Abstracts

Detection of VX2 Carcinoma in Rabbits by Passive Microwave Radiometry

J. Shaeffer, P.E. Parker, A.M. El-Mahdi and K.L. Carr. "Detection of VX2 Carcinoma in Rabbits by Passive Microwave Radiometry." 1983 MTT-S International Microwave Symposium Digest 83.1 (1983 [MWSYM]): 452-454.

VX2 cancers were grown at various anatomic sites in the New Zealand rabbit. Thermometric detection of these tumors was attempted by microwave radiometry as well as by contact thermometry using thermocouple and thermistor probes. Tumors, irrespective of site, could not be reliably detected by surface thermometry. Tumors growing subcutaneously in the ear could be detected early (diameter = 5mm) by microwave radiometry. Detection by microwave radiometry of tumors grown subcutaneously or intramuscularly in the hind limb was much less reliable. Blood flow rates in the tumor and surrounding tissues could not explain these site-related differences in tumor detectability by microwave radiometry.

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