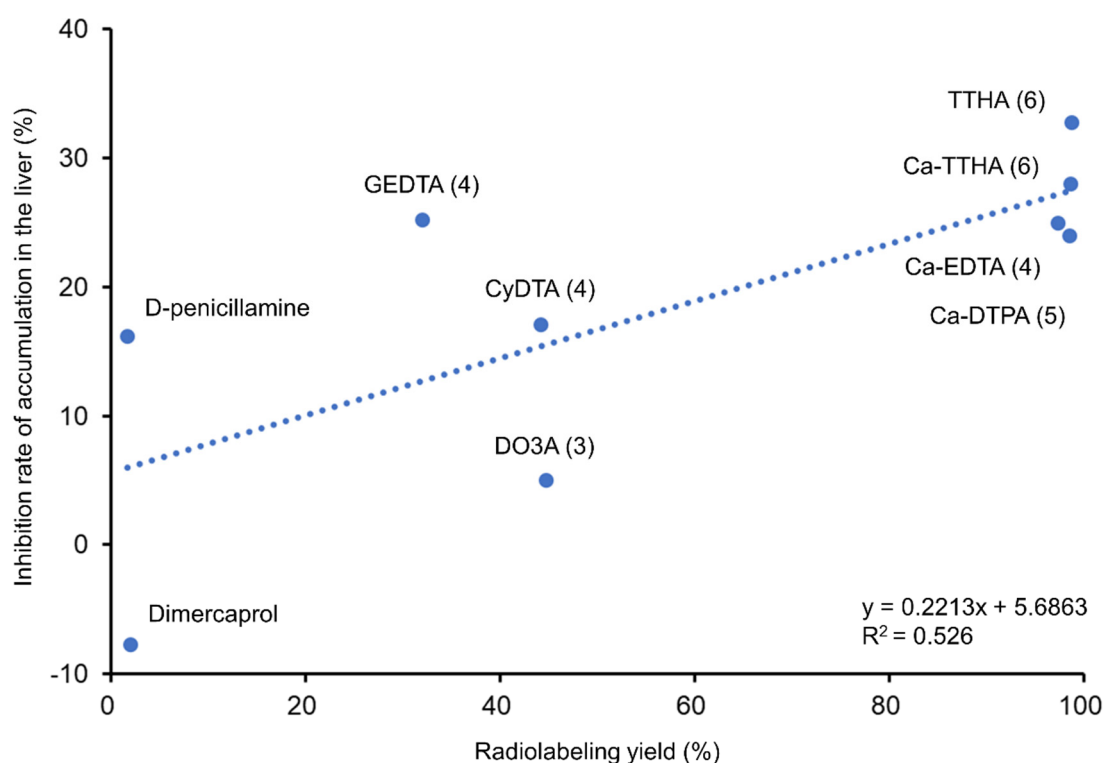
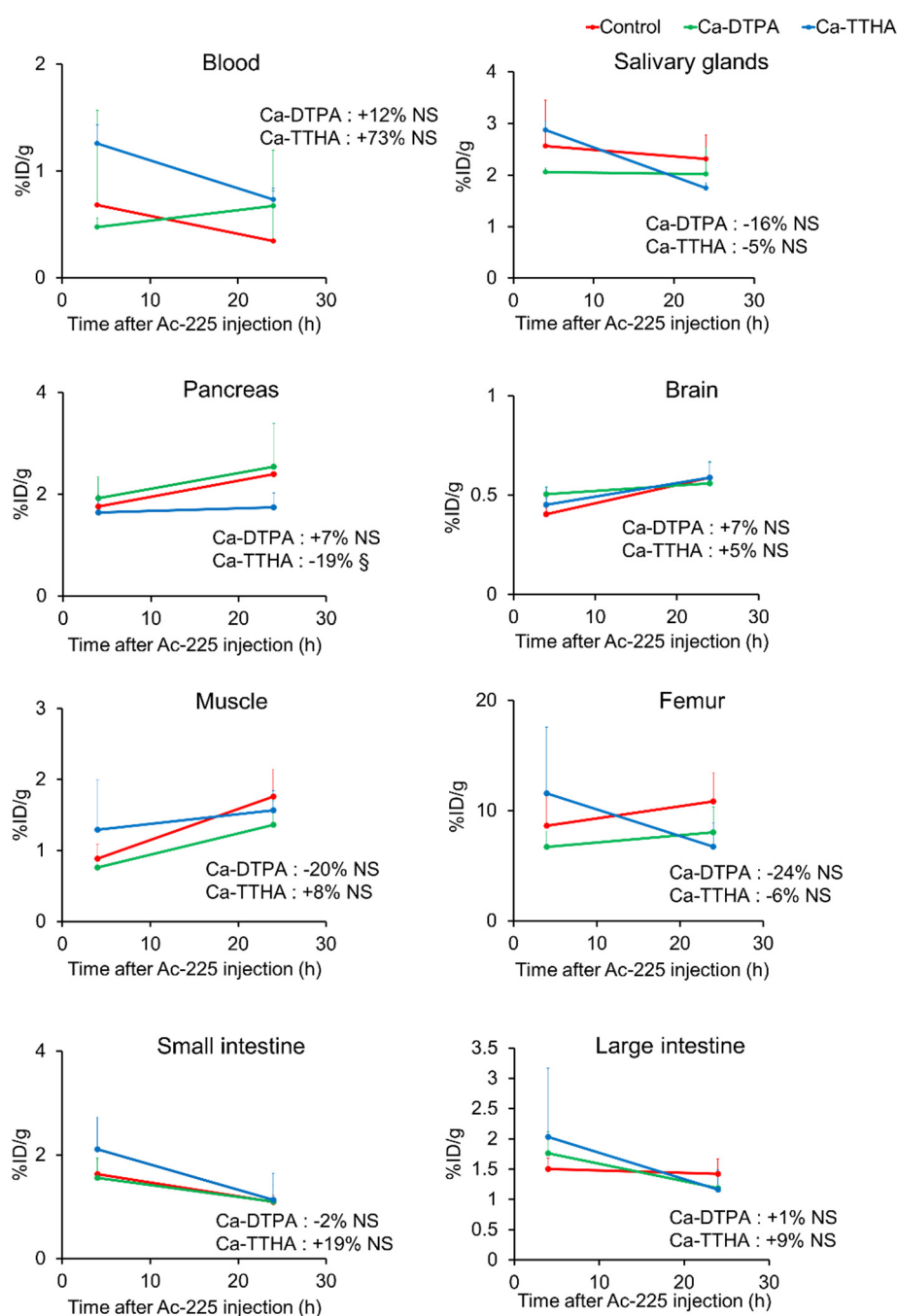


# Supplementary Materials: Evaluation of Aminopolycarboxylate Chelators for Whole-Body Clearance of Free $^{225}\text{Ac}$ : A Feasibility Study to Reduce Unexpected Radiation Exposure during Targeted Alpha Therapy

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**Figure S1.** Comparison of chelator interactions with free  $^{225}\text{Ac}$  in vitro and in vivo. Scatter plot showing a moderate positive correlation between the levels of chelator interaction with free  $^{225}\text{Ac}$  in vitro and  $^{225}\text{Ac}$  reduction in the liver in vivo ( $R^2 = 0.526$ ,  $P < 0.05$ ).



**Figure S2.** Time-activity curves of free  $^{225}\text{Ac}$  following Ca-DTPA and Ca-TTHA administration in the other organs. Time activity curves of the other organs, which are not shown in Fig. 6, in the control and chelator groups. Time-activity curves were generated using the biodistribution of  $^{225}\text{Ac}$  in control mice and mice with Ca-DTPA and Ca-TTHA at 4 and 24 h following  $^{225}\text{Ac}$  injection. Values are shown as the means  $\pm$  SD;  $n = 4-5$ . Numbers in the graphs show % increase (positive) or decrease (negative) of the area-under-the-curve in the chelating ligand groups, compared to the control. § Indicates statistical significance of time-activity curves ( $P < 0.05$ , vs. control). NS = not significant. There was no statistically significant difference at any time point in the organs in this figure.