TREOSULPHAN (Group 1)

A. Evidence for carcinogenicity to humans (*sufficient*)

In one epidemiological study of 553 patients with ovarian cancer treated only with treosulphan and followed for nine years (over 1700 person-years) after treatment, 13 patients developed acute nonlymphocytic leukaemia, mostly within five years after the start of chemotherapy; the expected number of cases among the patients was less than 0.1, giving a relative risk in excess of 100. There was a significant correlation between cumulative dose of treosulphan and risk of leukaemia[1,2].

B. Evidence for carcinogenicity to animals

No data were available to the Working Group.

C. Other relevant data

Treosulphan is a bifunctional alkylating agent. No data were available on the genetic and related effects of this compound in humans. It induced chromosomal aberrations in plant cells[3].

References

[1]*IARC Monographs, 26,* 341-349, 1981

[2]Pedersen-Bjergaard, J., Ersbøll, J., Sørensen, H.M., Keiding, N., Larsen, S.O., Philip, P., Larsen, M.S., Schultz, H. & Nissen, N.I. (1985) Risk of acute nonlymphocytic leukemia and preleukemia in patients treated with cyclophosphamide for non-Hodgkin's lymphomas. Comparison with results obtained in patients treated for Hodgkin's disease and ovarian carcinoma with other alkylating agents. *Ann. intern. Med., 103,* 195-200

[3]*IARC Monographs, Suppl. 6,* 528-529, 1987