Reviewer’s report

Title: Clinical application of genomic profiling to find druggable targets for adolescent and young adult (AYA) cancer patients with metastasis

Version: 0 Date: 04 Sep 2015

Reviewer: Artur Kowalik

Reviewer’s report:

This is the well constructed paper that reports findings from the very important and interesting study. The study concerns aspects of adolescent and young adult cancers (AYA). The subject of the study were seven cases of tumors diagnosed in AYA. The tumors were analysed using comprehensive genomic methods (WGS, WES, CNV). Genomic results revealed differences in carcinogenesis between tumors diagnosed in AYA and older patients. Namely there are less mutations detected in AYA patients in comparison to tumors detected in older patients. In addition mutation pattern detected in AYA patients differs from those in other age groups of patients which would have an impact on the treatment efficacy and disease course. Thanks to comprehensive genomic techniques applied author’s were able to propose targeted therapy for almost all studied cancer cases. This could become a standard of diagnostics for AYA cancers in the future and help to set up clinical trials for those group of patients.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
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Yes

Are the conclusions drawn adequately supported by the data shown?
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Yes

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I am able to assess the statistics

Quality of written English
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