### Actions on Draft NTP Technical Reports Reviewed by the NTP Board of Scientific Counselors Technical Reports Review Subcommittee, June 12, 2006

#### Genistein (multigenerational) (TR 539)

The Subcommittee accepted unanimously (10 yes, 0 no) the summary of the findings for this continuous breeding study as written. Offspring from the F1 and F3 generations exposed *in utero* and during lactation to genistein, were either exposed to genistein or a control diet until 2 years of age (TR 545).

### Genistein (bioassay) (TR 545)

The Subcommittee accepted unanimously (10 yes, 0 no) the conclusions as written, *no* evidence of carcinogenic activity in F1 male Sprague-Dawley rats and some evidence of carcinogenic activity in F1 female Sprague-Dawley rats exposed to genistein from conception to 2 years of age and *no evidence of carcinogenic activity* in F1 male Sprague-Dawley rats and equivocal evidence of carcinogenic activity in F1 female Sprague-Dawley rats exposed to genistein from conception to 20 weeks of age followed by control feed to 2 years of age.

The Subcommittee accepted unanimously (10 yes, 0 no) the conclusions, *no evidence of carcinogenic activity* in F3 male Sprague Dawley rats and *equivocal evidence of carcinogenic activity* in F3 female Sprague Dawley rats exposed to genistein from conception through weaning at postnatal day 21 followed by control diet to 2 years of age. The Subcommittee stated that the effects of genistein on estrous cycling and the incidences of common, hormonally related, spontaneous neoplasms of female Sprague-Dawley rats are consistent with an estrogenic mechanism of toxicity.

# α-Methylstyrene (TR 543)

The Subcommittee accepted unanimously (9 yes, 0 no) the conclusions as written, *some evidence* of carcinogenic activity of  $\alpha$ -methylstyrene in male F344/N rats, *no evidence* of carcinogenic activity in female F344/N rats, *equivocal evidence* of carcinogenic activity in male B6C3F1 mice, and *clear evidence* of carcinogenic activity in female B6C3F1 mice. The Subcommittee stated that the kidney toxicity in male rats exhibited some features of  $\alpha$ 2u-globulin nephropathy.

# Methylene Blue Trihydrate (TR 540)

The Subcommittee accepted unanimously (10 yes, 0 no) the conclusions as written, *some evidence of carcinogenic activity* of methylene blue trihydrate in male F344/N rats and B6C3F1 mice, *no evidence of carcinogenic activity* in female F344/N rats, and *equivocal evidence of carcinogenic activity* in female B6C3F1 mice.