RNA-Seq blood transcriptome profiling in familial attention deficit and hyperactivity disorder (ADHD)


Abstract

We have carried an exploratory study by blood transcriptome to find RNA expression signatures in familial ADHD. Samples were collected from three cases with familial ADHD and their paired controls and evaluated by RNA-Seq. Transcriptome profiling identified 7 differentially expressed transcripts with a FDR <0.05 that were involved in pathways in Huntington's disease or axonal guidance signaling previously implicated in ADHD, and enriched for signal peptide, growth factor binding, and notably the lipid metabolism pathways. These findings show that blood transcriptome can have an associated signature and highlight a potential to use blood transcriptome to identify patterns of ADHD.