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Título	Multiplatform Investigation of Plasma and Tissue Lipid Signatures of Breast Cancer Using Mass Spectrometry Tools
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Resumo	Plasma and tissue from breast cancer patients are valuable for diagnostic/prognostic purposes and are accessible by multiple mass spectrometry (MS) tools. Liquid chromatography-mass spectrometry (LC-MS) and ambient mass spectrometry imaging (MSI) were shown to be robust and reproducible technologies for breast cancer diagnosis. Here, we investigated whether there is a correspondence between lipid cancer features observed by desorption electrospray ionization (DESI)-MSI in tissue and those detected by LC-MS in plasma samples. The study included 28 tissues and 20 plasma samples from 24 women with ductal breast carcinomas of both special and no special type (NST) along with 22 plasma samples from healthy women. The comparison of plasma and tissue lipid signatures revealed that each one of the studied matrices (i.e., blood or tumor) has its own specific molecular signature and the full interposition of their discriminant ions is not possible. This comparison also revealed that the molecular indicators of tissue injury, characteristic of the breast cancer tissue profile obtained by DESI-MSI, do not persist as cancer discriminators in peripheral blood even though some of them could be found in plasma samples.
Fomento	