عنوان مقاله:
Pharmacogenomics of Breast Cancer Therapy

محل انتشار:
یازدهمین کنگره بین المللی سرطان پستان (سال: 1394)

تعداد صفحات اصل مقاله: 2

نویسنده:
T Langaee

خلاصه مقاله:
Breast cancer is a heterogeneous disease that requires multidisciplinary teams to properly classify patients, manage and coordinate surgical treatment along with administration of chemotherapy, hormonal therapy or immunotherapy. The selective estrogen receptor modulators (SERMs) tamoxifen and raloxifene and third-generation aromatase inhibitors (AIs) letrozole, anastrozole and exemestane, are hormonal agents commonly used for the prevention and treatment of breast cancer. There is substantial variation in clinical outcomes among patients with similar clinical and pathologic features who are treated with the same treatment regimens such as SERMs and AIs. The difference in response to specific pharmacotherapy can be attributed to somatic tumor characteristics (degree of ER expression and HER2 status) and germline DNA variations (Pharmacogenomics) affecting the response to breast cancer therapy. These drugs have specific pharmacokinetic properties and show differences in their distribution, metabolism, and excretion pathways due to the genetic variations in the drug metabolizing enzymes and drug transporter proteins. These genetic variations serve as important predictive biomarkers to guide therapy in patients for maximum drug efficacy and minimum drug toxicity. Here we review the role of pharmacogenomics and genetic biomarkers in breast .cancer pharmacotherapy with a special emphasis on CYP2D6 enzyme and tamoxifen

کلمات کلیدی: