[Eur. Urol., 29, 487-490 (1996)]

[Lab. of Pharmaceutics]

Serum and tissue levels of manganese superoxide dismutase in testicular germ cell tumors.

Kiyoshi Koshida, Tetsuo Adachi*, Hajime Yamamoto, Tadao Uchibayashi, Kazuyuki Hirano

To investigate the potential of manganese superoxide dismutase (MnSOD) as a tumor marker for seminoma. A total of 44 patients with testicular germ cell tumors were assessed for serum and tissue levels of MnSOD. Positive rates of serum MnSOD were 11% for stage I, 25% for stage II and 80% for stage II. No difference was observed in serum MnSOD between seminoma and NSGCT. Since serum MnSOD was shown to have lower sensitivity than placental alkaline phosphatase (PLAP) and MnSOD concentration did not differ significantly between tumors and their normal counterparts, the role of MnSOD as a marker for seminoma appears to be limited.

[Biochem. Biophys. Res. Commun., 219, 727-733 (1996)]

[Lab. of Pharmaceutics]

Primary structure of alboaggregin-B purified from the venom of *Trimeresurus albolabris*.

Yoshiko Usami*, Masami Suzuki, Eri Yoshida, Yoshihiko Sakurai, Kazuyuki Hirano, Tomihisa Kawasaki, Yoshihiro Fujimura, Koiti Titani

The complete amino acid sequences of α and β subunits of alboaggregin-B are presented. The α and β subunits were separated by reversed-phase HPLC after reduction and Spyridylethylation, and their sequences were determined by analysis of peptides generated by enzymatic or chemical digestion. The α and β subunits consist of 133 and 123 amino acid residues, respectively. The sequences are highly homologous to each other and also to those of the α and β subunits of botrocetin and the A and B chains of factor IX/X binding protein from other snake venoms. It is also homologous to C-type lectins with a homodimeric structure, but it shows no lectin-like activity.

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[Lab. of Pharmaceutics]

Significance of placental alkaline phosphatase (PLAP) in the monitoring of patients with seminoma.

KIYOSHI KOSHIDA, TADAO UCHIBAYASHI, HAJIME YAMAMOTO, KAZUYUKI HIRANO*

To investigate the significance of placental alkaline phosphatase (PLAP) as a tumour marker for seminoma. Serum PLAP was increased initially in about 50% of patients with seminoma, and the mean magnitude of elevation was about five times the normal value. There was no significant correlation between PLAP and LDH or between PLAP and HGG-B. Therefore, a combination of these three markers was of value, and resulted in a possible identification rate of 82% of patients with seminoma. False-positive results for PLAP appeared in 1.6% of 673 samples investigated. The monitoring of serum PLAP might be of value, as fluctuations in this marker provide information about disease status and prognosis.