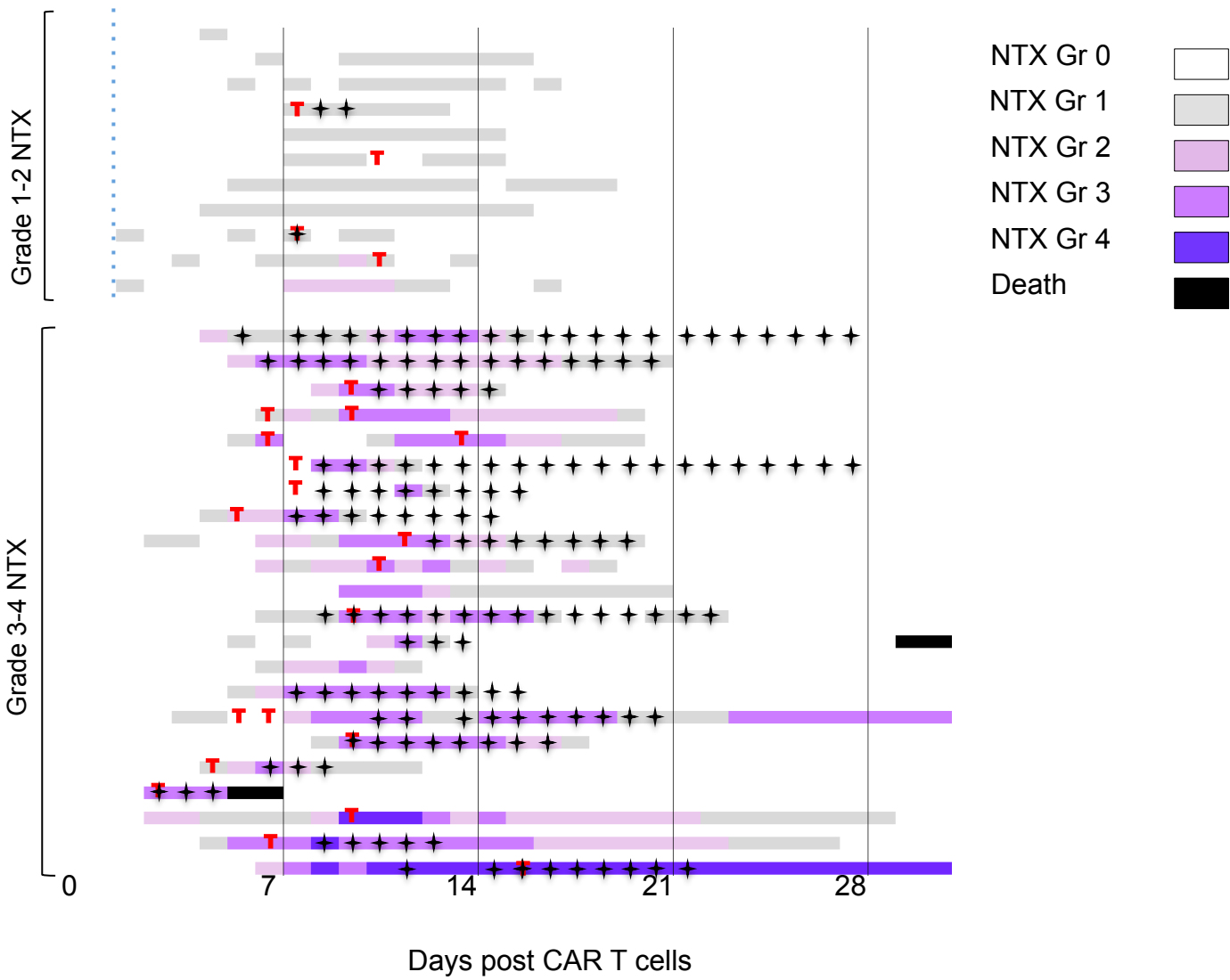
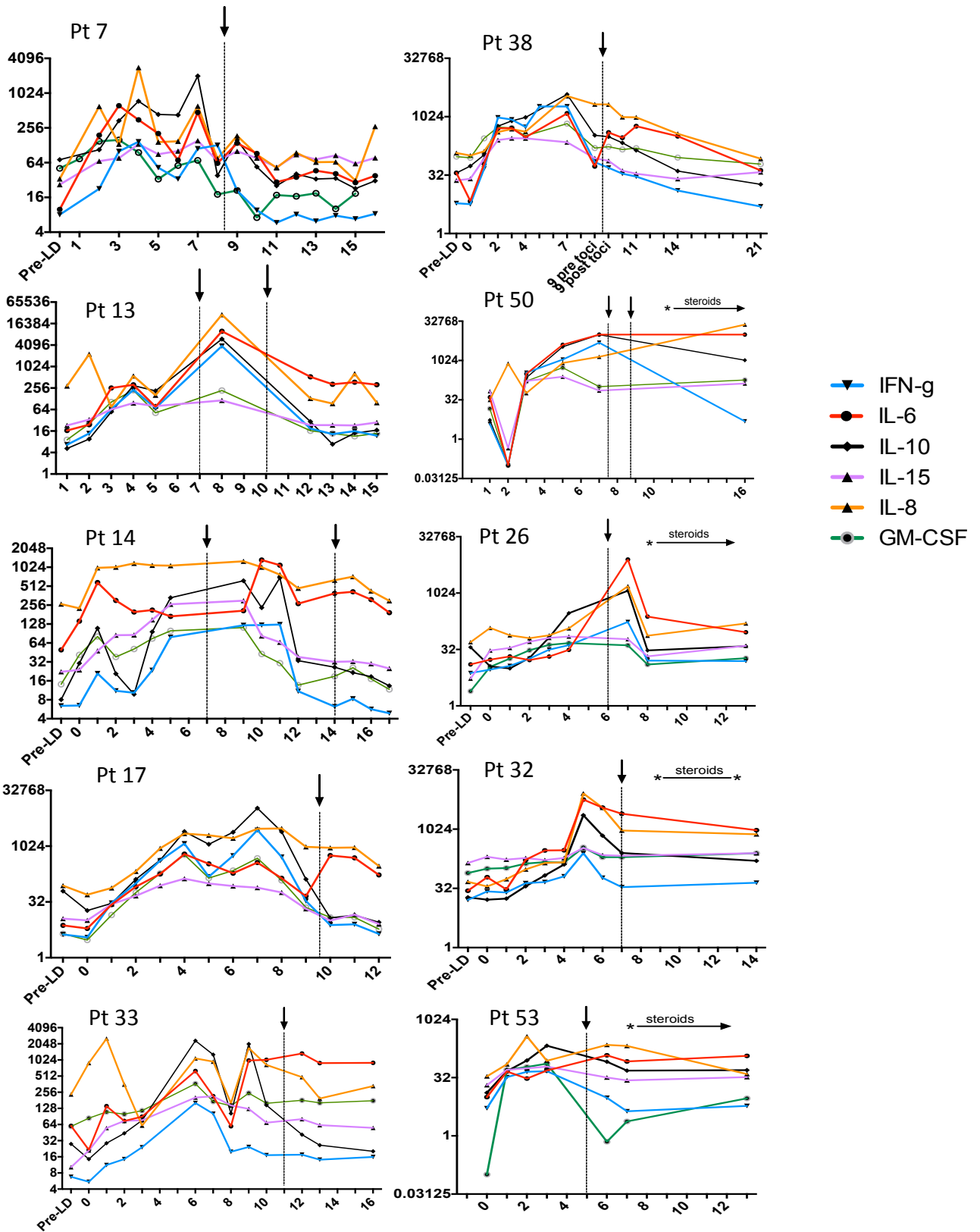


Supplementary Figure 1.



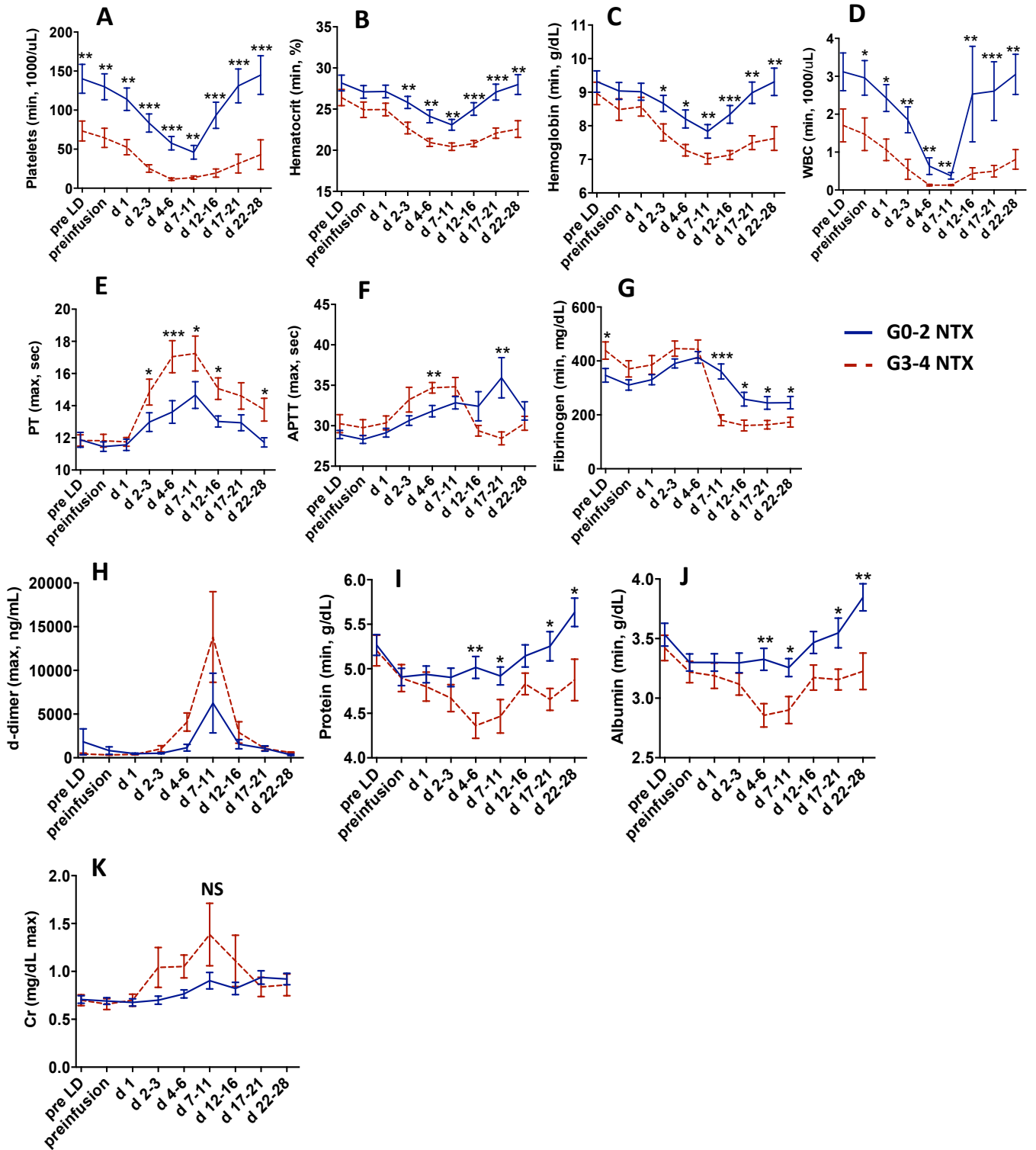
Supplementary Figure 1. Management of patients with neurotoxicity (NTX). Colors on the swimmer lane plot indicate the highest grade of any neurologic symptom recorded on each day for patients who developed grade ≥ 1 NTX through the first 30 days after CAR T infusion (n=33; 11 grade 1-2 NTX, 22 grade 3-4 NTX). Interventions with tocilizumab (red T) and/or corticosteroids (black cross) are indicated.

Supplementary Figure 2



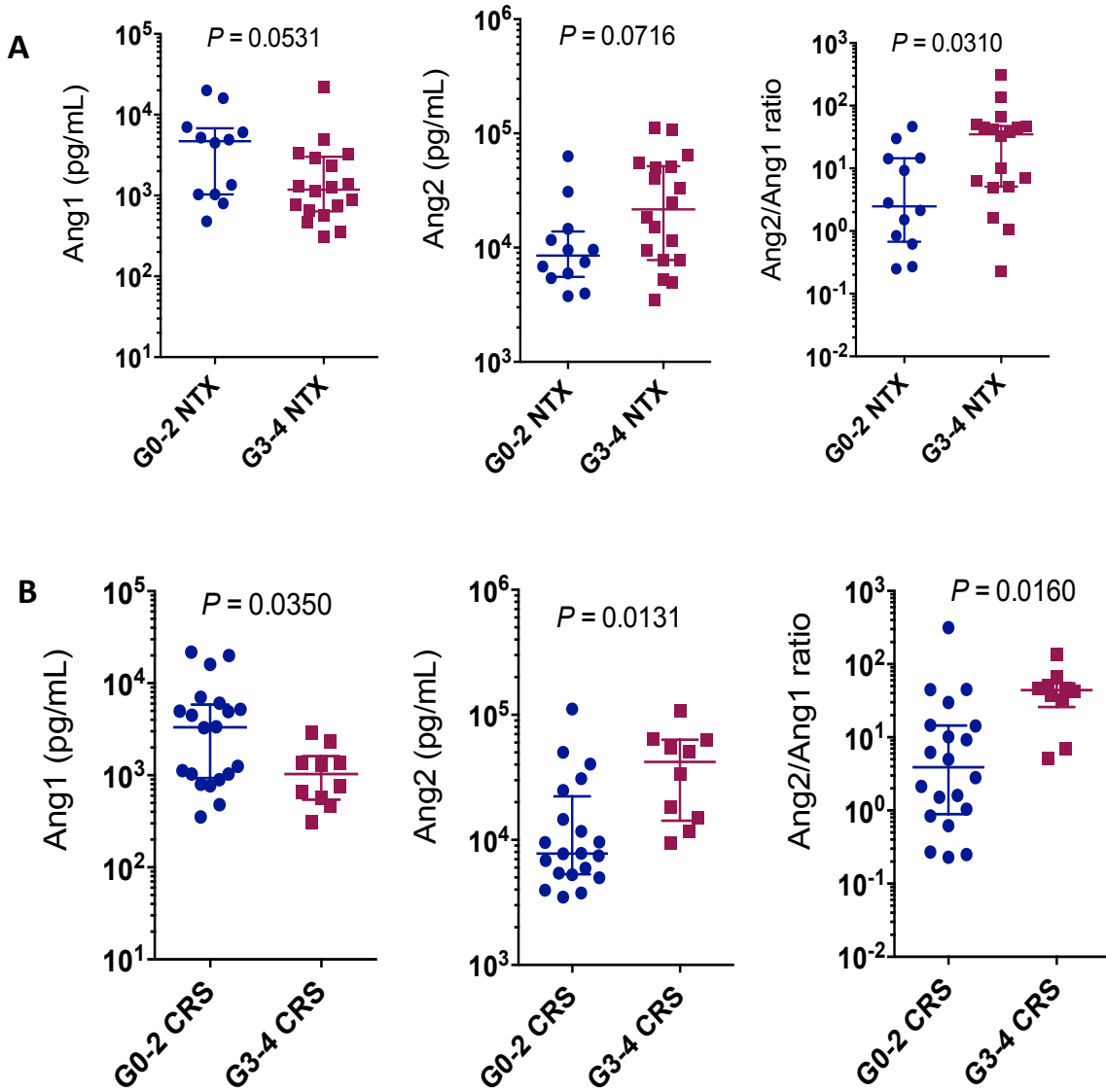
Supplementary Figure 2. Serum cytokine levels of IL6, IL8, IFN γ , IL10, IL15, and GMCSF at baseline and at indicated time points after 19-28z CAR T cell infusion in individual patients with severe neurotoxicity who received tocilizumab and/or corticosteroids. Tocilizumab (arrow) and corticosteroid administration are indicated. Each graph represents data from one patient.

Supplementary Figure 3



Supplementary Figure 3. Hematopoietic toxicity and coagulopathy in severe neurotoxicity (NTX). The graphs show the minimum platelet count (A), hematocrit (B), hemoglobin (C), WBC (D), maximum PT (E), aPTT (F), minimum fibrinogen (G), maximum d-dimer (H), minimum protein (I), albumin (J), and maximum serum creatinine (K) at the indicated time after CAR T cell infusion. Within each time window, the y-axis shows the mean \pm SEM of the values for all patients according to the NTX severity. *P* values were determined using the Kruskal-Wallis test, *** $P < .001$, ** $.001 < P < .01$, * $.01 < P < .05$. Pre-LD, prior to the start of lymphodepletion chemotherapy; Preinfusion, prior to CAR T cell infusion; d, days after CAR-T cell infusion.

Supplementary Figure 4



Supplementary Figure 3. Angiopoetin 1 (ANG1) and Angiopoetin 2 (ANG2) alterations in severe neurotoxicity (NTX) and severe CRS. **A.** ANG1 (left) and ANG2 (center) concentrations and ANG2:ANG1 ratio (right) in serum collected 6 or 7 days after CAR T cell infusion from a subset of patients with grade 0-2 (n=12) or grade 3-4 (n=18) NTX. **B.** ANG1 (left) and ANG2 (center) concentrations and ANG2:ANG1 ratio (right) in the same serum samples as A grouped by grade 0-2 (n=20) or grade 3-4 (n=12) CRS. The median and interquartile range are shown. Each point represents data from one patient.