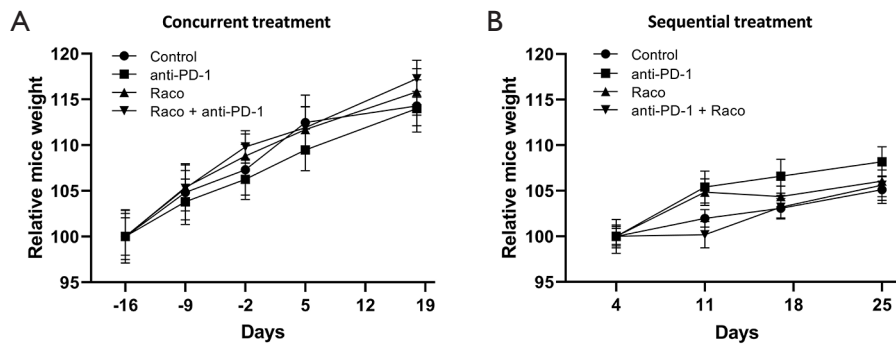
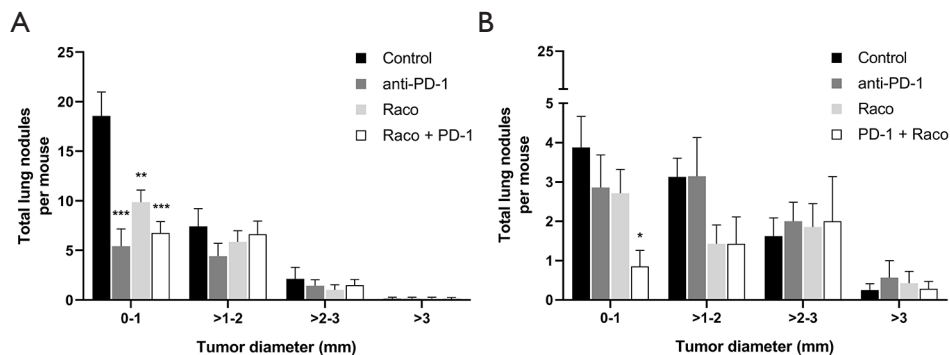


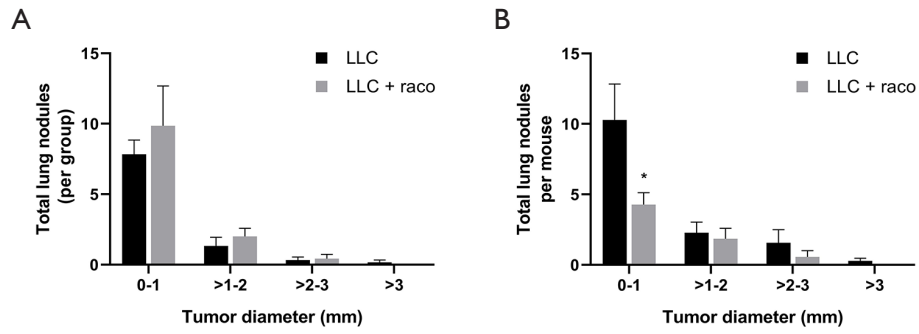
**Figure S1** Tumor diameter distribution. Lung nodule sizes were measured and categorized into four groups based on their diameters: 0–1 mm, >1–2 mm, >2–3 mm, and greater than 3 mm for anti-PD-1 therapy. \*\*\*,  $P < 0.001$ ; unpaired  $t$  test. PD-1, programmed death-1.



**Figure S2** Body weight gain for both immunotherapy treatment schedules. (A) In the concurrent scheme, the measurements were taken until day 18 post-cell injection, while in the (B) sequential scheme, the measurements were taken until day 25. The data points for each experimental group were normalized to day 1, facilitating a more accurate comparison between groups by accounting for any variations in initial weights. For each experimental group, the median values of body weight gain are shown, and the SD is indicated for each data set. PD-1, programmed death-1; Raco, racotumomab; SD, standard deviation.



**Figure S3** Tumor diameter distribution. Lung nodule sizes were measured and categorized into four groups based on their diameters: 0–1 mm, >1–2 mm, >2–3 mm, and greater than 3 mm for (A) concurrent treatment and (B) sequential treatment. Values represent the total number of lung nodules per mouse, and data are presented as mean  $\pm$  SEM for each size category. Concurrent treatment: \*\*,  $P = 0.007$ ; \*\*\*,  $P < 0.001$  vs. control group; ANOVA followed by Tukey's multiple comparisons test. Sequential treatment: \*,  $P = 0.02$  vs. control group, Kruskal-Wallis test followed by Dunn's multiple comparisons test. ANOVA, analysis of variance; PD-1, programmed death-1; Raco, racotumomab; SEM, standard error of the mean.



**Figure S4** Lung nodule sizes were measured and categorized into four groups based on their diameters: 0–1 mm, >1–2 mm, >2–3 mm, and greater than 3 mm for (A) the standard diet with low NeuGc content and (B) the NeuGc-rich diet. Values represent the total number of lung nodules per mouse, and data are presented as mean  $\pm$  SEM for each size category. \*,  $P=0.04$ ; unpaired  $t$  test. LLC, Lewis lung carcinoma; NeuGc, N-glycolylneuraminic acid; Raco, racotumomab; SEM, standard error of the mean.