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Breast Cancer

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Tumor microenvironment in breast cancer brain metastases

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Brain metastases occur in ~15 % of patients with advanced breast cancer. Their incidence is particularly high in triple negative and HER2-positive disease (30-50%). Therapeutic options for brain metastases are limited and patients with central nervous system involvement have very poor prognosis. In order to better understand the biology of brain metastases, we studied tumour microenvironment in the brain using pre-clinical models of breast cancer brain metastases. In addition to characterizing the inflammatory tumour microenvironment, we developed a pre-clinical strategy for an improved delivery of therapeutic agents into the brain using bone marrow-derived macrophages.

Biography

Mihaela Lorger is a tenure-track group leader at the University of Leeds since 2011. She obtained her PhD degree in biology from the Darmstadt University of Technology, Germany. During her Postdoctoral studies at the University of Zurich in Switzerland and at The Scripps Research Institute in La Jolla USA, she focused on breast cancer progression and metastasis. Her current focus is on the development of cell-based and immune-modulatory therapies for brain metastases.

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