## Supplemental Table 1: CRS With or Without Prophylactic Tocilizumab

Parameter	100 mg without prophylactic tocilizumab (n=26)	100 mg with prophylactic tocilizumab (n=20)	
Patients with CRS, <sup>a</sup> n (%)	18 (69.2)	4 (20.0)	
Grade 1	14 (53.8) 4 (15.4)	4 (20.0)	
Grade 2	4 (15.4)	0	
Grade 3	0	0	
Onset of CRS,b days, median (range)	2 (1–4)	1 (1–2)	
Duration of CRS, days, median (range)	2 (1–5)	2 (2–2)	
Timing of CRS, <sup>c</sup> n (%)	05		
SUD 1	12 (46.2)	2 (10.0)	
First full dose	10 (38.5)	2 (10.0)	
≥Second full dose	0	1 (5.0)	
Supportive measures for CRS,d n (%)	18 (69.2)	4 (20.0)	
Tocilizumab	12 (46.2)	2 (10.0)	
Oxygen	3 (11.5)	0	
Corticosteroids	18 (69.2) 12 (46.2) 3 (11.5) 1 (3.8)	2 (10.0)	
Other	15 (57.7)	4 (20.0)	
CRS recovered or resolved	18 (100.0)	4 (100.0)	

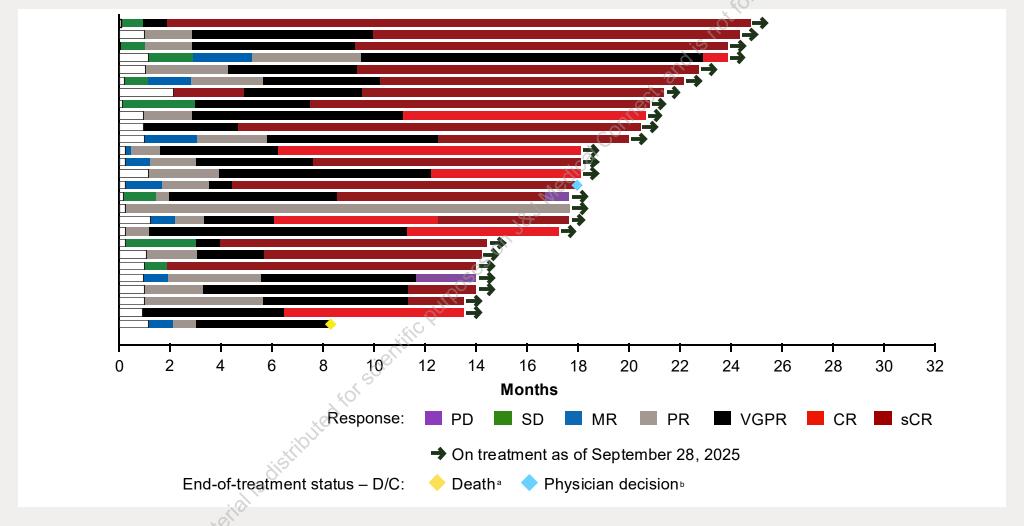
<sup>a</sup>CRS graded per ASTCT criteria. <sup>b</sup>Relative to the most recent dose. <sup>c</sup>Patients could experience ≥1 event. <sup>d</sup>Patients could receive ≥1 supportive therapy. ASTCT, American Society of Transplantation and Cellular Therapy, CRS, cytokine release syndrome; SUD, step-up dose.

## Supplemental Table 2: Summary of Infections and Hypogammaglobulinemia at the RP2D

	RP2D (N=36)	
Most common infections (≥10% of total) and hypogammaglobulinemia, <sup>a</sup> n (%)	Any Grade	Grade 3/4
Infections	29 (80.6)	12 (33.3)
Upper respiratory tract infection	15 (41.7)	1 (2.8)
Pneumonia	8 (22.2)	4 (11.1)
SARS-CoV-2	6 (16.7)	0
Urinary tract infection	5 (13.9)	1 (2.8)
Nasopharyngitis	4 (11.1)	0
Patients who received ≥1 dose of immunoglobulinb	32 (88.9)	
Hypogammaglobulinemia <sup>a</sup>	19 (52.8)	
Patients who received ≥1 dose of immunoglobulin <sup>b</sup>	17 (89.5)	

<sup>&</sup>lt;sup>a</sup>Patients with ≥1 TEAE or postbaseline IgG value <400 mg/dL. <sup>b</sup>Intra ven ous and subcuta neous immunoglo bulin use was recommended to maintain Ig levels ≥400 mg/dL. RP2D, recommended phase 2 dose; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2; TEAE, treatment-emergent adverse event.

Supplemental Figure: Responses at the RP2D in Triple Class Exposed Patients Naïve to T-Cell Redirection Therapies



<sup>&</sup>lt;sup>a</sup>1 patient died while in VGPR (due to pneumonia in the setting of hypogammaglobulinemia <200 mg/dL). <sup>b</sup>1 patient discontinued at physician's discretion following central nervous system progression (myelomatous meningitis). BCMA, B-cell maturation antigen, CR, complete response; D/C, discontinued; GPRC5D, G protein—coupled receptor class C group 5 member D; MR, minimal response; PD, progressive disease; PR, partial response; RP2D, recommended phase 2 dose; sCR, stringent complete response; SD, stable disease; VGPR, very good partial response.