

Girona, May 2018

Dear Dr. Xue-Jiao Wang,

We have carefully revised the manuscript "Glycoprotein biomarkers for the detection of pancreatic ductal adenocarcinoma" (NO: 38918) taking into account the comments of the reviewers, which we believe have helped to improve the manuscript. A point-by-point reply to reviewers' comments and suggestions is included. We have also added a new figure and the audio core tip and have corrected some format issues requested by the Editorial.

Yours sincerely,

Rosa Peracaula

Reply to the comments the reviewers

Reviewer 1:

This is a well written review of glycoprotein biomarkers for pancreatic cancer. 1. Introduction appears redundant. Since this is a review of biomarkers, the first paragraph can be shortened. In addition, "Imaging techniques" can be deleted or significantly shortened. 2. In Results, some data shown in the manuscript are difficult to follow. Data on most studies are shown in Tables 1 and 2. Please summarize and discuss them rather than list all the data.

As suggested by the reviewer we have shortened the first section of the introduction and have reduced significantly the section of imaging techniques. The studies of Tables 2 and 3 described in results section have been simplified and more emphasis has been put in their discussion.

Reviewer 2:

Pancreatic cancer is a notorious disease with poor prognosis. Unfortunately, the incidence of PC is expected to increase in the next decades in developed and developing

countries. Detection of early PC is the key to improve the prognosis of patients with PC. Biomarkers with high sensitivity and specificity and imaging equipments with high resolution are the main modalities for early detection of PC. Until now the value of biomarkers in detecting early PC is compromised due to many factors. In this manuscript the authors reviewed the existing biomarkers for PC diagnosis and assessed their clinical value. More importantly, the manuscript focused on some glycoproteins which were associated with PC and presented potential diagnostic value. The authors also pointed out that the combination of these new candidate glycoproteins with the existing biomarkers could result in a panel that may improve early diagnosis of PC. The content of this manuscript is comprehensive and updated, but it is too lengthy and should be concise in some part. For example, imaging techniques and mutated genes are not closely related to the topic of the manuscript and these contents are not necessary for this review.

As suggested by the reviewer we have shortened significantly the section of imaging techniques.