

The potential therapeutic effect of nor-NOHA and L-NAME in breast cancer treatment

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What kind of therapeutic effect nor-NOHA and L-NAME in breast anticancer treatment have?

Rats (Wistar, 90-120g, female) were divided into 7 groups (control (C), saline, C_{L-NAME}, C_{nor-NOHA}, DMBA, DMBA+nor-NOHA and DMBA+L-NAME, n=7).

DMBA was administrated (i.g.) in single dose (20 mg/ml oil). L-NAME was injected (i.p.) for 5 weeks (after 10 days of DMBA, every 3th day) in dose of 30 mg/kg body-weight in 0.25ml saline.

Histopathological alteration in DMBA group (2-4 tumors, 0.3-0.8cm) in 20th week has revealed the invasive ductal and invasive lobular carcinoma, in DMBA+nor-NOHA group (0-2 tumors, 0.1-0.3 cm) - only lobular carcinoma *in situ*, and in DMBA+L-NAME group (0-2 tumors, 0.1-0.4cm) - only noninvasive ductal carcinoma. There was a difference in the timings of the deaths in DMBA (1 in 12th week), DMBA+L-NAME and DMBA+nor-NOHA groups (1 in 17th week). We conclude that inhibition of NOS and arginase influence on tumor growth, pathological progression and death rate.