Reviewer's report

Title: Use of Next Generation Sequencing Technologies in Research and Beyond: are participants with mental health disorders fully protected?

Version: 3 Date: 6 May 2012

Reviewer: Antonios H Tzamaloukas

Reviewer's report:

This review analyzed publications presenting a series of ethical problems created by genetic studies. Next generation gene sequencing and bipolar disorders are the focus of the report. The content of the review is appropriate for a forum on medical ethics. The main issue with the report is its language.

A. Major compulsory revisions:

The instructions to the reviewers specify attention to the language of the report. I suggest that this report requires extensive revision with emphasis on the English of the report. One practical suggestion to the authors is to use short sentences. Each sentence should contain a single message. For example, the last sentence of the Introduction can easily be split in three sentences.

B. Minor essential revisions

Spelling, agreement of verbs and subjects, etc

(1) Section "NGS in Research Applied to Complex Traits", line 13 from top, change "...a genetically predispose condition... to "...a condition with a geneticy predisposition..."

(2) Section "Behind Results Diversity of PD"

(a) Change the title

(b) Next to last line: change "...bases..." to "...basis..."

(3) Section "Disease Phenotype"

(a) Line 4 from top, change "...incline..." to "...inclined..."

(b) Line 6 from top, ommit "(Uhl, 2008)"

(c) Line 11 from top, and in several other sites in the text, change "...ethnical..." to "...ethnic..."

(4) Section "Social and Ethical Implications of NGS Consent"

(a) Make several paragraphs

(b) Line 21 from top, correct "Concent process requires to consider..." (Does it mean "The concent process is required to consider..."?)

(c) Line 28 from top, correct "or misused of results..."
(5) Section "Feedback, Return (?) of Results and Incidental Findings"
(a) Line 3 from top, ommit "it"

(6) Section "Informed decision making and autonomy"
(a) Second paragraph, first line, change "...there is also feasible..." to "...it is also feasible..."
(b) Second paragraph, line 4 from top, change "would not only allows the finding..." to "would allow not only the discovery..."

(7) Section "Clinically relevant ethical challenges"
(a) Make additional paragraphs
(b) Line 4 from top, change "helping discerning a great amount..." to "helping to differentiate a large number..."
(c) Next page (to the page containing the title of the section), line 5 from the bottom, change "genetic diagnosis" to genetic diagnoses"
(d) Third page, line 6 from top, correct "privative" ("limited")?
(e) Correct the sentence "It becomes also clear...same time research participants [32]" in lines 25-28 from the top of the same page
(f) Same page, lines 36-41 from top, the sentence needs to be completely changed. This sentence is one example where creation of several sentences will help the clarity of the text.

(C) Discretionary Revisions
I have two suggestions to assist the reviewers of a revision:
(a) Double the space between lines
(b) Number the pages of the manuscript

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests