Reviewer's report

Title: A mutation screening of oncogenes and nuclear encoded mitochondrial complex I genes in oncocytic thyroid tumors

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Reviewer: Patrick Mehlen

Reviewer's report:

In the manuscript by "A mutation screening of oncogenes and nuclear encoded mitochondrial complex I genes in oncocytic thyroid cancer", Giovanni Romeo's group has studied the mutation profiles of a panel of 45 thyroid tumors by performing a candidate approach. On the overall this is an interesting and important contribution to the field of thyroid tumors. The quasi-absence of detection of p53 mutation together with the finding of mutations in mitochondria function are interesting per se and should be published.

I do not have any specific concerns. It would may be interesting to replace this study in the light of the large deep-sequencing effort. Is there any thyroid tumor that was fully sequenced and does it match with this targeted approach? I think it would make sense also to change the title as the title states about oncogenes but no tumor suppressor genes while the interesting data are found with p53 (that is a tumor suppressor gene).