Reviewer’s report

Title: The Role of Cytochrome c Oxidase Subunit Va in Non-small Cell Lung Carcinoma Cells: Association with Migration, Invasion and Prediction of Distant Metastasis

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Reviewer: Etmar Bulk

Reviewer’s report:

Major Compulsory Revisions

The authors have addressed most of the points raised by this reviewer. However, since the authors present new data regarding Bcl-2 in Fig.7 several questions remain. 1) The mRNA expression of Bcl-2 is definitely the strongest in the H2009 cell line. Why did the authors choose the CL-1-5 cell line for the knockdown experiments in Fig. 7B? In this case, almost every researcher would use the cell line with its strongest expression. I can understand that the authors would like to present data for the same cell line (CL-1-5) they presented for the knockdown experiments for COX Va, but even here is the mRNA expression for COX Va stronger in the H2009 cell line. The work of the authors would benefit if they also could present experimental results for the H2009 cell line which they obtained for the CL-1-5 cell line in Fig. 5 and 7B.

2) From their experiments shown in Fig. 7B, the authors conclude that “COX Va may interact with Bcl-2 in some way” – this is a very vague speculation. Using only a RT-PCR approach to identify a possible interaction between COX Va and Bcl-2 is just unsatisfying. Most researchers would firstly look via immunoprecipitation for such possible interaction. If the authors will keep their findings regarding Bcl-2 they have to improve their experimental work.

Anyway, the authors should know whether they want to focus only on COX Va and its relation to migration, invasion and prediction of distant metastasis or, in addition, to its possible interaction with Bcl-2 which, of course, would strengthen their interesting findings.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.