

JIC 1443 USE OF INTRA-ARTERIAL LARGE PARTICLE RADIOISOTOPES IN THE TREATMENT OF INOPERABLE CANCER. Edgar D. Grady (Piedmont Hospital, Atlanta, First Research Center). Contract AT(40-1)3096.

Yttrium oxide as Y-90 particulate radioisotopes has already been established as an agent suitable for localizing radiation in an area by injecting the artery supplying that area. Thirty-five of 51 patients with advanced and otherwise uncontrollable cancer benefited from intravascular administration. The use of these particles to treat various locations of VX-2 rabbit tumors has been and is

being investigated under normal conditions and under conditions of hyperbaric oxygen.

The production of Yttrium-90 as chloride in large quantities from a solvent extraction Strontium-90 cow has been developed. It has been attached to ion exchange resin spheres (Chelex-100) for similar work, which is being investigated in animals. Y-90 as $^{90}\text{YCl}_3$ solution has been found to be a good form of radioisotopes for interstitial injection. It, too, is being investigated to treat animal tumors under normal conditions and under conditions of hyperbaric oxygen.

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