

Supplementary Table 1. Dose Reductions for Treatment-Related Toxicity at Each Dose Level

	Dose Level: CBP501 (mg/m²)/ cisplatin (mg/m²)/ nivolumab (mg)			
	16/ 60/ 240 N=3	16/ 75/ 240 N=6	25/ 60/ 240 N=35	25/ 75/ 240 N=3
CBP501 reduced (%)	0	1 (17%)	4 (11%)	1 (33%)
Cisplatin reduced (%)	1 (33%)	2 (33%)	7 (20%)	2 (67%)

Supplementary Table 2. Summary of Grade ≥ 3 AEs by System Organ Class and Preferred Term by Dose Cohort each patient reported once per preferred term

MedDRA SOC Preferred Term	Dose Level: CBP501 (mg/m ²)/ cisplatin (mg/m ²)/ nivolumab (mg)				
	16/ 60/ 240 N=3	16/ 75/ 240 N=6	25/ 60/ 240 N=35	25/ 75/ 240 N=3	Total N=47
	n (%)				
Patients with any Grade ≥ 3 AE	2 (66.7)	6 (83.3)	28 (74.3)	2 (66.7)	38 (80.9)
Blood & lymphatic system disorders	1 (33.3)	4 (66.7)	21 (60.0)	0	26 (55.3)
Anemia	1	2	12	1	16 (34.0)
Leukopenia ^A	0	0	4	0	4 (8.5)
Lymphopenia ^B	0	2	9	1	12 (25.5)
Neutropenia ^C	0	0	4	0	4 (8.5)
Thrombocytopenia ^D	0	0	3	0	3 (6.4)
Gastrointestinal disorders	1 (33.3)	1 (16.7)	9 (25.7)	0	11 (23.4)
Abdominal pain	1	0	4	0	5 (10.6)
Diarrhea	0	1	1	0	2
Diarrhea hemorrhagic	0	0	1	0	1
Duodenal obstruction	0	0	1	0	1
Gastritis erosive	0	0	1	0	1
GI hemorrhage	0	0	2	0	2
Lower GI hemorrhage	0	0	2	0	2
Small intestinal obstruct.	0	0	1	0	1
General disorders	1 (33.3)	0	3 (8.6)	0	4 (8.5)
Asthenia	1	0	0	0	1
Fatigue	1	0	2	0	3 (6.4)
Pyrexia	0	0	1	0	1
Hepatobiliary disorders	0	0	1 (2.9)	0	1 (2.1)
Hepatic failure	0	0	1	0	1
Infections & infestations	1 (33.3)	1 (16.7)	1 (2.9)	0	3 (6.4)
Influenza	0	1	0	0	1
Kidney infection	0	0	1	0	1
Sepsis	1	0	0	0	1
Injury, poisoning & procedural complications	1	0	2 (5.7)	0	3 (6.4)
Infusion related reaction ^E	1	0	1	0	2
Lower limb fracture	0	0	1	0	1
Investigations	0	0	3 (8.6)	2 (66.7)	11 (23.4)
ALP increased	0	0	0	1	1
ALT increased	0	0	2	0	2
AST increased	0	0	2	1	3 (6.4)
Bilirubin increased	0	0	1	1	2
Troponin T increased	0	0	1	0	1
Metabolism & nutrition disorders	1 (33.3)	3 (50.0)	7 (20.0)	1 (33.3)	11 (23.4)
Dehydration	0	1	0	0	1
Hyperglycemia	0	0	0	1	1
Hypoalbuminemia	0	0	3	1	4 (8.5)
Hypocalcemia	1	0	1	0	2
Hypokalemia	0	0	2	0	2
Hypomagnesemia	0	0	1	0	1

Hyponatremia	0	2	4	1	7 (14.9)
Hypophosphatemia	0	0	1	0	1
Musculoskeletal & connective tissue disorders	0	0	3 (8.6)	0	3 (6.4)
Back pain	0	0	1	0	1
Flank pain	0	0	1	0	1
Muscular weakness	0	0	1	0	1
Nervous system disorders	1 (33.3)	0	1 (2.9)	0	2 (4.3)
Encephalopathy	1	0	0	0	1
Syncope	0	0	1	0	1
Psychiatric disorders	1 (33.3)	0	0	0	1 (2.1)
Mental status changes	1	0	0	0	1
Renal & urinary disorders	0	1 (16.7)	2 (5.7)	0	3 (6.4)
Acute kidney injury ^F	0	2	2	0	4 (8.5)
Hydronephrosis	0	0	1	0	1
Respiratory, thoracic & mediastinal disorders	0	0	1 (2.9)	0	1 (2.1)
Dyspnea	0	0	1	0	1
Vascular disorders	1 (33.3)	0	5 (14.3)	0	6 (12.8)
Deep vein thrombosis	0	0	1	0	1
Embolism	0	0	1	0	1
Hypertension	0	0	2	0	2
Hypotension	1	0	1	0	2

A: Includes cases based on white blood cell count decreased, graded per NCI CTCAE v4.03

B: Includes cases based on lymphocyte count decreased, graded per NCI CTCAE v4.03

C: Includes cases based on granulocyte or neutrophil count decreased, graded per NCI CTCAE v4.03 Includes cases based on platelet count decreased, graded per NCI CTCAE v4.03

D: Includes cases based on white blood cell count decreased, graded per NCI CTCAE v4.03

E: Includes cases for anaphylactic reaction, cytokine release syndrome, urticaria, erythema, pruritis, flushing, rash F: Includes cases based on creatinine increased, graded per NCI CTCAE v4.03

ALP: alkaline phosphatase; ALT: alanine aminotransferase; AST: aspartate aminotransferase; GI: gastrointestinal

Supplementary Table 3. Analysis of Paired Biopsies and Efficacy Outcomes

Pancreatic Cancer	CD8 Infiltration		PD-L1 Expression		PD-L1 antibody	PFS (months)	OS (months)
	Pre-treatment	In cycle 2	Pre-treatment	In cycle 2			
Patient A	0%	1-5%	20%	50%	28.8	5.8	5.8
Patient B	<0.1%	1-2%	NA	1%	28-8	8.0	8.0
Patient C	2%	2%	NA	NA	28-8	1.3	4.3
Patient D	20%	5%	0%	0%	SP142	2.0	2.3
Colo-rectal Cancer	CD8 Infiltration		PD-L1 Expression		PD-L1 antibody	PFS (months)	OS (months)
	Pre-treatment	In cycle 2	Pre-treatment	In cycle 2			
Patient E	3%	5%	0%	0%	28-8	1.4	11.8
Patient F	<1%	10%	0%	0%	SP142	1.4	>4.7
Patient G	2%	NA	0%	NA	28-8	1.4	16.8
Patient H	3%	NA	0%	0%	28-8	1.3	9.0

PD: progressive disease; PFS: progression-free survival; SD: stable disease

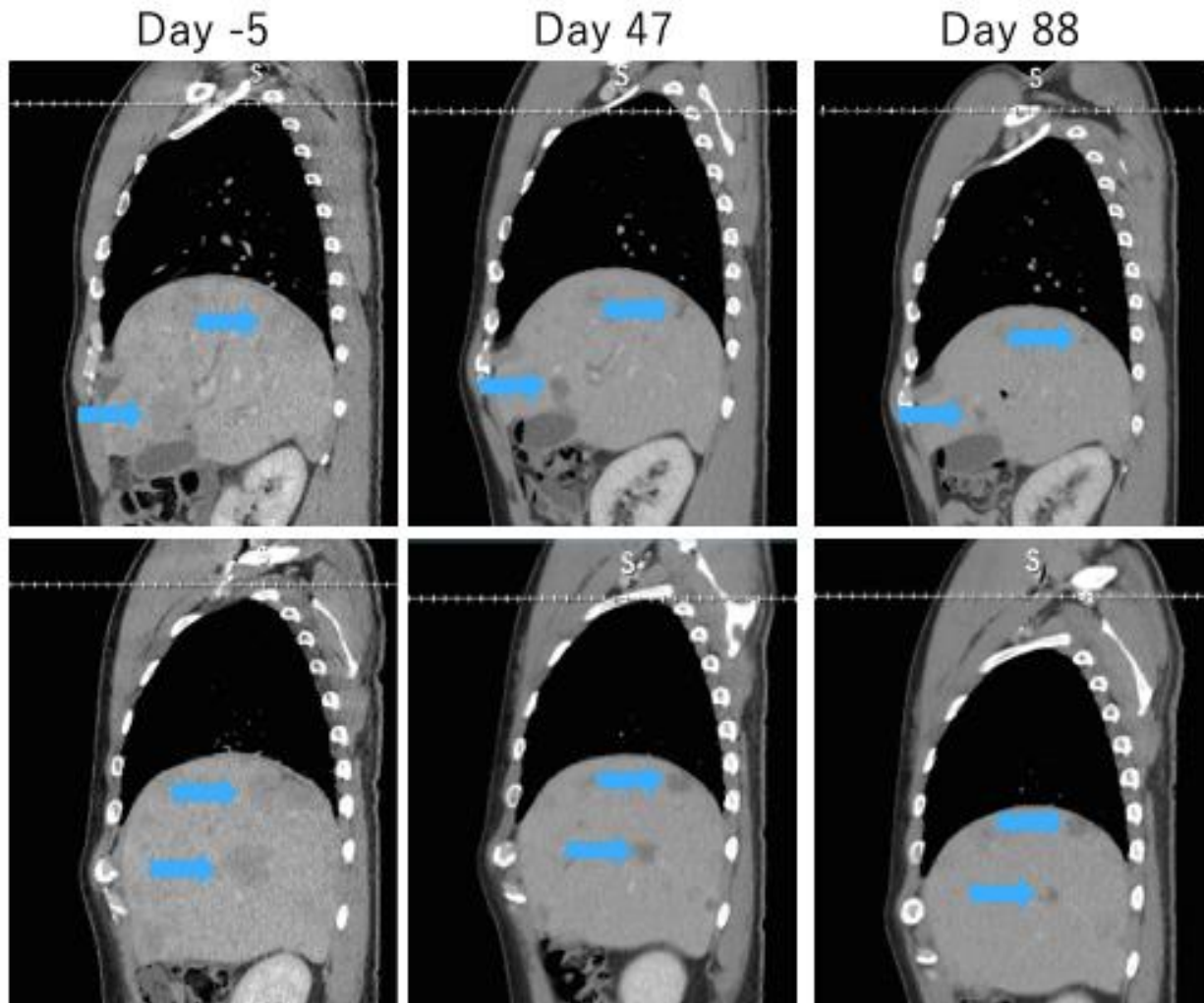
Supplementary Table 4. Survival Outcomes for Patient Cohorts Treated with CBP501 Combination Therapy

ClinicalTrials.gov Identifier	NCT03113188	NCT00551512	NCT00700336	NCT00942825
Study code	CBP17-01	CBP06-01	CBP08-01	CBP08-02
Tumor Type/ Indication	Relapsed/refractory pancreatic cancer	Platinum refractory/resistant ovarian cancer	Chemo-naïve malignant pleural mesothelioma	Chemo-naïve non-squamous non-small cell lung cancer
Regimen	CBP501 + cisplatin + nivolumab	CBP501 + cisplatin	CBP501 + cisplatin + pemetrexed	CBP501 + cisplatin + pemetrexed
All treated, n	24	14	40	96
Efficacy population, n	14	14	40	96
PFS, median (95% CI), months	2.4 (1.3, 4.6)*	3.3 (2.4, 4.0)#	5.9 (4.3, 7.2)*	4.7 (3.6,5.7)*
OS, median (95% CI), months	4.9 (3.4, 6.8)*	Not reached	13.3 (11.1,15.3)#	15.2 (11.0,18.0)*
Subsets with WBC ≤/ >10,000/mm ³ at screening, n	11 / 3	12 / 2	28 / 12	71 / 25
OS or PFS, median (95% CI), months for subset with WBC ≤10,000/mm ³	OS 5.8 (4.2, 8.0)*	PFS 4.4 (3.2,5.5)#	PFS 7.2 (5.8,8.5)#	OS 17.3 (15.1,19.3)#

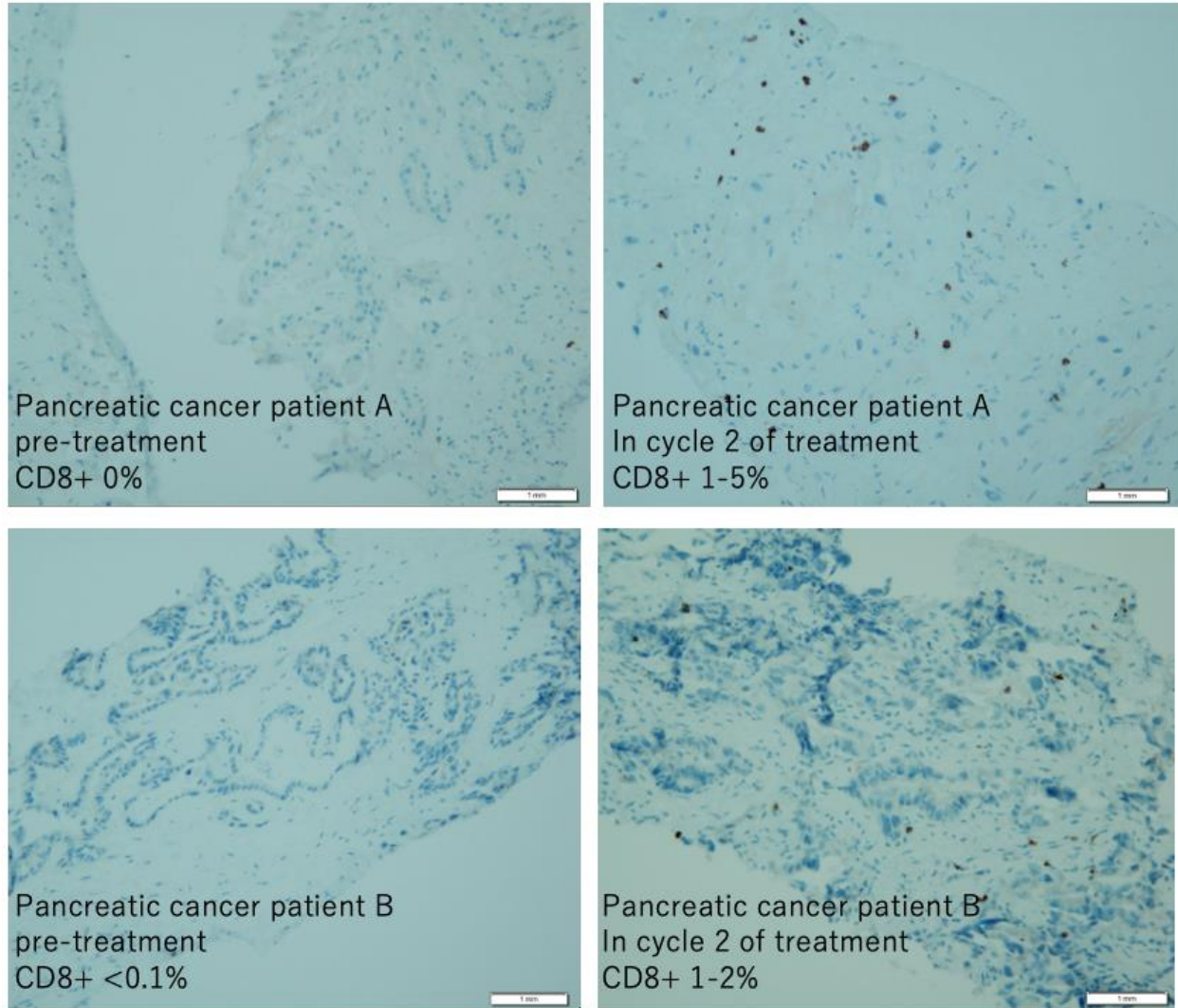
OS or PFS, median (95% CI), months for subset with WBC >10,000/mm ³	OS 3.4 [#]	PFS 1.3 [#]	PFS 4.2 (3.0,5.2) [#]	OS 6.3 (4.9,7.4) [#]
Logrank Hazard Ratio, WBC ≤ vs > 10,000/μL, (95% CI)	OS 0.28 (0.035, 2.2) [#]	PFS 0.093 (0.0014, 6.3) [#]	PFS 0.34 (0.13, 0.90) [#]	OS 0.35 (0.17, 0.74) [#]
Logrank (Mantel-Cox) p value	0.0213 [#]	<0.0001 [#]	0.0013 [#]	<0.0001 [#]

Numbers calculated by SAS* or GraphPad Prism 9[#]

CI: confidence interval; OS: overall survival; PFS: progression-free survival; WBC: white blood cell count



Supplementary Figure 1



Supplementary Figure 2