

**^{99m}Tc-N-(3-BROMO-2,4,6 trimethyl) IDA: SYNTHESIS
AND BIODISTRIBUTION STUDIES AS
HEPATOBIILIARY RADIOPHARMACEUTICALS**

H E Setuko

Instituto de Pesquisas Energéticas e Nucleares-CNEN/SP

Technetium-99m labelled - N(3-Bromo-2,4,6 trimethyl) IDA (Tc-99m-Mebrofenin) has been used extensively in the evaluation of hepatobiliary diseases.

This paper describes the synthesis, radiopharmaceutical preparation and biological distribution, in order to determine precise concentrations of this compound in the standard clinical formulation.

The biodistribution study of Tc-99m-mebrofenin was carried out in normal mice. The complex was rapidly cleared by the liver; then it was excreted by the hepatobiliary system. After the administration, approximately 50% dose organ was found in the intestine after 5 min., and after 60 min. was 85,2%. The specificity of Tc-99m-Mebrofenin was 80,28% ($\pm 5,45$) in the bile at 80 min., and <1% of the injected dose remaining in the blood at 15 min.

The results of these studies suggest the potential use of this radiopharmaceutical useful for hepatobiliary pathologies and suitable method for the routine production of Tc-99m-Mebrofenin.