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The insulin and insulin-like growth factor receptor family in neoplasia: an update.

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Source

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Abstract

Although several early phase clinical trials raised enthusiasm for the use of insulin-like growth factor I receptor (IGF1R)-specific antibodies for cancer treatment, initial Phase III results in unselected patients have been disappointing. Further clinical studies may benefit from the use of predictive biomarkers to identify probable responders, the use of rational combination therapies and the consideration of alternative targeting strategies, such as ligand-specific antibodies and receptor-specific tyrosine kinase inhibitors. Targeting insulin and IGF signalling also needs to be considered in the broader context of the pathophysiology that relates obesity and diabetes to neoplasia, and the effects of anti-diabetic drugs, including metformin, on cancer risk and prognosis. The insulin and IGF1 receptor family is also relevant to the development of PI3K-AKT pathway inhibitors.

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