

# Multimodal Prehabilitation in Onco-surgery: A Systematic Review †

Madalina-Nina Sandu <sup>1,\*</sup>, Alina Viorica Iacob <sup>1</sup>, Roxana-Doina Tetic-Turcanu<sup>1</sup>, Camelia Alexandrina Ghilic <sup>2</sup>, Dorel Firescu <sup>3,4</sup>

<sup>1</sup> Department of ICU, Emergency Clinical Hospital “Sf. Apostol Andrei” Galati, Romania

<sup>2</sup> Department of Hematology, Clinical Hospital “Sf. Apostol Andrei” Galati, Romania

<sup>3</sup> University “Dunarea de Jos” Galati, Romania

<sup>4</sup> Department of Surgery, Clinical Hospital “Sf. Apostol Andrei” Galati, Romania

\* Correspondence: mada.ninasandu@yahoo.com (M.N.S.);

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**Abstract:** Cancer is a leading cause of death and an important barrier to increasing life expectancy worldwide. The physiological distress of surgery has been compared to running a marathon, so prehabilitation aims to enhance functional capacity and mental status before surgery. This systematic review of multimodal prehabilitation strategies versus standard care and the relevance to the surgical outcome was performed following PRISMA guidelines, using PubMed, Google Scholar, Embase, and Cochrane database. Studies of prehabilitation programs (nutritional, exercise, psychological intervention) in patients undergoing once-surgery reporting postoperative outcomes were included to determine the impact of multimodal prehabilitation. In this systematic review with meta-analysis, we report that multimodal prehabilitation strategies improved functional capacity and shortened the length of hospitalization, but it was no influence on 30-day hospital readmission or postoperative mortality. Further work is required for specific prehabilitation protocols because the studies were heterogeneous, with multiple surgical sub-specialties.

**Keywords:** multimodal prehabilitation; surgery; distress; outcome.

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## Conflicts of Interest

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