

The relationship between tumor budding and survival in colorectal carcinomas

 Gulali Aktas¹

¹. Abant Izzet Baysal University, Faculty of Medicine, Bolu, Turkey

E-mail: draliaktas@yahoo.com

<http://dx.doi.org/10.1590/1806-9282.66.2.236>

Dear Editor

I have reviewed the article entitled ‘*The Relationship Between Tumor Budding and Survival in Colorectal Carcinomas*’, by Peltek Ozer et al.¹ for the Revista da Associação Médica Brasileira. The authors investigated tumor budding (TB) by its new definition and reported that TB was an independent prognostic factor in colorectal carcinoma, which was also associated with perineural invasion, lymph node metastasis, lymphovascular invasion, and survival. The association with TB and perineural invasion has been reported in only a few studies; thus, Peltek Ozer et al.’s¹ study made a significant contribution to the literature.

Tumor budding has been considered a prognostic factor in many cancers recently. It was first described in the 1990s, followed by great interest from researchers. In 2016, The International Tumor Budding Consensus Conference² defined tumor budding as a single tumor cell or a cell cluster of up to 4 cells. Tumor budding may reflect the aggressive character of tumors. In a recent study, the authors reported that the cell proliferation index was higher in samples with high-intensity tumor budding than in samples with low-intensity or no tumor budding in subjects with oral squamous cell carcinoma³.

Numerous studies have shown that tumor budding is an independent prognostic factor associated with lymph node metastasis, local recurrence, and survival. Zhu et al.⁴ reported that TB was significantly associated with poor survival and lymph node metastasis

in subjects with head and neck squamous cell carcinomas. In another study, TB was associated with prognosis in patients with oral squamous cell cancer⁵. Recently, another study reported TB as a risk factor for lymph node metastasis⁶. Accordingly, the guidelines of the European Society for Medical Oncology now include tumor budding as a criterion for identifying high-risk patient groups.

In conclusion, TB should be considered an independent prognostic factor in colorectal carcinomas, and it should be included in the pathology reports along with lymphovascular and perineural invasion.

REFERENCES

- Ozer SP, Baru SG, Ozer B, Catal O, Sit M. The relationship between tumor budding and survival in colorectal carcinomas. *Rev Assoc Med Bras*. 2019;65(12): 1502-1507
- Lugli A, Kirsch R, Ajioka Y, Bosman F, Cathomas G, Dawson H, et al. Recommendations for reporting tumor budding in colorectal cancer based on the International Tumor Budding Consensus Conference (ITBCC) 2016. *Mod Pathol*. 2017;30(9):1299-311.
- Marangon Junior H, Leão PLR, Melo VVM, Caixeta ÂB, Souza PEA, Aguiar MCF, et al. Cell proliferation is associated with intensity of tumor budding in oral squamous cell carcinoma. *J Oral Pathol Med*. 2018;47:128-35.
- Zhu Y, Liu H, Xie N, Liu X, Huang H, Wang C, et al. Impact of tumor budding in head and neck squamous cell carcinoma: a meta-analysis. *Head Neck*. 2019;41(2):542-50.
- Almangush A, Bello IO, Keski-Säntti H, Mäkinen LK, Kauppila JH, Pukkila M, et al. Depth of invasion, tumor budding, and worst pattern of invasion: prognostic indicators in early-stage oral tongue cancer. *Head Neck*. 2014;36(6):811-8.
- Cappellesso R, Luchini C, Veronese N, Lo Mele M, Rosa-Rizzotto E, Guido E, et al. Tumor budding as a risk factor for nodal metastasis in pT1 colorectal cancers: a meta-analysis. *Hum Pathol*. 2017;65:62-70.

