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Interleukin 4 and cancer resistance in glioblastoma multiforme

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Abstract

In this review, the author highlights the role of IL4 in mitigating all the "hallmarks" of cancer growth and resistance to current immunotherapy, providing a framework for its role in GBM as well as guideline for future treatment regimens. This review is organized around six strategies by which IL4 contributes to the immune resistance seen in GBM: (i) apoptosis evasion, (ii) self-sufficiency in growth signals, (iii) insensitivity to anti-growth signals, (iv) invasion and metastasis, (v) limitless replicative potential, (vi) sustained angiogenesis.

Keywords: Cancer; Glioblastoma; Hallmarks; Immunotherapy; Interleukin.

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