Author's response to reviews

Title: Tumor size as measured at initial X-ray examination, not length of bile duct stricture, predicts survival in patients with unresectable pancreatic cancer

Authors:

Henrik Forssell HF (henrik.forssell@ltblekinge.se)
Katrin Pröh KP (katrin.proh@ltblekinge.se)
Michael Wester MW (michael.wester@ltblekinge.se)
Hans Krona HK (hans.krona@bth.se)

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Answer to the reviewers

Title:

Tumor size as measured at initial X-ray examination, not length of bile duct stricture, predicts survival in patients with unresectable pancreatic cancer

Forssell Henrik1,2*, Pröh Katrin 3, Wester Michael 1, Krona Hans4

Address: 1 Dept of Surgery, Blekinge Hospital, 371 85 Karlskrona, Sweden, 2 Blekinge Centre of Competence, Blekinge, 371 81 Karlskrona, Sweden, 3 Dept of Radiology, Blekinge Hospital, 371 85 Karlskrona, Sweden, 4 Blekinge Institute of Technology, School of Health Science, 371 79 Karlskrona, Sweden

Reviewer N Ikenaga

General comments

The clinician who meets a patient with unresectable pancreatic cancer does have an interest in supplying his or her patient with information regarding their prognosis. Very little information on what predicts survival in cases of unresectable pancreatic cancer is currently available and the study should therefore be of interest. This study supplies detailed information on at least one factor predicting survival, namely tumor size at initial presentation of symptoms,
that is currently not available from any other source. Determining the largest tumor diameter at the patient’s initial X-ray examination and can identify patients with a very short survival time and those who are likely to survive longer in order to allow for optimal individualized patient care.

Specific points

1. This is a retrospective study based on observations made in a routine clinical setting. The patients have not undergone any other particular radiologic examinations for the specific purpose of this study. Measurements are therefore based on the best information on size available to the authors. We respect the view that a highly standardized protocol used on every observation would have been the ideal method for scientific purposes. The reviewer must however accept that slight sources of variation may be difficult to counter for in a setting like ours. We find it unlikely that different radiologic modalities would produce vast differences in measurements of tumor size. The method of letting one and the same radiologist re-examine every investigation counters at least one potential source of false variation in measurements. The slice thickness in CT-scans was routinely 2 mm and this fact is now specified in the text. 3D-CT was not used and this examination was to the authors’ knowledge not in clinical practice anywhere in Sweden at the time of the study.

2. Results were recalculated following a comment made by reviewer H Thorlacius and the P<0.05 and P=0.05 discrepancy is no longer present after this. Please see Table 3.

3. The unclear statement “It is concluded that… …with a measurable tumor” has been removed. Following revision, the paper now focuses only on patients with radiologically measurable tumors.

4. The arrangement of table 1 is now changed and hopefully easier to understand.

5. P values are now included in every picture.

Reviewer H Thorlacius

Specific points
1. Gemcitabine and presence of liver metastases are now adjusted for in survival analysis. Please see Figure 3.

2. There is no correlation between stricture length and tumor size. This is clearly stated in the results section.

3. This part has been removed. Following revision, the paper now focuses only on patients with radiologically measurable tumors.

4. All unexplained abbreviations have been completely removed during revision.

5. The discussion of CT’s sensitivity and specificity for detecting pancreatic tumors has been modified according to the points made by the reviewer.

6. The authors share the reviewer’s enthusiasm over endoscopic ultrasound as a diagnostic method and regret that this new modality was unavailable at the time of the observations. It is now mentioned in detail in the discussion.

7. The point that two groups defined as being less than or greater than the median must per definition be of equal size is obviously correct. This mistake reflected an error in computer code that slipped our attention before the paper was submitted. This has now been corrected so that each group contains 44 patients. The survival curves have been recalculated accordingly. They are virtually similar to before.

8. A reference to Parlak et al has been added to the list of references as suggested by the reviewer. The reference to Sanjay et al has not been included, as it deals with survival after pancreaticoduodenectomy. While interesting, it deals with a different patient group than in our study.