Reviewer's report

Title: External Validation Suggests Integrin Beta 3 as Prognostic Biomarker in Serous Ovarian Adenocarcinomas

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Reviewer: Hermann Lage

Reviewer's report:

General

In this study, the authors evaluated the potential prognostic impact of 4 different ovarian carcinoma-associated markers which were identified in a previous study, in an independent cohort of patients. Tumors from 30 patients were analyzed by QPCR, tumors from 98 patients were analyzed by Western blot. ITGB3 was identified to be more expressed (on mRNA as well as on protein level) in tumor samples from survivors than in tumor samples from deceased patients. No significant differences were detected for the other thee factors. This study is interesting and worthy to be published. However, some comments may help to improve the manuscript.

Specific comments

Densitrometric evaluation of band intensities of Western blots is problematic. However, it is not clear how the semiquantitative analysis was performed. Is the expression level absolute or relative in comparison to GAPDH? What is the internal reference sample?

The increased ITGB3 expression shown in Figure 2 is not really convincing. Thus, the authors should include some original Western blots.

The authors mentioned that the Western blots of 98 cases were performed in duplicate. Did all of the 98 duplicate analyses show identical results? If not, how were the samples assessed?

The statistical analyses are not really clear:

How is low mRNA expression level defined? How is high mRNA expression level defined? How is low protein expression level defined? How is high protein expression level defined?

Were the mRNA and protein expression levels from the same patients in the same range? The authors could include a table or figure demonstrating the correspondence.

It is not clear whether the Kaplan-Meier curve in Figure 3B is derived from mRNA or protein level. For clarity, the authors should show two Kaplan-Meier curves, one derived from the mRNA data and one derived from the protein data.
Did the authors performed a multivariate analysis? In other words, is ITGB3 an independent marker?

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.