Dicloroacetato inibe crescimento do neuroblastoma

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**Dichloroacetate (DCA) inhibits neuroblastoma growth by specifically acting against malignant undifferentiated cells.**

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**Source**

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**Abstract**

The small, water soluble molecule Dichloroacetate (DCA) is recently arousing lively interests in the field of cancer therapy for it has been shown to be able to inhibit the growth of human tumors acting specifically on the mitochondria of cancer cells without perturbing the physiology of non-malignant cells. Neuroblastoma was one of the tumor types on which DCA was considered ineffective as it is composed of cells with few recognized mitochondrial anomalies. Neuroblastoma, however, is composed of different cell types in terms of metabolism, phenotype and malignant potential. Despite the above prediction, in this work we show that i) DCA exhibits an unexpected anticancer effect on NB tumor cells and ii) this effect is selectively directed to very malignant NB cells whereas the more differentiated/less malignant NB cells are refractory to DCA treatment. This result supports the need of a detailed investigation of DCA anticancer properties against this tumor type with the final aim of its possible use as therapeutic agent. © 2011 Wiley-Liss, Inc.

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