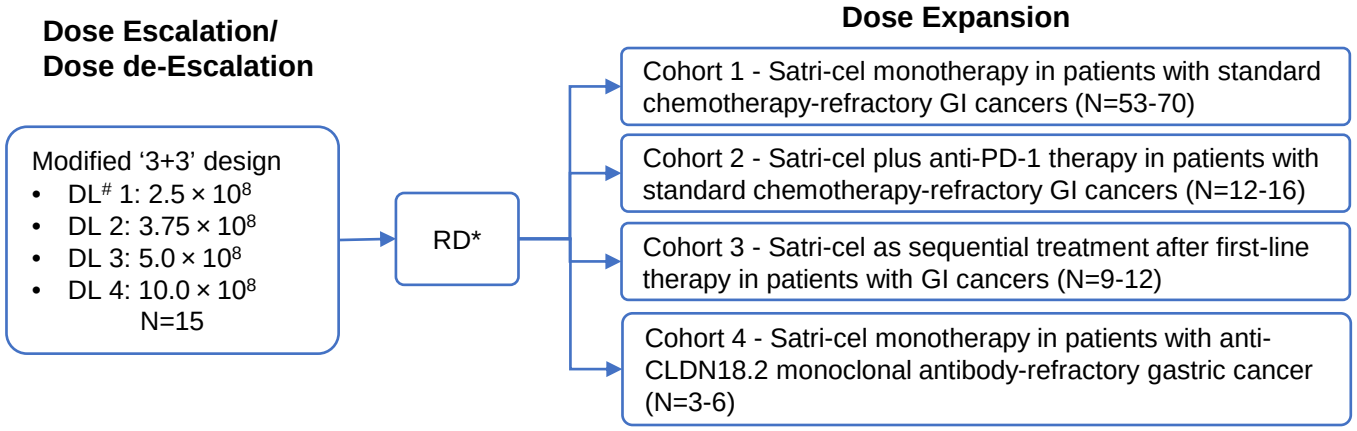
Key Takeaways

- Satricabtagene autoleucel (satri-cel)/CT041 demonstrated its highly promising efficacy and manageable safety profile in patients with CLDN18.2-positive advanced gastrointestinal (GI) cancers.
- The trial explored various cohorts, including combination therapy with anti-PD1, frontline therapy, and early apheresis.
- Additionally, an exploratory analysis of potential factors was performed on the efficacy and safety of satri-cel.

Background

- Claudin 18.2 (CLDN18.2) is highly expressed in GI tumors, rendering it one of the most popular targets for anti-tumor interventions[1,2].
-

Trial Design and Procedure schema



Baseline Characteristics

Characteristics	Total N = 98	Characteristics	Total N = 98
Median			

Safety

Efficacy

	Dose Escalation n = 15	Cohort 1 n = 61	Cohort 2 n = 15	Cohort 3 n = 5	Cohort 4 n = 2	All N = 98
Best overall response						
CR, n (%)	0	1 (1.6)	0	0	0	1 (1.0)
PR, n (%)	7 (46.7)	21 (34.4)	4 (26.7)	4 (80.0)	1 (50.0)	37 (37.8)
SD, n (%)	7 (46.7)	36 (59.0)	7 (46.7)	1 (20.0)	1 (50.0)	52 (53.1)
PD, n (%)	1 (6.7)	3 (4.9)	4 (26.7)	0	0	8 (8.2)
ORR, n (%) [95% CI]	7 (46.7) [21.3, 73.4]	22 (36.1) [24.2, 49.4]	4 (26.7) [7.8, 55.1]	4 (80.0) [28.4, 99.5]	1 (50.0) [1.3, 98.7]	**38 (38.8)** [29.1, 49.2]
DCR, n (%) [95% CI]	14 (93.3) [68.1, 99.8]	58 (95.1)				

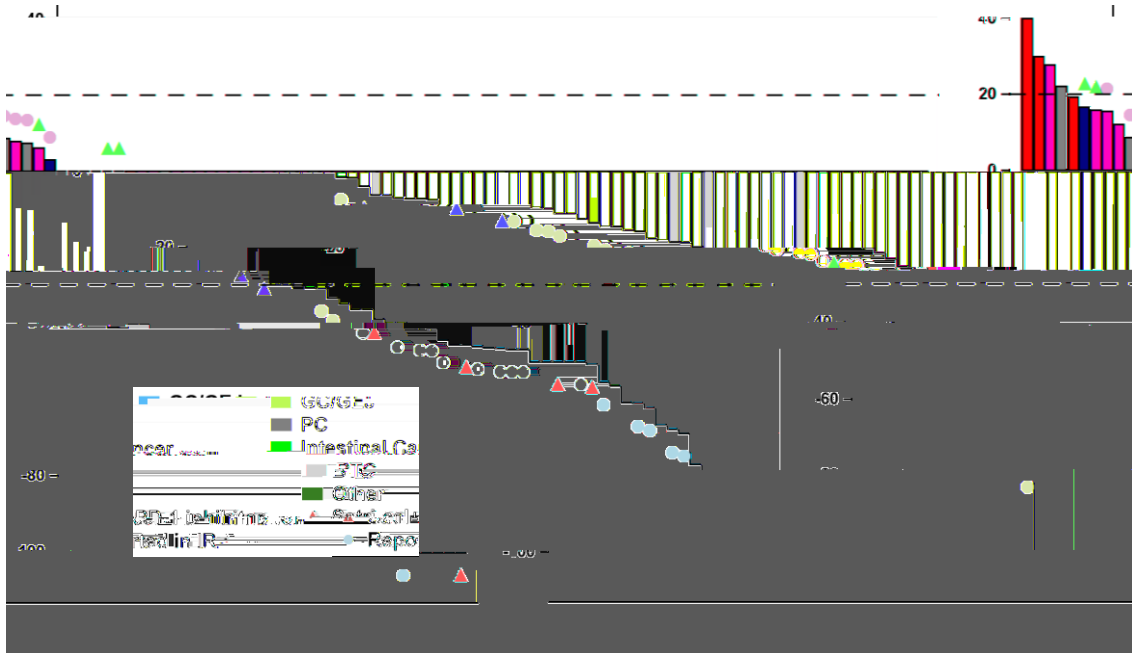
Efficacy

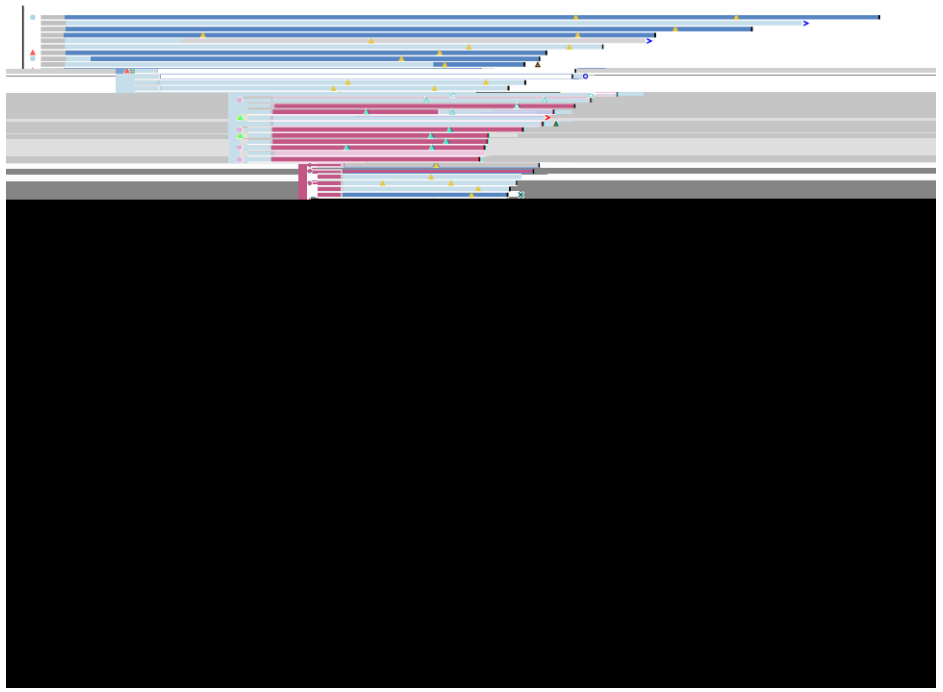
Efficacy in patients with target lesions received satri-cel monotherapy

Variable	GC/GEJ n = 51	PC n = 10	Intestinal cancer n = 8	BTC n = 4	Other n = 2	All N = 75
Best overall response*						
CR, n (%)	1 (2.0)	0	0	0	0	1 (1.3)
PR, n (%)	27 (52.9)	2 (20.0)	1 (12.5)	2 (50.0)	1 (50.0)	33 (44.0)
SD, n (%)	21 (41.2)	7 (70.0)	6 (75.0)	2 (50.0)	1 (50.0)	37 (49.3)
PD, n (%)	2 (3.9)	1 (10.0)	1 (12.5)	0	0	4 (5.3)
ORR, n (%) [95% CI]	**28 (54.9) [40.3, 68.9]**	2 (20.0) [2.5, 55.6]	1 (12.5) [0.3, 52.7]	2 (50.0) [6.8, 93.2]	1 (50.0) [1.3, 98.7]	**34 (45.3) [33.8, 57.3]**
DCR, n (%) [95% CI]	49 (**96.1**) [86.5, 99.5]	9 (90.0) [55.5, 99.7]	7 (87.5) [47.3, 99.7]	4 (100.0) [39.8, 100.0]	2 (100.0) [15.8, 100.0]	71 (94.7) [86.9, 98.5]
mDOR (months) [95% CI]	**6.4 [4.6, 8.3]**	9.4 [2.6, NR]	6.4 [NR, NR]	2.8 [2.1, NR]	3.5 [NR, NR]	**6.2 [4.4, 8.3]**

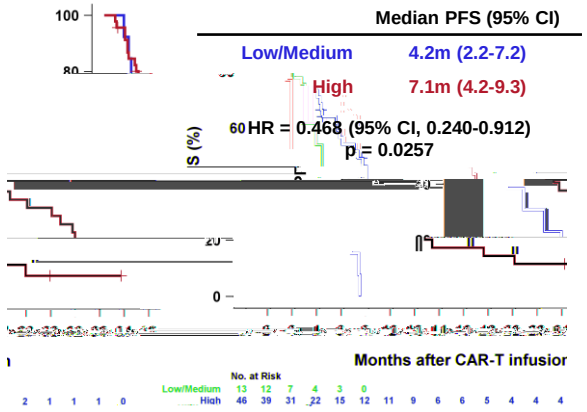
ORR objective responses rate; CR complete response; PR partial response; SD stable disease; PD progression disease; DCR disease control rate; DOR duration of response.
* Tumor response was confirmed based on investigator assessment according to RECIST version 1.1.
Two-sided 95% CI for ORR and DCR was calculated using by Clopper-Pearson exact method. DOR was estimated by Kaplan-Meier method, and the corresponding two-sided 95% confidence interval was calculated using Brookmeyer-Crowley method.

Tumor Response

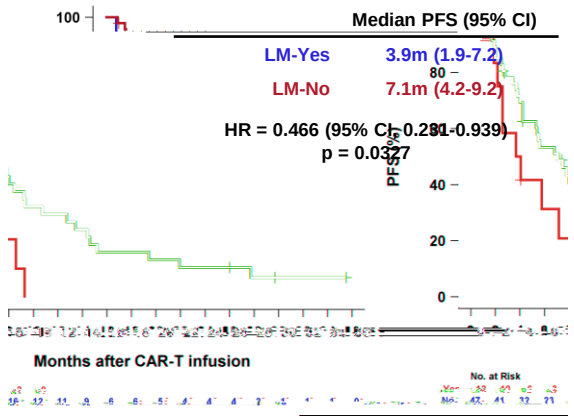




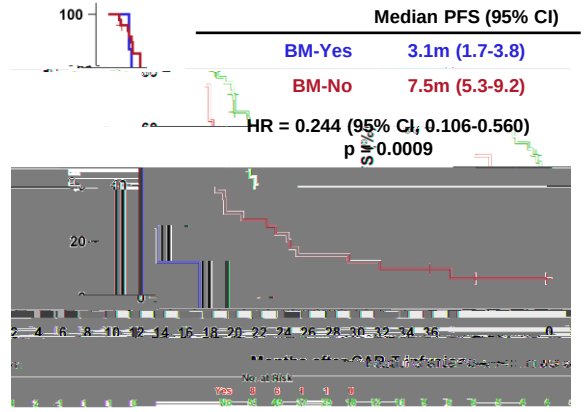
Efficacy - Subgroup Analysis in GC/GEJ



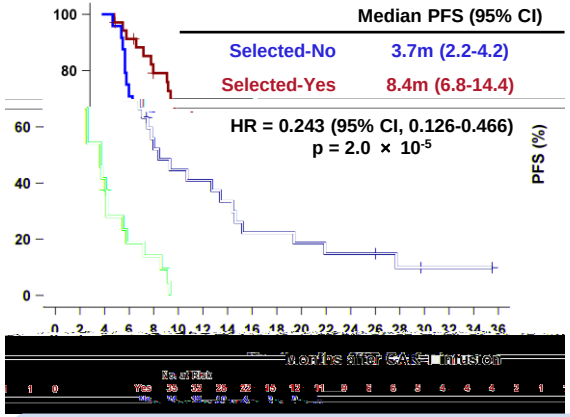
CLDN18.2 expression High vs. Low/Medium

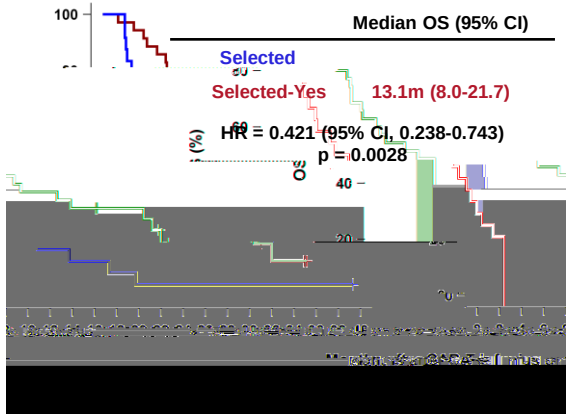


With liver metastasis vs. without liver metastasis



With bone metastasis vs. without bone metastasis

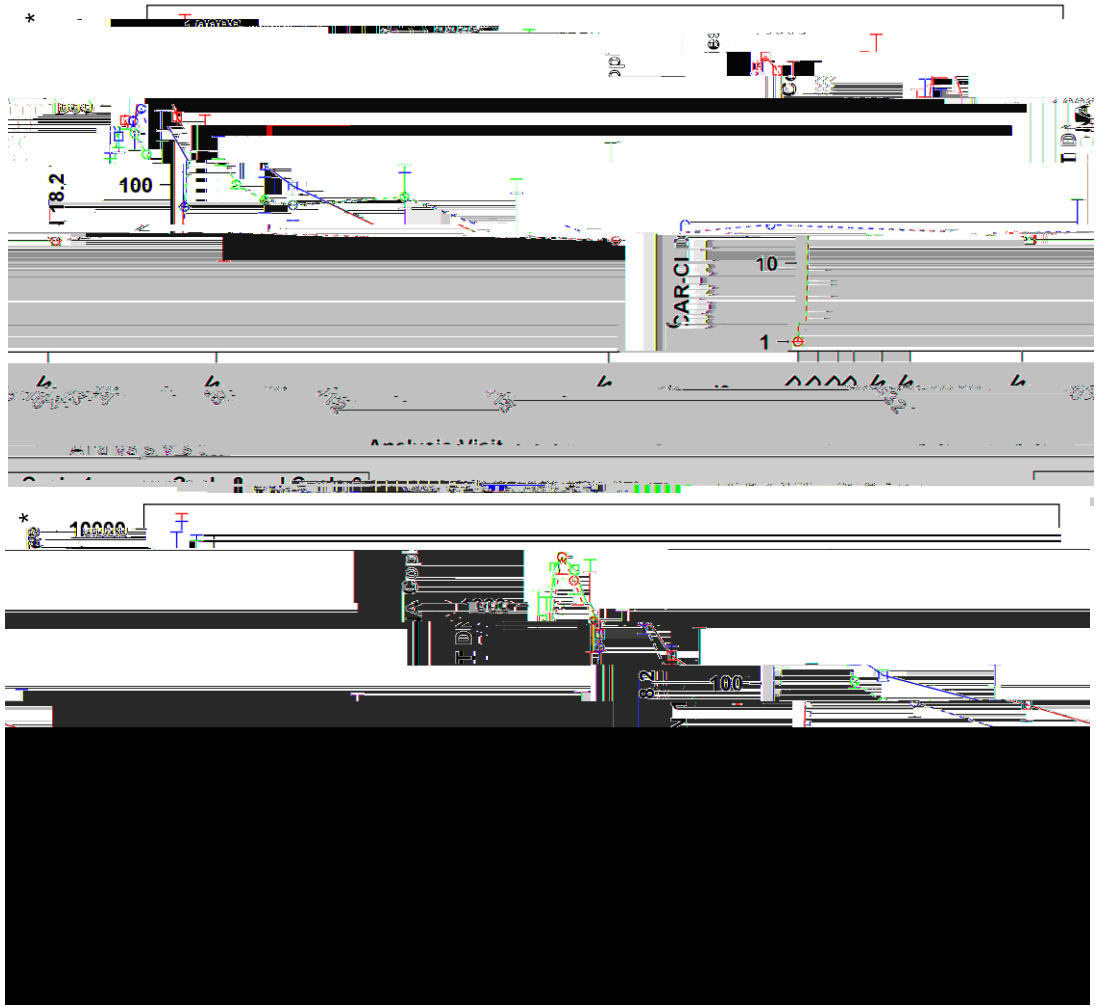




Selected group (CLDN18.2 high expression without liver or bone metastasis) vs. the others

More favorable efficacy signals were identified in those GC/GEJ patients with CLDN18.2 high expression who didn't have liver or bone metastases

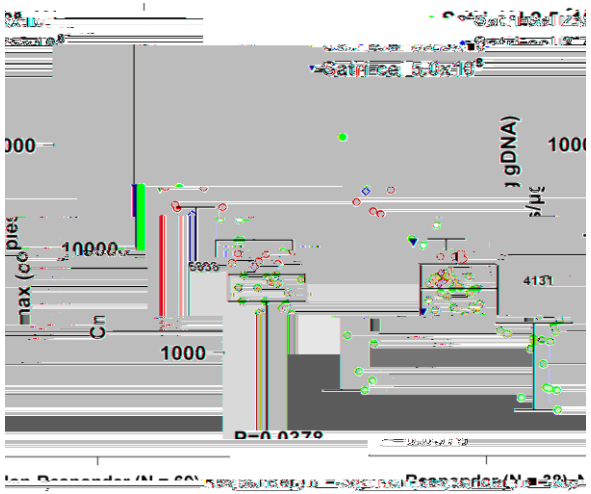
CAR expansion and persistence



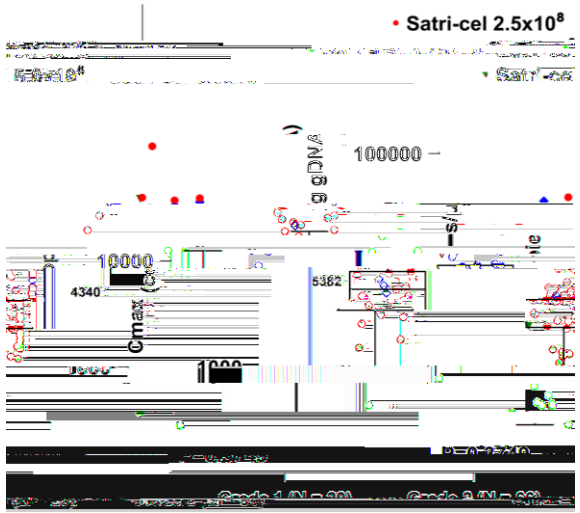
- CAR copies were detected in the peripheral blood of all 98 patients following satri-cel infusion. Generally, the CAR copies can be detected within several hours post infusion.
- After the first infusion, the median time to maximum effect (T_{max}) was **28);** median maximum concentration (C_{max}) was **4,613 copies per genomic DNA (gDNA) (280 119,581)**; median persistence (T_{last}) in peripheral blood was 28 d (6–615).
- For the second infusion, the median T_{max} was 3 d (0–10), and the median C_{max} decreased to 1,128 copies per μg gDNA (20–9,877).
- No significant difference was observed in the median C_{max} and persistence of CAR copies after the first infusion between satri-cel monotherapy (n=83) and satri-cel plus Toripalimab (n=15).

*Unit: copies per μg genomic DNA (gDNA)

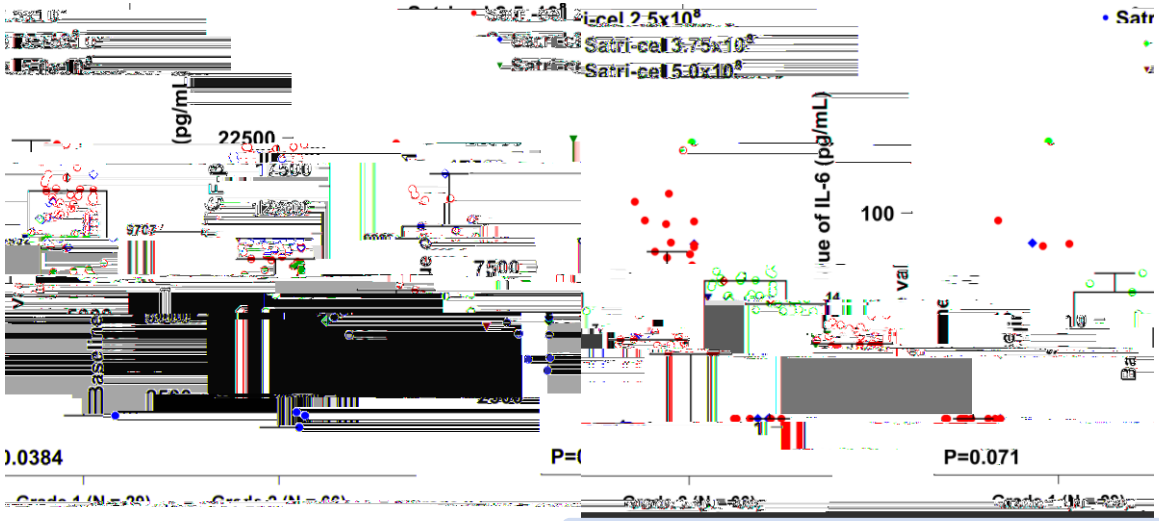
Exploratory Outcomes



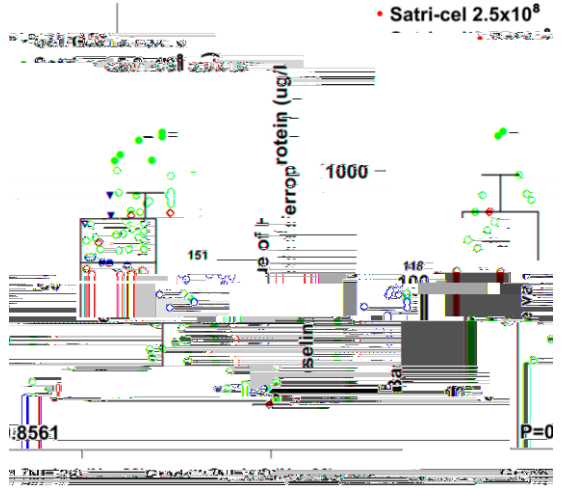
Association between C_{max} and efficacy



Association between C_{max} and CRS grade







Association between inflammatory markers at baseline and CRS grade

Limitations

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Conclusions/Key takeaways

- Long-term follow-up of satricabtagene autoleucel/CT041 trial demonstrated its highly promising efficacy and manageable safety profile in pretreated patients with CLDN18.2-positive advanced GI cancers, especially GC/GEJ cancer.
-

Full Publication *Nature Medicine*

- Qi, C., Liu, C., Gong, J. et al. Claudin18.2-specific CAR T cells in gastrointestinal cancers: phase 1 trial final results. *Nat Med* (2024). https://doi.org/10.1038/s41591-024-

Acknowledgements

