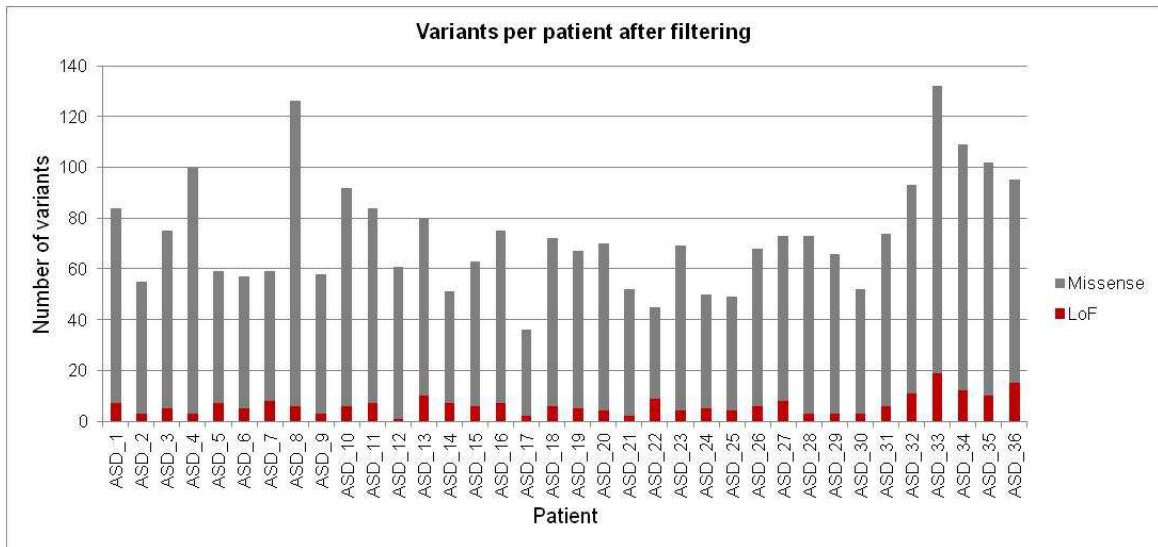
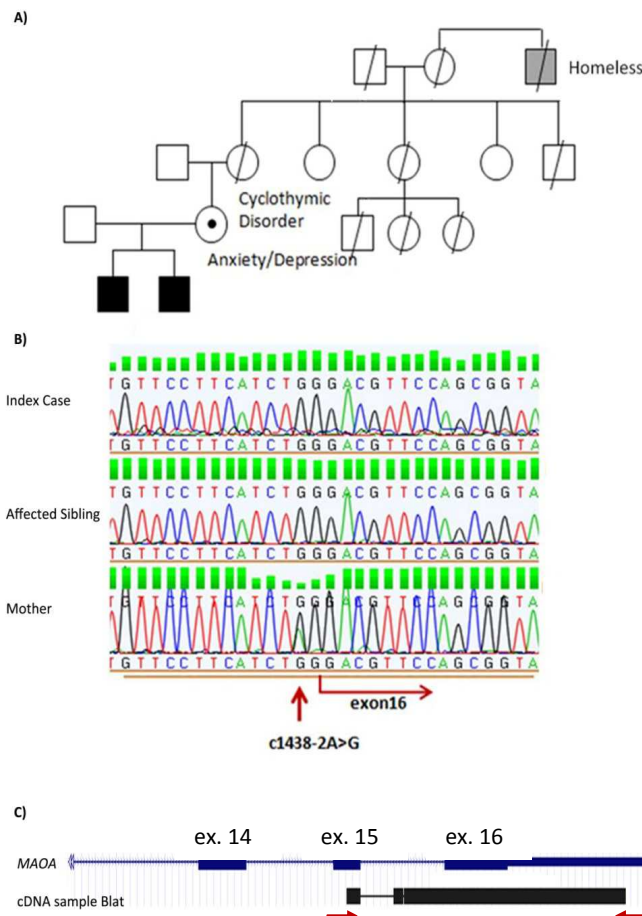


**Figure S1.** Distribution of WES variants per patient after filtering. Grey bars correspond to missense mutations, whereas red bars correspond to LoF mutations.



**Figure S2.** A) Pedigree of the family ASD\_16 compatible with X-linkage inheritance. B) Validation by Sanger sequencing of the hemizygous *MAOA* splicing mutation (c.1438-2A>G) in the proband and brother as well as the heterozygous mother. C) Schematic representation of the aberrant *MAOA* transcript detected in blood mRNA of the proband, generated by the use of a cryptic acceptor splice site in intron 15 of the gene.



**Figure S3.** Distribution of z-score values among genes contained in all Copy Number Variant regions (CNVs) detected byXHMM in exome data.

