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Transient alleviation of tumor hypoxia during first days of antiangiogenic therapy as a result of therapy-induced alterations in nutrient supply and tumor metabolism – analysis by mathematical modeling

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Highlights

- Mathematical model of tumor progression and antiangiogenic therapy is developed.
- Transient tumor hypoxia alleviation after injection of bevacizumab is reproduced.
- The effect is due to alterations in nutrients supply and tumor metabolism.
- The effect occurs in a wide range of physiologically justified parameters.
- Main factors defining oxygen dynamics during antiangiogenic therapy are defined.

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