

## 9 $\alpha$ -フルオロメドロキシプロゲステロンアセテートの腫瘍血管新生阻害活性について

山地建人\*、坪井 洋\*、村田奈津子\*、内田勝幸\*、河野哲也\*、  
杉野栄一、日比野 俐、島村真理子\*\*、及川 勉\*\*

*Cancer Lett.*, 145(1-2), 107-114 (1999)

### Anti-angiogenic activity of a novel synthetic agent, 9 $\alpha$ -fluoromedroxyprogesterone acetate

Taketo Yamachi\*, Hiroshi Tsuboi\*, Natsuko Murata\*,  
Katsuyuki Uchida\*, Tetsuya Kohno\*, Eiichi Sugino,  
Satoshi Hibino, Mariko Shimamura\*\*, Tsutomu Oikawa\*\*

**ABSTRACT** 9 $\alpha$ -Fluoromedroxyprogesterone acetate (FMPA) is a novel synthetic analog of medroxyprogesterone acetate (MPA). Widely used as therapeutic for breast and endometrium cancers. FMPA showed almost the same binding affinities to the progesterone and glucocorticoid receptors as MPA. In the rabbit corneal assay, FMPA, MPA and fumagillin significantly inhibited the angiogenic response induced by rat mammary tumors at doses of 0.1, 1 and 50 mg/pellet, respectively, so FMPA showed greater anti-angiogenic activity than MPA and fumagillin. In the mouse dorsal air sac method, FMPA inhibited the mouse sarcoma 180 cell-induced angiogenesis by oral administration at a dose of 200 mg/kg. FMPA inhibited the activity of plasminogen activator (PA) in bovine endothelial cells. These results suggest FMPA may be useful for diseases associated with angiogenesis by oral administration.

抄録 9 $\alpha$ -フルオロメドロキシプロゲステロンアセテート(FMPA)の腫瘍血管新生阻害活性の評価をウサギ角膜法などで実施した。

\* Department of Pharmaceutical Development, Meiji Institute of Health Science,

Meiji Milk Products Co., Ltd.

明治乳業ヘルスサイエンス研究所

\*\* Department of Cancer Therapeutics, The Tokyo Metropolitan Institute of Medical Science (Rinshouken)

東京都臨床医学総合研究所