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Mathematical modeling of cancer metabolism

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ABSTRACT

Systemic approaches are needed and useful for the study of the very complex issue of cancer.

Modeling has a central position in these systemic approaches. Metabolic reprogramming is

nowadays acknowledged as an essential hallmark of cancer. Mathematical modeling could

contribute to a better understanding of cancer metabolic reprogramming and to identify new

potential ways of therapeutic intervention. Herein, I review several alternative approaches to

metabolic modeling and their current and future impact in oncology.

Keywords: mathematical model; cancer; tumor microenvironment; systems biology;

metabolism

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