Dear editor;

Thank you for your decision and constructive comments on my manuscript. We have carefully considered the suggestion of Reviewers and make some changes. We have tried our best to improve and made some changes in the manuscript. The controversial part that has been revised according to your comments. Revision notes are given as follows:

**Reviser #1**

**Comments 1**: Scale bars should be indicated in Figure 1A and Figure 4F.

**Response**: Scale bars are indicated in the upper left corner of the picture (Bar = 50 μm).

**Comments 2**: Supplementary Table 1 shows the relationship between PARN expression and clinicopathological factors. Patients were classified into two groups (high expression vs. low expression). The criteria of this classification should be indicated.

**Response**: According to the PARN IHC score, patients were classified into two groups (the group of high expression is PARN IHC score > 6; the group of low expression is PARN IHC score ≤ 6). And the score criteria we post in Supplementary Table 5.

**Comments 3**: How about the relationship between PARN expression and other factors, such as lymphatic invasion and venous invasion?

**Response**: We add Supplementary Table 2 in the manuscript: Relationship between PARN expression and tumor characteristics (lymphatic metastasis) in patients with esophagus cancer (Spearman’s correlation coefficient for ranked data). We found PARN expression was correlated with lymphatic metastasis (P = 0.028). The expression of PARN was positively correlated with tumor lymph node metastasis (N value). With the increase of tumor malignancy, the expression of PARN increased. We are sorry that our study don’t involve venous invasion so can’t tell you the relationship between PARN expression and venous invasion.
**Comments 4:** Figure 1C shows prognostic analysis based on PARN expression. In Figure 1C, PARN IHC score was shown and the cutoff value of IHC score was set at 6. The authors should explain about the criteria of IHC score and the determination of the cutoff value of IHC score.

**Response:** We add the Supplementary Table 5 to explain about the criteria of IHC score and the determination of the cutoff value of IHC score.

**IHC scoring criteria:**

1. Positive cell score:
   - no positive signal in cytoplasm, cell membrane or nucleus < 0%
   - Positive cell score: 0 (negative)
   - 0% < the proportion of positive cells < 25% Positive cell score: 1
   - 25% ≤ the proportion of positive cells < 50% Positive cell score: 2
   - 50% ≤ the proportion of positive cells < 75% Positive cell score: 3
   - 75% ≤ the proportion of positive cells Positive cell score: 4

2. Staining intensity score: 0-3 points for the staining intensity of cytoplasm, membrane or nucleus
   - No signal color Staining intensity score: 0 (negative)
   - Pale yellow Staining intensity score: 1
   - Brown yellow Staining intensity score: 2
   - Dark brown Staining intensity score: 3

**Results:** The positive cell score × staining color intensity score was used to judge the IHC results, and the higher the score, the higher the antibody expression.

Score 0 - negative, score 1-4 - positive, score 5-8 - positive ++, score 9-12 - positive +++

**Reviser #2**

**Comment:** I would advise to compact the introduction somewhat and let a native English speaker/editor read through the manuscript to revise some small errors style and grammar errors.

**Response:** We were really sorry for our careless mistakes. We have tried our
best to revise the manuscript. We have involved native English speakers for language corrections. We really hope that the language level had been substantially improved. We have tried to compact the introduction. But we need to describe the background of Esophageal cancer and PARN clearly.