Reviewer's report

Title: Differential expression of THOC1 and ALY mRNP biogenesis/export factors in human cancers

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Reviewer: David Goodrich

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The significance of the presented study is limited by its nature as a broad survey of Thoc1/Aly expression in a number of different cancer types. The relatively large sample variation and small sample size limit the conclusions that can be drawn. More focused analysis of individual tumor types with larger sample sizes is likely necessary to tease out the biological meaning of the observed variation.

Nonetheless, this is an understudied area with few published papers. While Thoc1/Aly expression data is available as part of the numerous expression profiling studies available in public databases, the current manuscript does represent an advance due to its focus on Thoc1/Aly and its use of multiple complementary approaches to assess expression (arrays, qRT-PCR, IHC, western blotting). Availability of this data would be of use to people in this field.

The specific essential revisions have been addressed with varying degrees of success. The specificity of the antibodies has been addressed in a limited and minimally acceptable way; I note that this is a limitation of most currently published IHC studies assessing Thoc1/Aly. Some IHC data has been verified by western blotting, although this verification is on a small number of available samples.

Concern remains regarding the conclusions that can be drawn from this data, given potential limitations in the methods and small sample sizes. The authors are encouraged to be circumspect in any specific conclusions made regarding the potentially differential roles of Thoc1/Aly in tumorigenesis.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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.