3) $^{57}$Co-BLM
The distribution to organs was more rich in liver than in tumor, and the accumulation to tumor specimen was rich in cytoplasm was well as in nucleus. The uptake to tumor was 0.74%, and the adhesionsrate to human serum albumin was 33.09%.
4) $^{203}$HgCl$_2$

The distribution to organs was more rich in kidney, liver, muscle and intestine than in tumor, and the accumulation to tumor specimen was rich in cytoplasm. The uptake to tumor was 2.58%, and the adhesionsrate to human serum albumin was 99.61%.

And we demonstrated clinical cases and the accuracy in the clinical tumorscan.

Clinical Evaluation of $^{169}$Yb-citrate Tumor Scintigraphy
(First Reports: A Comparative Study of $^{67}$Ga-citrate and $^{57}$Co-bleomycin)
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The advantages of $^{169}$Yb-citrate tumor scintigraphy are as follows:
1) Since $^{169}$Yb-citrate has a relatively long shelf-life, $^{169}$Yb can be available any time tumor scintigraphy is required.
2) $^{169}$Yb is a reactor-produced nuclide and much cheaper than $^{67}$Ga or $^{57}$Co which is a cyclotron-produced nuclide.
3) Body background is extremely small, especially 3–5 days after injection, and tumor image is obtained very clearly.
4) Distinct visualization of the skeleton is helpful in localizing the anatomical landmark.

A hundred to 1,000 $\mu$Ci of $^{169}$Yb-citrate was administered intravenously to each volunteer patient. Scintiphotos were obtained at intervals of 1–5 days following the administration. In our 95 cases, no side effects have been observed.

In 47 of 73 cases (64.4%), the tumors were positively delineated. False positive of $^{169}$Yb-citrate scintigraphy was 22.7% (3/22). As a comparative study on $^{67}$Ga-citrate tumor scintiphotos of 160 cases and $^{57}$Co-bleomycin tumor scintiphotos of 32 cases, each true positive of the tumors were 91.1% (112/123) and 70.8% (17/24). Each false negative were 43.2% (16/37) and 37.5% (3/8).