

Peer Review File

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Review Comments A

Comment 1: Because “abdominal tumor, thoracic tumor and breast cancer” includes a large group of pathology ranging from benign to highly malignant or metastasis cancer. It is my opinion that general risk factors cannot be drawn without a meticulous and precise subgroup analysis.

Reply 1: We added some data about tumor type analysis in table 2(see Page 12) and modified our text (see Page 5, line 127). There was no statistical significance in tumor type in our study. However, the sample in our study was not enough to do more detailed and in-depth research.

Changes in the text: Please see Page 12 and Page 5, line 127.

Comment 2: Pulmonary embolism profiles are missing that includes

- a. Symptomatic or asymptomatic
- b. Severity (massive or non-massive)
- c. Surgery (embolectomy) or not?

Reply 2: a、 There were 25 asymptomatic patients in our study and we added the data in the text (see Page 4, line 101). b、 The severity of PE was classified as high risk PE or non-high risk PE in our study. We did not use massive or non-massive. c、 In our hospital, we did not take operations in these patients.

Changes in the text: We added “There were 25 asymptomatic patients in our study” in Page 4, line101.

Comment 3: The cause of death is not mentioned.

Reply 3: The cause of death was multiple organ failure caused by pulmonary embolism except one case with infection. We added this in the text (see Page 5, line 121).

Changes in the text: We added “The cause of death was multiple organ failure caused by pulmonary embolism except one case with infection” in Page 5, line 121.

Comment 4: Many words or terms should be addressed in its definition, e.g. CTPA, shock, infection, MPV, etc.

Reply 4: We modified our text as advised (see Page 4, line 96; Page 5, line 123; Page 5, line 124). Thank you for this comment.

Changes in the text: We modified our text as advised (see Page 4, line 96; Page 5,

line 123; Page 5, line 124).

Review Comments B

Comment 1: As shock and high APACHE II score are well known predictors of all cause mortality (not only in patients diagnosed with PE) how does this study add to the rich body of the literature?

Reply 1: Yes, shock and high APACHE II score are well known predictors of all cause mortality in many critically ill patients. However, the cut-off value for APACHE II score may be different in varied diseases. In our study, we found that APACHE II score greater than 15 within 24 hours after diagnosis with PE was an independent prognostic factor. It may be useful for clinical application and follow-up study.

Changes in the text: Not applicable.

Comment 2: Is it possible to have the total number of tumor-patients who underwent surgery, and those who were imaged for clinically suspected PE in order to find the incidence of clinically suspected and confirmed PE in this cohort?

Reply 2: I am sorry that the exact number of tumor-patients who underwent surgery cannot be obtained because the system that our hospital extracted data has experienced multiple updates over time. So was the imaged system.

Changes in the text: No change.

Comment 3: Was there any difference between the subgroup of patients who underwent thoracic and those who underwent abdominal surgery?

Reply 3: We added some data about tumor type analysis in table 2(see Page 12) and modified our text (see Page 5, line 127). There was no statistical significance between patients who underwent thoracic surgery and those who underwent abdominal surgery in our study.

Changes in the text: Please see Page 12 and Page 5, line 127.

Comment 4: A matched group of cancer-free patients diagnosed with PE after abdominal/thoracic surgery (probably in 2:1 allocation ratio, based on sex, age and major comorbidities) would increase the appeal of the findings significantly. It is of great clinical utility to know if the predictors of adverse outcome differ between patients with and without malignancies.

Reply 4: Yes, this is a good idea. In the future, we will try similar design to know if the predictors of adverse outcome differ between patients with and without malignancies.

Changes in the text: No change.