

1 SUMMARY =====

1.1 Objective

In the present chronic study the tumorigenic ^{ity} activity (tumor incidence and multiplicity) of WHOLE SMOKE CONDENSATE (WSC) of mainstream and sidestream smoke of the standard reference cigarette 2R1 was determined after applications to the dorsal skin of female CD1 mice for 80 weeks. In addition mainstream condensate was assayed on female B6C3F1 mice (a). WSC was applied to both mouse strains without and with pretreatment of a single, tumor initiating dose (200 nanomols per mouse) of 7,12-dimethylbenz(a)anthracene (DMBA).

The objective (b) of the study was:

- (1) comparison of the tumorigenicity (incidence, multiplicity and malignancy) of MWSC-I and SWSC-I of the standard reference cigarette 2R1
- (2) influence of a pretreatment of mice with an initiating dose of DMBA on the tumorigenicity of WSC-I (relative initiating and promoting activity of WSC-I)
- (3) comparison of CD1 and B6C3F1 mice with respect to their sensitivity towards the tumorigenic activity of MWSC-I
- (4) comparison of the tumorigenic ^{probability} ~~activity~~ of MWSC-I stored at 4 and minus 75 degrees centigrade before application

1.2 Method

For the preparation of the application solution MWSC and SWSC were collected in impaction traps (MWSC-I and SWSC-I), processed and suspended in acetone. Concentrations of nicotine, water, hydrogenions, selected nitrosamines, catechol, polycyclic aromatic hydro-

- (a) hybrid strain used by the National Toxicology Program (NTP) (USA) for dermal carcinogenesis studies
- (b) see FIGURE 1

2028969426