



Receptor conversion in breast cancer patients with liver metastases after hepatectomy might affect survival

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Dear Editor,

I want to congratulate Ruiz and colleagues for their article [1] in which they evaluated survival in a select group of breast cancer liver metastases (BCLM) patients after hepatectomy. Patients who survived <5 years were compared to those who survived ≥5 years from first diagnosis of hepatic metastases. Significant differences between patient groups (<5 vs. ≥5 years) were mean time interval between primary tumor and hepatic metastases diagnosis (50 vs. 43 months), mean number of resected tumors (3 vs. 2), positive estrogen receptors (54% vs. 79%), microscopic lymphatic invasion (65% vs. 34%), vascular invasion (63% vs. 37%), hormonal therapy after resection (34% vs. 74%), number of recurrence (40% vs. 65%), and repeat hepatectomy (1% vs. 42%), respectively. However, authors did not give information about discordance of immunohistochemical receptor status between primary and metastatic tumor. A change of estrogen receptor (ER), progesterone receptor (PR), and HER2 status in distant metastases has frequently been reported. Recent metaanalysis including 39 studies assessing receptor conversion from primary breast tumors to paired distant breast cancer metastases showed that negative to positive conversion percentages were 21.5, 15.9, and 9.5% for ER, PR, and HER2 [2]. Therefore, these patients might have a chance to use targeted endocrine and anti-HER-2 therapies which in turn might increase survival rate. The impact of receptor

conversion on survival is not known in breast cancer patients with liver metastases and needs to be determined in large prospective studies.

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Compliance with ethical standards

Conflicts 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.

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