Neoadjuvant chemotherapy for breast Cancer: evaluation by PET / CT

Thesis

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INTRODUCTION

Breast cancer is the most commonly occurring cancer in women and the second most common cancer overall. There were over 2 million new cases in 2018 ***(Bray Fet al., 2018).***

Treatment of breast cancer includes locoregional resection, with or without radiotherapy as well as systemic therapies such as chemotherapy, endocrine therapy, biological targeting agents, and a combination of the above ***(Peart, 2015).***

Neoadjuvant therapy (NAT), which corresponds to the administration of systemic anticancer agents prior to local treatment, has been recommended as a general approach in locally advanced-stage diseases ***(Kaufmann et al., 2012).***

The advantages of NAT for breast cancer include decreasing the tumor size, improving outcomes of radical or more conservative surgical interventions and early evaluation of clinical efficacy ***(Rubovszky and Horváth, 2017).***

Positron emission tomography (PET)-CT scans have recently gained popularity as an effective functional diagnostic imaging method in the clinical management ofbreast cancer ***(Inokuchi et al., 2009).***