**Supplementary material – hormonal analyses**

**Hormonal processing**

Venous blood was obtained at the end of the scanning session and was stored at −80˚C. Once hormones from all study participants were available, they were analyzed in one batch. The inter-assay CV was 2.19%. Testosterone and Estradiol (E2) were determined using liquid chromatography tandem mass spectrometry (AB Sciex 5500 triple-quadrupole mass spectrometer; AB Sciex, Toronto Canada). The serum limit of quantification for E2 was 0.3 pg/mL and 1 ng/dL (35pmol/L) for T and their respective inter-assay CVs were 4% at 21 pg/mL (E2) and 6.5% at 3 ng/dL for T.

**Hormonal analysis**

Correlations between the two hormones and the mean parameter estimates for each ROI were conducted for all four groups and Bonferroni corrected for multiple comparisons within groups, i.e., 0.05 divided by 6 tests per group (2 hormones x 3 ROIs) = .008.

**Hormonal results**

*Exclusion – inclusion contrast*

Trans men showed a negative correlation between E2 and the dorsal ACC (r(18)=-.62, p=.006).

*Re-inclusion contrast*

There were no statistically significant effects.