

**Radioimmunodetection of lung cancer with IMACIS-1, I-131 labeled
monoclonal antibodies to CEA and CA19-9
Comparison of accumulations in irradiated and non-irradiated site**

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IMACIS-1 is a radiopharmaceutical containing a mixture of Iodine-131 labeled monoclonal antibodies to CEA and CA19-9. IMACIS-1 immunoscintigraphy was evaluated for tumor detection in 7 primary lung cancer and 2 metastatic lung cancer patients who received radiotherapy. No adverse side effects due to IMACIS-1 were observed in this study. Positive detection was achieved in 5 of 9 patients (55.6%). It was less, but nearly the same as the detection rate obtained with Gallium-67 citrate (⁶⁷Ga-citrate) in these patients. There was no clear correlation between IMACIS-1 accumulation and the CEA or CA19-9 serum levels. The IMACIS-1 positive detection rate decreased in many of the irradiated lesions. We considered that the decreased number of tumor cells and changes in blood perfusion are some of the factors controlling accumulation in tumors.

Key words: immunoscintigraphy, IMACIS-1, lung cancer, radiotherapy, Ga-67 citrate