



## Reply to “Radiomics May Be a New Opportunity for Bariatric Surgery”

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We read with great interest the letter by Song et al. regarding our recently published paper “Routine early computed tomography scanner after laparoscopic sleeve gastrectomy in high-risk severely obese patients is effective for bleeding or hematoma diagnosis but not for staple-line leak detection: a prospective study” [1]. We appreciate the authors’ interest in our prospective study and would like to thank them for their interesting comments.

Radiomics is a method that extracts numerous features from medical images using data-characterization algorithms. Song et al. propose the use of radiomics to extract quantitative features from medical images and eliminate subjective factors to a certain extent through quantitative analysis of radiomics features [2]. We agree with the authors regarding the potential use of radiomics to assess staple-line leak after laparoscopic sleeve gastrectomy. In addition, we believe that radiomics could improve the sensitivity of routine early CT scanner on staple-line leak detection, since it has already been suggested that this technique has great potential in the diagnosis of postoperative complications as well as in the long-term follow-up of patients [3, 4]. It is, however, of the utmost importance that each distinct step of the radiomics process (such as image acquisition and reconstruction, image segmentation, features extraction and qualification, analysis, and model building) is carefully evaluated for the construction of models that can be easily and accurately transferred into bariatric clinical practice [5].

The purpose of postoperative imaging in bariatric patients is prompt diagnosis and therapeutic management of postoperative complications, especially bleeding and staple-line leak. In the future, radiomics could be a useful tool in our arsenal to improve imaging results, such as sensitivity of

early postoperative CT scanner for the above-mentioned complications. Nevertheless, reproducibility and clinical value of the radiomics parameters in bariatric surgery are yet to be established. Further research in the field is essential.

### Declarations

**Ethical Approval** Does not apply.

**Informed Consent** Does not apply.

**Conflict of Interest** The authors declare no competing interests.

### References

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