

## The dynamics of liposomal anti-tumor agent

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### Abstract

The aim of this experiment was to confirm that the platinum reaches to the regional lymph node ( submandibular lymph node ) or not when the liposomal cisplatin was injected to the mouse tongue.

The liposomal cisplatin was injected in the mouse tongue under anesthesia. After 24 hours, the tongue and the both side of submandibular lymph nodes were extracted, and then they were desiccated in the dryer at the 200 degree centigrade overnight. The tongues were treated by the chemical ashing method using nitric acid adding with Indium as the internal standard. The submandibular lymph nodes were treated by the standard-free method using the PIXE.

The large size of liposome remained in the tongue more than the small size of liposome. The enough quantity of platinum was accumulated in the regional lymph nodes ( over 2.6 $\mu$ g/g ). The large size (about 800 nm $\phi$ ) of liposome was very useful for the sustained release agent.

We believe that this method is useful for control to the side effects caused by the administration of anti-tumor agent.