

WANWISA SUKONTPRADIT : LABELLING OF META-IODOBENZYLGUANIDINE WITH  
IODINE-131 (I-131 MIBG) FOR ADRENAL GLAND DIAGNOSIS. THESIS ADVISOR :  
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Labelling of meta-iodobenzylguanidine with iodine-131 (I-131 MIBG) for adrenal gland diagnosis has been studied. The MIBG was synthesized from the reaction of meta-iodobenzylamine hydrochloride with cyanamide and labelled with iodine-131 by isotope exchange method using copper(II) as a catalyst. The percentage of labelling was about 98 % , with a specific activity of 1.5-2.0 mCi/mg. The radiochemical purity was found to be greater than 99 %. Biodistribution studies were performed on mice, the results showed great affinity for the adrenal gland uptake with highest radioactivity after 1 day of injection. The stability of the product with 1 % benzyl alcohol was 7 days upon storing at 4°C.