HER3

HER3 is increasingly coming under investigation for its role in the development of cancer.

HER3 plays a distinct role in the HER family signaling network. Although it is kinase inactive and therefore incapable of initiating downstream signaling pathways on its own, HER3 can dimerize with other receptors, particularly HER2, for potent cellular signaling. Evidence is growing to show that the transactivating nature of HER3 is an essential aspect of the oncogenic function of the related receptors HER1/EGFR and HER2.

Tumor cell proliferation in human schwannomas is linked to a signaling network controlled by the Hippo effector YAP. Her2, Her3, PDGFRß, Axl, and Tie2, as well as YAP, represent potentially valuable therapeutic targets. However, the variability of their expression between tumors may result in strong differences in the response to targeted therapy [1)].

Data revealed novel candidates, potential clinical applications for genomic profiling of resectable Brain metastases (BM), and highlight the possibility of therapeutically targeting HER3, which is broadly over-expressed and activated in BM independent of primary site and systemic therapy [2)].

1)
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2)
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