

# Guidance for dosing and monitoring of oral antineoplastic drugs in breast cancer patients after bariatric surgery

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## Abstract

Bariatric surgery is a common applied surgical intervention in individuals with obesity to achieve weight-loss, to reduce comorbidities and improve overall survival. However, commonly performed techniques are associated with physiological changes in the gastrointestinal tract that may lead to changes in oral drug disposition. Furthermore, recommended dietary restrictions after bariatric surgery might influence drug disposition and due to prophylactic prescribed drugs interactions might occur. Also, in the years after bariatric surgery, patients will lose weight. These alterations can influence oral drug disposition of oral antineoplastic drugs and, subsequently influence outcomes of breast cancer treatment. The purpose of this review is to provide an overview of the available evidence on the effect of bariatric surgery on the pharmacokinetics of oral antineoplastic drug used in breast cancer treatment. We performed a comprehensive analysis of published pharmacokinetic and pharmacodynamics data. Subsequently we provide, where possible, recommendations on preferences within therapeutic classes and provide recommendations when prescribing oral antineoplastic drugs for breast cancer. Due to the limited availability of clinical evidence on oral drug disposition and subsequently outcomes in this population, our advice is to monitor patients extensively for efficacy but also for safety before and after surgery.

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