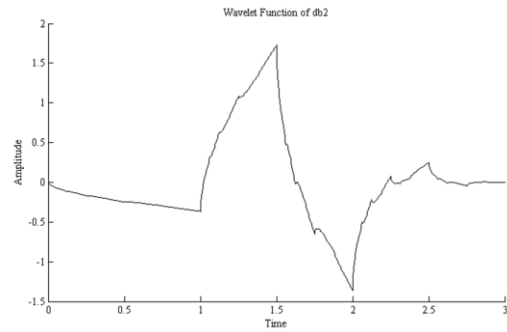
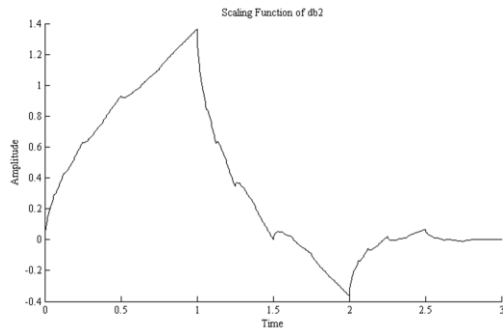
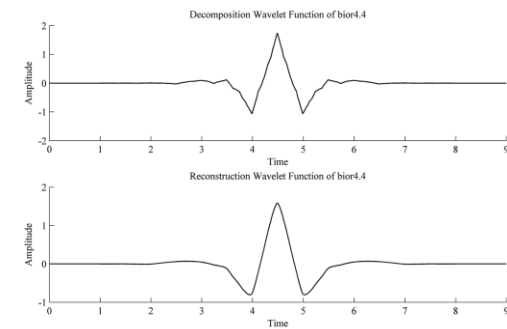
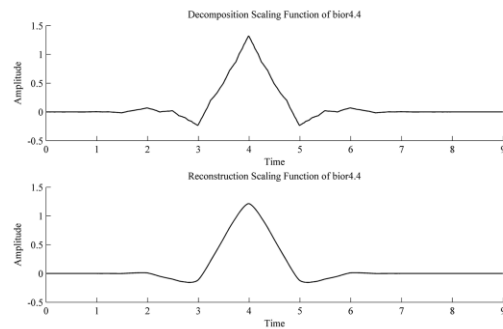


## Supplementary Material



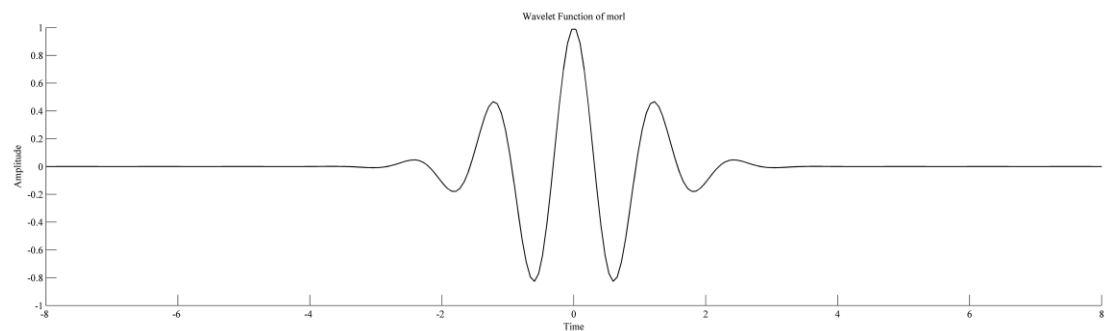
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2 **Supplementary Figure S1.** The scaling function and wavelet function of  
3 Daubechies2 (db2).



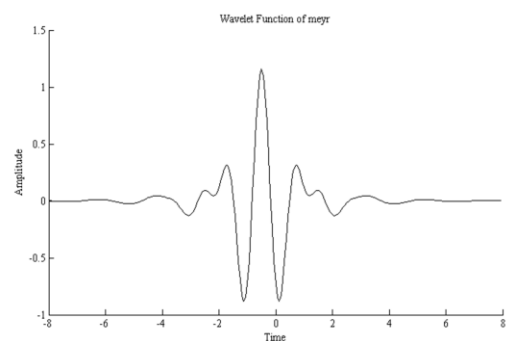
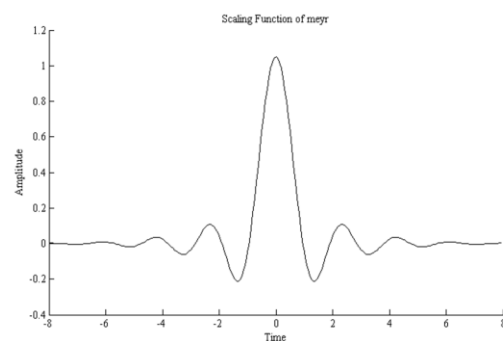
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5 **Supplementary Figure S2.** The decomposition scaling function, decomposition  
6 wavelet function, reconstruction scaling function, and reconstruction wavelet function  
7 of biorthogonal 4.4 (bior 4.4).



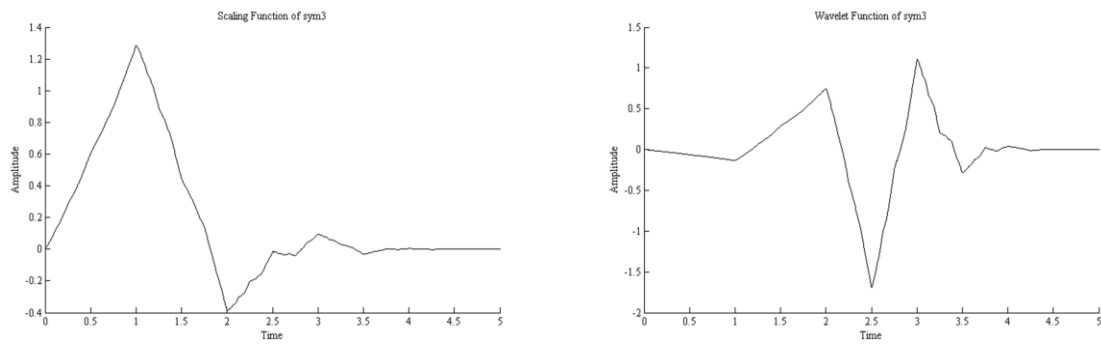
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9 **Supplementary Figure S3.** The wavelet function of Morlet (morl).



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11 **Supplementary Figure S4.** The scaling function and wavelet function of Meyer  
12 (meyr).



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14 **Supplementary Figure S5.** The scaling function and wavelet function of Symlets 3  
15 (sym3).

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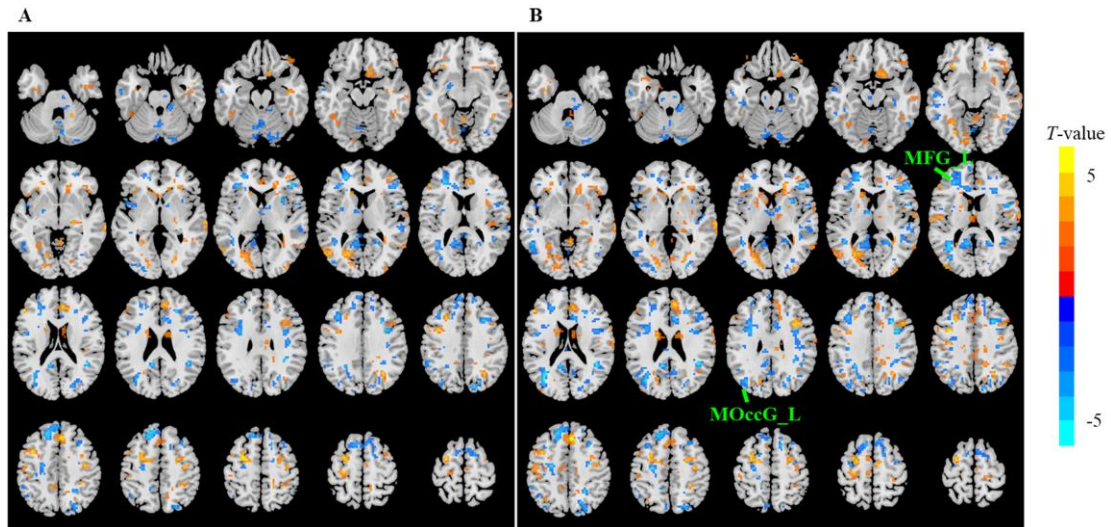
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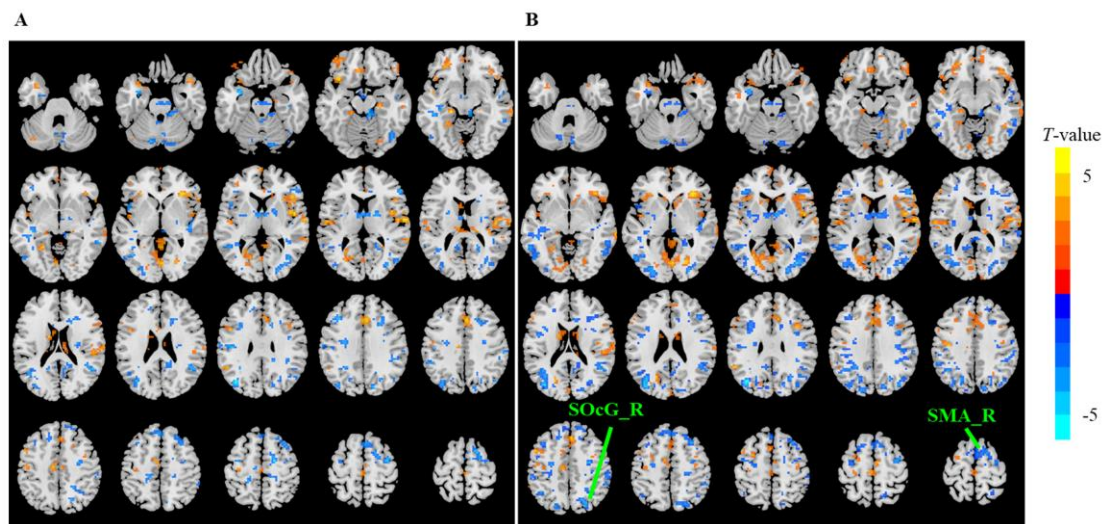
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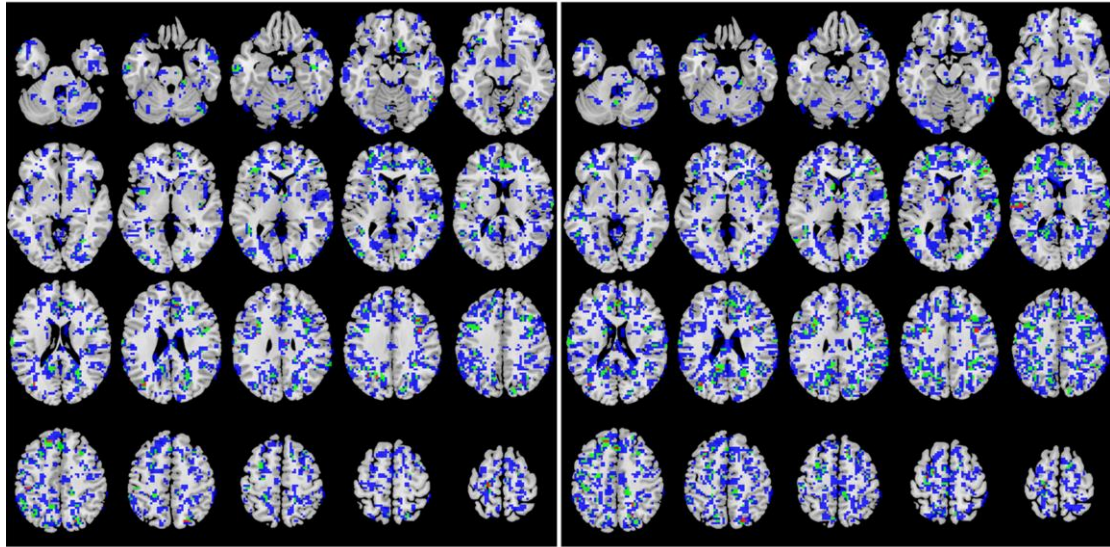
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39 **Supplementary Figure S6.** The  $t$  map ( $p < 0.05$ , cluster size  $\geq 10$  voxels) of ADHD  
 40 vs. TDC of NYU cohort in Slow-6 (0 - 0.0117 Hz) by FFT-ALFF (A) and db2-ALFF  
 41 (B), respectively. Cold colors indicate lower ALFF in ADHD. MFG\_L, left middle  
 42 frontal gyrus; MOccG\_L, left middle occipital gyrus.



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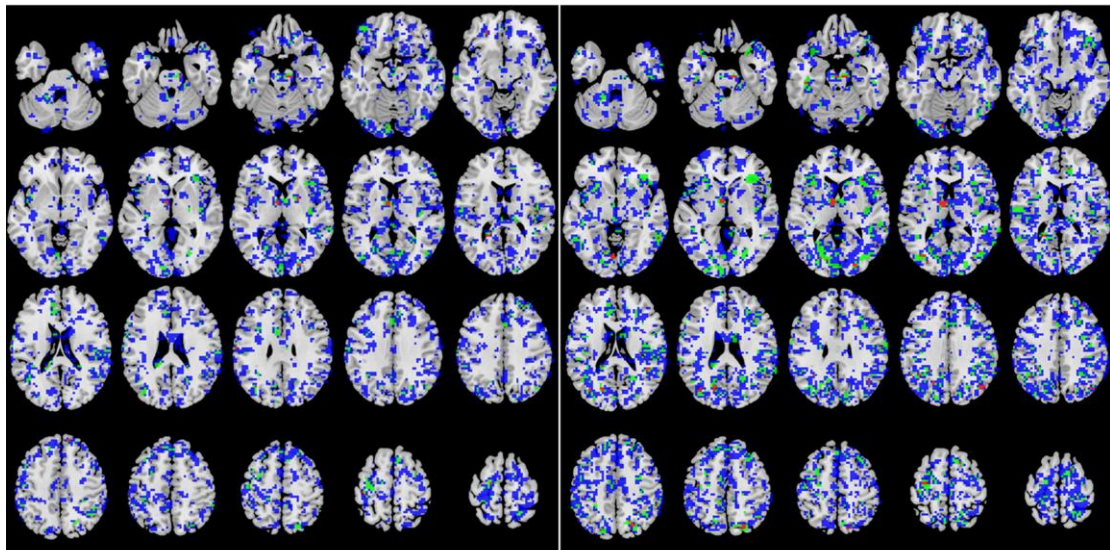
44 **Supplementary Figure S7.** The  $t$  map ( $p < 0.05$ , cluster size  $\geq 10$  voxels) of ADHD  
 45 vs. TDC of NYU cohort in Slow-2 (0.1992 - 0.25 Hz) by FFT-ALFF (A) and  
 46 db2-ALFF (B), respectively. Cold colors indicate lower ALFF in ADHD. SOcG\_R,  
 47 right superior occipital gyrus; SMA\_R, right supplementary motor area.  
 48



1 cohort
  2 cohorts
  at least 3 cohorts

49

50 **Supplementary Figure S8.** The reproducibility brain maps across the 4 cohorts in  
 51 Slow-6 (0 - 0.0117 Hz) by FFT-ALFF (**A**) and db2-ALFF (**B**), respectively. Blue  
 52 indicates the regions detected in only one of the 4 cohorts. Green and red indicate the  
 53 regions detected in 2 and at least 3 cohorts, respectively.



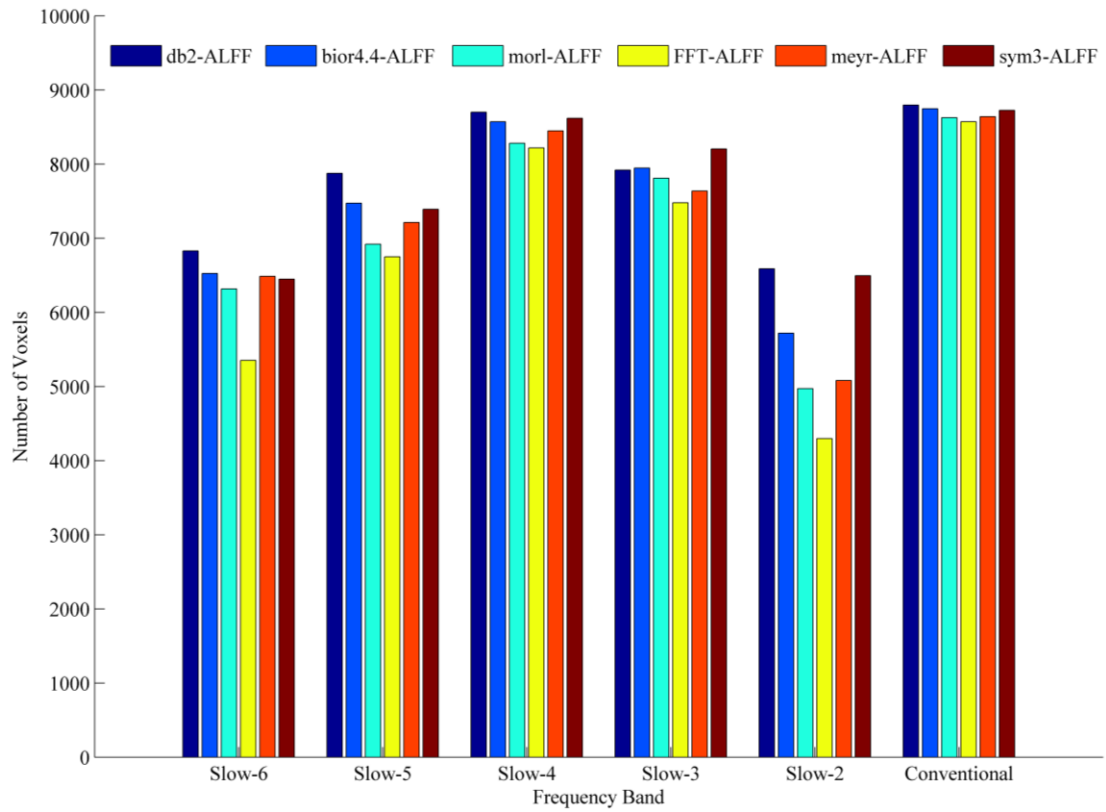
1 cohort
  2 cohorts
  at least 3 cohorts

54

55 **Supplementary Figure S9.** The reproducibility brain maps across the 4 cohorts in  
 56 Slow-2 (0.1992 - 0.25 Hz) by FFT-ALFF (**A**) and db2-ALFF (**B**), respectively. Blue  
 57 indicates the regions detected in only one of the 4 cohorts. Green and red indicate the  
 58 regions detected in 2 and at least 3 cohorts, respectively.

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62 **Supplementary Figure S10.** The mean number of voxels showing significant  
 63 difference in all 5 cohorts (NYU, PKU1, PKU2, PKU3, and EOEC ) ) calculated from  
 64 Wavelet-ALFF and FFT-ALFF results in different frequency bands.