Reviewer's report

Title: Genome-wide expression profiling and functional characterization of SCA28 lymphoblastoid cell lines reveal impairment in cell growth and activation of apoptotic pathways.

Version: 2 Date: 15 April 2013

Reviewer: Diego di Bernardo

Reviewer's report:

The manuscript describes the results of an RNA-seq experiment to identify genes and pathways differentially active in SCA28 lymphoblastoid cell lines compared to cells from control subjects. Differentially expressed genes were identified from RNA-seq data and a subset verified by real-time PCR. Gene Ontology analysis was used to reveal biological pathways altered in patients and some of these pathways were validated by secondary assays. The statistical and bioinformatics analysis used to analyse the RNA-seq data is the current state-of-the-art, therefore I have no concerns of the results obtained.

I am not an expert of SCAs however I believe these results will be of interest to the community working in the area.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare I have no competing interests/