

IPORSIP-2000



**RADIOPHARMACY
(RPh)**

POSTER PRESENTATIONS

POSTER PRESENTATION I.
(RPh)

Production and Clinical Testing of $^{99m}\text{Tc}(\text{V})\text{-DSMA}$ and $^{99m}\text{Tc}\text{-MDP-RBC}$ Kits

M. Ayranov, Tz. Nonova, A. Strezov, A. Jordanova, and M. Kostova
Institute for Nuclear Research and Nuclear Energy Blv. Tzarigradsko shosse 72,
Sofia1784, BULGARIA

The $^{99m}\text{Tc}\text{-MDP-RBC}$ for labelling red blood cells and $^{99m}\text{Tc}(\text{V})\text{-DSMA}$ for studying thyroid medullar carcinoma, osteosarcoma, primary and metastatic bone and soft tissue tumours were produced and applied in nuclear medicine diagnostics. The aims of this study were to define the optimum terms for high yield of $^{99m}\text{Tc}(\text{V})\text{-DMSA}$ complex and to formulate a kit that can be conveniently applied hospitals. The clinical results show that the $^{99m}\text{Tc}\text{-MDP-RBC}$ kit can be successfully applied in case of coronary disease, systemic embolism and thrombosis, gastrointestinal bleeding and haemangiomas. Specific procedures were developed for testing the radiochemical purity of the labelled $\text{DMSA}(\text{V})$ and MDP-RBC kits. Initial experience about the clinical application investigations of the kits for determining various malignancies is reported.