

Membrane-bound-Progesterone-Receptor can predict prognosis of breast cancer

X Ruan (CN) [1]

Membrane-bound-progesterone receptor can predict prognosis of breast cancer Prof.Xiangyan RUAN; MD. PhD.

Beijing Obstetrics & Gynecology Hospital, Capital Medical University, China

University Women's Hospital of Tuebingen, Germany, Guest Professor

During MHT, the main safety issue is breast cancer risk. Epidemiological and clinical studies never will predict the breast cancer risk of an individual women. Only screening for known risk factors and the research of mechanisms will identify the women at risk during hormone therapy.

PGRMC1 – Progesterone Receptor Membrane Component-1 Different synonyms for this receptor can be found in the literature. Until now the receptor best has been described as part of the "Membrane-associated progesterone receptor protein family", so called MAPR family.

Our team and other teams found Natural progesterone added to estradiol does not increase the proliferation of breast cancer cells expressed PGRMC1, in contrast to certain synthetic progestogens, but Membrane-bound Progesterone receptors are upregulated in malignant cells in patients with breast cancer (in contrast to their benign tissue) and mediate strong proliferating effects of certain synthetic progestins (not progesterone).

Can the breast-cell-membrane-bound receptor PGRMC1 be used to predict the progestogen-induced breast cancer risk and the prognosis of breast cancer patients?

From cell culture to animal model, to clinic research data, I will give more detail information about that.

[1] Beijing Obstetrics and Gynecology Hospital, Beijing

