CK19 expression should be tested prior to OSNA analysis of sentinel lymph nodes in breast cancer

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Dear Editor,

The observations of Remoundos et al. [1] are quite interesting. Effectively, there is not a direct relationship between presence of mRNA and expression of protein.

In the first case of breast cancer in which we found lack of CK19 expression, absence of CK19 mRNA was confirmed by Sysmex S.L. by means of a RT-PCR, which confirmed that truly CK19-negative tumours can be found among those with a luminal phenotype and not only among those with a triple-negative phenotype. After terminating the study, we found five more cases lacking CK19 expression. For various reasons, we did not confirm the mRNA status of these tumours, but the one-step nucleic acid amplification (OSNA) assay was not performed and sentinel lymph nodes (SLN) were studied by means of standard procedures.

Even though the proportion of breast cancers lacking CK19 mRNA is most likely lower than that of immunohistochemically CK19-negative tumours, we think it may be hazardous to perform the OSNA assay in cases lacking expression of CK19. In our paper [2], we reported a case of a luminal-A breast carcinoma expressing CK19 in only very few cells,

both in the primary tumour and in the matched SLN macrometastasis. This metastasis probably would have been detected by the OSNA analysis, not as macrometastasis but with a diagnosis of micrometastasis or even as isolated cells.

Dr. Remoundos affirms that they found on OSNA analysis a micrometastasis in a SLN from a patient with a breast cancer lacking CK19 expression. How do they know that that metastasis was a micrometastasis and not a macrometastasis?

Sincerely

Dr. Felip Vilardell

References

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