

cytometry. We found that IN 2001 as well as Trichostatin A inhibited cell growth dose-dependently in both ER positive and ER negative human breast cancer cell lines. The growth inhibition with HDAC inhibitors was associated with profound morphological change. The result of cell cycle analysis after 24 h exposure of IN2001 showed G2-M cell cycle arrest in MCF-7 cell and apoptosis in T47D and MDA-MB-231 cell. In summary, IN2001 has antiproliferative effect on human breast cancer cells regardless of the expression of estrogen receptor. These findings heights the possibility of developing HDAC inhibitors as potential anticancer therapeutic agents for the treatment of breast cancer.

[PA4-18] [2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function]

Micronucleus test of SS cream and CJ-4001 using Acridine orange staining method

Park Jie Eun^o, Lee Sung Hak, Choi Jae Mook, Kim Il Hwan, Kim Taekrho, Kim Deog Yeor, Noh Hyun Jung, Kang Hee Chol, Cho Hi Jae, Kim Young Hoon
R&D center of Pharmaceuticals, CJ Corporation

SS cream and its revised formula, CJ-4001 is topical Chinese herbal drugs for premature ejaculation. To evaluate the genotoxic potentials of these drugs, micronucleus test using Acridine orange (AO) staining method was performed. Acridine orange (AO) staining is adopted in OECD guideline 474 and widely used in micronucleus test. In dose range finding study, no mouse was dead at 2000 mg/kg using single treatment subcutaneously. Therefore, 3 dose levels were chosen at 500, 1000, 2000 mg/kg. ICR male mice were subcutaneously administered with SS cream and CJ-4001 at doses of 500, 1000, 2000 mg/kg. Mytomycin C (MMC, 2 mg/kg) used as positive control was injected intraperitoneally. Bone marrow was collected from femur at 24h following the injection. Samples were stained according to AO staining method and 2,000 polychromatic erythrocytes (PCEs) were observed per mouse. As a result, the frequency of micronucleated polychromatic erythrocyte (MN-PCE) was 1.8 ± 1.3 and $29.0 \pm 7.4\%$ at vehicle control and MMC-treated group, respectively. MN-PCE frequency in SS cream-treated group was 1.3 ± 0.8 , 1.0 ± 0.9 , and $1.0 \pm 0.9\%$ at doses of 500, 1000, 2000 mg/kg, respectively. MN-PCE frequency in CJ-4001-treated group was 0.3 ± 0.6 , 0.5 ± 0.5 , and $0.3 \pm 0.6\%$, respectively. In conclusion, SS cream and CJ-4001 were negative at micronucleus test in mice.

[PA4-19] [2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function]

Fatal cases related to propofol

Choi Hyeyoung^o, Choi Hwakyung, Lee Juseon, Woo Sanghee, Park Yoosin
National Institute of Scientific Investigation

Propofol(2,6-diisopropylphenol) is rapid, short-acting intravenous anaesthetic agent. It is used for the induction and maintenance of general anaesthesia or sedation. The recommended doses are 2-2.5mg/kg given as a titration infusion over about 30min to achieve anaesthesia. Recently, we encountered 4 fatalities related to propofol. One death is a suicide by self-administered of propofol and the others are therapeutic misadventures during surgical care. The propofol level in the blood and tissues were determined by gas chromatographic analysis with mass spectral detection. In suicidal case, blood concentration of propofol was $5.1 \mu\text{g/ml}$ and higher than those of accidental case ($0.2 \mu\text{g/ml}$, $0.3 \mu\text{g/ml}$, $1.1 \mu\text{g/ml}$). In one fatal case by misadventure, the propofol levels in kidney, brain and adipose tissues were $1.8 \mu\text{g/ml}$, $1.2 \mu\text{g/ml}$ and $4.5 \mu\text{g/ml}$ respectively. Those were higher than blood level ($1.1 \mu\text{g/ml}$) because of rapid metabolism and distribution of propofol to the tissues.

[PA4-20] [2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function]

Rapid Screening Method for the Solid-Phase Extraction and GC/MS analysis of Diazepam.

Choi Hwakyung^o, Lee Juseon, Choi Hyeyoung, Woo Sanghee, Park Yoosin, Chung Heesun
National Institute of Scientific Investigation