared (eta squared)	0.3227	
F test to compare variances		
F, DFn, Dfd	26.24, 5, 5	
P value	0.0027	
P value summary	**	
Significantly different (P < 0.05)?	Yes	

### Figure 2 D, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9745	0.9611
P value	0.9214	0.8158

Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	5
Table Analyzed	PFC BDNF P14 Post	
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.9365
P value summary		ns
Significantly different (P < 0.05)?		No
One- or two-tailed P value?		Two-tailed
t, df		t=0.08198, df=9
How big is the difference?		
Mean of column A		127.6
Mean of column B		126.2
Difference between means (B - A) $\pm$ SEM		-1.428 $\pm$ 17.42
95% confidence interval		-40.83 to 37.98
R squared (eta squared)		0.0007461
F test to compare variances		
F, DFn, Dfd		5.264, 5, 4
P value		0.1327
P value summary		ns
Significantly different (P < 0.05)?		No

#### Figure 2 D, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9882	0.9645
P value	0.9730	0.8074
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	4
Table Analyzed	PFC Nt3 P14 Post	
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0009
P value summary		***
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=5.522, df=7
How big is the difference?		
Mean of column A		49.84
Mean of column B		28.39
Difference between means (B - A) $\pm$ SEM		-21.45 $\pm$ 3.884
95% confidence interval		-30.63 to -12.27
R squared (eta squared)		0.8133
F test to compare variances		

F, DFn, Dfd	3.147, 4, 3
P value	0.3733
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 2 D, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8705	0.9342
P value	0.2282	0.6129
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed		PFC IGF P14 Post
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0014
P value summary		**
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=4.388, df=10
How big is the difference?		
Mean of column A		279.0
Mean of column B		96.82
Difference between means (B - A) ± SEM		-182.2 ± 41.53
95% confidence interval		-274.8 to -89.69
R squared (eta squared)		0.6581
F test to compare variances		
F, DFn, Dfd		260.4, 5, 5
P value		<0.0001
P value summary		****
Significantly different (P < 0.05)?		Yes

### Figure 2 F, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8957	0.8003
P value	0.3867	0.0815
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed		PFC BDNF P21 Pre
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.5349

P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.6484, df=8
How big is the difference?	
Mean of column A	189.5
Mean of column B	174.3
Difference between means (B - A) ± SEM	-15.21 ± 23.45
95% confidence interval	-69.29 to 38.88
R squared (eta squared)	0.04993
F test to compare variances	
F, DFn, Dfd	1.777, 4, 4
P value	0.5911
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 2 F, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9764	0.7435
P value	0.9323	0.0259
Passed normality test (alpha=0.05)?	Yes	No
P value summary	ns	*
Number of values	6	5
Table Analyzed	PFC NT3	P21 Pre
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0864
P value summary		ns
Significantly different (P < 0.05)?		No
One- or two-tailed P value?		Two-tailed
t, df		t=1.925, df=9
How big is the difference?		
Mean of column A		140.2
Mean of column B		172.6
Difference between means (B - A) ± SEM		32.41 ± 16.84
95% confidence interval		-5.684 to 70.51
R squared (eta squared)		0.2916
F test to compare variances		
F, DFn, Dfd		1.420, 5, 4
P value		0.7561
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 2 F, IGF

Test for normal distribution  
Shapiro-Wilk test

W	0.9764	0.7435
P value	0.9323	0.0259
Passed normality test (alpha=0.05)?	Yes	No
P value summary	ns	*
Number of values	6	5
Table Analyzed	PFC NT3 P21 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0864	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.925, df=9	
How big is the difference?		
Mean of column A	140.2	
Mean of column B	172.6	
Difference between means (B - A) $\pm$ SEM	32.41 $\pm$ 16.84	
95% confidence interval	-5.684 to 70.51	
R squared (eta squared)	0.2916	
F test to compare variances		
F, DFn, Dfd	1.420, 5, 4	
P value	0.7561	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 3 H, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8658	0.9525
P value	0.2100	0.7548
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	5
Table Analyzed	PFC BDNF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.1742	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.476, df=9	
How big is the difference?		
Mean of column A	270.4	
Mean of column B	341.5	
Difference between means (B - A) $\pm$ SEM	71.10 $\pm$ 48.19	
95% confidence interval	-37.91 to 180.1	

R squared (eta squared)	0.1948
F test to compare variances	
F, DF <sub>n</sub> , D <sub>fd</sub>	2.514, 5, 4
P value	0.3926
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 2 H, NT-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9764	0.9585
P value	0.9323	0.7972
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Table Analyzed	PFC NT3 P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.8696	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=0.1689, df=9	
How big is the difference?		
Mean of column A	140.2	
Mean of column B	144.8	
Difference between means (B - A) ± SEM	4.563 ± 27.02	
95% confidence interval	-56.56 to 65.69	
R squared (eta squared)	0.003159	
F test to compare variances		
F, DFn, Dfd	3.782, 4, 5	
P value	0.1771	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 2 H, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9412	0.9219
P value	0.6689	0.5425
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	5
Table Analyzed	PFC IGF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		

P value	0.0047
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.725, df=9
How big is the difference?	
Mean of column A	204.6
Mean of column B	427.7
Difference between means (B - A) ± SEM	223.1 ± 59.90
95% confidence interval	87.60 to 358.6
R squared (eta squared)	0.6065
F test to compare variances	
F, DFn, Dfd	4.894, 4, 5
P value	0.1117
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 B, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9181	0.9288
P value	0.4921	0.5705
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	HIP BDNF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0016	
P value summary	**	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=4.276, df=10	
How big is the difference?		
Mean of column A	100.2	
Mean of column B	154.4	
Difference between means (B - A) ± SEM	54.21 ± 12.68	
95% confidence interval	25.96 to 82.46	
R squared (eta squared)	0.6465	
F test to compare variances		
F, DFn, Dfd	1.151, 5, 5	
P value	0.8815	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 3 B, Nt-3

Test for normal distribution

Shapiro-Wilk test		
W	0.9704	0.9769
P value	0.8777	0.8835
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	4
Table Analyzed	Hip Nt3 P14 Pre	
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0007
P value summary		***
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=5.769, df=7
How big is the difference?		
Mean of column A		31.23
Mean of column B		78.26
Difference between means (B - A) ± SEM		47.03 ± 8.152
95% confidence interval		27.75 to 66.31
R squared (eta squared)		0.8262
F test to compare variances		
F, DFn, Dfd		7.994, 3, 4
P value		0.0729
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 3 B, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9146	0.9062
P value	0.4956	0.4116
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	6
Table Analyzed	HIP IGF P14 Pre	
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		<0.0001
P value summary		****
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=7.133, df=9
How big is the difference?		
Mean of column A		274.2
Mean of column B		127.6
Difference between means (B - A) ± SEM		-146.6 ± 20.55



95% confidence interval	-193.1 to -100.1
R squared (eta squared)	0.8497
F test to compare variances	
F, DFn, Dfd	4.532, 4, 5
P value	0.1286
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 B, GDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8845	0.9487
P value	0.3303	0.7276
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	HIP GDNF P14 Pre	
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.1247
P value summary		ns
Significantly different (P < 0.05)?		No
One- or two-tailed P value?		Two-tailed
t, df		t=1.715, df=8
How big is the difference?		
Mean of column A		34.76
Mean of column B		45.40
Difference between means (B - A) ± SEM		10.64 ± 6.202
95% confidence interval		-3.665 to 24.94
R squared (eta squared)		0.2688
F test to compare variances		
F, DFn, Dfd		6.100, 4, 4
P value		0.1079
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 3 D, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9181	0.9230
P value	0.4921	0.5492
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	5
Table Analyzed	HIP BDNF P14 Post	
Column B		PostVPA
vs.		vs.

Column A	Control
Unpaired t test	
P value	0.1824
P value summary	ns
Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.445, df=9
How big is the difference?	
Mean of column A	100.2
Mean of column B	117.7
Difference between means (B - A) $\pm$ SEM	17.55 $\pm$ 12.14
95% confidence interval	-9.927 to 45.02
R squared (eta squared)	0.1883
F test to compare variances	
F, DFn, Dfd	1.302, 5, 4
P value	0.8216
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 D, NT-3

Test for normal distribution

Shapiro-Wilk test

W	0.9704	0.9822
P value	0.8777	0.9458
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5

Table Analyzed	Hip Nt3 P14 Post
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0035
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=4.090, df=8
How big is the difference?	
Mean of column A	31.23
Mean of column B	59.85
Difference between means (B - A) $\pm$ SEM	28.62 $\pm$ 6.998
95% confidence interval	12.48 to 44.76
R squared (eta squared)	0.6764
F test to compare variances	
F, DFn, Dfd	5.629, 4, 4
P value	0.1228
P value summary	ns
Significantly different (P < 0.05)?	No

**Figure 3 D, IGF**

Test for normal distribution

Shapiro-Wilk test

W	0.9146	0.9775
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P value	0.4956	0.9387
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Passed normality test (alpha=0.05)?	Yes	Yes
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P value summary	ns	ns
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Number of values	5	6
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Table Analyzed	HIP IGF P14 Post	
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Column B	PostVPA	
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vs.	vs.	
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Column A	Control	
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Unpaired t test

P value	<0.0001	
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P value summary	****	
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Significantly different (P < 0.05)?	Yes	
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One- or two-tailed P value?	Two-tailed	
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t, df	t=9.070, df=9	
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How big is the difference?

Mean of column A	274.2	
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Mean of column B	101.8	
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Difference between means (B - A) $\pm$ SEM	-172.4 $\pm$ 19.01	
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95% confidence interval	-215.4 to -129.4	
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R squared (eta squared)	0.9014	
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F test to compare variances

F, DF <sub>n</sub> , DF <sub>d</sub>	13.69, 4, 5	
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P value	0.0133	
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P value summary	*	
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Significantly different (P < 0.05)?	Yes	
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**Figure 3 D, GDNF**

Test for normal distribution

Shapiro-Wilk test

W	0.9035	0.9079
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P value	0.4297	0.4550
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Passed normality test (alpha=0.05)?	Yes	Yes
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P value summary	ns	ns
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Number of values	5	5
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Table Analyzed	HIP GDNF P14 Post	
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Column B	PostVPA	
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vs.	vs.	
-----	-----	--

Column A	Control	
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Unpaired t test

P value	<0.0001	
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P value summary	****	
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Significantly different (P < 0.05)?	Yes	
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One- or two-tailed P value?	Two-tailed	
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t, df	t=7.286, df=8	
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How big is the difference?

Mean of column A	32.76
Mean of column B	75.02
Difference between means (B - A) $\pm$ SEM	42.25 $\pm$ 5.799
95% confidence interval	28.88 to 55.63
R squared (eta squared)	0.8690
F test to compare variances	
F, DFn, Dfd	1.543, 4, 4
P value	0.6846
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 F, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9272	0.8553
P value	0.5777	0.2117
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	HIP BDNF	P21 Pre
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0042
P value summary		**
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=3.956, df=8
How big is the difference?		
Mean of column A		228.9
Mean of column B		272.8
Difference between means (B - A) $\pm$ SEM		43.85 $\pm$ 11.08
95% confidence interval		18.29 to 69.41
R squared (eta squared)		0.6617
F test to compare variances		
F, DFn, Dfd		1.205, 4, 4
P value		0.8611
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 3 F, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.8685	0.9327
P value	0.2604	0.6147
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5

Table Analyzed	HIP Nt3 P21 Pre
Column B	PreVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0084
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.470, df=8
How big is the difference?	
Mean of column A	144.9
Mean of column B	92.48
Difference between means (B - A) $\pm$ SEM	-52.37 $\pm$ 15.09
95% confidence interval	-87.17 to -17.57
R squared (eta squared)	0.6008
F test to compare variances	
F, DF <sub>n</sub> , Df <sub>d</sub>	3.199, 4, 4
P value	0.2863
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 F, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9828	0.9724
P value	0.9489	0.8905
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	HIP IGF P21 Pre	
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0115
P value summary		*
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=3.261, df=8
How big is the difference?		
Mean of column A		137.6
Mean of column B		71.94
Difference between means (B - A) ± SEM		-65.67 ± 20.14
95% confidence interval		-112.1 to -19.24
R squared (eta squared)		0.5707
F test to compare variances		
F, DFn, Dfd		1.068, 4, 4
P value		0.9509
P value summary		ns

Significantly different (P < 0.05)?

No

### Figure 3 F, GDNF

Test for normal distribution

Shapiro-Wilk test

W

0.8646

0.9792

P value

0.2451

0.9303

Passed normality test (alpha=0.05)?

Yes

Yes

P value summary

ns

ns

Number of values

5

5

Table Analyzed

Hip GDNF P21 Pre

Column B

PreVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.0126

P value summary

\*

Significantly different (P < 0.05)?

Yes

One- or two-tailed P value?

Two-tailed

t, df

t=3.198, df=8

How big is the difference?

Mean of column A

101.2

Mean of column B

70.08

Difference between means (B - A) ± SEM

-31.10 ± 9.725

95% confidence interval

-53.53 to -8.675

R squared (eta squared)

0.5611

F test to compare variances

F, DF<sub>n</sub>, D<sub>fd</sub>

1.414, 4, 4

P value

0.7453

P value summary

ns

Significantly different (P < 0.05)?

No

### Figure 3 H, BDNF

Test for normal distribution

Shapiro-Wilk test

W

0.8625

0.8208

P value

0.1980

0.0897

Passed normality test (alpha=0.05)?

Yes

Yes

P value summary

ns

ns

Number of values

6

6

Table Analyzed

Hip BDNF P21 Post

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.0057

P value summary

\*\*

Significantly different (P < 0.05)?

Yes

One- or two-tailed P value?

Two-tailed

t, df	t=3.506, df=10
How big is the difference?	
Mean of column A	235.4
Mean of column B	440.8
Difference between means (B - A) $\pm$ SEM	205.3 $\pm$ 58.57
95% confidence interval	74.85 to 335.8
R squared (eta squared)	0.5514
F test to compare variances	
F, DFn, Dfd	6.093, 5, 5
P value	0.0692
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 3 H, NT-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9803	0.9347
P value	0.9362	0.6286
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	Hip Nt3 P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	<0.0001	
P value summary	****	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=12.94, df=8	
How big is the difference?		
Mean of column A	104.5	
Mean of column B	49.58	
Difference between means (B - A) $\pm$ SEM	-54.96 $\pm$ 4.247	
95% confidence interval	-64.75 to -45.17	
R squared (eta squared)	0.9544	
F test to compare variances		
F, DFn, Dfd	1.028, 4, 4	
P value	0.9794	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 3 H, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9399	0.9982
P value	0.6583	0.9990
Passed normality test (alpha=0.05)?	Yes	Yes

P value summary	ns	ns
Number of values	6	5
Table Analyzed	HIP IGF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	<0.0001	
P value summary	****	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=6.810, df=9	
How big is the difference?		
Mean of column A	97.72	
Mean of column B	276.5	
Difference between means (B - A) $\pm$ SEM	178.8 $\pm$ 26.25	
95% confidence interval	119.4 to 238.1	
R squared (eta squared)	0.8375	
F test to compare variances		
F, DFn, Dfd	10.71, 4, 5	
P value	0.0229	
P value summary	*	
Significantly different (P < 0.05)?	Yes	

### Figure 3 H, GDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9675	0.9169
P value	0.8749	0.4831
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	Hip GDNF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0007	
P value summary	***	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=4.796, df=10	
How big is the difference?		
Mean of column A	97.85	
Mean of column B	66.15	
Difference between means (B - A) $\pm$ SEM	-31.70 $\pm$ 6.609	
95% confidence interval	-46.43 to -16.97	
R squared (eta squared)	0.6970	
F test to compare variances		
F, DFn, Dfd	2.987, 5, 5	



P value	0.2550
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 B, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9862	0.9085
P value	0.9646	0.4584
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	OB BDNF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0002	
P value summary	***	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=6.345, df=8	
How big is the difference?		
Mean of column A	120.2	
Mean of column B	188.7	
Difference between means (B - A) ± SEM	68.44 ± 10.79	
95% confidence interval	43.57 to 93.31	
R squared (eta squared)	0.8342	
F test to compare variances		
F, DFn, Dfd	1.702, 4, 4	
P value	0.6191	
P value summary	ns	
Significantly different (P < 0.05)?	No	

#### Figure 4 B, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9522	0.8270
P value	0.7578	0.1014
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO NT3 P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.7197	
P value summary	ns	

Significantly different (P < 0.05)?	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.3692, df=10
How big is the difference?	
Mean of column A	30.39
Mean of column B	31.19
Difference between means (B - A) ± SEM	0.8000 ± 2.167
95% confidence interval	-4.028 to 5.628
R squared (eta squared)	0.01345
F test to compare variances	
F, DF <sub>n</sub> , Df <sub>d</sub>	1.479, 5, 5
P value	0.6780
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 B, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9148	0.9015
P value	0.4690	0.3831
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO IGF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value		0.0478
P value summary		*
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=2.255, df=10
How big is the difference?		
Mean of column A		438.0
Mean of column B		315.4
Difference between means (B - A) ± SEM		-122.6 ± 54.37
95% confidence interval		-243.7 to -1.473
R squared (eta squared)		0.3371
F test to compare variances		
F, DF <sub>n</sub> , Df <sub>d</sub>		2.332, 5, 5
P value		0.3742
P value summary		ns
Significantly different (P < 0.05)?		No

#### Figure 4 B, GDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8553	0.9247

P value	0.2118	0.5607
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	OB GDNF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0886	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.938, df=8	
How big is the difference?		
Mean of column A	85.04	
Mean of column B	46.67	
Difference between means (B - A) $\pm$ SEM	-38.37 $\pm$ 19.80	
95% confidence interval	-84.02 to 7.284	
R squared (eta squared)	0.3195	
F test to compare variances		
F, DFn, Dfd	29.72, 4, 4	
P value	0.0062	
P value summary	**	
Significantly different (P < 0.05)?	Yes	

#### Figure 4 D, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9862	0.9789
P value	0.9646	0.9286
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	OB BDNF P14 Psot	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0004	
P value summary	***	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=5.845, df=8	
How big is the difference?		
Mean of column A	120.2	
Mean of column B	172.2	
Difference between means (B - A) $\pm$ SEM	52.01 $\pm$ 8.899	
95% confidence interval	31.49 to 72.53	
R squared (eta squared)	0.8103	

F test to compare variances	
F, DFn, Dfd	12.39, 4, 4
P value	0.0318
P value summary	*
Significantly different (P < 0.05)?	Yes

#### Figure 4 D, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9522	0.8491
P value	0.7578	0.1547
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO NT3 P14 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.1589	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.522, df=10	
How big is the difference?		
Mean of column A	30.39	
Mean of column B	33.78	
Difference between means (B - A) ± SEM	3.395 ± 2.230	
95% confidence interval	-1.574 to 8.364	
R squared (eta squared)	0.1882	
F test to compare variances		
F, DFn, Dfd	1.290, 5, 5	
P value	0.7868	
P value summary	ns	
Significantly different (P < 0.05)?	No	

#### Figure 4 D, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9148	0.8406
P value	0.4690	0.1318
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO IGF P14 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		

P value	0.0018
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=4.214, df=10
How big is the difference?	
Mean of column A	438.0
Mean of column B	215.8
Difference between means (B - A) ± SEM	-222.3 ± 52.74
95% confidence interval	-339.8 to -104.7
R squared (eta squared)	0.6398
F test to compare variances	
F, DF <sub>n</sub> , Df <sub>d</sub>	2.903, 5, 5
P value	0.2670
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 D, GDNF

Test for normal distribution

Shapiro-Wilk test

W

P value

Passed normality test (alpha=0.05)?

P value summary

Number of values

Table Analyzed

OB GDNF P14 Post

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.9725

P value summary

ns

Significantly different (P < 0.05)?

No

One- or two-tailed P value?

Two-tailed

t, df

t=0.03552, df=8

How big is the difference?

Mean of column A

81.04

Mean of column B

81.69

Difference between means (B - A) ± SEM

0.6500 ± 18.30

95% confidence interval

-41.55 to 42.85

R squared (eta squared)

0.0001577

F test to compare variances

F, DF<sub>n</sub>, Df<sub>d</sub>

2.880, 4, 4

P value	0.3300
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 F, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8800	0.9403
P value	0.3093	0.6681
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	OB GDNF P21	Pre
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0010
P value summary		**
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=5.029, df=8
How big is the difference?		
Mean of column A		69.76
Mean of column B		26.13
Difference between means (B - A) ± SEM		-43.63 ± 8.676
95% confidence interval		-63.64 to -23.62
R squared (eta squared)		0.7597
F test to compare variances		
F, DFn, Dfd		11.40, 4, 4
P value		0.0369
P value summary		*
Significantly different (P < 0.05)?		Yes

#### Figure 4 F, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9682	0.8921
P value	0.8635	0.3680
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	BO NT3 P21	Pre
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		<0.0001

P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=13.97, df=8
How big is the difference?	
Mean of column A	196.6
Mean of column B	102.1
Difference between means (B - A) ± SEM	-94.53 ± 6.767
95% confidence interval	-110.1 to -78.92
R squared (eta squared)	0.9606
F test to compare variances	
F, DFn, Dfd	2.410, 4, 4
P value	0.4150
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 F, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8395	0.9940
P value	0.1634	0.9916
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	BO IGF P21 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0752	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=2.044, df=8	
How big is the difference?		
Mean of column A	468.2	
Mean of column B	329.5	
Difference between means (B - A) ± SEM	-138.7 ± 67.86	
95% confidence interval	-295.2 to 17.76	
R squared (eta squared)	0.3431	
F test to compare variances		
F, DFn, Dfd	7.370, 4, 4	
P value	0.0788	
P value summary	ns	
Significantly different (P < 0.05)?	No	

#### Figure 4 F, GDNF

Test for normal distribution  
Shapiro-Wilk test

W	0.8800	0.9403
P value	0.3093	0.6681
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	OB GDNF P21 Pre	
Column B		PreVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0010
P value summary		**
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=5.029, df=8
How big is the difference?		
Mean of column A		69.76
Mean of column B		26.13
Difference between means (B - A) $\pm$ SEM		-43.63 $\pm$ 8.676
95% confidence interval		-63.64 to -23.62
R squared (eta squared)		0.7597
F test to compare variances		
F, DFn, Dfd		11.40, 4, 4
P value		0.0369
P value summary		*
Significantly different (P < 0.05)?		Yes

#### Figure 4 H, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9425	0.8938
P value	0.6791	0.3384
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	OB BDNF P21 Post	
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0314
P value summary		*
Significantly different (P < 0.05)?		Yes
One- or two-tailed P value?		Two-tailed
t, df		t=2.501, df=10
How big is the difference?		
Mean of column A		281.6
Mean of column B		430.0
Difference between means (B - A) $\pm$ SEM		148.4 $\pm$ 59.31
95% confidence interval		16.19 to 280.5



R squared (eta squared)	0.3848
F test to compare variances	
F, DFn, Dfd	1.167, 5, 5
P value	0.8698
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 H, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9206	0.9540
P value	0.5094	0.7722
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO Nt P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.2552	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.207, df=10	
How big is the difference?		
Mean of column A	168.4	
Mean of column B	200.4	
Difference between means (B - A) ± SEM	32.02 ± 26.52	
95% confidence interval	-27.08 to 91.11	
R squared (eta squared)	0.1272	
F test to compare variances		
F, DFn, Dfd	3.077, 5, 5	
P value	0.2429	
P value summary	ns	
Significantly different (P < 0.05)?	No	

#### Figure 4 H, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9818	0.8700
P value	0.9603	0.2263
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	BO IGF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	

Unpaired t test	
P value	0.0041
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.695, df=10
How big is the difference?	
Mean of column A	221.2
Mean of column B	383.6
Difference between means (B - A) ± SEM	162.4 ± 43.94
95% confidence interval	64.47 to 260.3
R squared (eta squared)	0.5773
F test to compare variances	
F, DFn, Dfd	1.853, 5, 5
P value	0.5148
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 4 H, GDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8771	0.8716
P value	0.2559	0.2328
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	6
Table Analyzed	OB GDNF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.8134	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=0.2424, df=10	
How big is the difference?		
Mean of column A	69.77	
Mean of column B	72.08	
Difference between means (B - A) ± SEM	2.317 ± 9.559	
95% confidence interval	-18.98 to 23.61	
R squared (eta squared)	0.005840	
F test to compare variances		
F, DFn, Dfd	1.020, 5, 5	
P value	0.9832	
P value summary	ns	
Significantly different (P < 0.05)?	No	

### Figure 5 B, BDNF

Test for normal distribution

Shapiro-Wilk test

W	0.8746	0.7573
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P value	0.2855	0.0347
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Passed normality test (alpha=0.05)?	Yes	No
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P value summary	ns	*
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Number of values	5	5
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Table Analyzed	SVZ BDNF P14 Pre	
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Column B	PreVPA	
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vs.	vs.	
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Column A	Control	
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Unpaired t test

P value	0.0047	
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P value summary	**	
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Significantly different (P < 0.05)?	Yes	
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One- or two-tailed P value?	Two-tailed	
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t, df	t=3.879, df=8	
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How big is the difference?

Mean of column A	194.8	
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Mean of column B	121.2	
------------------	-------	--

Difference between means (B - A) $\pm$ SEM	-73.67 $\pm$ 18.99	
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95% confidence interval	-117.5 to -29.87	
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R squared (eta squared)	0.6529	
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F test to compare variances

F, DFn, Dfd	10.19, 4, 4	
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P value	0.0451	
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P value summary	*	
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Significantly different (P < 0.05)?	Yes	
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### Figure 5 B, Nt-3

Test for normal distribution

Shapiro-Wilk test

W	0.9624	0.9041
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P value	0.7941	0.3988
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Passed normality test (alpha=0.05)?	Yes	Yes
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P value summary	ns	ns
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Number of values	4	6
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Table Analyzed	SVZ Nt3 P14 Pre	
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Column B	PreVPA	
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vs.	vs.	
-----	-----	--

Column A	Control	
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Unpaired t test

P value	0.0261	
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P value summary	*	
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Significantly different (P < 0.05)?	Yes	
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One- or two-tailed P value?	Two-tailed	
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t, df	t=2.723, df=8	
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How big is the difference?

Mean of column A	67.18
Mean of column B	43.06
Difference between means (B - A) $\pm$ SEM	-24.12 $\pm$ 8.859
95% confidence interval	-44.55 to -3.692
R squared (eta squared)	0.4810
F test to compare variances	
F, DFn, Dfd	1.499, 3, 5
P value	0.6448
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 5 B, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9792	0.9095
P value	0.9305	0.4332
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	6
Table Analyzed	SVZ IGF P14 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0004	
P value summary	***	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=5.518, df=9	
How big is the difference?		
Mean of column A	298.7	
Mean of column B	114.1	
Difference between means (B - A) $\pm$ SEM	-184.5 $\pm$ 33.44	
95% confidence interval	-260.2 to -108.9	
R squared (eta squared)	0.7719	
F test to compare variances		
F, DFn, Dfd	95.53, 4, 5	
P value	0.0001	
P value summary	***	
Significantly different (P < 0.05)?	Yes	

#### Figure 5 D, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8746	0.8066
P value	0.2855	0.0917
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5

Table Analyzed	SVZ BDNF P14 Post
Column B	PostVPA
vs.	vs.
Column A	Control
Unpaired t test	
P value	0.0047
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.882, df=8
How big is the difference?	
Mean of column A	194.8
Mean of column B	120.0
Difference between means (B - A) $\pm$ SEM	-74.85 $\pm$ 19.28
95% confidence interval	-119.3 to -30.39
R squared (eta squared)	0.6532
F test to compare variances	
F, DFn, Dfd	7.586, 4, 4
P value	0.0751
P value summary	ns
Significantly different (P < 0.05)?	No

#### Figure 5 D, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.9624	0.8595
P value	0.7941	0.2586
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	4	4
Table Analyzed	SVZ Nt3 P14 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.0047	
P value summary	**	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=4.373, df=6	
How big is the difference?		
Mean of column A	67.18	
Mean of column B	30.37	
Difference between means (B - A) $\pm$ SEM	-36.81 $\pm$ 8.417	
95% confidence interval	-57.41 to -16.22	
R squared (eta squared)	0.7612	
F test to compare variances		
F, DFn, Dfd	5.221, 3, 3	
P value	0.2079	
P value summary	ns	

Significantly different ( $P < 0.05$ )?

No

#### Figure 5 D, IGF

Test for normal distribution

Shapiro-Wilk test

W

0.9792

0.9158

P value

0.9305

0.4756

Passed normality test ( $\alpha=0.05$ )?

Yes

Yes

P value summary

ns

ns

Number of values

5

6

Table Analyzed

SVZ IGF P14 Post

Column B

PostVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.0002

P value summary

\*\*\*

Significantly different ( $P < 0.05$ )?

Yes

One- or two-tailed P value?

Two-tailed

t, df

t=5.839, df=9

How big is the difference?

Mean of column A

298.7

Mean of column B

102.9

Difference between means ( $B - A$ )  $\pm$  SEM

-195.8  $\pm$  33.54

95% confidence interval

-271.7 to -119.9

R squared (eta squared)

0.7911

F test to compare variances

F, DFn, Dfd

65.98, 4, 5

P value

0.0003

P value summary

\*\*\*

Significantly different ( $P < 0.05$ )?

Yes

#### Figure 5 F, BDNF

Test for normal distribution

Shapiro-Wilk test

W

0.8812

0.8858

P value

0.3149

0.3364

Passed normality test ( $\alpha=0.05$ )?

Yes

Yes

P value summary

ns

ns

Number of values

5

5

Table Analyzed

SVZ BDNF P21 Pre

Column B

PreVPA

vs.

vs.

Column A

Control

Unpaired t test

P value

0.0539

P value summary

ns

Significantly different ( $P < 0.05$ )?

No

One- or two-tailed P value?

Two-tailed

t, df	t=2.258, df=8
How big is the difference?	
Mean of column A	123.3
Mean of column B	141.8
Difference between means (B - A) $\pm$ SEM	18.46 $\pm$ 8.176
95% confidence interval	-0.3925 to 37.32
R squared (eta squared)	0.3892
F test to compare variances	
F, DFn, Dfd	1.315, 4, 4
P value	0.7974
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 5 F, Nt-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.8870	0.9890
P value	0.3422	0.9759
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	SVZ NT3 P21 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value		0.4167
P value summary		ns
Significantly different (P < 0.05)?		No
One- or two-tailed P value?		Two-tailed
t, df		t=0.8564, df=8
How big is the difference?		
Mean of column A		128.9
Mean of column B		140.6
Difference between means (B - A) $\pm$ SEM		11.70 $\pm$ 13.66
95% confidence interval		-19.80 to 43.20
R squared (eta squared)		0.08398
F test to compare variances		
F, DFn, Dfd		4.314, 4, 4
P value		0.1858
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 5 F, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9294	0.9259
P value	0.5924	0.5689
Passed normality test (alpha=0.05)?	Yes	Yes

P value summary	ns	ns
Number of values	5	5
Table Analyzed	SVZ IGF P21 Pre	
Column B	PreVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	<0.0001	
P value summary	****	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=11.31, df=8	
How big is the difference?		
Mean of column A	79.96	
Mean of column B	42.50	
Difference between means (B - A) $\pm$ SEM	-37.46 $\pm$ 3.312	
95% confidence interval	-45.10 to -29.82	
R squared (eta squared)	0.9411	
F test to compare variances		
F, DF <sub>n</sub> , D <sub>fd</sub>	1.902, 4, 4	
P value	0.5487	
P value summary	ns	
Significantly different (P < 0.05)?	No	

#### Figure 5 H, BDNF

Test for normal distribution		
Shapiro-Wilk test		
W	0.8891	0.9055
P value	0.3524	0.4410
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	5
Table Analyzed	SVZ BDNF P21 Post	
Column B	PostVPA	
vs.	vs.	
Column A	Control	
Unpaired t test		
P value	0.1686	
P value summary	ns	
Significantly different (P < 0.05)?	No	
One- or two-tailed P value?	Two-tailed	
t, df	t=1.513, df=8	
How big is the difference?		
Mean of column A	220.0	
Mean of column B	300.1	
Difference between means (B - A) $\pm$ SEM	80.11 $\pm$ 52.93	
95% confidence interval	-41.95 to 202.2	
R squared (eta squared)	0.2226	
F test to compare variances		
F, DF <sub>n</sub> , D <sub>fd</sub>	3.298, 4, 4	



P value	0.2745
P value summary	ns
Significantly different (P < 0.05)?	No

### Figure 5 H, NT-3

Test for normal distribution		
Shapiro-Wilk test		
W	0.8813	0.9137
P value	0.2750	0.4902
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	6	5
Table Analyzed	SVZ Nt3 P21 Post	
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.9830
P value summary		ns
Significantly different (P < 0.05)?		No
One- or two-tailed P value?		Two-tailed
t, df		t=0.02193, df=9
How big is the difference?		
Mean of column A		98.38
Mean of column B		97.92
Difference between means (B - A) ± SEM		-0.4633 ± 21.13
95% confidence interval		-48.26 to 47.33
R squared (eta squared)		5.343e-005
F test to compare variances		
F, DFn, Dfd		5.673, 4, 5
P value		0.0845
P value summary		ns
Significantly different (P < 0.05)?		No

### Figure 5 H, IGF

Test for normal distribution		
Shapiro-Wilk test		
W	0.9403	0.7996
P value	0.6677	0.0582
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns
Number of values	5	6
Table Analyzed	SVZ IGF P21 Post	
Column B		PostVPA
vs.		vs.
Column A		Control
Unpaired t test		
P value		0.0046
P value summary		**

Significantly different ( $P < 0.05$ )?	Yes
One- or two-tailed P value?	Two-tailed
t, df	$t=3.742$ , $df=9$
How big is the difference?	
Mean of column A	138.4
Mean of column B	281.3
Difference between means ( $B - A$ ) $\pm$ SEM	$142.9 \pm 38.18$
95% confidence interval	56.50 to 229.2
R squared (eta squared)	0.6087
F test to compare variances	
F, DFn, Dfd	18.90, 5, 4
P value	0.0138
P value summary	*
Significantly different ( $P < 0.05$ )?	Yes

Prefrontal cortex, PND14

Western blotting results

Group	Protein	p	t	df	Figure
Control	GFAP	0.0001	11.31	10	Fig 2 A
PreVPA					
Control		0.0001	9.087	10	Fig 2 C
PostVPA					
Control	DCX	0.4625	0.764	10	Fig 2 A
PreVPA		0.0576	2.144	10	Fig 2 C
Control					
PostVPA					
Control	NeuN	0.0001	8.853	10	Fig 2 A
PreVPA		0.0537	2.186	10	Fig 2 C
Control					
PostVPA					
Control	SYP	0.0001	12.96	10	Fig 2 A
PreVPA		0.0001	6.019	10	Fig 2 C
Control					
PostVPA					

Prefrontal cortex, PND21

Western blotting results

Group	Protein	p	t	df	Figure
Control	GFAP	0.0001	8.229	10	Fig 2 E
PreVPA					
Control		0.0001	20.786	10	Fig 2 G
PostVPA					
Control	DCX	0.0718	2.013	10	Fig 2 E
PreVPA		0.8221	0.2309	10	Fig 2 G
Control					
PostVPA					
Control	NeuN	0.0001	24.25	10	Fig 2 E
PreVPA		0.1125	1.740	10	Fig 2 G
Control					
PostVPA					
Control	SYP	0.0001	12.40	10	Fig 2 E
PreVPA		0.0001	8.207	10	Fig 2 G
Control					
PostVPA					

Hippocampus, PND 14

Western blotting results

Group	Protein	p	t	df	Figure
Control	GFAP	0.0867	1.899	10	Fig 3 A
PreVPA					
Control		0.0023	4.050	10	Fig 3 C
PostVPA					
Control	DCX	0.0597	2.123	10	Fig 3 A
PreVPA					
Control		0.9739	0.0335	10	Fig 3 C
PostVPA					
Control	NeuN	0.8093	0.2478	10	Fig 3 A
PreVPA					
Control		0.0001	10.95	10	Fig 3 C
PostVPA					
Control	SYP	0.0564	2.157	10	Fig 3 A
PreVPA					
Control		0.6790	0.4262	10	Fig 3 C
PostVPA					

Hippocampus, PND21

Western blotting

Group	Protein	p	t	df	Figure
Control	GFAP	0.0029	3.913	10	Fig 3 E
PreVPA					
Control		0.0001	8.169	10	Fig 3 G
PostVPA					
Control	DCX	0.0003	5.482	10	Fig 3 E
PreVPA					
Control		0.0003	5.438	10	Fig 3 G
PostVPA					
Control	NeuN	0.0028	3.935	10	Fig 3 E
PreVPA					
Control		0.3401	1.002	10	Fig 3 G
PostVPA					
Control	SYP	0.0001	15.48	10	Fig 3 E
PreVPA					
Control		0.0001	7.352	10	Fig 3 G
PostVPA					

Olfactory bulb, PND14

Western blotting results

Group	Protein	p	t	df	Figure
Control	GFAP	0.0001	12.32	10	Fig 4 A
PreVPA					
Control		0.0001	20.786	10	Fig 4 C
PostVPA					
Control	DCX	0.1657	1.495	10	Fig 4 A
PreVPA					
Control		0.8221	0.2309	10	Fig 4 C
PostVPA					
Control	NeuN	0.3929	0.8928	10	Fig 4 A
PreVPA					
Control		0.1125	1.740	10	Fig 4 C
PostVPA					

Olfactory bulb, PND21

Western blotting results

Group	Protein	p	t	df	Figure
Control	GFAP	0.9911	0.0114	10	Fig 4 E
PreVPA					
Control		0.0001	14.53	10	Fig 4 G
PostVPA					
Control	DCX	0.0001	10.12	10	Fig 4 E
PreVPA					
Control		0.0001	6.952	10	Fig 4 G
PostVPA					
Control	NeuN	0.2083	1.345	10	Fig 4 E
PreVPA					
Control		0.6943	0.4046	10	Fig 4 G
PostVPA					

Prefrontal cortex, PND14

ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.68	0.4178	10	Fig 2 B
PreVPA					
Control		0.94	0.0819	10	Fig 2 D
PostVPA					
Control	NT3	0.025	2.676	10	Fig 2 B
PreVPA					
Control		0.0009	5.522	10	Fig 2 D
PostVPA					
Control	IGF	0.05	2.183	10	Fig 2 B
PreVPA					
Control		0.0014	4.388	10	Fig 2 D
PostVPA					

Prefrontal cortex, PND21

ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.53	0.6484	8	Fig 2 F
PreVPA					
Control		0.17	1.476	9	Fig 2 H
PostVPA					
Control	NT3	0.086	1.925	9	Fig 2 F
PreVPA					
Control		0.87	0.1689	9	Fig 2 H
PostVPA					
Control	IGF	0.0001	7.239	8	Fig 2 F
PreVPA					
Control		0.0537	2.186	9	Fig 2 H
PostVPA					

## Hippocampus PND14

### ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.0016	4.276	10	Fig 3 B
PreVPA					
Control		0.18	1.445	9	Fig 3 D
PostVPA					
Control	NT3	0.0007	5.769	7	Fig 3 B
PreVPA					
Control		0.0035	4.090	8	Fig 3 D
PostVPA					
Control	IGF	0.0001	7.133	9	Fig 3 B
PreVPA					
Control		0.004	*U=0		Fig 3 D
PostVPA					
Control	GDNF	0.12	1.715	8	Fig 3 B
PreVPA					
Control		0.0001	7.286	8	Fig 3 D
PostVPA					

\*Mann Whitney test

## Hippocampus PND21

### ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.0042	3.956	8	Fig 3 F
PreVPA					
Control		0.0057	3.506	10	Fig 3 H
PostVPA					
Control	NT3	0.0084	3.478	8	Fig 3 F
PreVPA					
Control		0.0001	12.94	8	Fig 3 H
PostVPA					
Control	IGF	0.0115	3.261	8	Fig 3 F
PreVPA					
Control		0.004	*U=0		Fig 3 H
PostVPA					
Control	GDNF	0.01	3.198	8	Fig 3 F
PreVPA					
Control		0.0007	4.796	10	Fig 3 H
PostVPA					

\* Mann Whitney test

# Olfactory bulb PND14

## ELISA results

Group	Protein	p	t	df	Figure	
Control	BDNF	0.0002	6.345	10	Fig 4 B	
PreVPA						
Control		0.008	*U=0		Fig 4 D	
PostVPA						
Control	NT3	0.72	0.3692	10	Fig 4 B	
PreVPA						
Control		0.16	1.522		10	Fig 4 D
PostVPA						
Control	IGF	0.05	2.255	10	Fig 4 B	
PreVPA						
Control		0.002	4.214		10	Fig 4 D
PostVPA						
Control	GDNF	0.09	1.938	8	Fig 4 B	
PreVPA						
Control		0.97	0.0355		8	Fig 4 D
PostVPA						

\* Mann Whitney test

# Olfactory bulb PNd21

## ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.0001	11.31	10	Fig 4 F
PreVPA					
Control		0.0314	2.501	10	Fig 4 H
PostVPA					
Control	NT3	0..0001	13.97	8	Fig 4 F
PreVPA					
Control		0.26	1.207	10	Fig 4 H
PostVPA					
Control	IGF	0.0752	2.044	8	Fig 4 F
PreVPA					
Control		0.0041	3.695	10	Fig 4 H
PostVPA					
Control	GDNF	0.008	*U=0		Fig 4 F
PreVPA					
Control		081	0.2424	10	Fig 4 H
PostVPA					

\* Mann Whitney test



# Subventricular zone PND14

## ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.008	*U=0		Fig 5 A
PreVPA					
Control		0.005	3.882	8	Fig 5 B
PostVPA					
Control	NT3	0.026	2.723	8	Fig 5 A
PreVPA					
Control		0.005	4.373	6	Fig 5 B
PostVPA					
Control	IGF	0.004	U=0		Fig 5 A
PreVPA					
Control		0.004	U=0		Fig 5 B
PostVPA					

\* Mann Whitney test

# Subventricular zone PND21

## ELISA results

Group	Protein	p	t	df	Figure
Control	BDNF	0.54	2.258	8	Fig 5 C
PreVPA					
Control		0.17	1.513	8	Fig 5 D
PostVPA					
Control	NT3	0.42	0.8564	8	Fig 5 C
PreVPA					
Control		0.98	0.0219	9	Fig 5 D
PostVPA					
Control	IGF	0.0001	11.31	8	Fig 5 C
PreVPA					
Control		0.02	*U=2		Fig 5 D
PostVPA					

\* Mann Whitney test

## **Specificity of the primary and secondary antibodies used in the current study**

1. A polyclonal rabbit antibody anti-GFAP, Dako, Z0334.

<https://www.citeab.com/antibodies/2452274-z0334-glial-fibrillary-acidic-protein-gfap>

Cited in 4043 publications.

2. A monoclonal mouse antibody anti-DCX, sc-271390

<https://www.scbt.com/p/doublecortin-antibody-e-6?srltid=AfmBOop79Xkvkk4s-rU-5vs5dV2JusXPNN8Ec1QJEg-IWFtJDC5pd1Ny>

Cited in 131 publications.

3. A monoclonal mouse antibody anti-NeuN, MAB377.

<https://www.citeab.com/antibodies/226230-mab377-anti-neun-antibody-clone-a60>

Cited in 6998 publication.

4. A monoclonal mouse antibody anti-synaptophysin, SAB4200544

<https://www.citeab.com/antibodies/2282735-sab4200544-anti-synaptophysin-antibody-mouse-monocl>

Cited in 18 publications.

5. Goat Anti-Rabbit IgG H&L, ab6721

<https://www.abcam.com/en-us/products/secondary-antibodies/goat-rabbit-igg-h-l-hrp-ab6721?srltid=AfmBOordkxuB3tUoOKaKnFXPxKtz9RuoO0RIkzRLBZQA2z3FO3mfgo8u>

Cited in 5946 publications.

6. Goat Anti-Mouse IgG H&L, ab97023

[https://www.abcam.com/en-us/products/secondary-antibodies/goat-mouse-igg-h-l-hrp-ab97023?srltid=AfmBOopusr2MyScINIMa3irSPfiko2a6l9IluuOD6PRqNa\\_MZXX9ENZt](https://www.abcam.com/en-us/products/secondary-antibodies/goat-mouse-igg-h-l-hrp-ab97023?srltid=AfmBOopusr2MyScINIMa3irSPfiko2a6l9IluuOD6PRqNa_MZXX9ENZt)

Cited in 367 publications.

7. Rabbit anti- $\beta$ -actin antibody, Cell signaling #4967

<https://www.cellsignal.com/products/primary-antibodies/b-actin-antibody/4967?srltid=AfmBOopUvcK4npdbBaMIL51drga4YtBNwkRCTPdetD5QNOiO5acKdZTo>

Cited in 3824 publications.