

## Bronchiolar-pleural fistula repair with platelet-leukocyte rich gel

## Dear Editor,

We read with great interest the article entitled "First case of bronchiolar-pleural fistula repair with platelet-leukocyte rich gel" by Batori M, et al<sup>1</sup>.

The Authors discuss actual indications for platelet-leukocyte rich gel (PLR-G) and its possible role in bronchiolar-pleural fistula repair. We agree that this method has several advantages including minimally invasive technique and short hospital stay. But are there any disadvantages or contraindications.

Cancer is the first leading cause of lung surgery. After a thorough search of the literature, however, we found no reported evidence of platelet concentrates, including PLR-G, being applied on tumor excision sites. Platelet concentrates enhance the tissue-healing cascade by promoting the release of various growth factors (PDGF, TGF- $\beta$ , VEGF, etc.)<sup>2</sup>. Studies have shown that the release of these growth factors stimulates angiogenesis<sup>3</sup>, induces tumor lymphangiogenesis, enhances nodal metastasis rate<sup>4</sup>, regulates several cell biology processes, including proliferation, cell differentiation, migration, apoptosis and tumorigenesis<sup>5</sup>, and affects overall survival<sup>6</sup>. A more detailed understanding of the complex parameters that govern the interactions between the tumor and vascular compartments has already helped to improve strategies, not only for cancer treatment, but also for preventing recurrence<sup>7</sup>.

Even after a tumor is excised and in order to achieve optimal survival, we must implement every single evidence-based guideline while, in the same time, exclude any maneuver, the indication of which has not yet been established. Therefore, we consider the use of a platelet-rich substance, not yet indicated in patients undergoing resection for cancer. The Authors should have considered this important point, and analyzed or at least mentioned it in their paper. In conclusion, we believe that the role of PLR-G in surgical oncology deserves further experimental investigation and large-scale prospective randomized clinical trials.

## **Conflict of Interest**

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The Authors declare that they have no conflict of interests.

## References

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