

## **Answering reviewers**

### **Review 1**

#### **Q: SPECIFIC COMMENTS TO AUTHORS**

MALDI-TOF mass spectrometry technology has been widely used in the detection of sugars, nucleic acids, and proteins. The structural analysis and molecular weight determination of biological macromolecules and synthetic polymers have become some of the core objectives of current proteomics research. It is also a label-free detection technology, which reduces the cost of detection, and has high sensitivity and high-throughput detection capabilities. This study was designed to analyze the serum protein expression profiles of healthy controls, colorectal polyp patients, and CRC patients to find differentially expressed protein peaks using the MALDI-TOF mass spectrometry. The methods of the study were described in detail. The patients were selected properly. The results of serum protein profiles, diagnostic value of differential proteins and validation are very interesting. The Tables and figures are in high quality. The reviewer suggests to accept this study after a minor editing. Thank you.

**A:** Thanks. The manuscript has been edited carefully according to the editor-in-chief's comments.

### **Review 2**

#### **Q: SPECIFIC COMMENTS TO AUTHORS**

This is an interesting study of the diagnostic value of serum-based proteomics for CRC. The study is very well designed and the results are very interesting. The authors demonstrated that serum proteomics may be helpful for the detection of CRC, and it may provide a potential tool for CRC clinical management. Those findings are meaningful to the clinicians. The reviewer has no specific comments to authors.

**A:** Thanks.

## **Review 3**

### **Q: SPECIFIC COMMENTS TO AUTHORS**

The article reveals a new way in the attempt of a better colorectal cancer screening, by using the MALDI-TOF-MS proteomic evaluation. There are some issues since the proteins have not been characterized but this wasn't the main goal. Also specificity is not so high as compared to CEA. However it is a step forward to further studies in order to find a more accurate marker.

A: Thanks for the reviewer comments. We have described the limitation in the Discussion section, and declared that this study also needed larger sample size and multi-center to demonstrate the clinical value.