



# The relationship between tumour size and nodal status is more incompatible in triple-negative tumours

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## Dear Editor,

I want to congratulate Sopik and Narod for their article [1] in which they evaluated the relationship between primary tumour size, lymph node status and distant metastases in a cohort of 819,647 women diagnosed with first primary invasive breast cancer. They found that relationship between tumour size, lymph node status and distant metastases in patients with invasive breast cancer is not linear. They found that triple-negative tumours specifically display a smaller increase in lymph node metastasis per 20-mm increase in tumour size than other subtypes for small sizes. Many studies have detected less lymph node metastasis in triple-negative tumours than other subtypes. We studied capillary and lymphatic invasion in tumours of patients with triple-negative tumours. Capillary invasion is more commonly observed than lymphatic invasion in patients with triple-negative tumours [2]. This finding supports the fact that more hematogenous metastasis and less lymph node metastasis were observed in patients with triple-negative tumours.

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## Compliance with ethical standards

**Conflict of interest** I have no conflict of interest to declare.

**Ethical approval** My manuscript complies with the Ethical Rules applicable for this journal.

**Human and animal rights** This article does not contain any studies with human participants or animals performed by any of the authors.

## References

1. Sopik V, Narod SA (2018) The relationship between tumour size, nodal status and distant metastases: on the origins of breast cancer. *Breast Cancer Res Treat.* <https://doi.org/10.1007/s10549-018-4796-9>
2. Yaman S, Gumuskaya B, Ozkan C, Aksoy S, Guler G, Altundag K (2012) Lymphatic and capillary invasion patterns in triple negative breast cancer. *Am Surg* 78(11):1238–1242

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