

ABSTRACT

Breast cancer is a malignant tumor that originates in the cells of the breast both in women and men. It is the second leading cause of cancer death in women today. Risk factors causing breast cancer in humans comprise, among others, prolonged exposure to estrogen, ionizing radiation, genetic predisposition (BRCA1, BRCA2, others), sedentary lifestyle, high-fat diet, alcohol, and tobacco smoking. Classical treatment strategies include chemotherapy, surgery and radiotherapy. The aim of this diploma thesis was to review recent developments in breast cancer treatment, such as endocrine therapy, molecular targeting therapy as well as breast cancer stem cells.