

Figure 1
STUDY SCHEMA

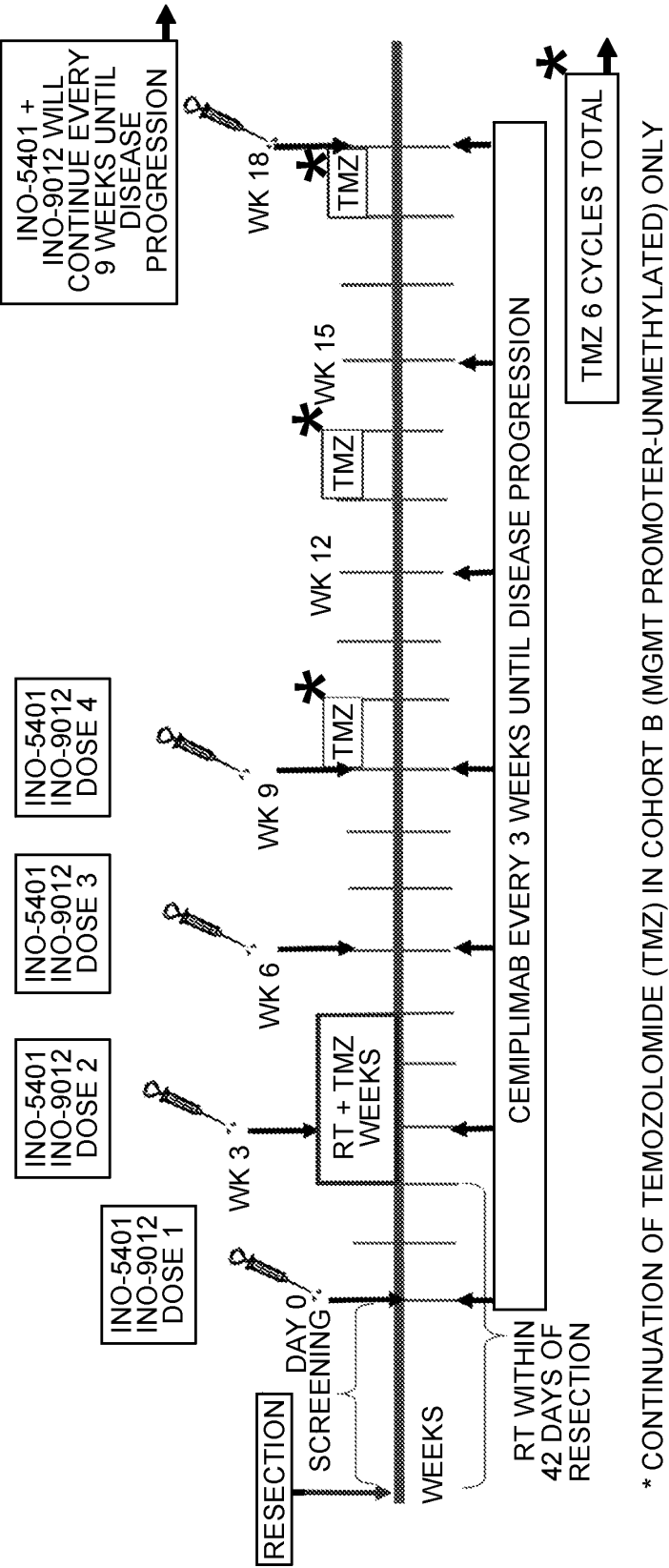


Figure 2
Study Population Demographics

	Cohort A (n=32)	Cohort B (n=20)
Age ≤65 years (%)	25 (78)	13 (65)
Age ≥65 years (%)	7 (22)	7 (35)
Median Age in Years (range)	59 (19-71)	63 (33-78)
Female Sex (%)	11 (34)	7 (35)
Male Sex (%)	21 (66)	13 (65)
Karnofsky Performance Score 90-100 (%)	23 (72)	17 (85)
Karnofsky Performance Score 70-80 (%)	9 (28)	3 (15)
Median Time on Study from First Dose (Days; range)	541 (113-722)	557 (40-750)
Median Exposure* (Dosing cycles; range) of INO-5401	6 (1-14)	7.5 (1-13)
Median Exposure* (Dosing cycles; range) of cemiplimab	10 (1-34)	17 (1-29)
Subjects of dexamethasone at Day 0 (N, %)	14 (44)	5 (25)
Discontinued Therapy to Date (N)**	28	13

* INO-5401 is given Q3 weeks x 4 and then Q9 weeks; cemiplimab is given Q3 weeks

** The majority of subjects who discontinued have discontinued therapy for progressive disease. 11 subjects continue therapy as of date of analysis.

Figure 3
REPRESENTATIVE MRI IMAGES FROM TWO PATIENTS

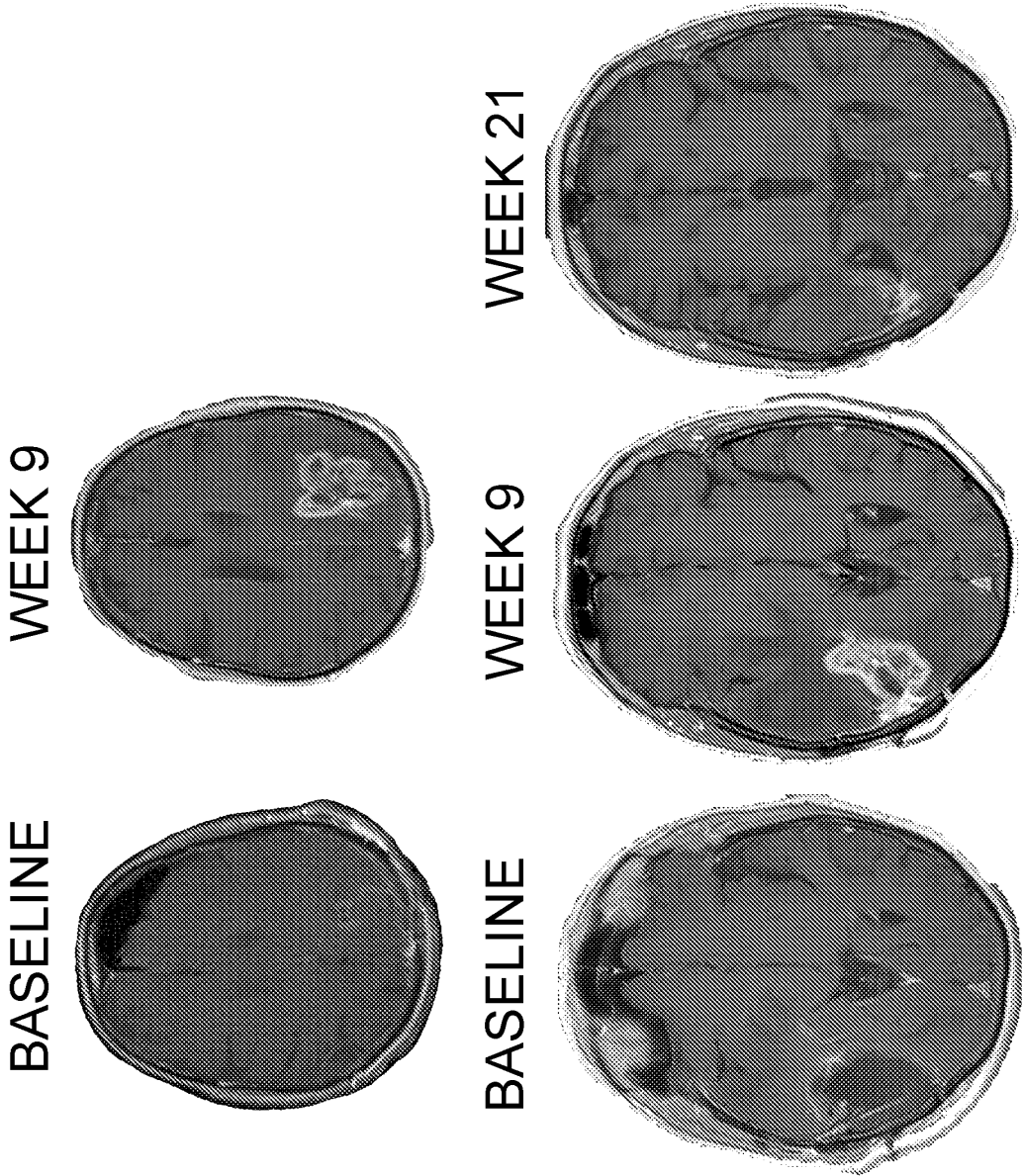


Figure 4
Immunogenicity by ELISpot

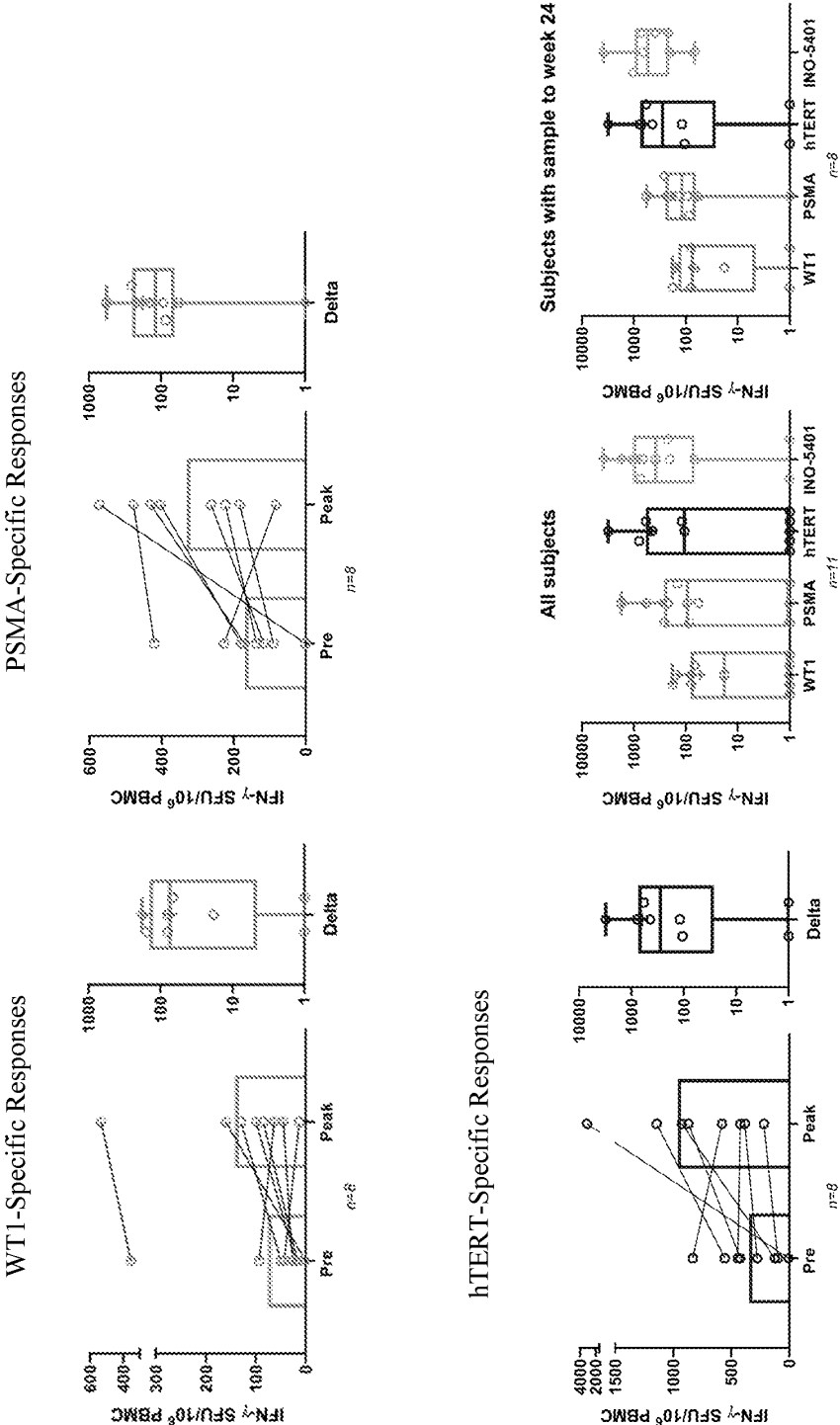


Figure 5A

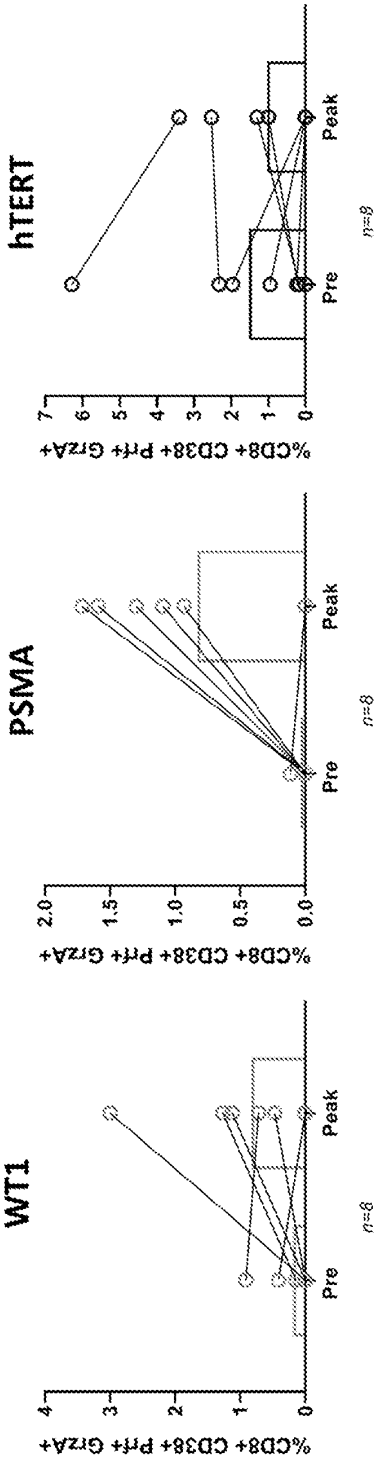


Figure 5B

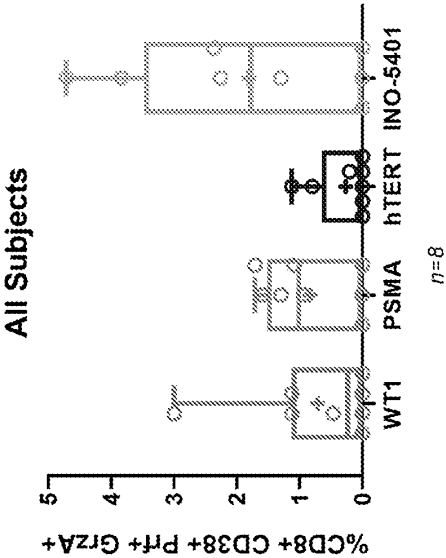


Figure 5C

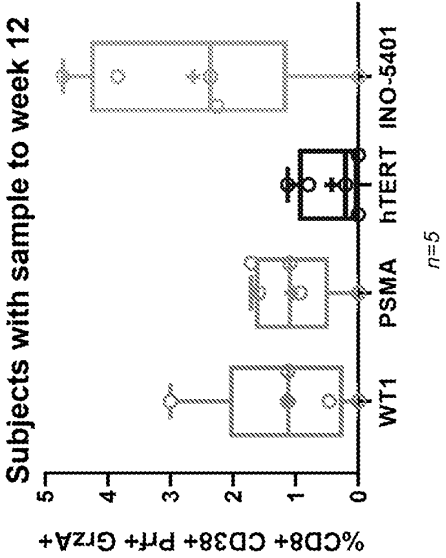


Figure 6 - Confirmed PFS (Cohort A)

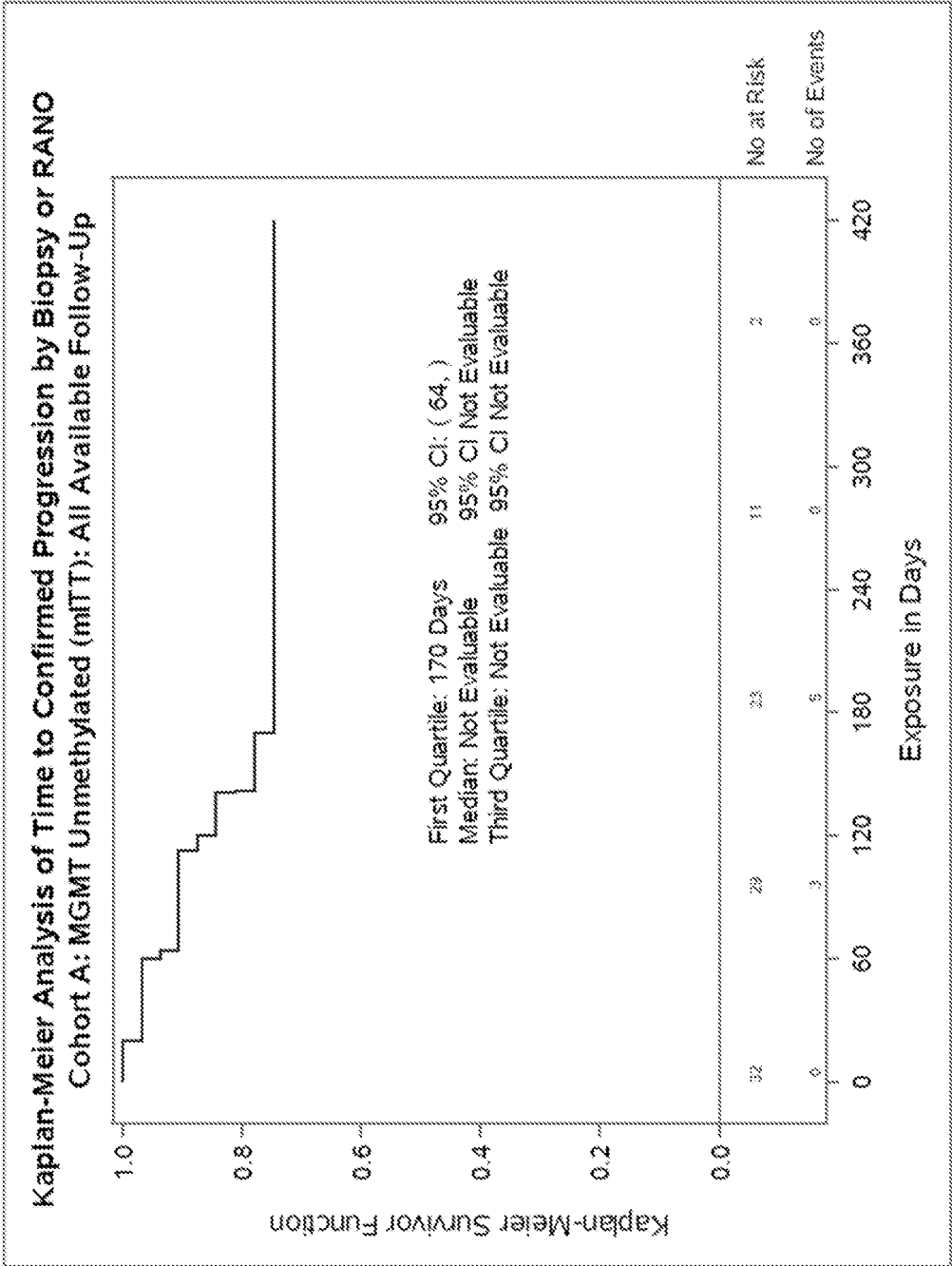


Figure 7 – Confirmed PFS (Cohort B)

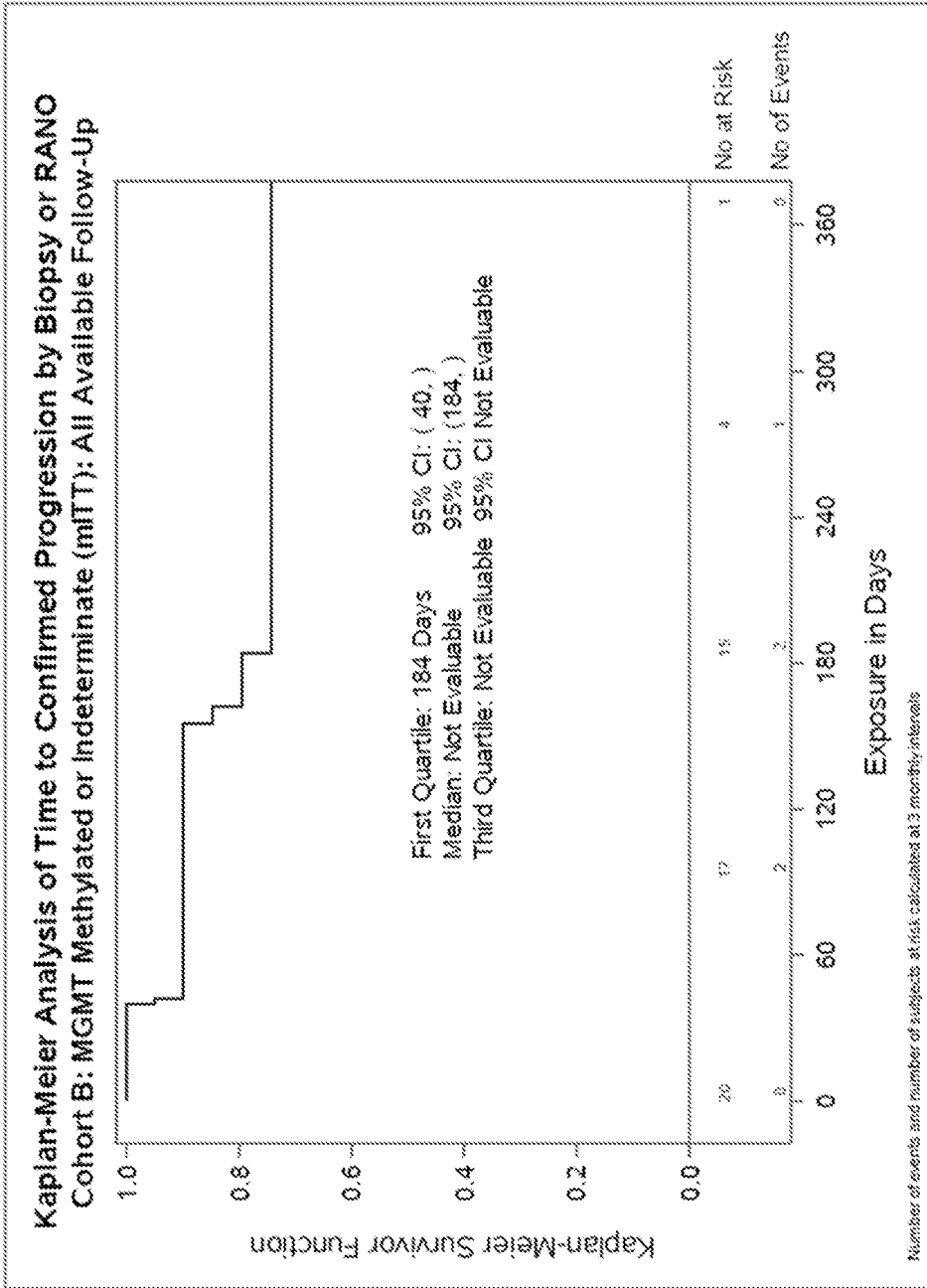
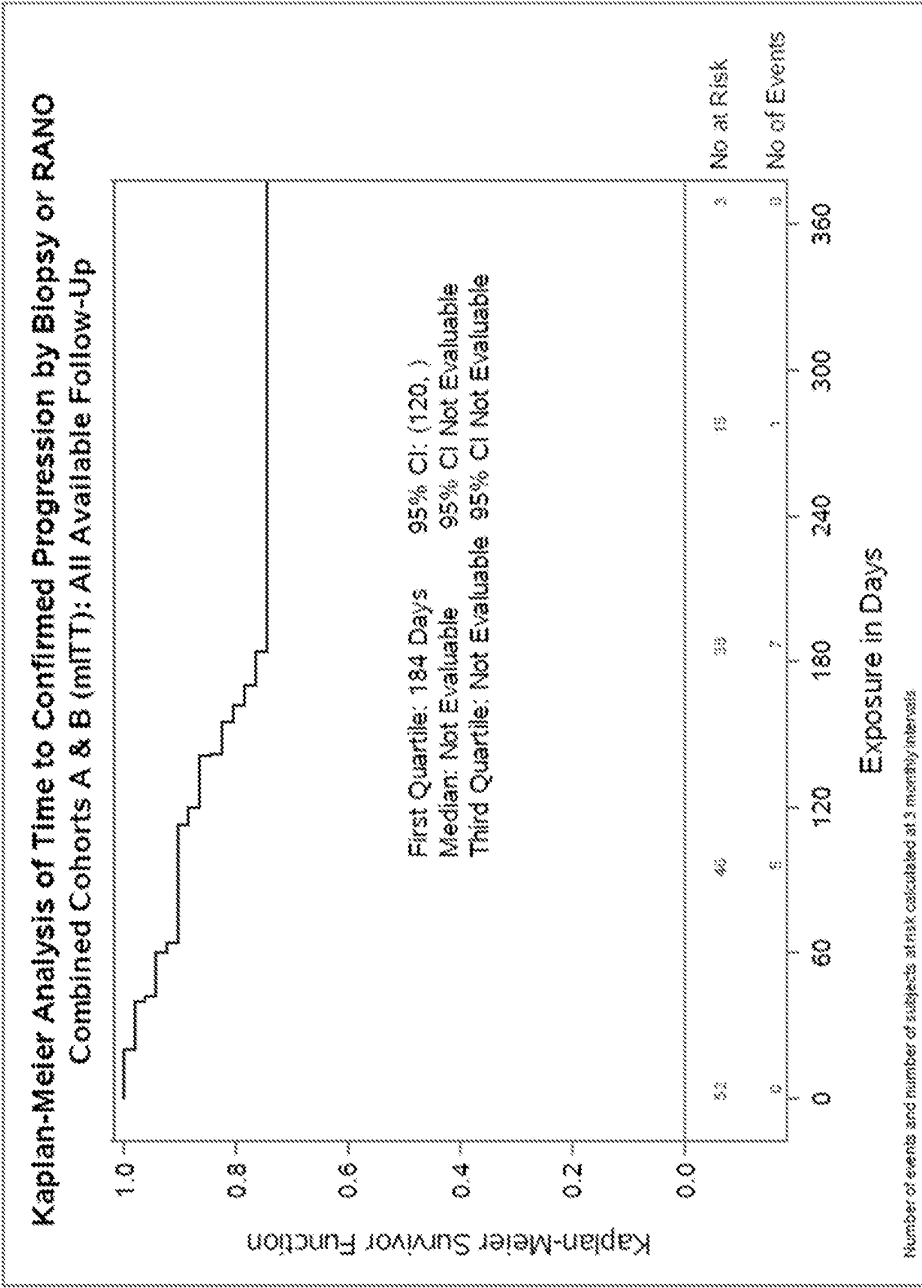


Figure 8 – Confirmed PFS (Cohort A + B)



9/20

Figure 9

Cohort	N Total Subjects	N Event-free Subjects	PFS6 (%)	95% CI Lower Bound	95% CI Upper Bound
Cohort A (MGMT Unmethylated)	32	24	75.00	56.60	88.54
Cohort B (MGMT Methylated)	20	16	80.00	56.34	94.27
Both Cohorts Combined	52	40	76.92	63.16	87.47

Figure 10A

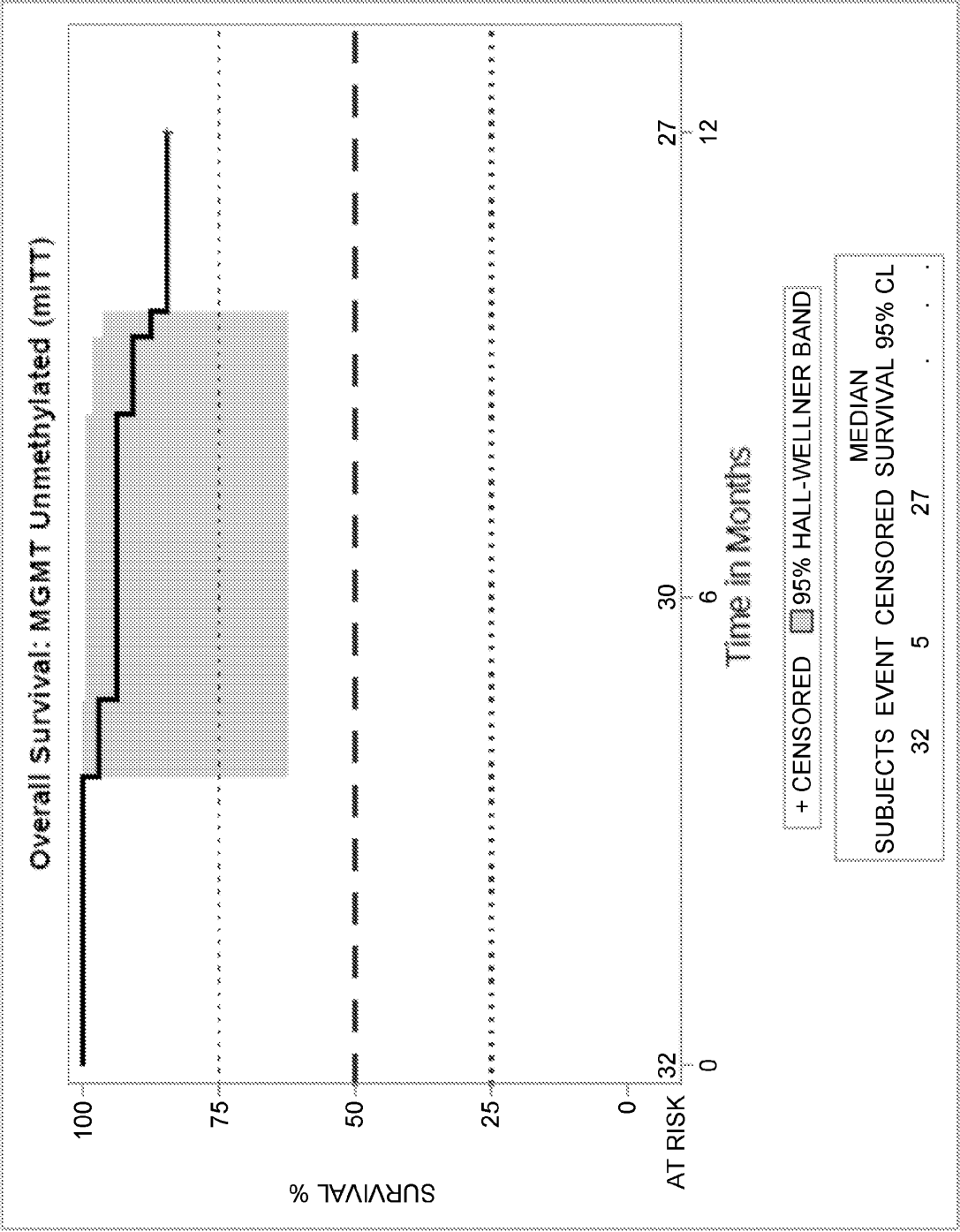


Figure 10B

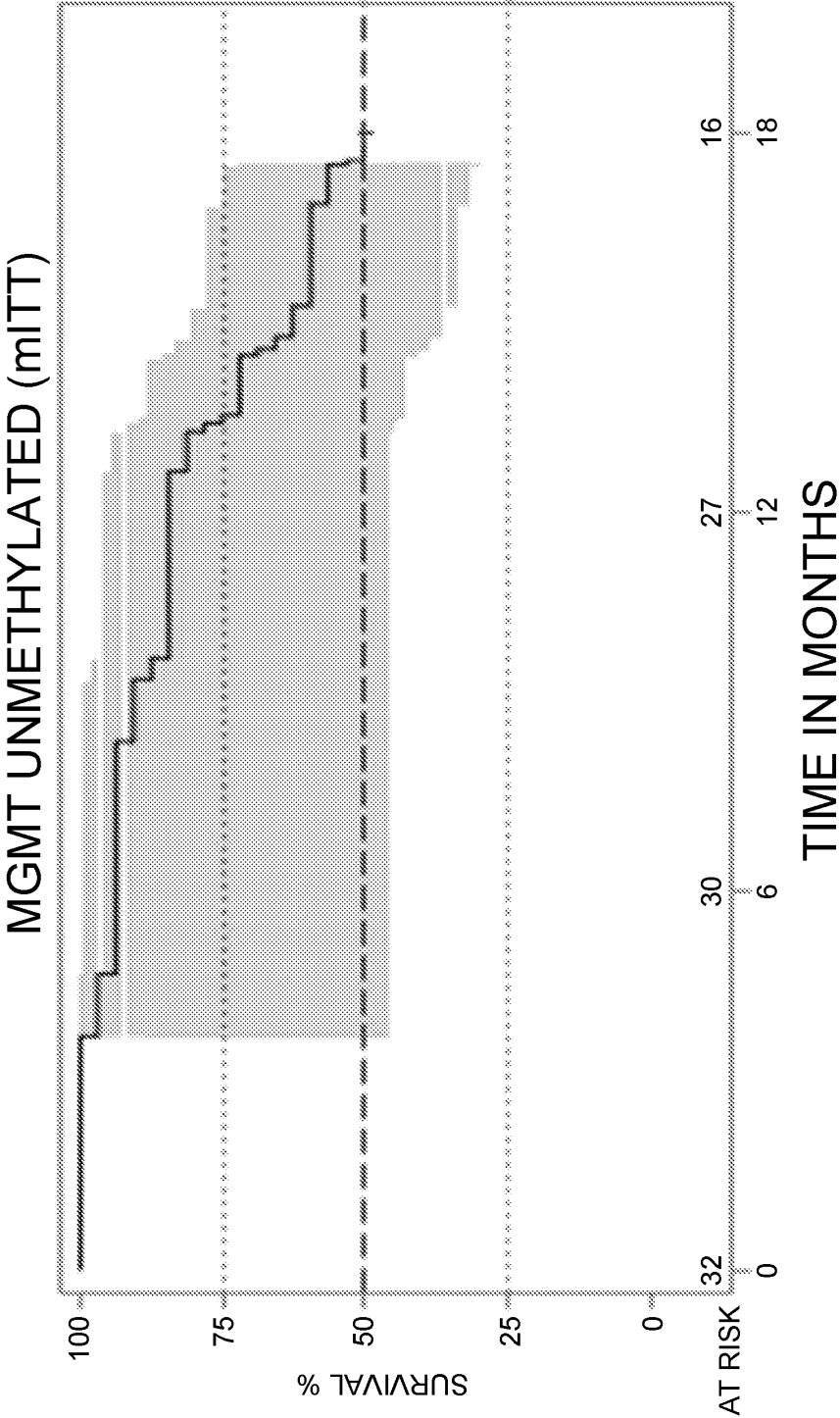


Figure 11A

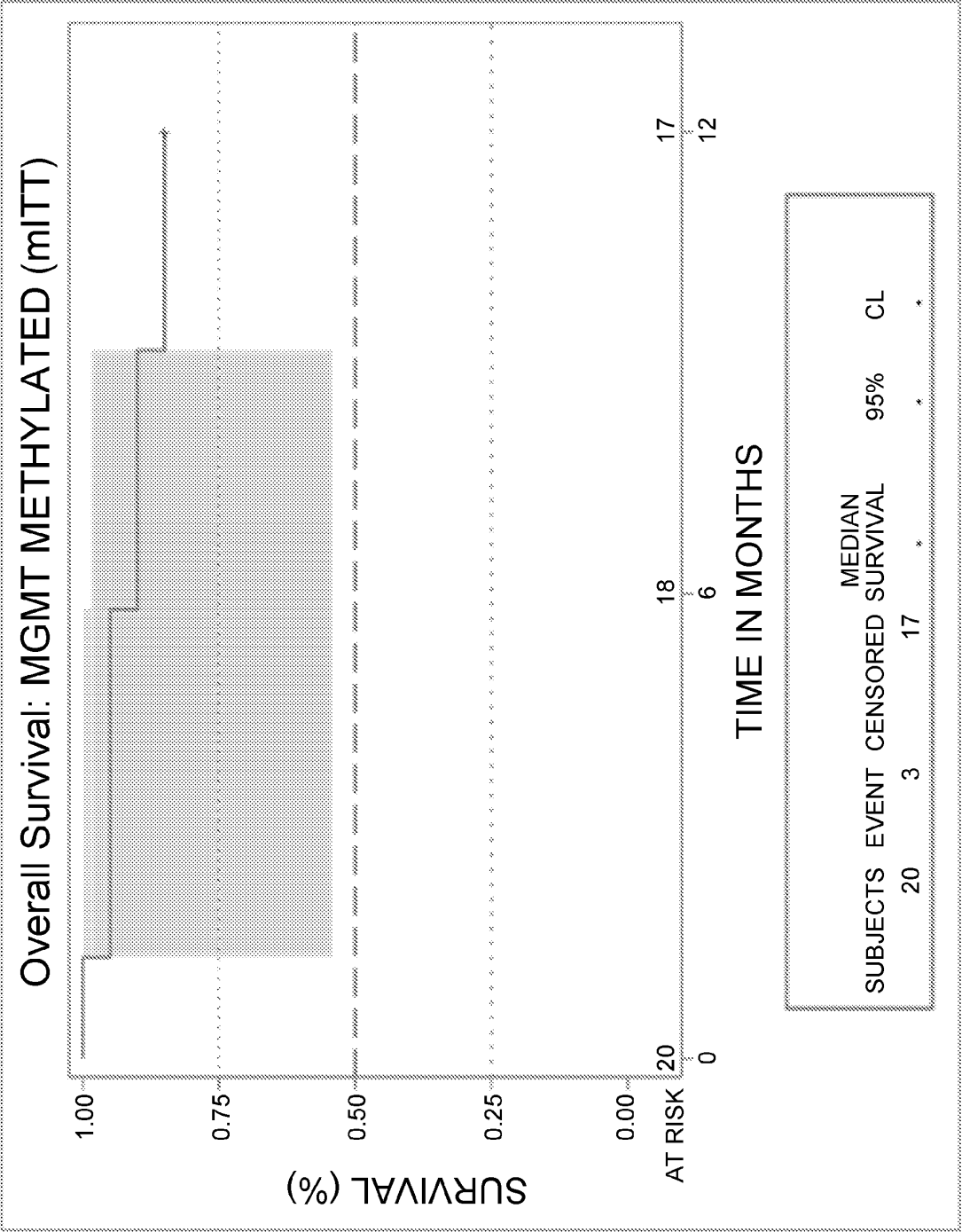
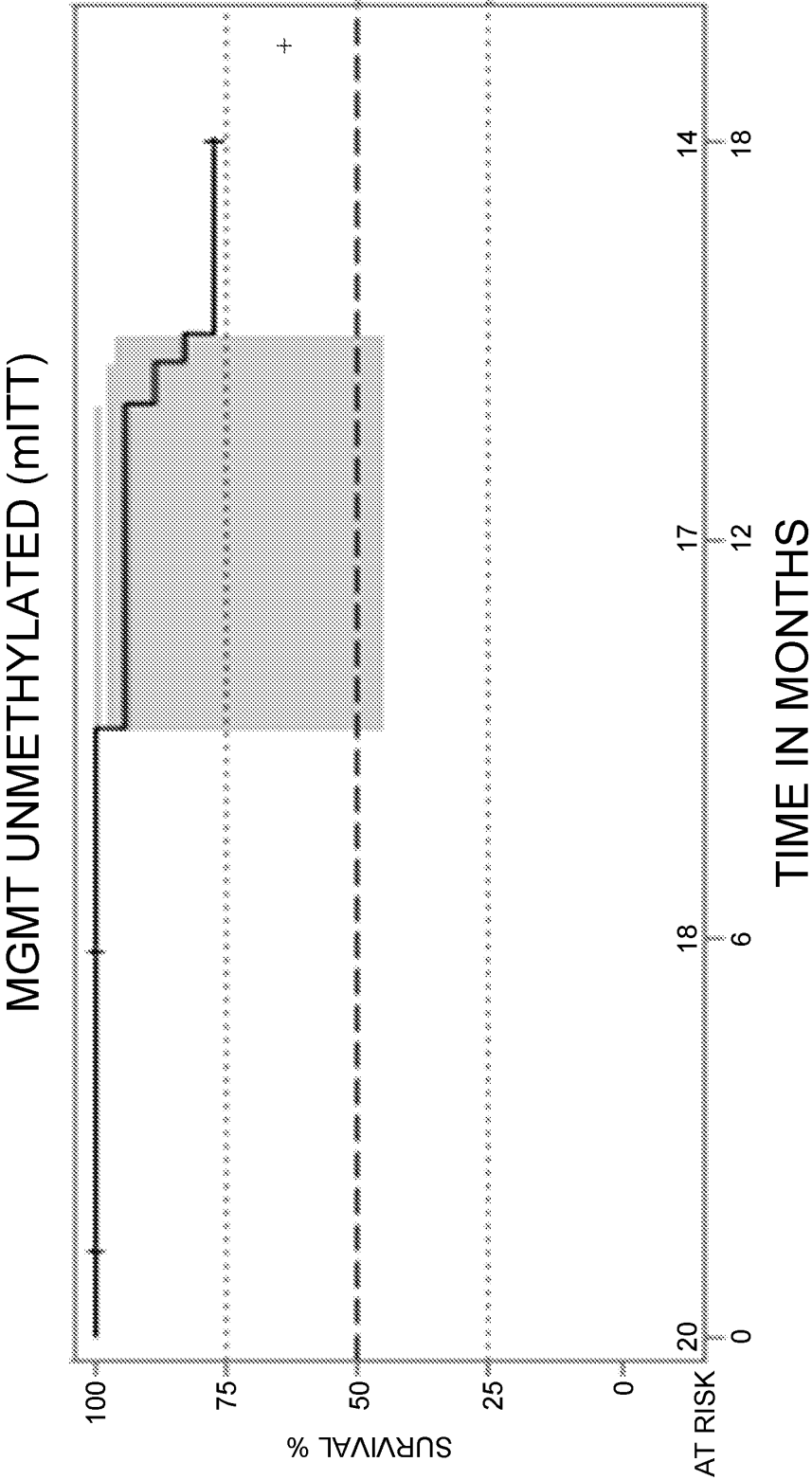


Figure 11B



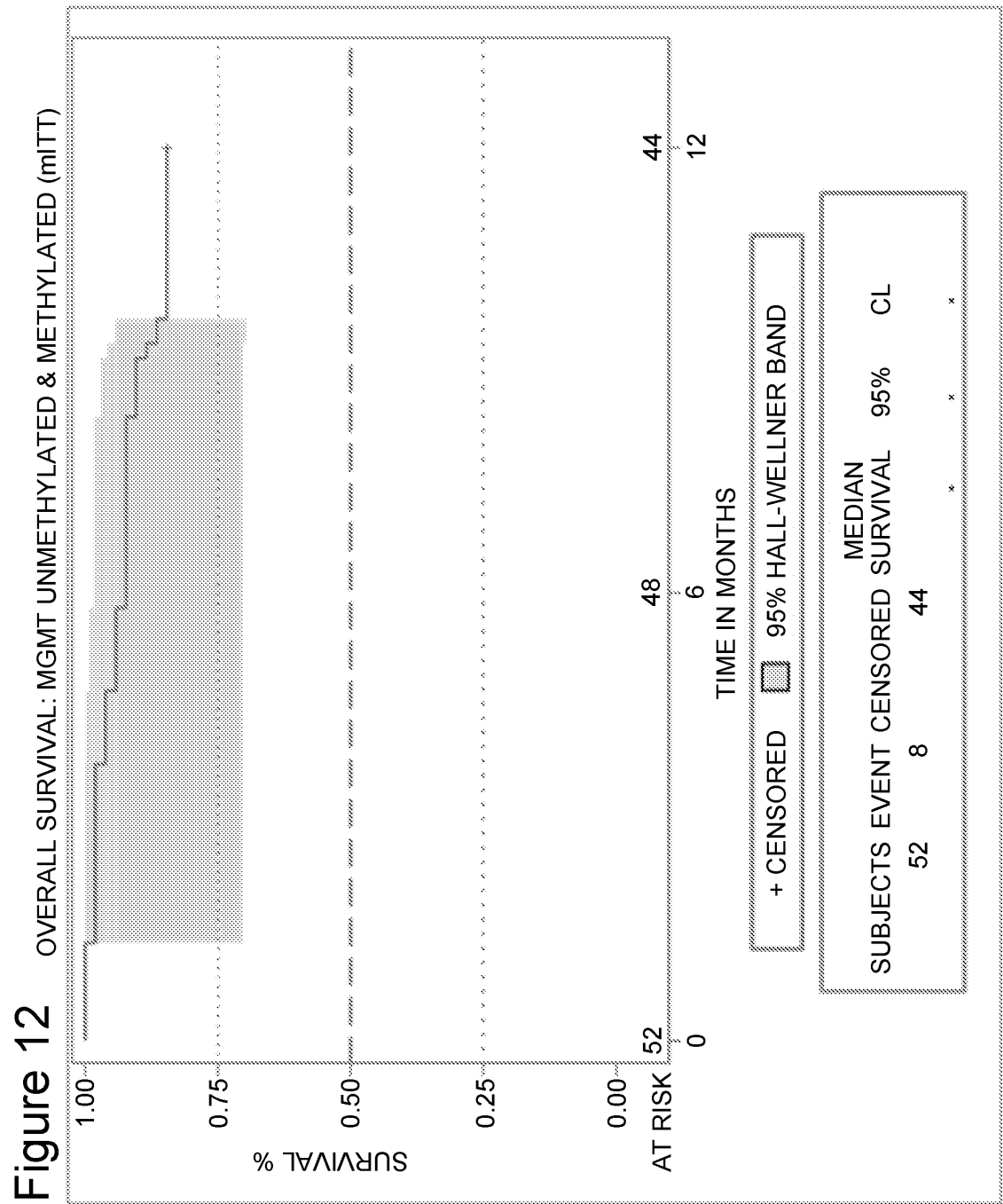


Figure 13 Interim Overall Survival at 18 Months

Median OS; unmethylated (Cohort A)	17.9 mo (14.5-NR)	
Median OS; methylated (Cohort B)	NR (18.4-NR)	
Overall Survival at 12 Months	n Alive/N Total	OS12 (95% CI)
MGMT Unmethylated (Cohort A)	27/32	84.4 (67.2-94.7)
MGMT Methylated (Cohort B)	17*/20	85.0 (62.1-96.8)
Combined	44/52	84.6 (71.9-93.1)
Overall Survival at 18 Months	n Alive/N Total	OS18 (95% CI)
MGMT Unmethylated (Cohort A)	16/32	50 (31.9-68.1)
MGMT Methylated (Cohort B)	14/20*	70 (45.7-88.1)
Combined	30/52	57.7 (14.5-71.3)

* Two patients in Cohort B withdrew consent for additional follow-up at Week 3 and are included in the denominator

NR: not reached

Figure 14 NCI CTCAE ≥ 3 Adverse Events Reported in More than One Subject

System Organ Class Preferred Term	Unmethylated MGMT (Cohort A) (N=32) n(%)	Methylated MGMT (Cohort B) (N=20) n(%)	Combined Unmethylated/ Methylated MGMT (N=52) n(%)
Blood and lymphatic system disorders			
Anaemia	1 (3.1)	1 (5.0)	2 (3.8)
Gastrointestinal disorders			
Diarrhoea	2 (6.3)	0 (0.0)	2 (3.8)
Infections and infestations			
Pneumonia	2 (6.3)	0 (0.0)	2 (3.8)
Investigations			
Amylase increased	1 (3.1)	1 (5.0)	2 (3.8)
Alanine aminotransferase increased	2 (6.3)	2 (10.0)	4 (7.7)
Lipase increased	1 (3.1)	2 (10.0)	3 (5.8)
Lymphocyte count decreased	4 (12.5)	2 (10.0)	6 (11.5)
Neutrophil count decreased	0 (0.0)	3 (15.0)	3 (5.8)
Platelet count decreased	2 (6.3)	4 (20.0)	6 (11.5)
White blood cell count decreased	0 (0.0)	3 (15.0)	3 (5.8)
Metabolism and nutrition disorders			
Hyponatraemia	2 (6.3)	0 (0.0)	2 (3.8)
Musculoskeletal and connective tissue disorders			
Muscular weakness	2 (6.3)	0	2 (3.8)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Tumour inflammation	3 (9.4)	1 (5.0)	4 (7.7)
Nervous system disorders			
Hemiparesis	1 (3.1)	1 (5.0)	2 (3.8)
Seizure	4 (12.5)	0 (0.0)	4 (7.7)
Respiratory, thoracic and mediastinal disorders			
Pneumonitis	2 (6.3)	0 (0.0)	2 (3.8)
Pulmonary embolism	2 (6.3)	1 (5.0)	3 (5.8)
Skin and subcutaneous tissue disorders			
Rash maculo-papular	2 (6.3)	0 (0.0)	2 (3.8)

Note: MGMT = O6-methylguanine methyltransferase. TEAE = Treatment-emergent adverse event. Adverse events are coded using Medical Dictionary for Regulatory Activities (MedDRA) version 22. If a subject experienced more than one event in a given system organ class, that subject is counted once for that system organ class. If a subject experienced more than one event with a given preferred term, that subject is counted only once for that preferred term by highest severity grade.

Figure 15 Immune-Related Adverse Events

System Organ Class Preferred Term	Unmethylated MGMT (Cohort A) (N=32)	Methylated MGMT (Cohort B) (N=20)	Combined Unmethylated/ Methylated MGMT (N=52)
Cardiac disorders			
Myocarditis		1	1
Endocrine disorders			
Diabetes insipidus	0	1	1
Immune-related hypothyroidism	2	0	2
Gastrointestinal disorders			
Diarrhoea	3	1	4
Immune-mediated enterocolitis	1	0	1
Pancreatitis	0	1	1
General disorders and administration site conditions			
Fatigue		1	1
Influenza like illness	1	1	2
Night sweats	0	1	1
Pyrexia	2	2	4
Hepatobiliary disorders			
Immune-mediated hepatitis*	3	0	3
Immune system disorders			
Hypersensitivity	1	0	1
Myasthenia gravis	0	1	1
Investigations			
Alanine aminotransferase increased	4	1	5
Amylase increased	1	0	1
Aspartate aminotransferase increased	4	0	1
Increased alkaline phosphatase	1	0	1
Lipase increased	0	1	1
Transaminitis	1	0	1
Musculoskeletal and connective tissue disorders			
Arthralgia*	4	0	4
Eosinophilic fasciitis	0	1	1
Muscular weakness	0	1	1
Myositis	0	1	1
Nervous system disorders			
Brain Oedema	2	0	2
Encephalitis autoimmune	0	1	1
Headache	0	1	1
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			

Tumour inflammation	4	1	5
Renal and urinary disorders			
Acute kidney injury	1	1	2
Autoimmune nephritis*	3	0	3
Haematuria	0	1	1
Respiratory, thoracic and mediastinal disorders			
Pneumonitis	3	0	3
Skin and subcutaneous tissue disorders			
Pruritus	1	1	2
Rash	0	1	1
Rash erythematous	1	0	1
Rash maculo-papular	2	0	2
Rash papular	1	0	1
Urticaria	1	0	1

*Subject experienced same event more than one time.

Arthralgia: 2 events reported for one subject

Autoimmune nephritis: 3 events reported for one subject

Immune-mediated hepatitis: 2 events reported for one subject

Figure 16A

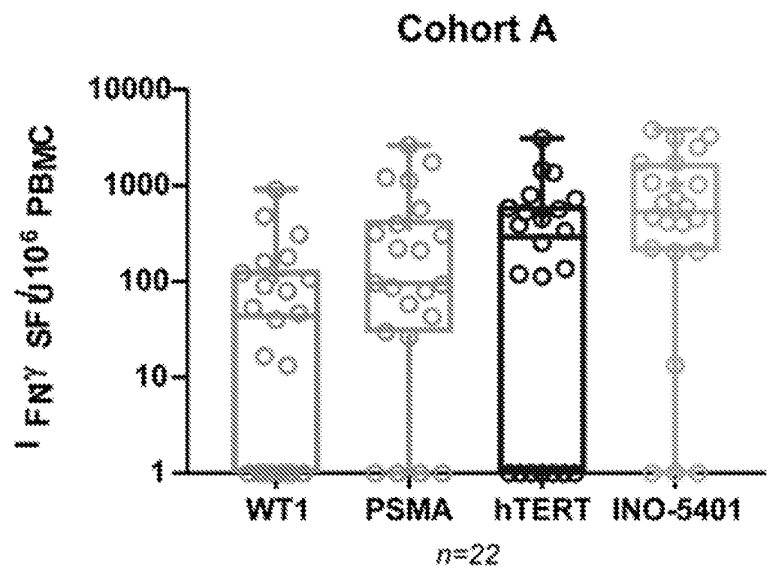


Figure 16B

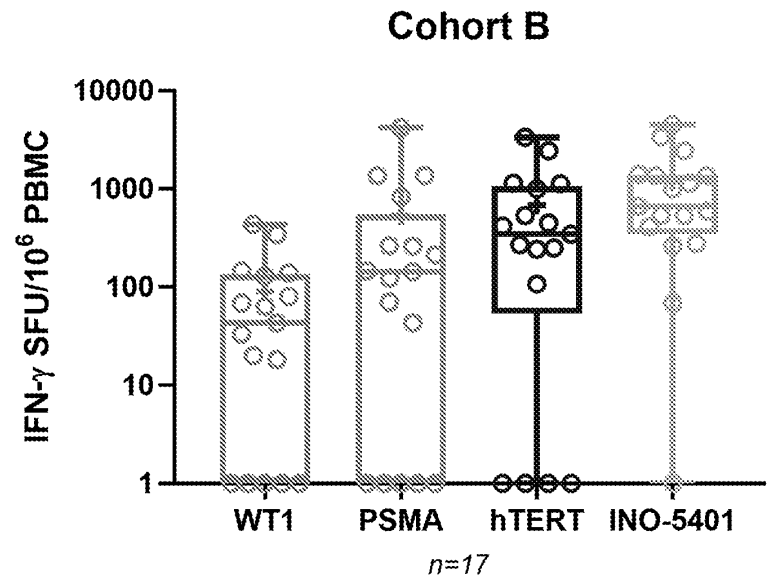


Figure 17A

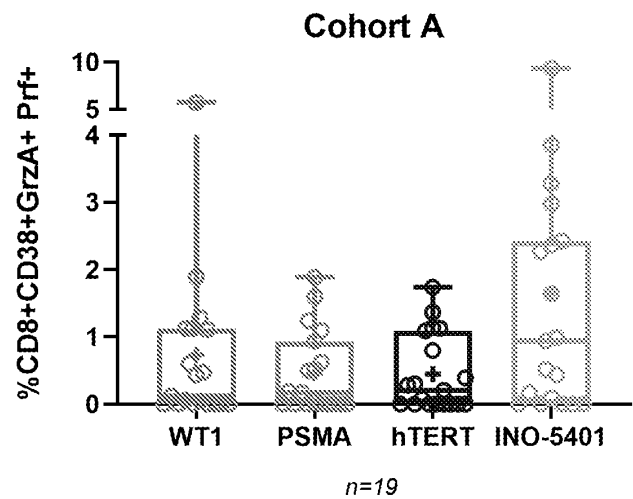


Figure 17B

