Inhibition of metastasis using encapsulated CEP 751

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Abstract

The liquid-core microcapsules that releases CEP 751 and Carboplatin was developed, and their ability to inhibit tumor growth and metastasis was tested *in VIVO* in C3H3/N mice.

The capsules were generated by spraying misture of alginate and hyaluronic acid containing 3mmol-CEP 751 and 5mg-Carboplatin into 0.1mol solution of CaCl₂ and FeCl₂. One million of microcapsules were injected subcutaneously around the MM47 tumor that was inoculated in the left hind legs of C3He/N mice. Then the 10, 20, or 30 Gy of irradiation (softex 100MV) was given.

After radiation, capsules continuously released carboplatin and CEP 751, which significantly inhibited tumor growth and metastasis.