Hormone replacement therapy (HRT) has several undesired side effects in the mammary gland. Therefore plant derived alternatives are currently promoted. Phytoestrogens were suggested to have only the desired estrogenic effects but most placebo-controlled studies question beneficial effects on climacteric complaints. When taken at the time of puberty however, they protect against mammary cancer later in life. Extracts from the rhizome of Cimicifuga racemosa BNO 1055 (CR) have no estrogenic effects. Neither subfractions with polar or unpolar substances of CR bind to estrogen receptors nor did they stimulate uterine or mammary gland tissue in ovariectomized rats and in postmenopausal women. In the animal model an actein/deoxyactein- and a 5-methylserotonin-containing fraction inhibited hot flushes. These are probably the substances which act synergistically in the hypothalamus to exert the proven beneficial effects on climacteric complaints. In placebo-controlled trials doses between 10-30 mg of CR extracts ameliorated climacteric complaints significantly, whereas low (8mg) and high (>120 mg) were ineffective. Due to the absence of estrogenic but climacteric complaints-ameliorating effects, CR BNO 1055 containing preparations are safe alternatives for HRT.