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## PI3K/AKT-SIGNALLING PATHWAY AND IMMUNE-ESCAPE IN TRIPLE-NEGATIVE BREAST CANCER

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**B**reast cancer accounts for 23% of all new tumour cases and it is the most common cancer among women worldwide. A high percentage (15-25% of all breast cancer cases) is characterized as triple-negative breast cancer (TNBC). Although TNBCs are sensitive to chemotherapy, survival of patients with these tumours is poor. Lack of effective therapies, younger age at onset and early metastatic spread have contributed to the poor prognosis and outcomes associated with TNBC. The phosphatidylinositol 3-kinase (PI3K)/AKT-pathway plays a critical role in malignant transformation of tumours and their subsequent growth, proliferation and metastasis as well as in activation of pathways that result in immune-escape mechanisms. Therefore, the PI3K/AKT pathway is considered an attractive candidate for therapeutic interventions. A modified FATAL assay was used as an in-vitro system to investigate the interaction between TNBC cell lines and natural killer (NK)-cells. Furthermore the ability of PI3K/AKT inhibition with AEZS-126 to selectively target TNBC cell proliferation and survival was explored. In parallel, we analysed mechanisms of cytotoxicity related to PI3K/AKT inhibition

### Biography

J C Hahne after completion of course on General Chemistry and Biochemistry at the Albert-Ludwigs-University of Freiburg (Germany) pursued his PhD in Biochemistry from the same university. During his PhD work, he was trained in Virology, Cell- and Molecular-Biology. During several Postdoc positions [Department of Molecular Pathology at the University of Bonn (Germany), Charite Berlin (Germany); Department of Gynaecology and Obstetrics at the University of Wurzburg (Germany)] he received a broad training and knowledge in Molecular Pathology and Cancer Research. Currently, he is working at the Department of Molecular Pathology of the ICR (London, UK). He has published more than 50 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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