

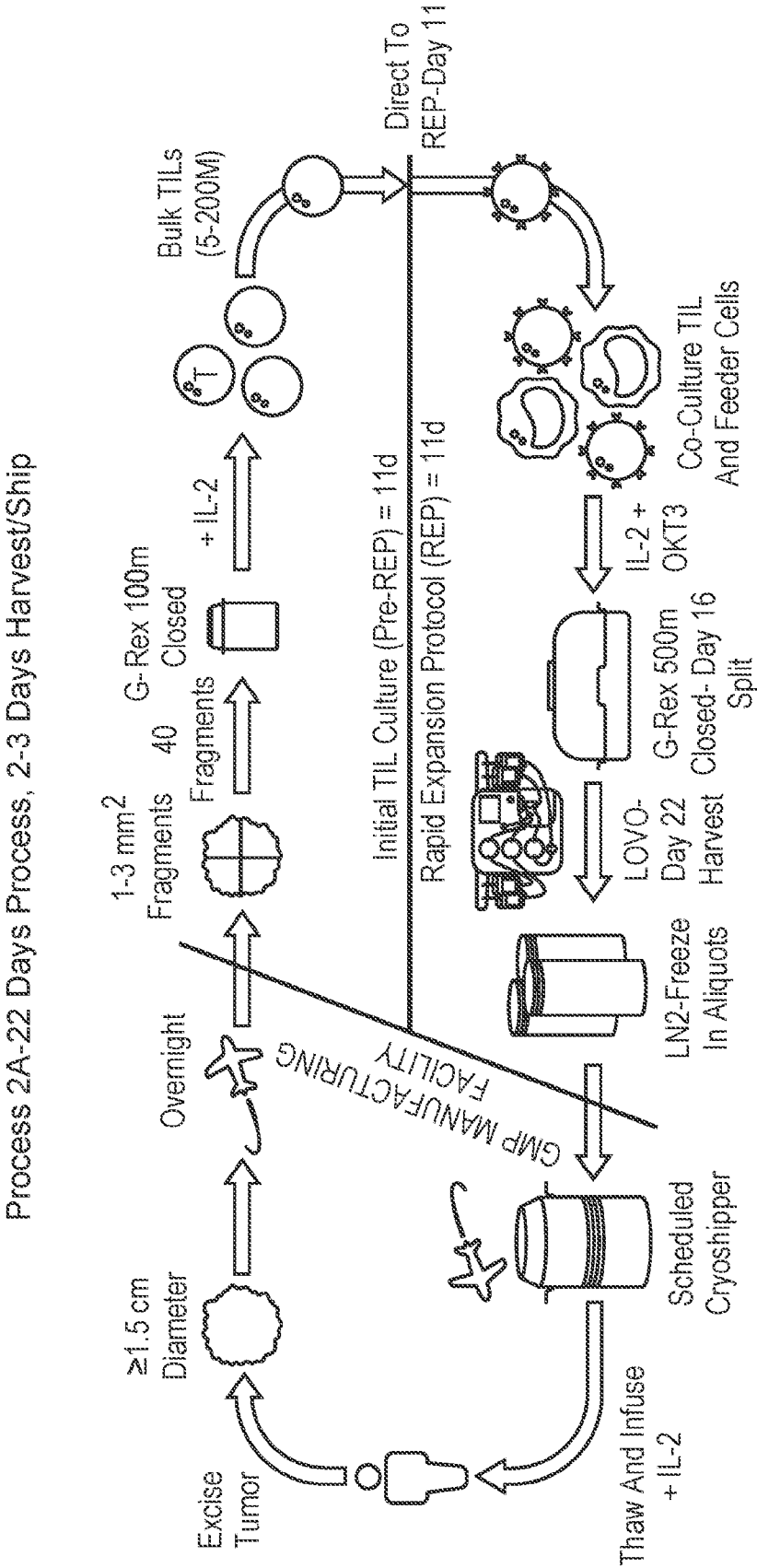


Figure 1

Process Development

Step	Current Process-1C	New Process-2A	Impact
1	4 Fragments/10 G-Rex 10-21 Days	40 Fragments/1-G-Rex 100 CS- (x2?) 11 Days	Increases Tumor Sample/Container, Shortens Culture, Reduces Steps, Amenable To Closed System
2	PreREP Freeze-> Testing -> Thaw- ~Day 27- >40e6TIL	Direct To REP- Day 11- <200e6	Shorten Process, Reduces Steps, Eliminates Testing
3	36 G-Rex 100-~Day 30 >5e6TIL - Split ~Day 36	4-5 G-Rex 500CS- TIL- Split Day 16	Reduces Steps, Closed System, Shorter REP
4	Harvest Day ~43+ Harvesting By Centrifugation	Harvest Day 22 LOVO-Automated Cell Washer	Reduces Steps, Automated, Closed System
5	Fresh Product- Hypothermosol-Single Infusion Bag	Cryopreserved Product-CS10 In LN ₂ , Multiple Aliquots	Shipping Flexibility, Patient Scheduling, Easier Release Testing, Global Trials
6	43+ Day Process Time	22 Day Process Time	Turnaround To Patient, Clean Room Throughput, COGs

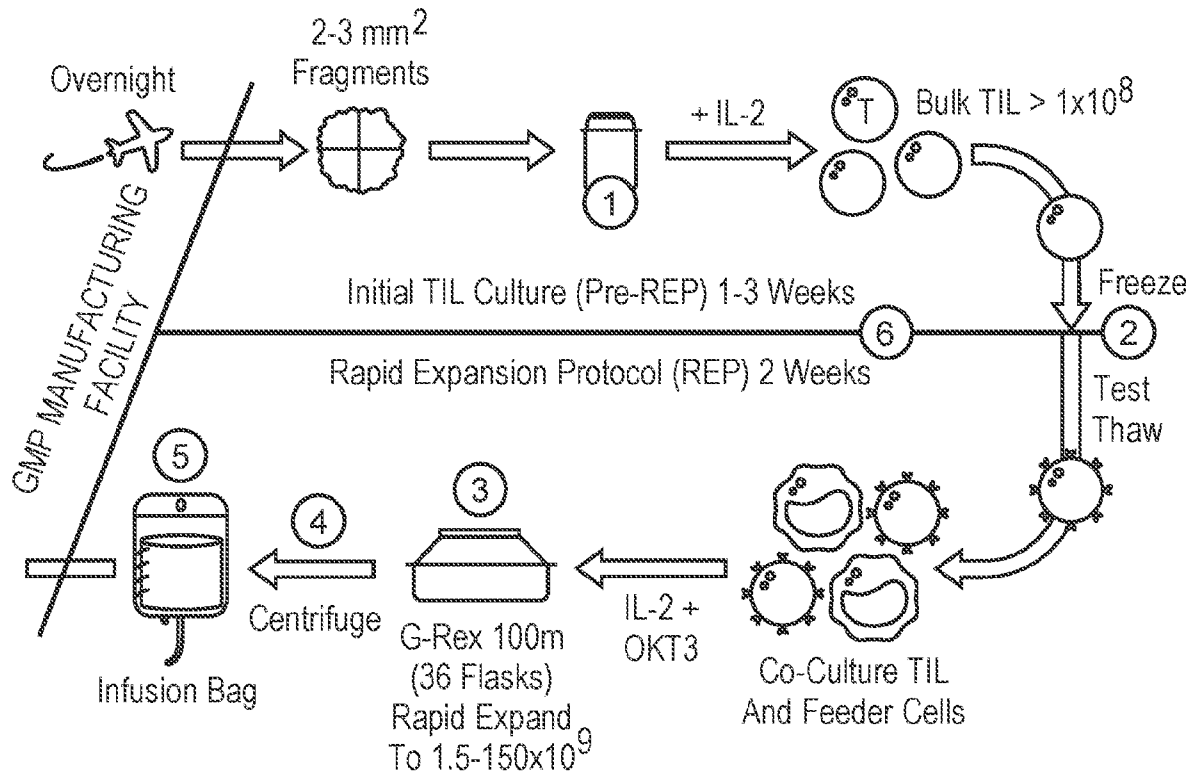


Figure 2

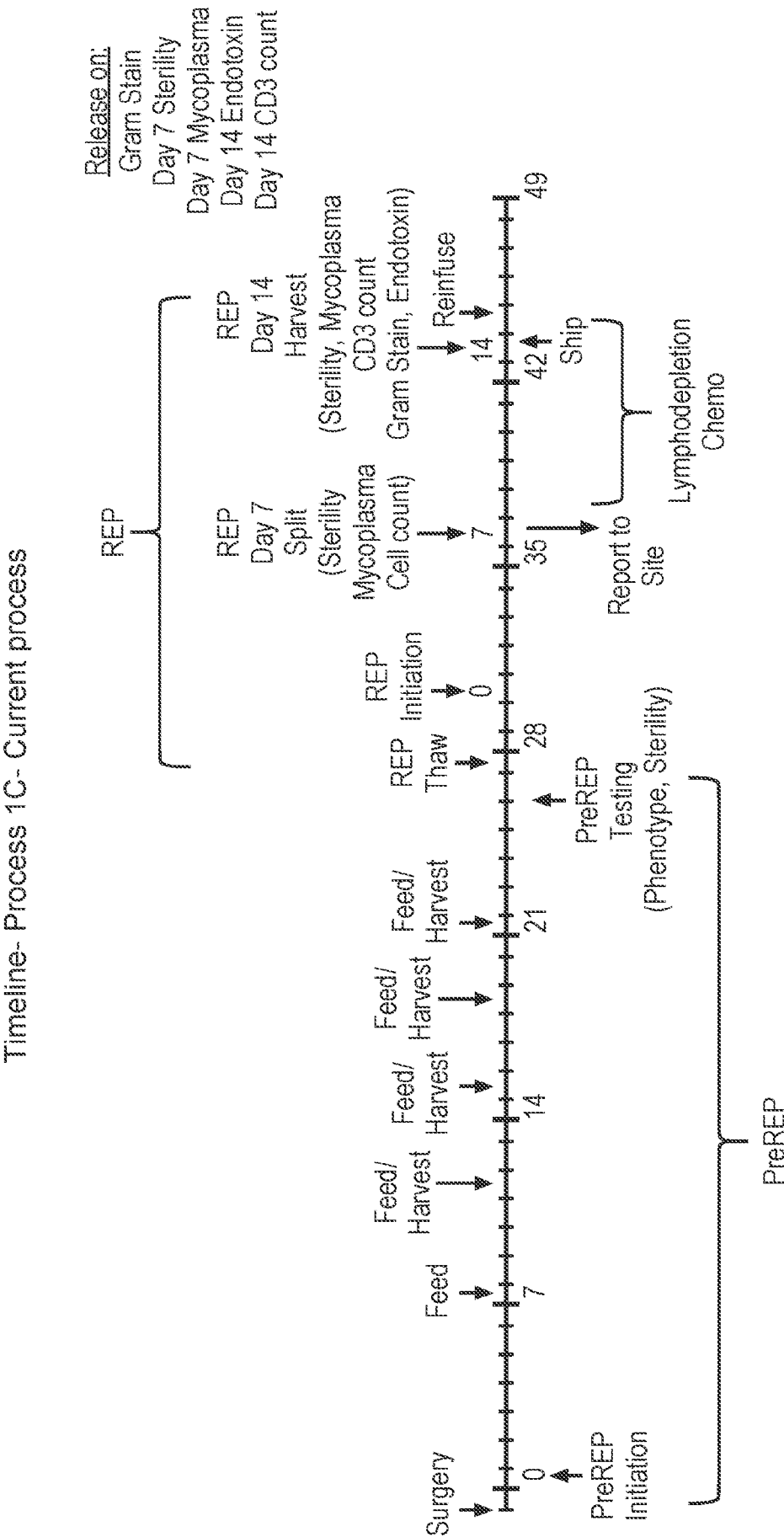


Figure 3

TIL Therapy Timeline- v2A- Day 16 REP >250e6

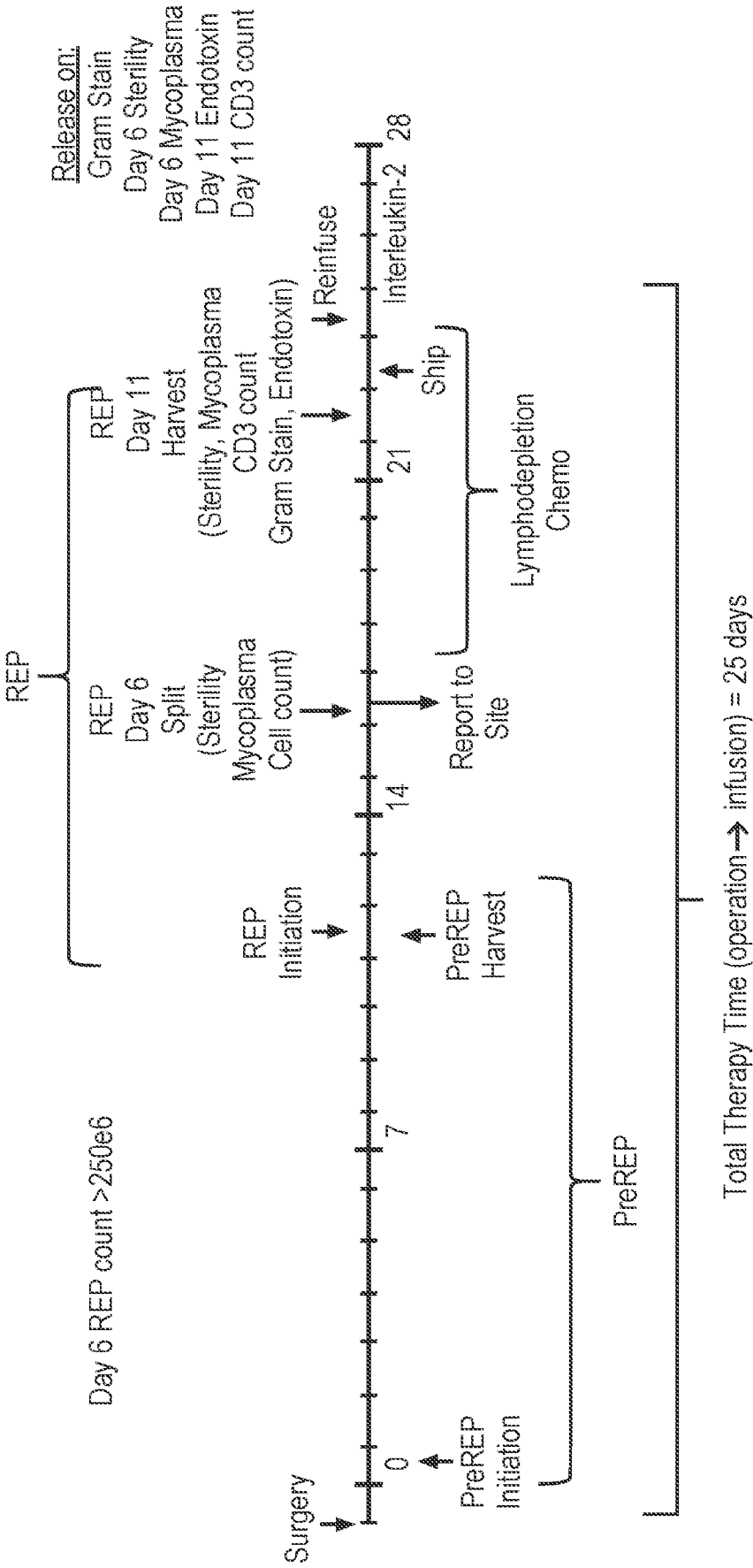


Figure 4

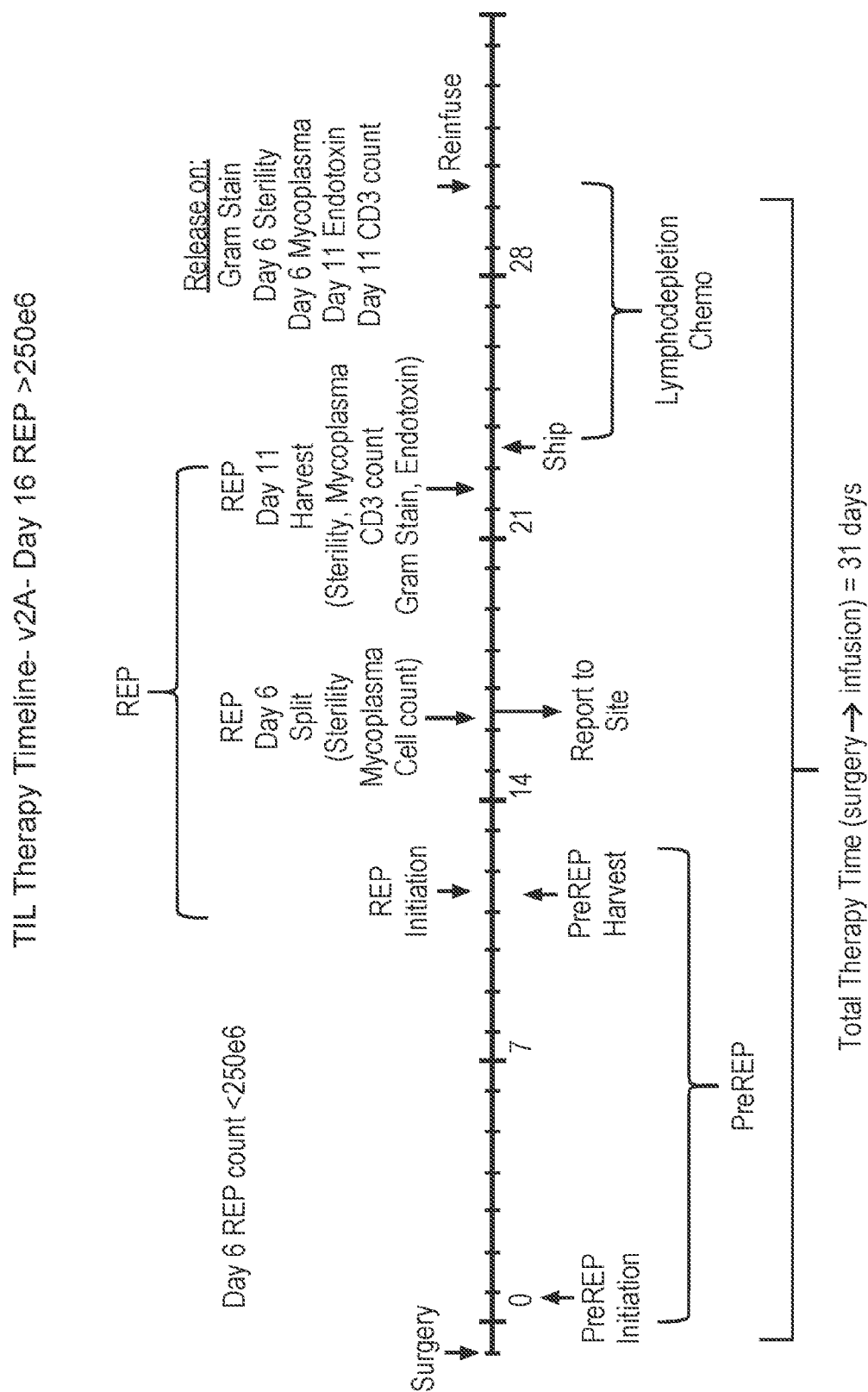


Figure 5

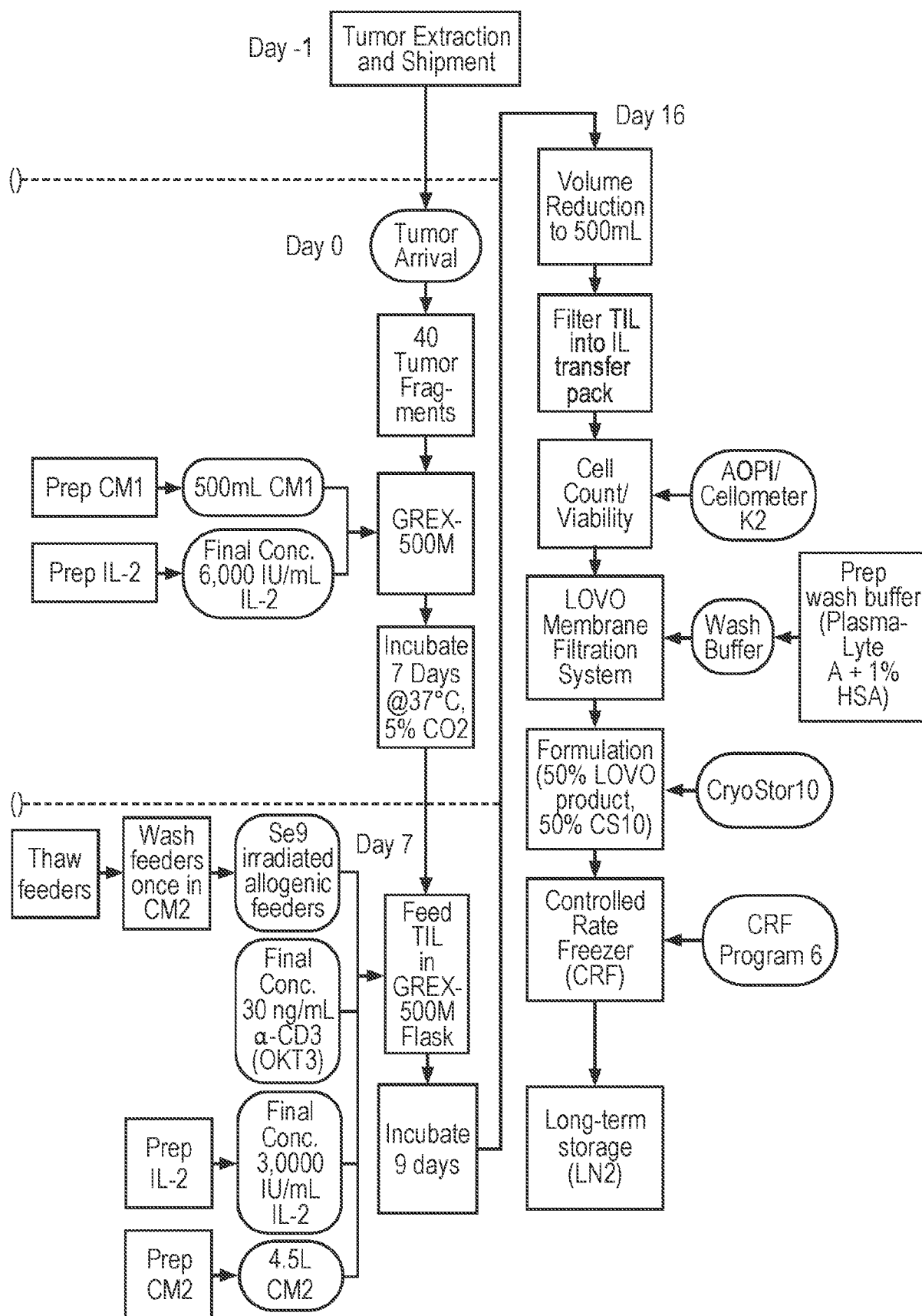
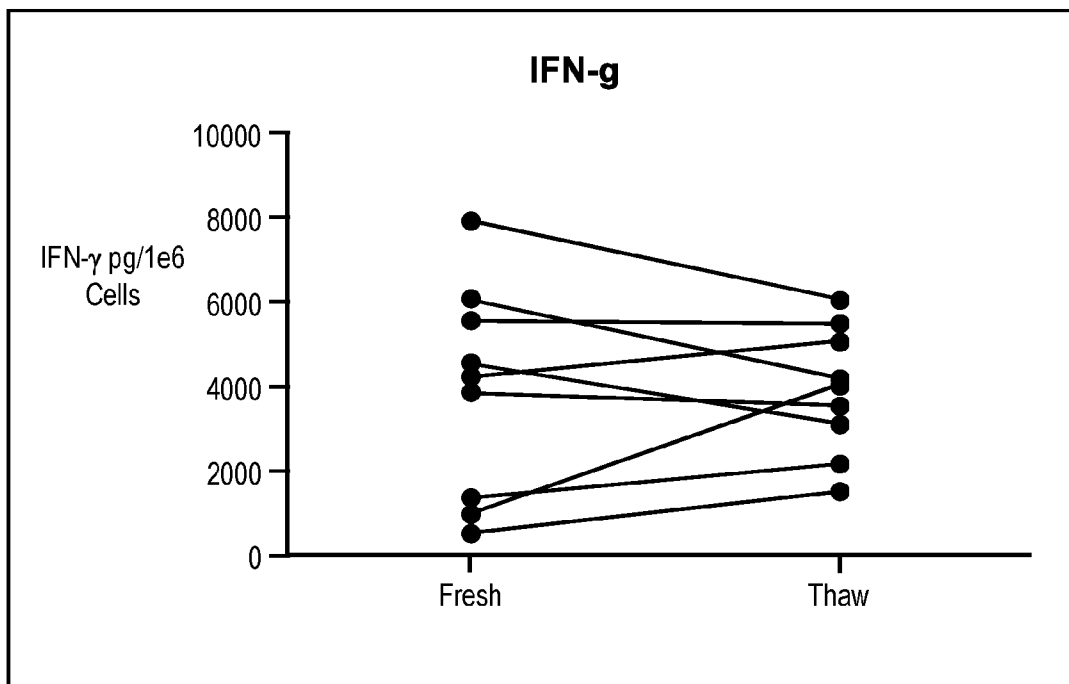


Figure 6

Figure 7

P value	0.9797
P value summary	ns
Significantly different? (P < 0.05)	No
One- or two-tailed P value?	Two-tailed
t, df	t=0.02626 df=8
Number of pairs	9



How effective was the pairing?

Correlation coefficient (r)

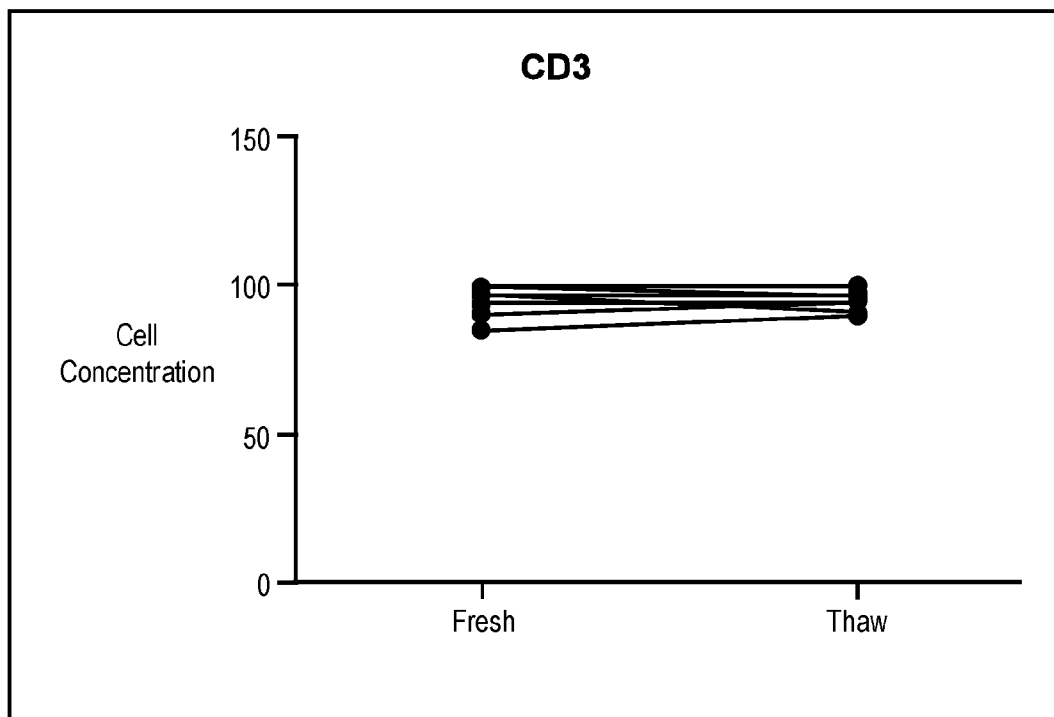
P value (one tailed)

P value summary

Was the pairing significantly effective?

Figure 8

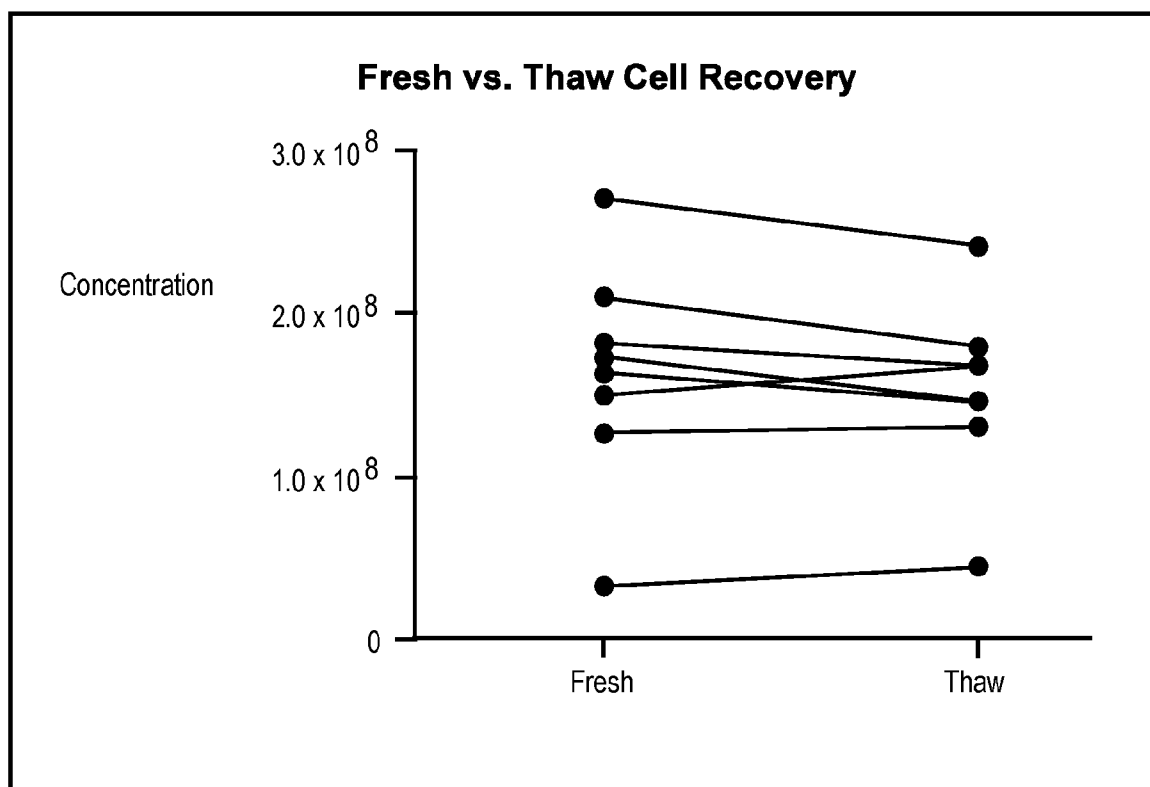
P value summary	ns
Significantly different? ($P < 0.05$)	No
One- or two-tailed P value?	Two-tailed
t, df	$t=0.8479$ $df=7$
Number of pairs	8



How effective was the pairing?	
Correlation coefficient (r)	0.9711
P value (one tailed)	< 0.0001
P value summary	****
Was the pairing significantly effective?	Yes

Figure 9

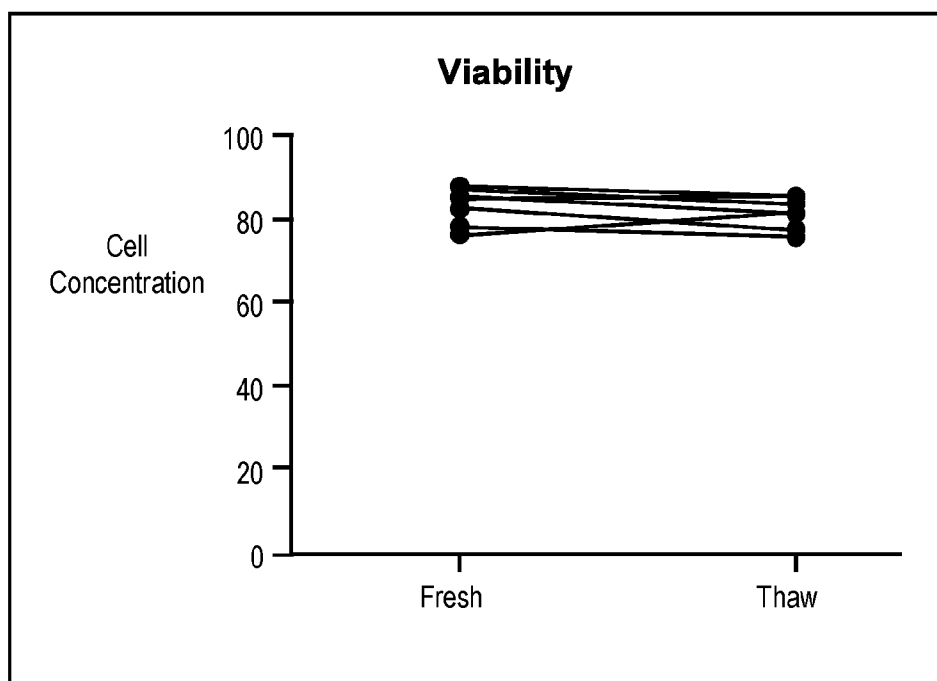
P value summary	ns
Significantly different? ($P < 0.05$)	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.568 df=7
Number of pairs	8



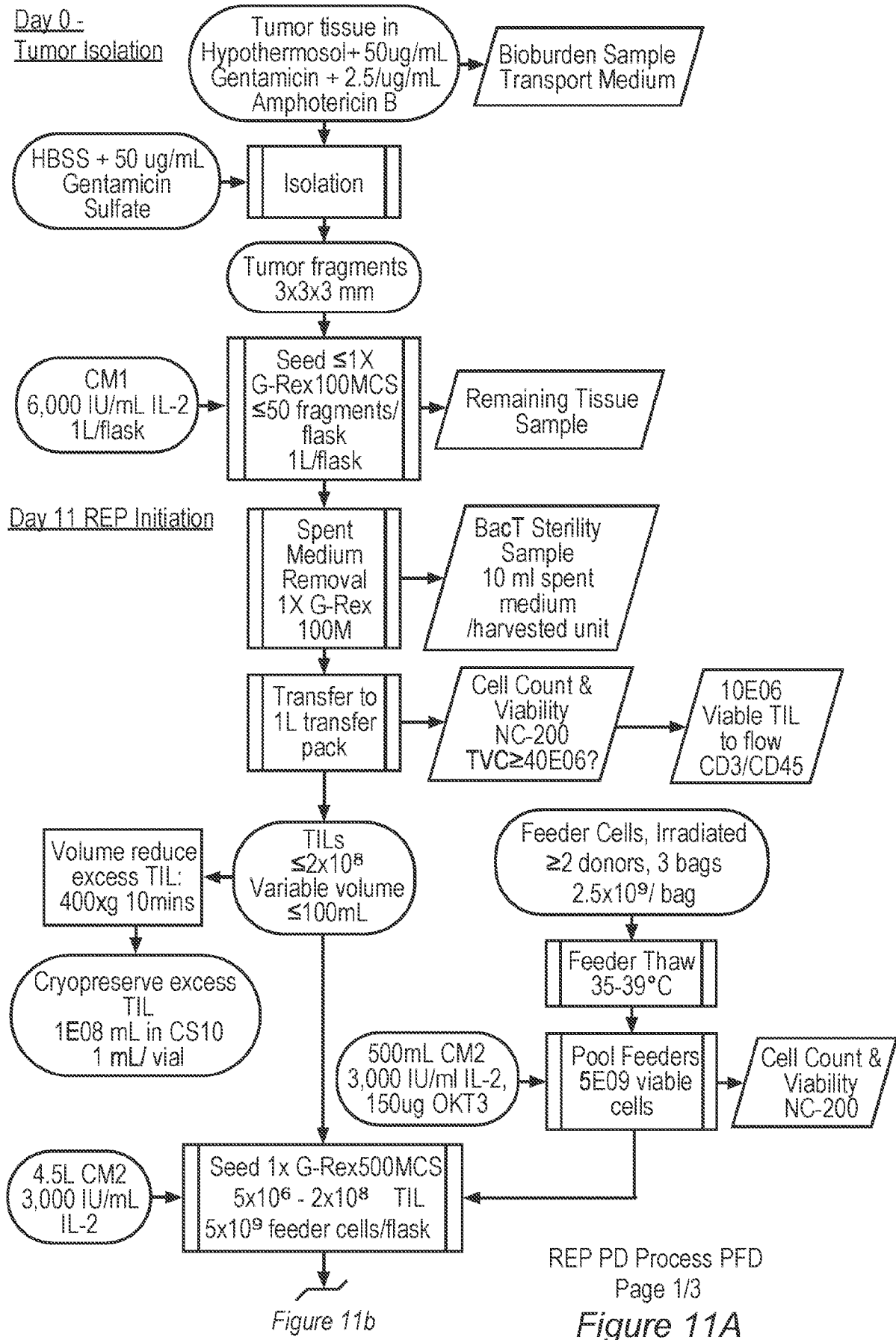
How effective was the pairing?	
Correlation coefficient (r)	0.7448
P value (one tailed)	0.017
P value summary	*
Was the pairing significantly effective?	Yes

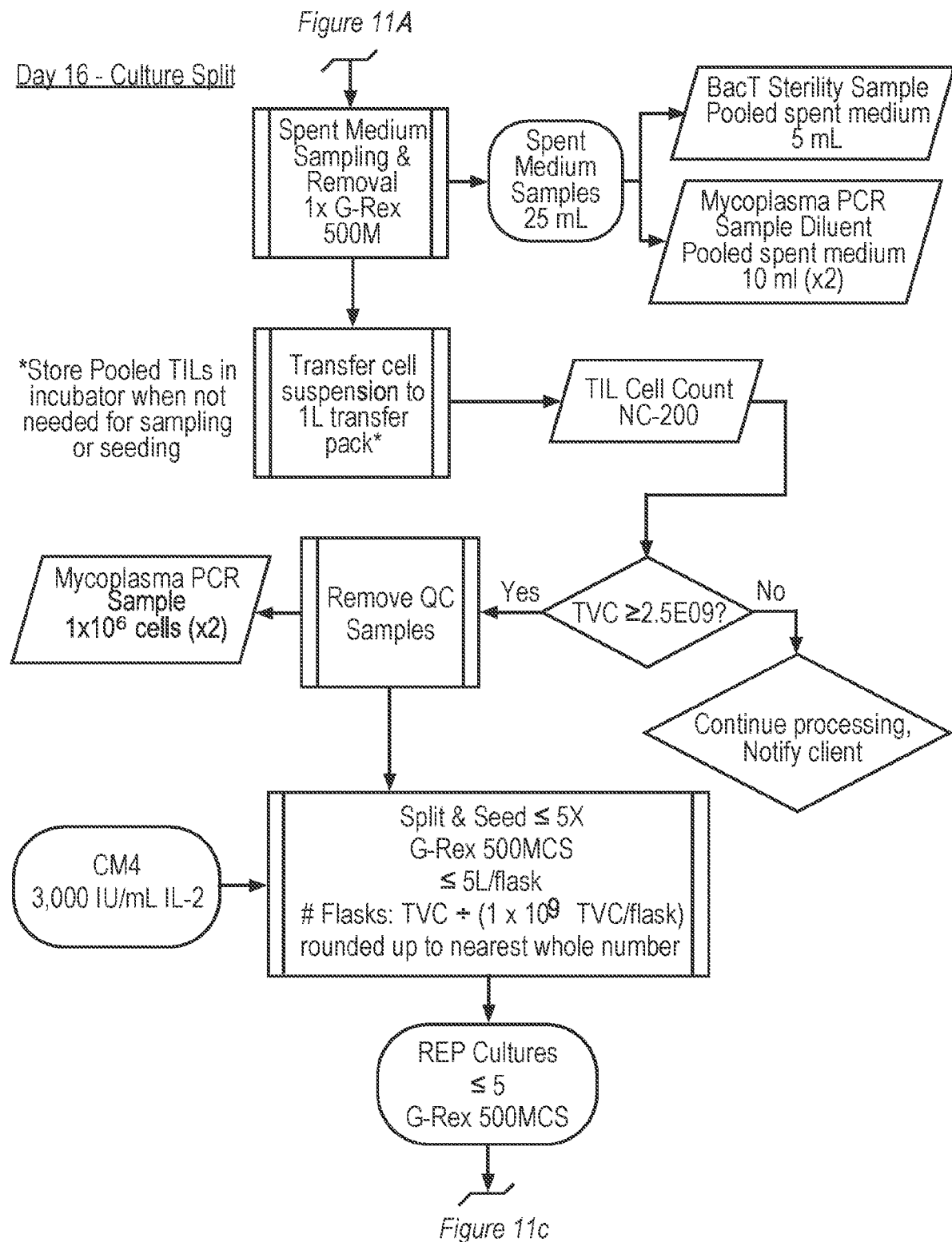
Figure 10

P value summary	ns
Significantly different? ($P < 0.05$)	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.596 df=7
Number of pairs	8



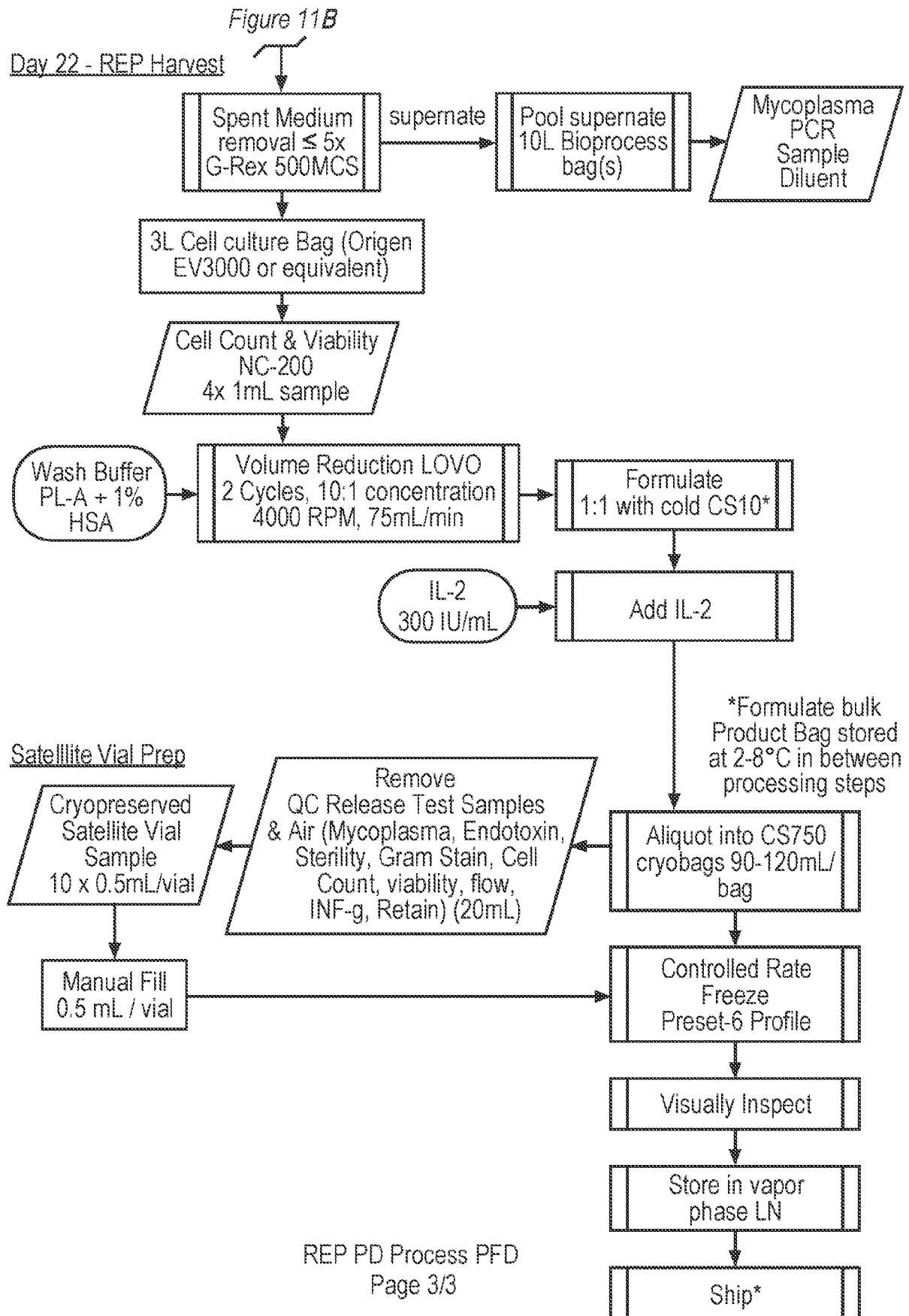
How effective was the pairing?	
Correlation coefficient (r)	0.6932
P value (one tailed)	0.0283
P value summary	*
Was the pairing significantly effective?	Yes

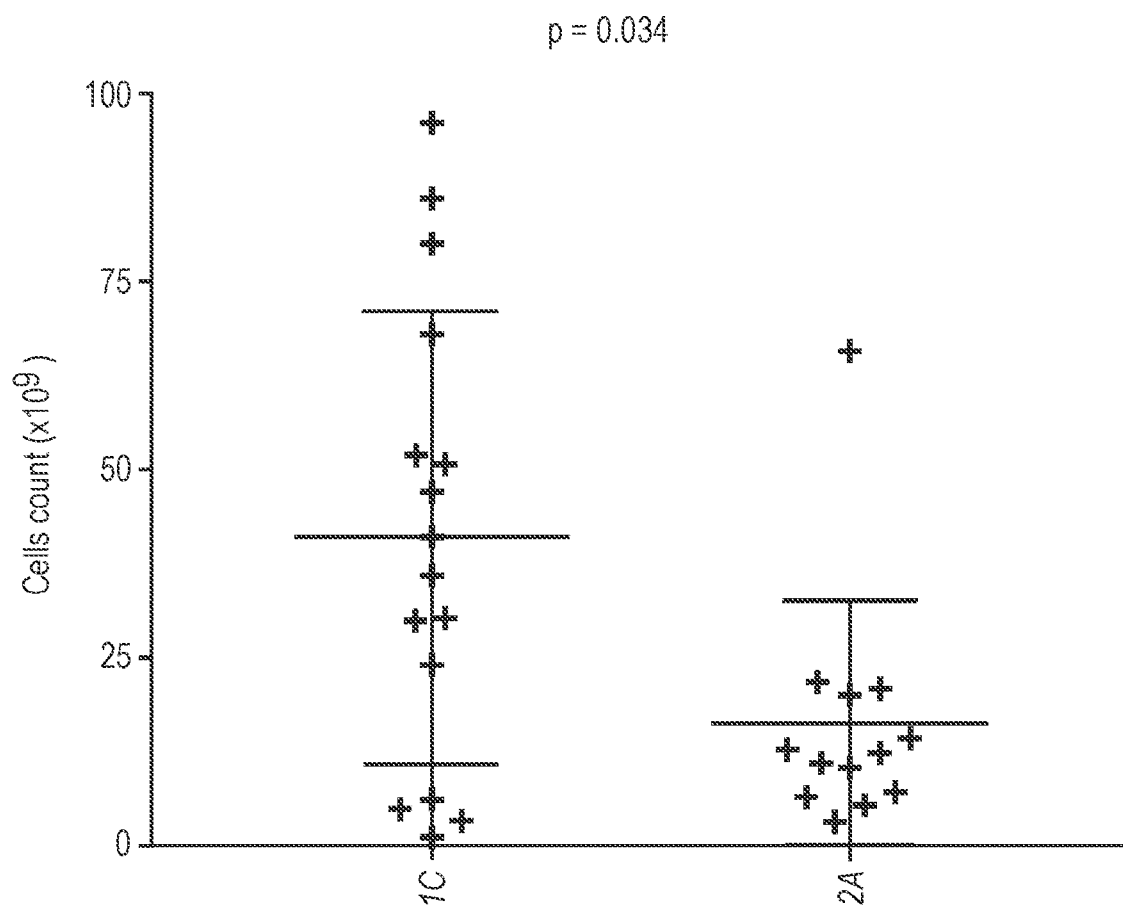


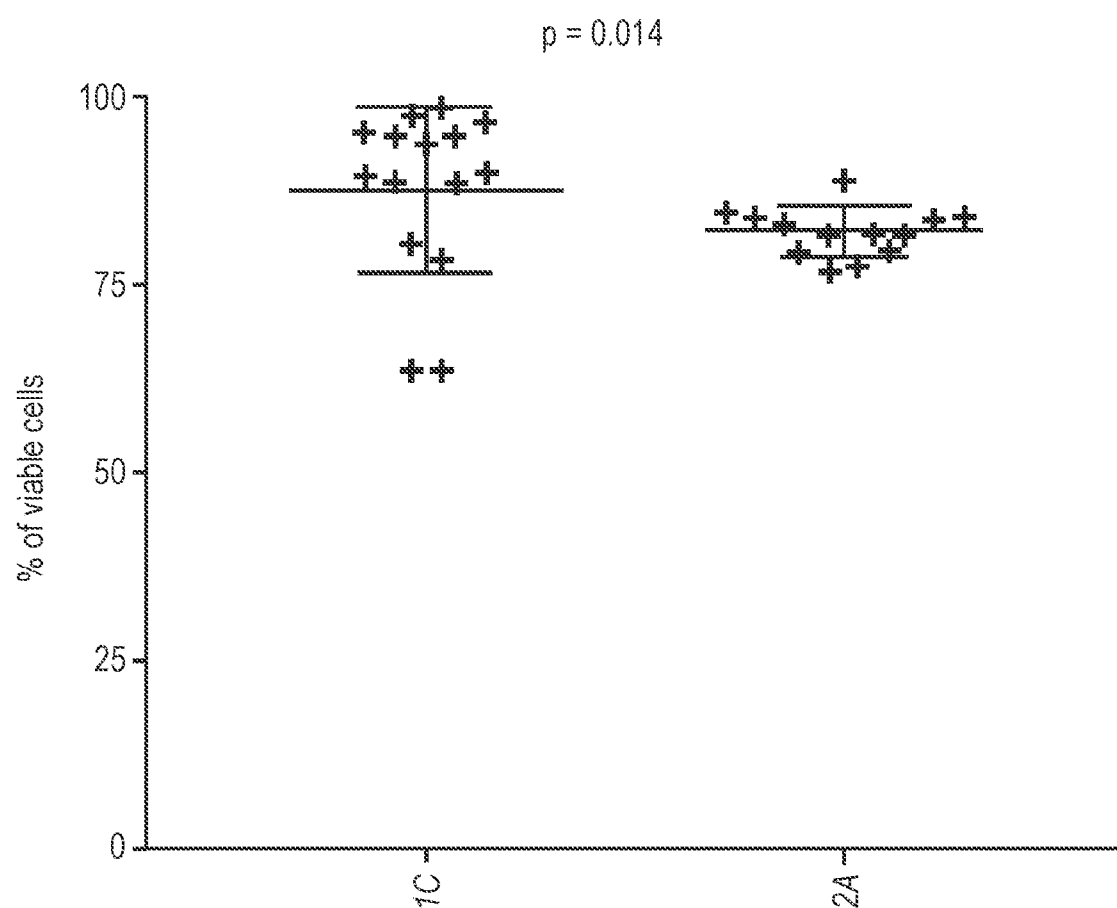


REP PD Process PFD
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Figure 11B



*Figure 12*

*Figure 13*

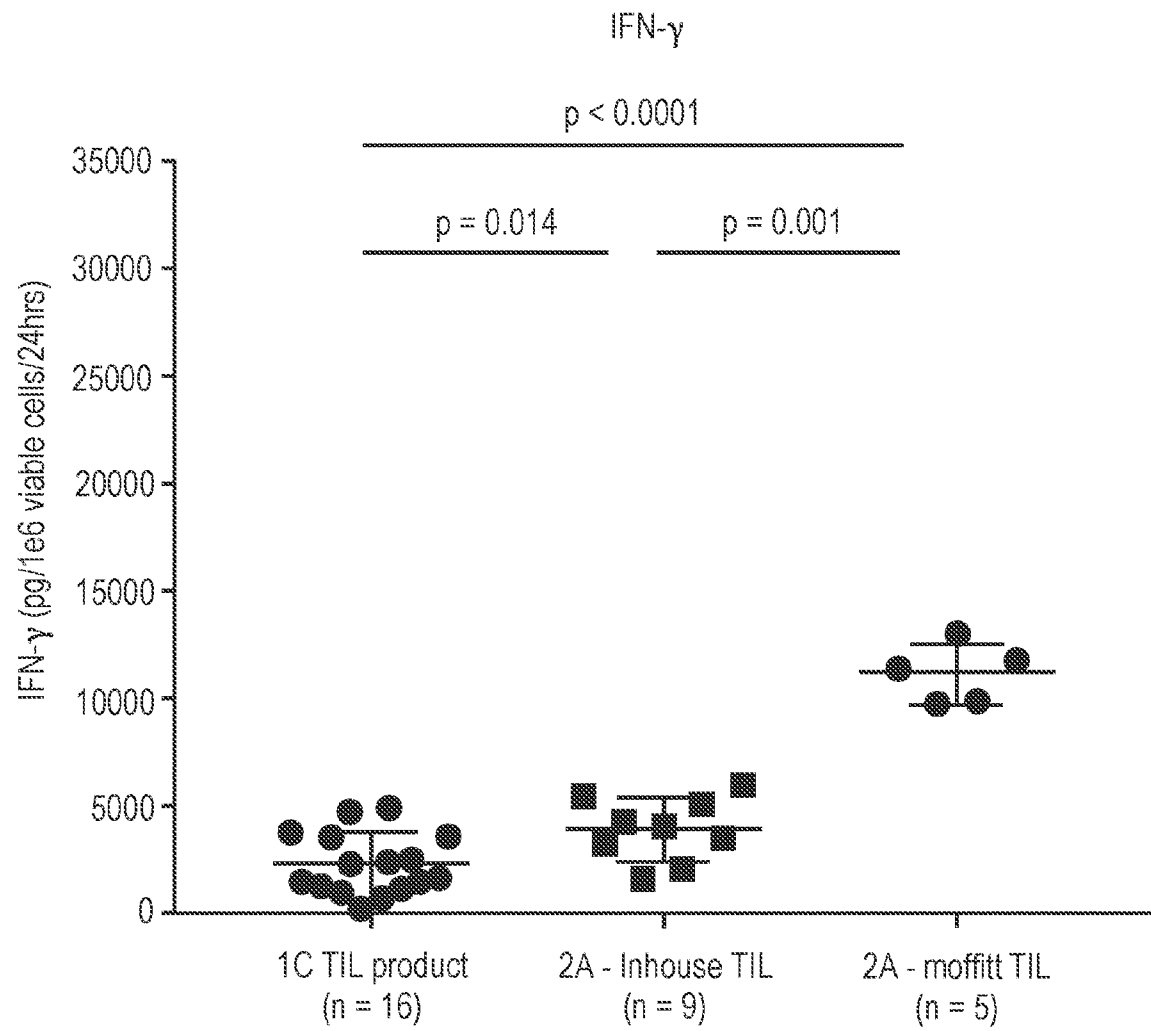
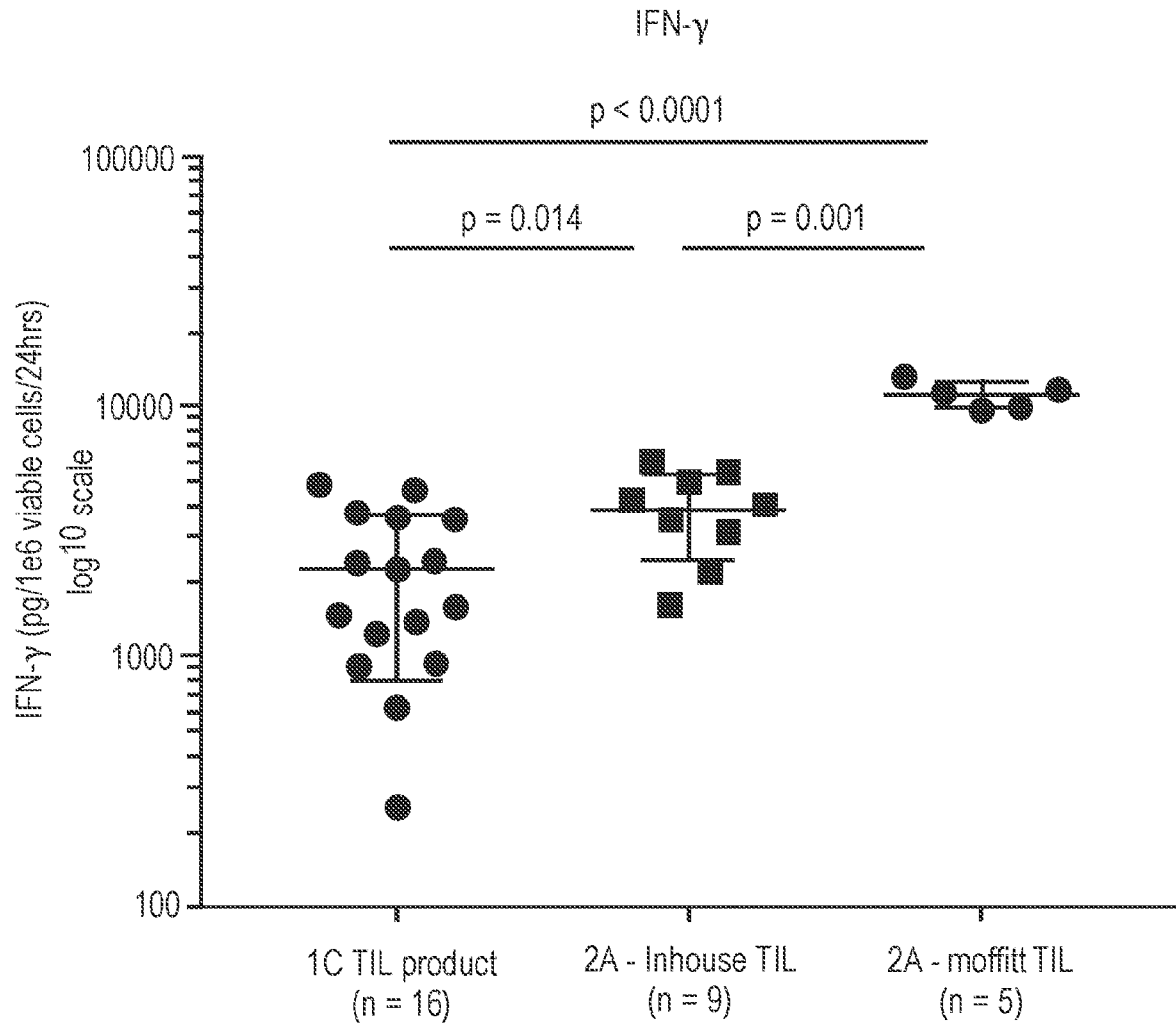


Figure 15

*Figure 16*

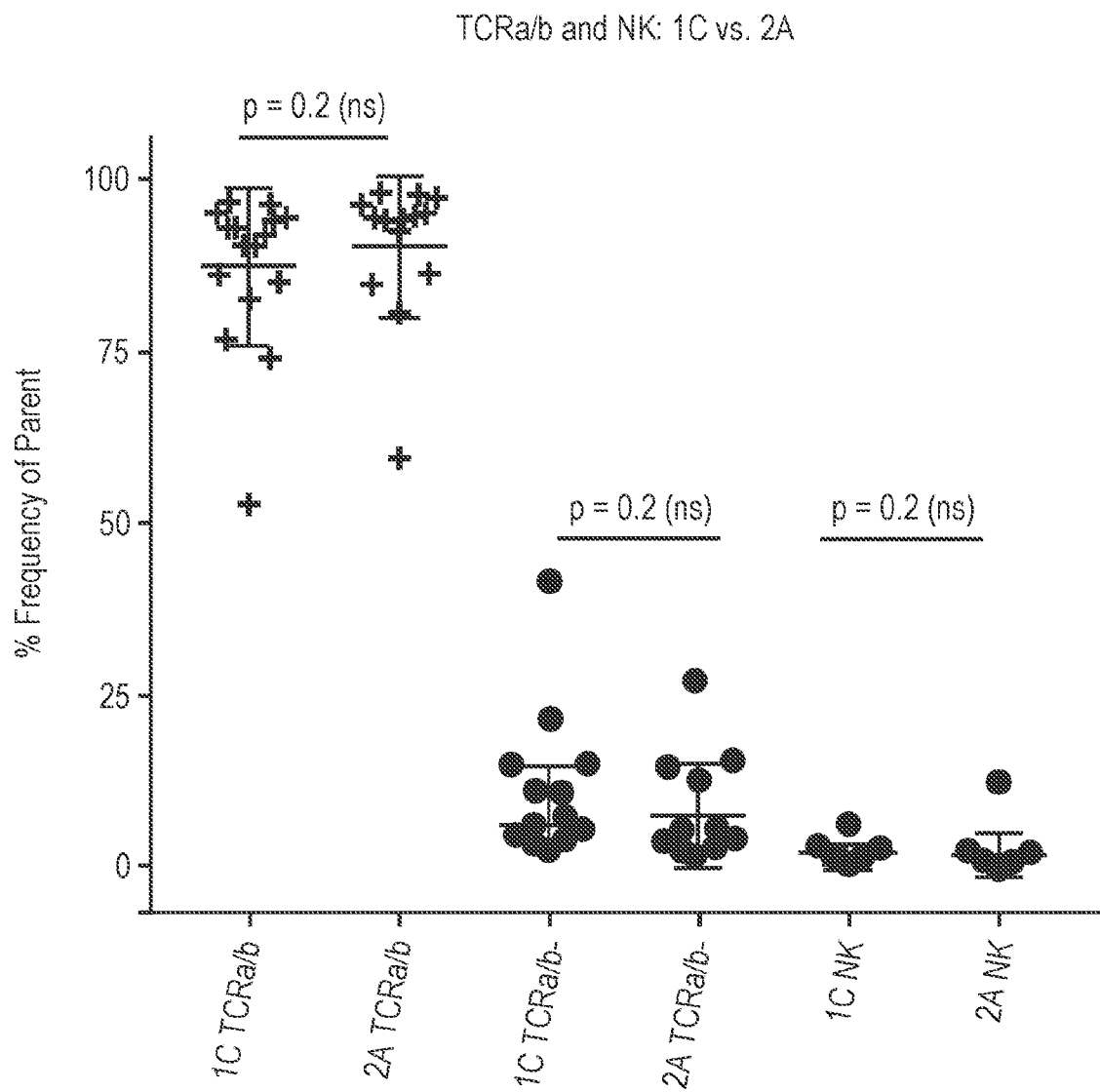


Figure 17

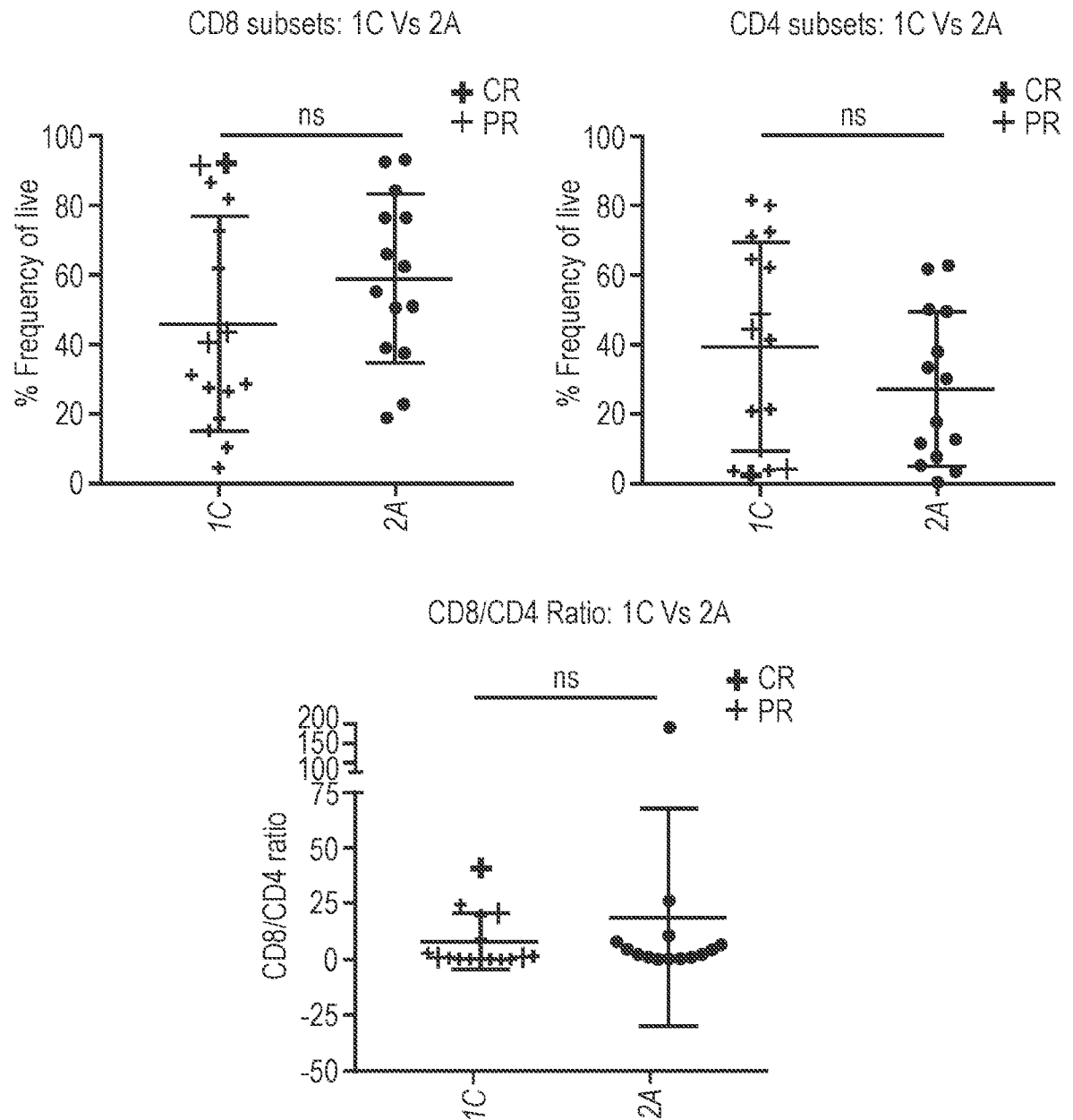


Figure 18

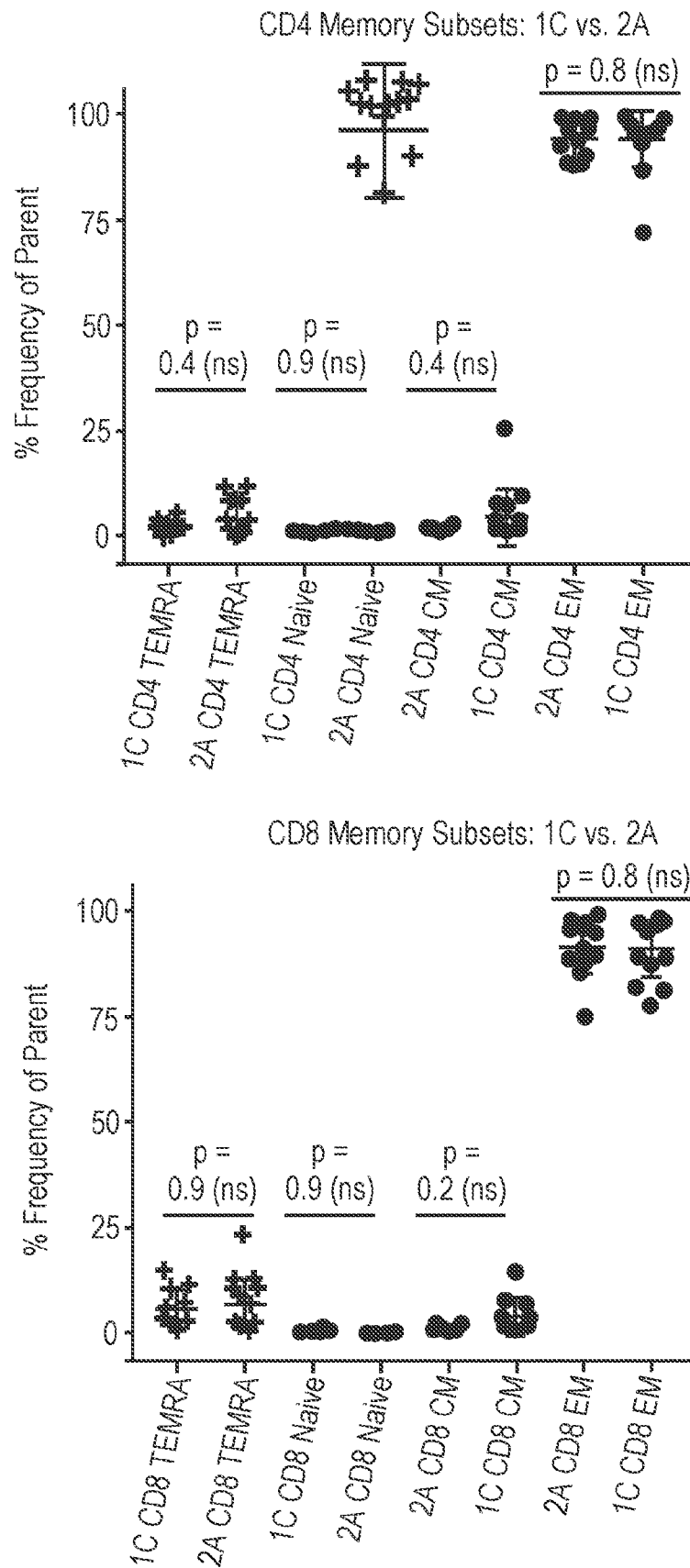


Figure 19

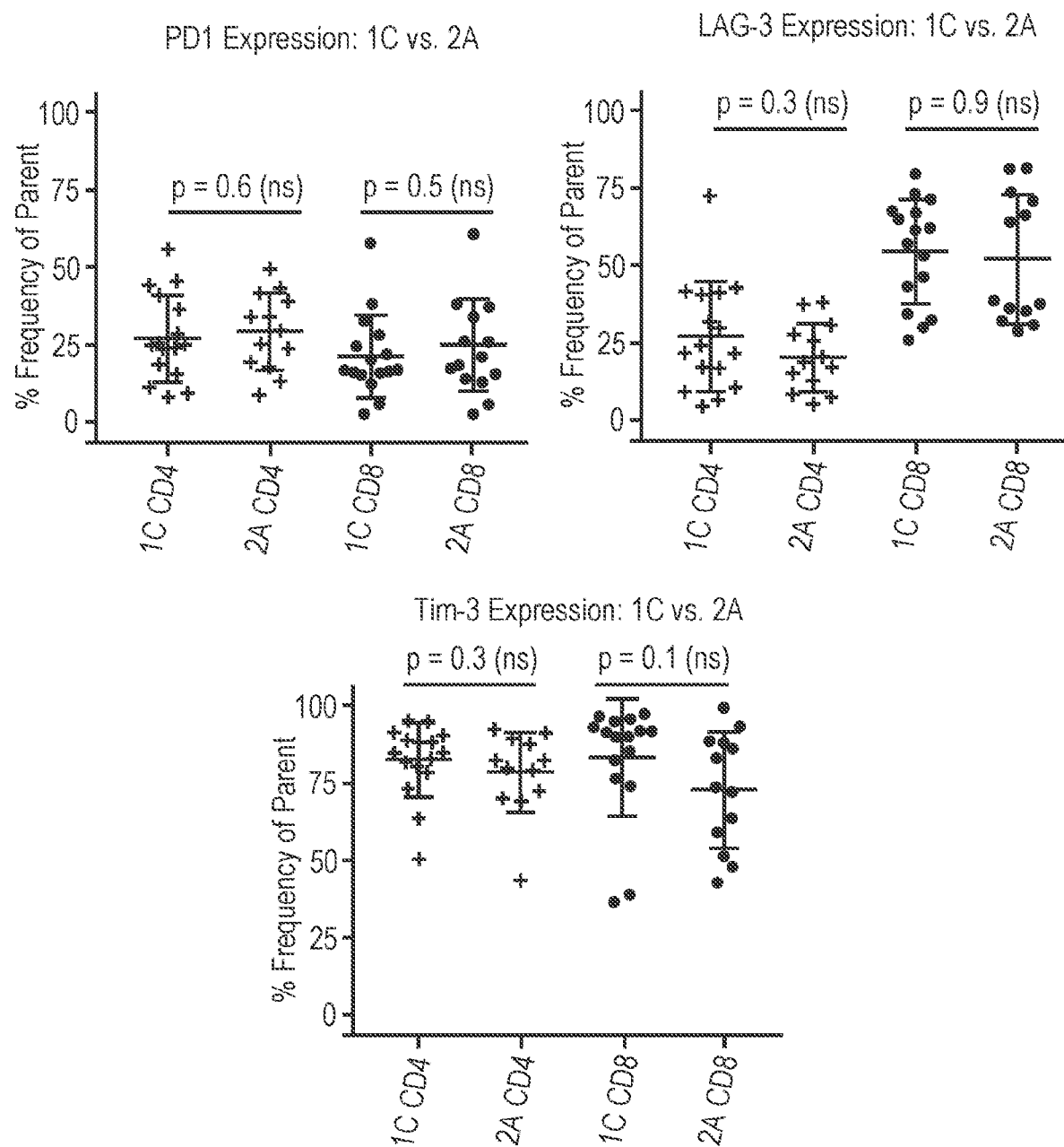
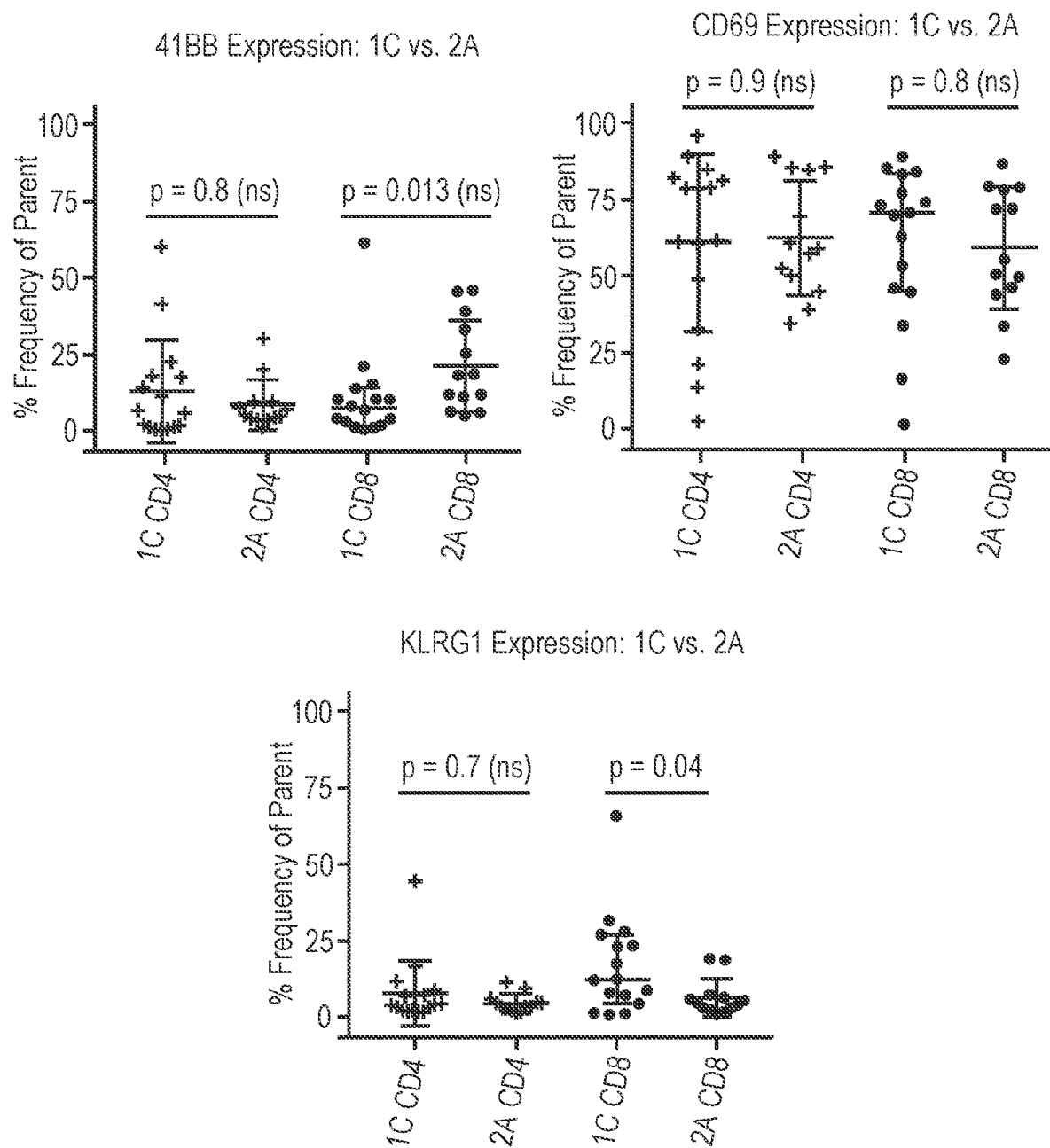
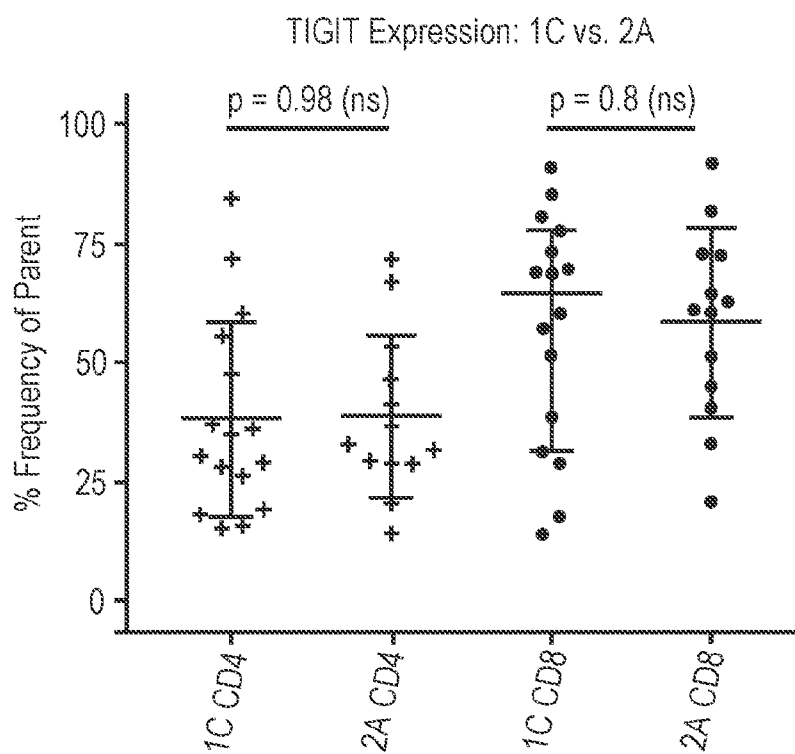
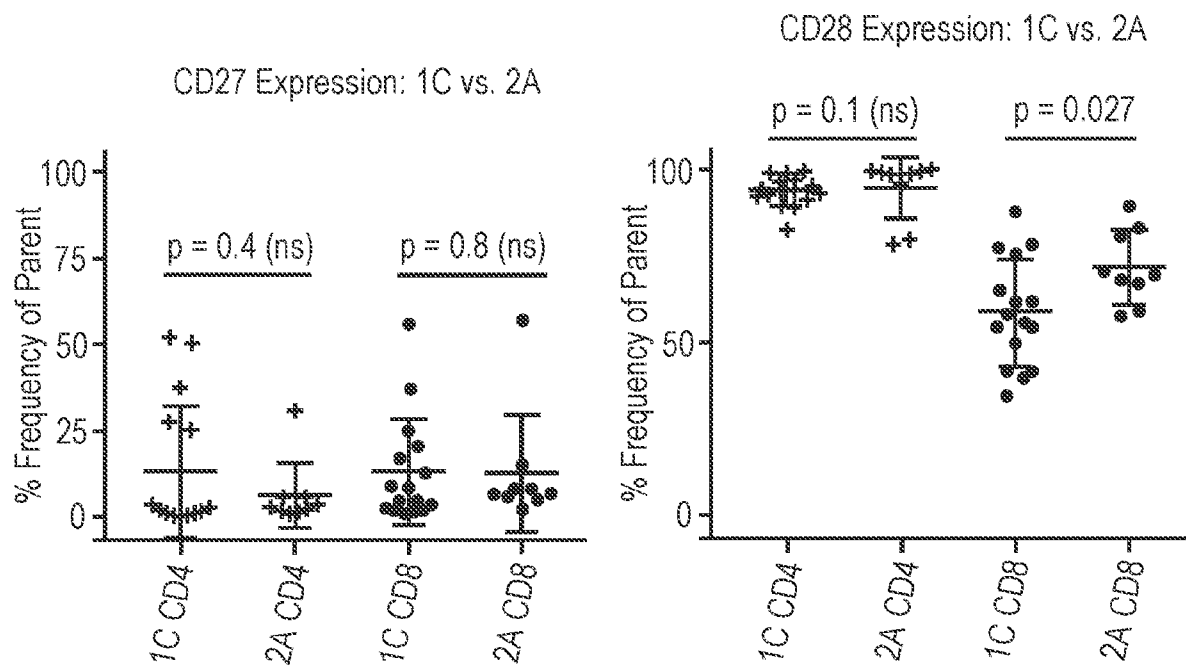
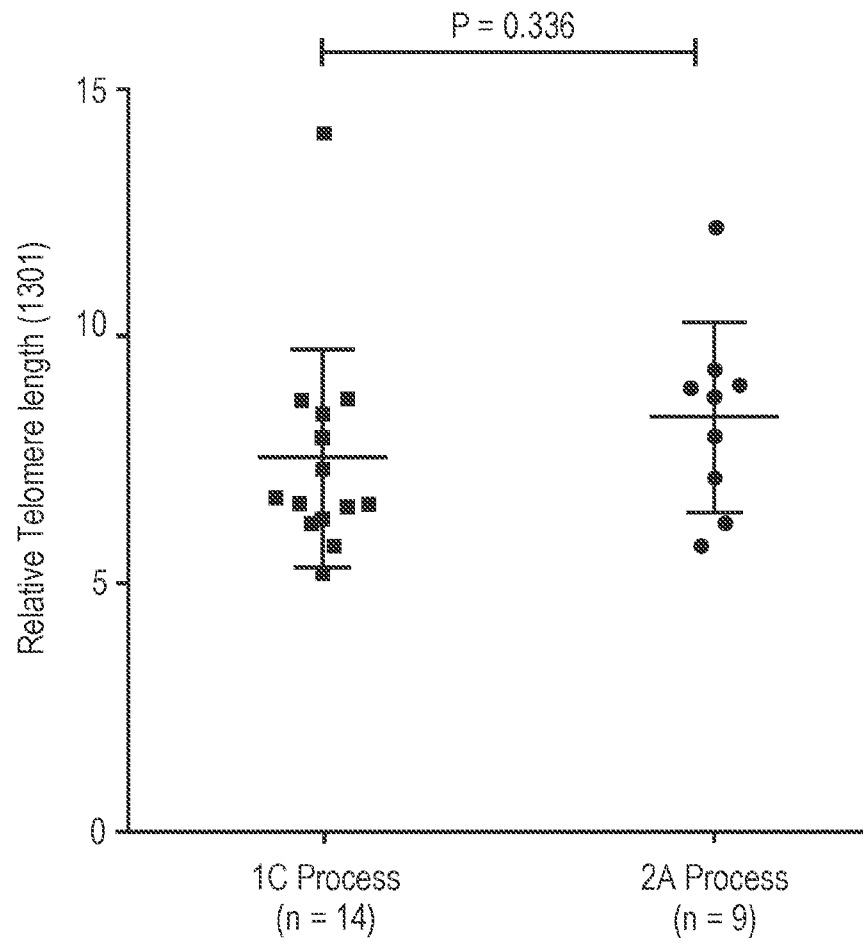


Figure 20

*Figure 21*

*Figure 22*

*Figure 23*

*Figure 24*

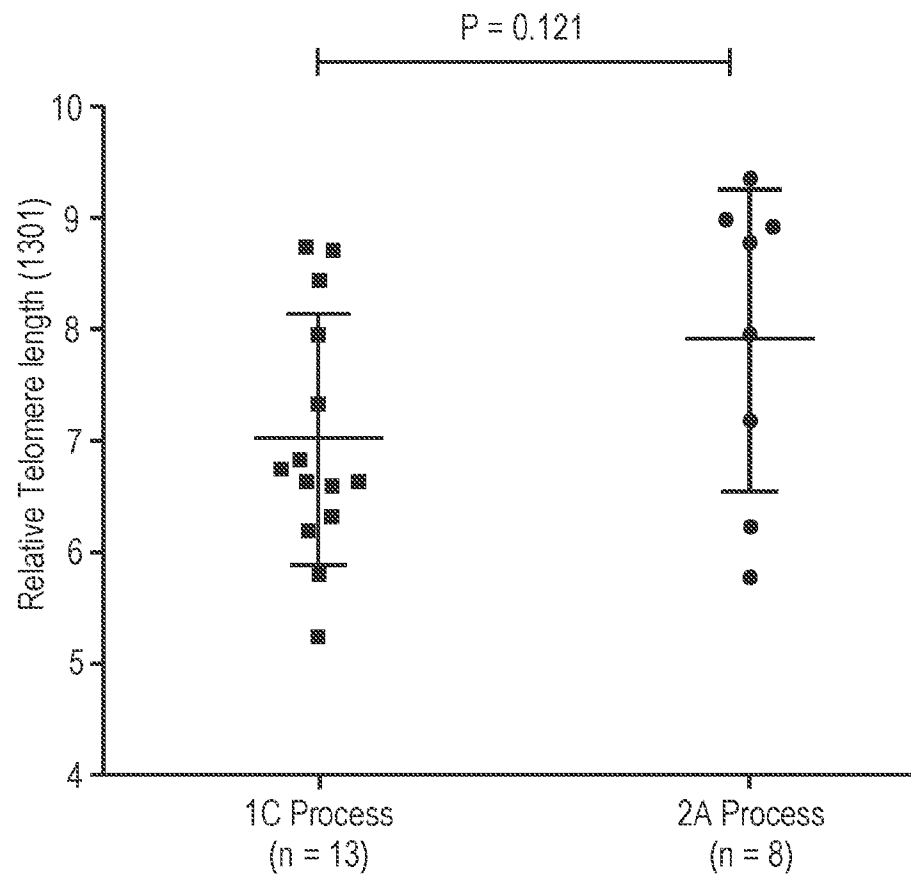
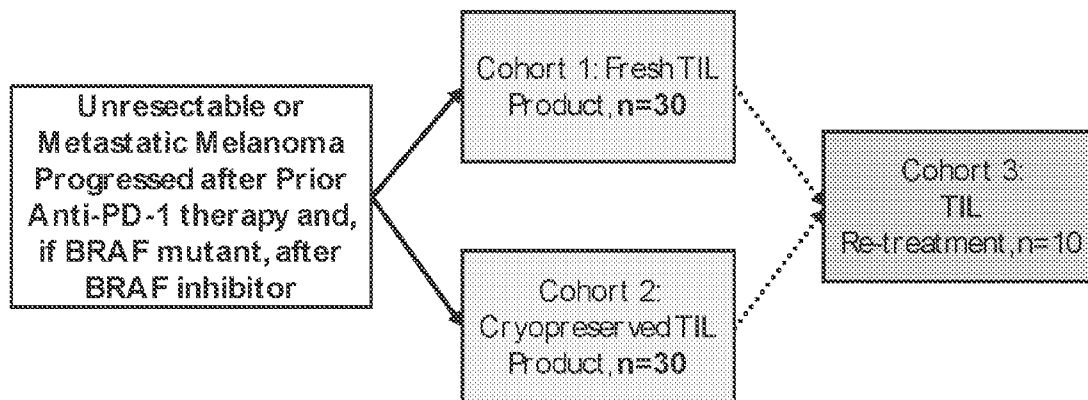
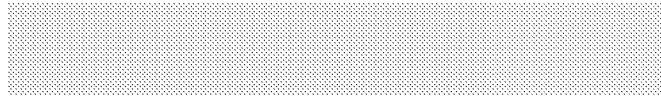
*Figure 25*

Figure 26

**1. STEP A**

Obtain Patient Tumor Sample

2. STEP B

Fragmentation and First Expansion

3 days to 14 days

3. STEP C

First Expansion to Second Expansion Transition

No Storage and Closed System

4. STEP D

Second Expansion

IL-2, OKT-3, and antigen-presenting feeder cells

Closed System

5. STEP E

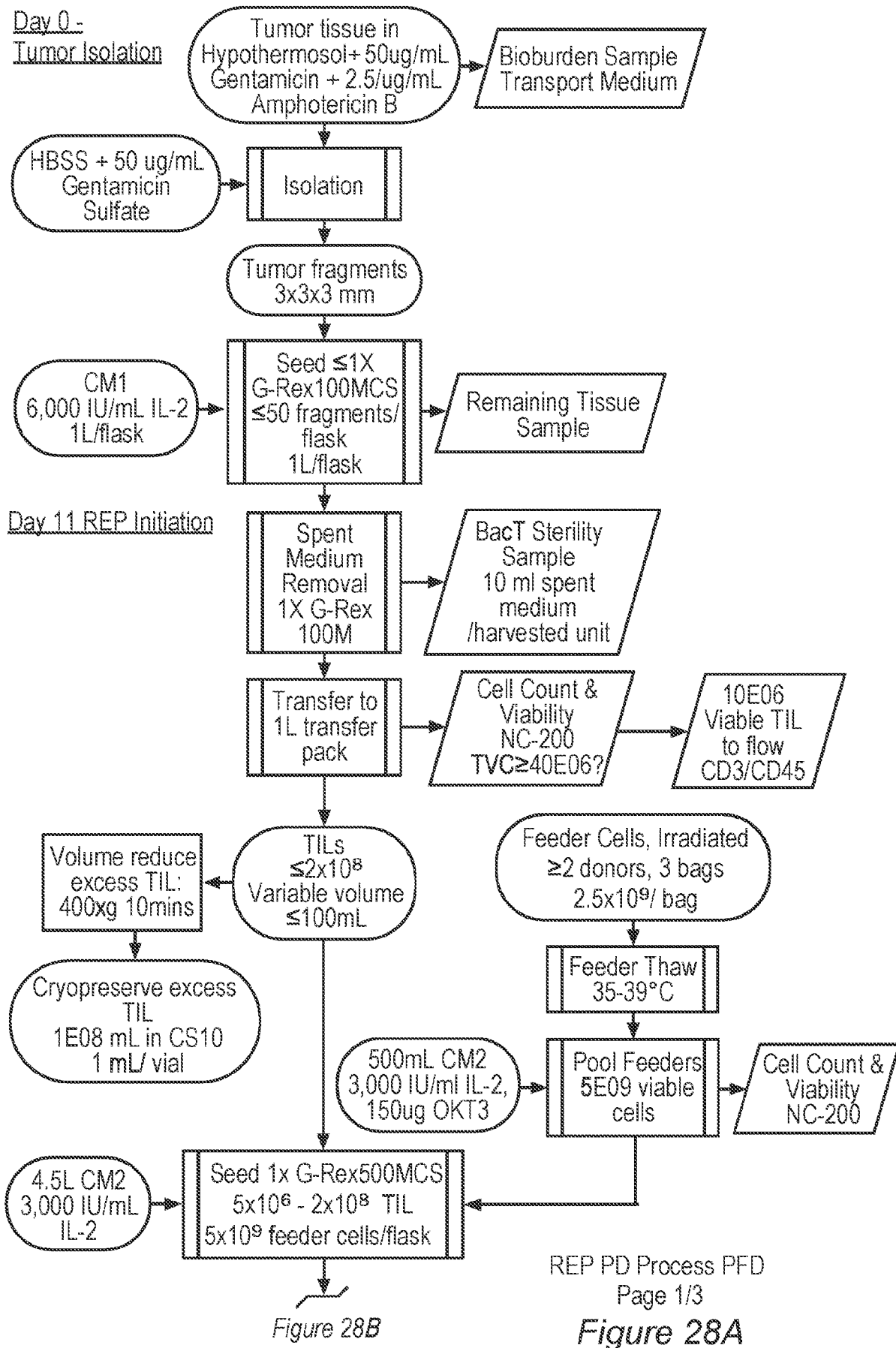
Harvest TILS from Step D

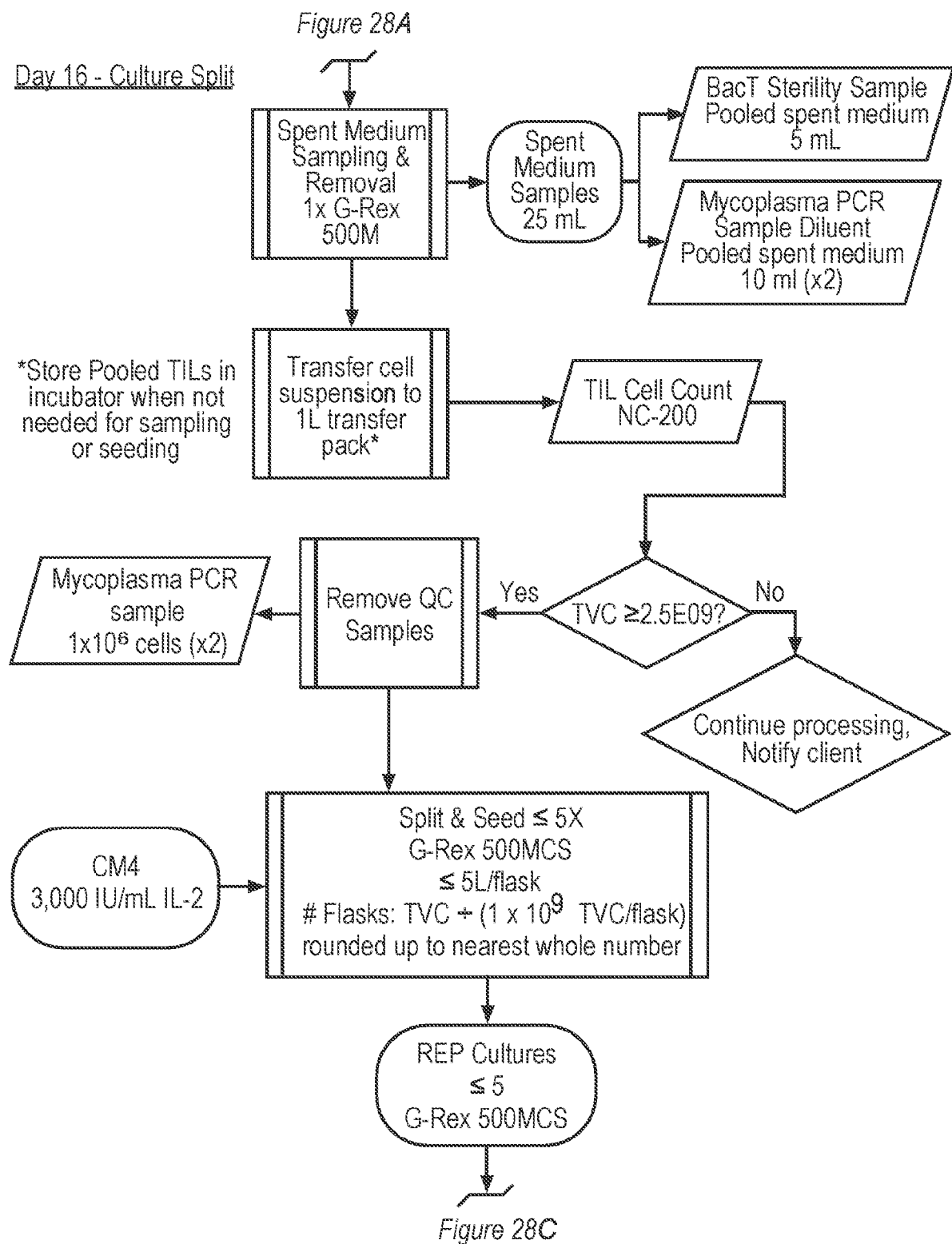
Closed System

6. STEP F

Final Formulation and/or Transfer to Infusion Bag

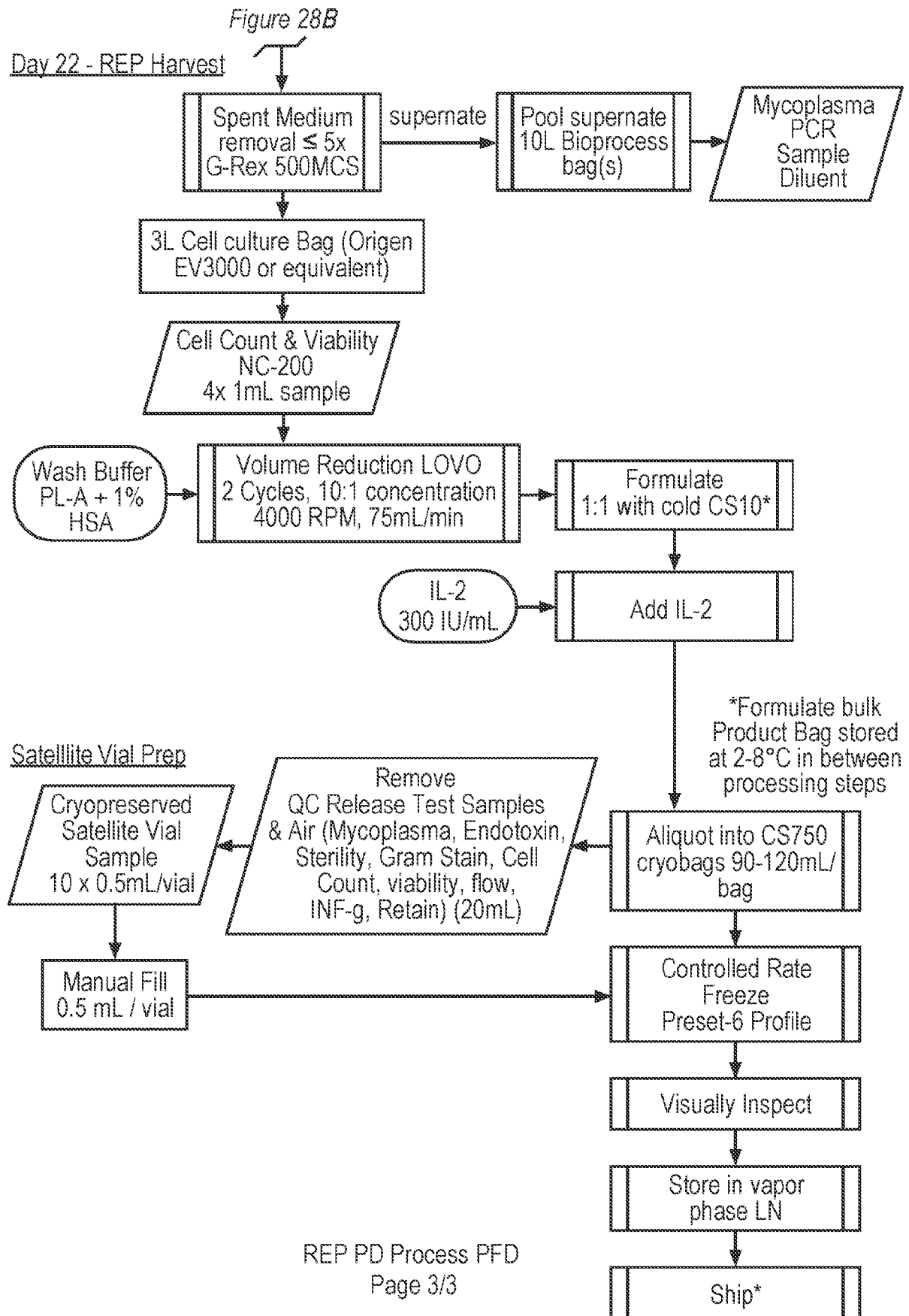
(optionally cryopreserve)





REP PD Process PFD
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Figure 28B



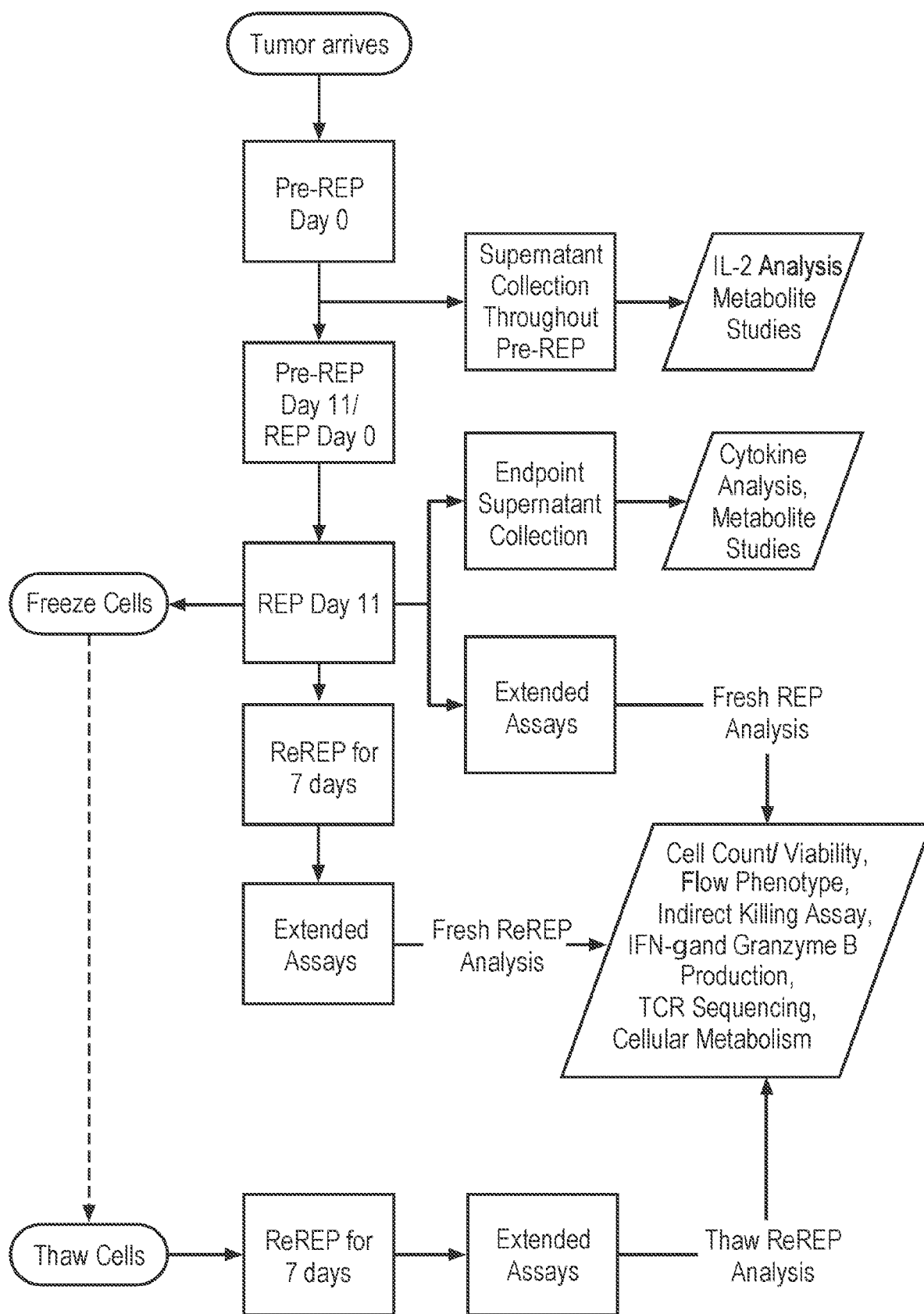
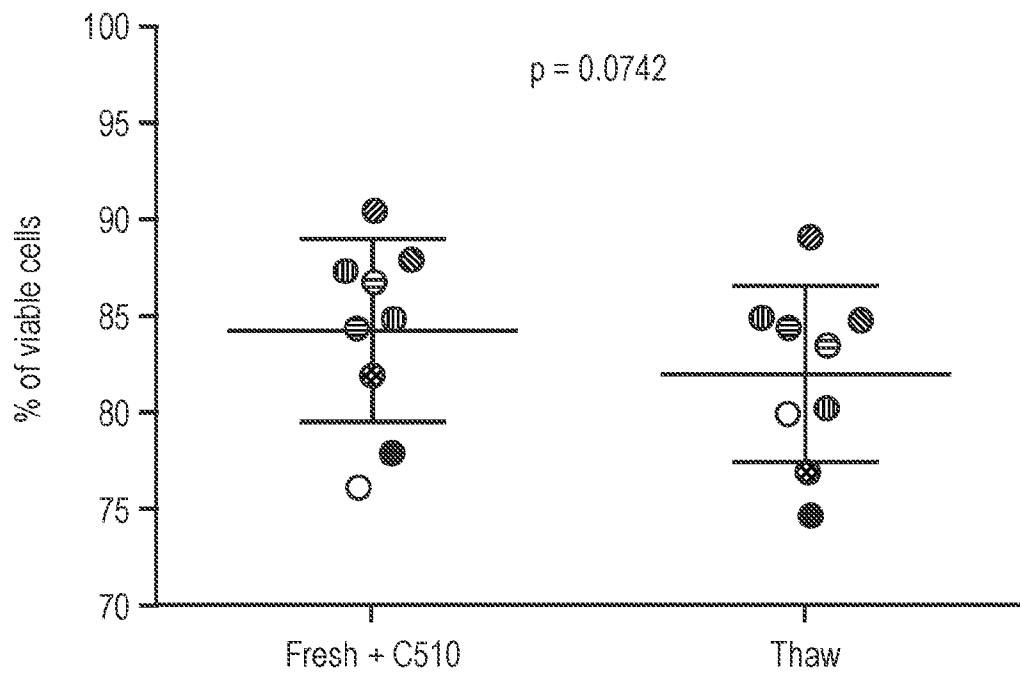
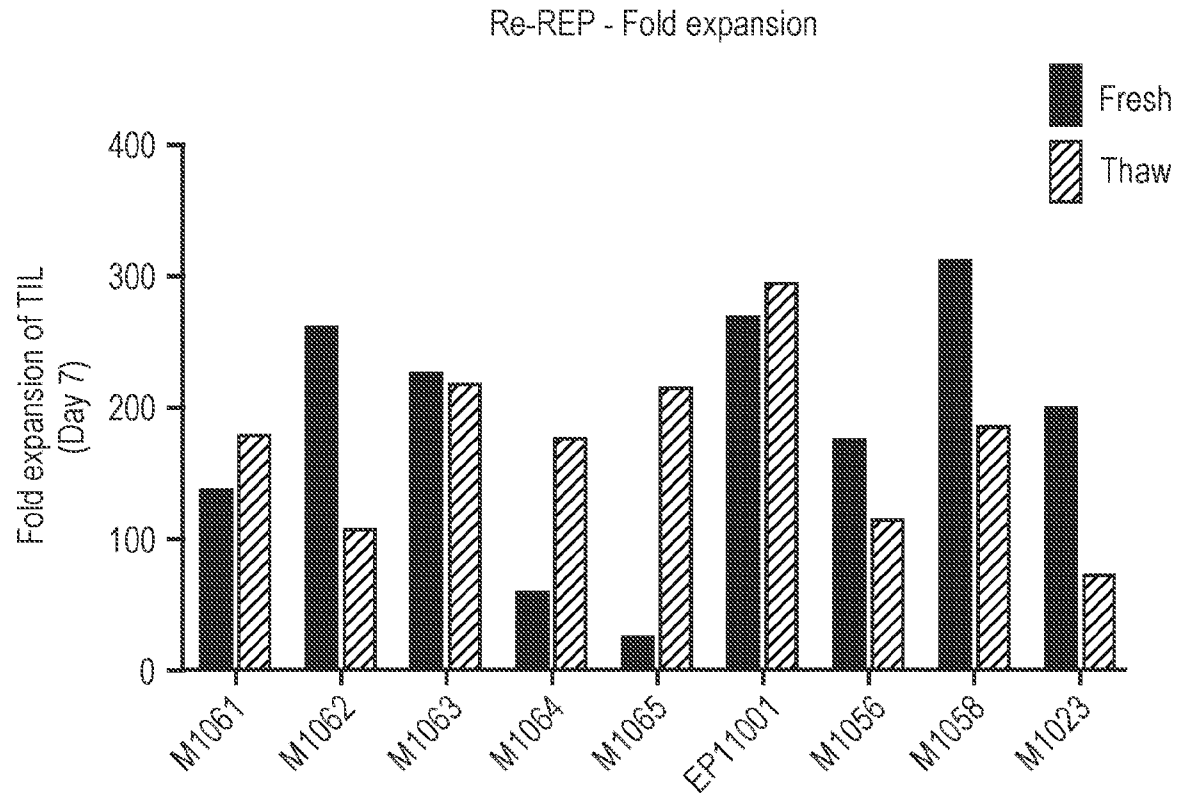


Figure 29

*Figure 30*

*Figure 31*

Normal Blood Values	
Glucose	0.7-1g/l
Glutamine	0.3-0.65mmol/l
Sodium	135-145mol/l
Potassium	3.5-5.0mmol/l
Lactic Acid	0.060-.16g/l
Ammonia	.023-.047mmol/l

Figure 32

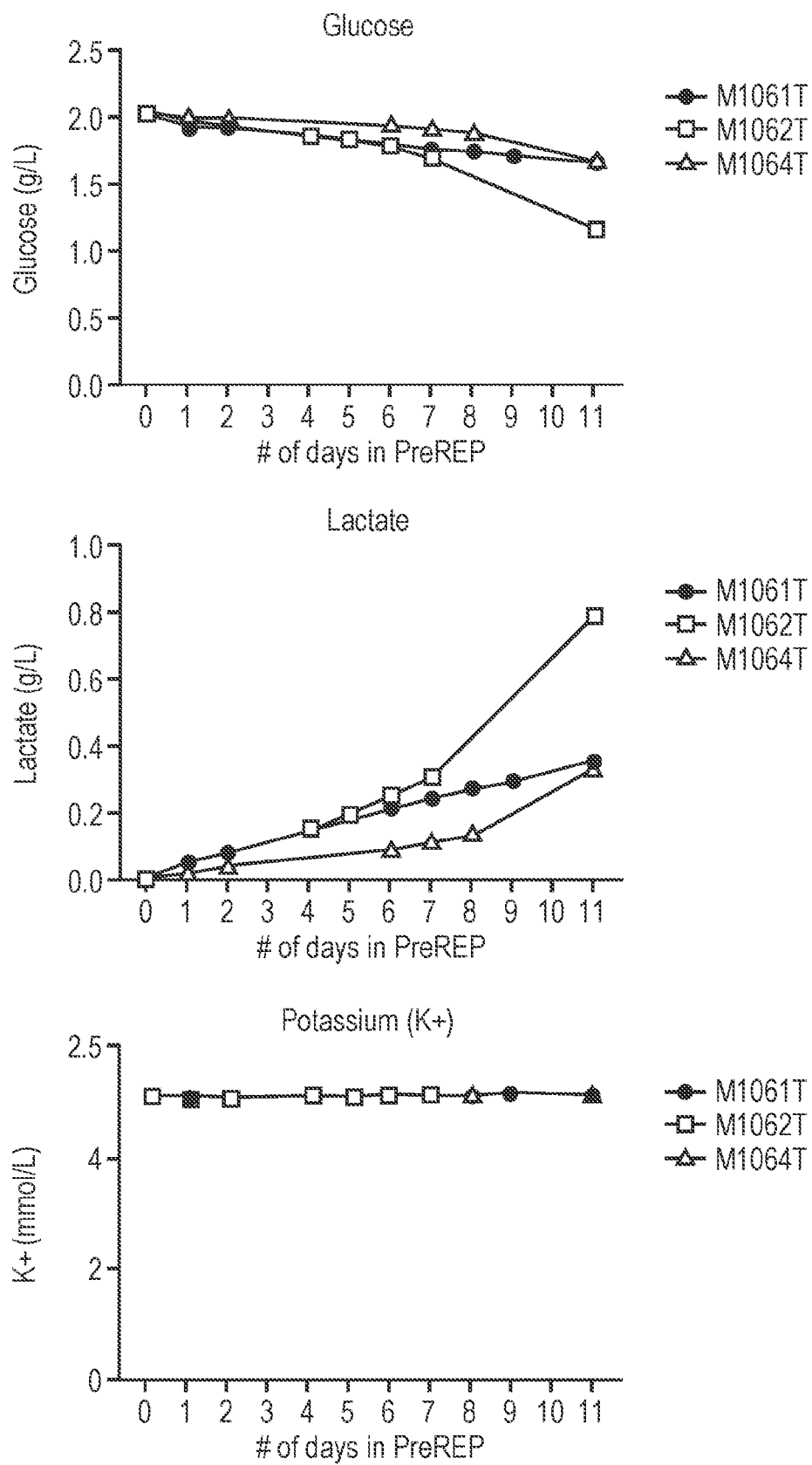
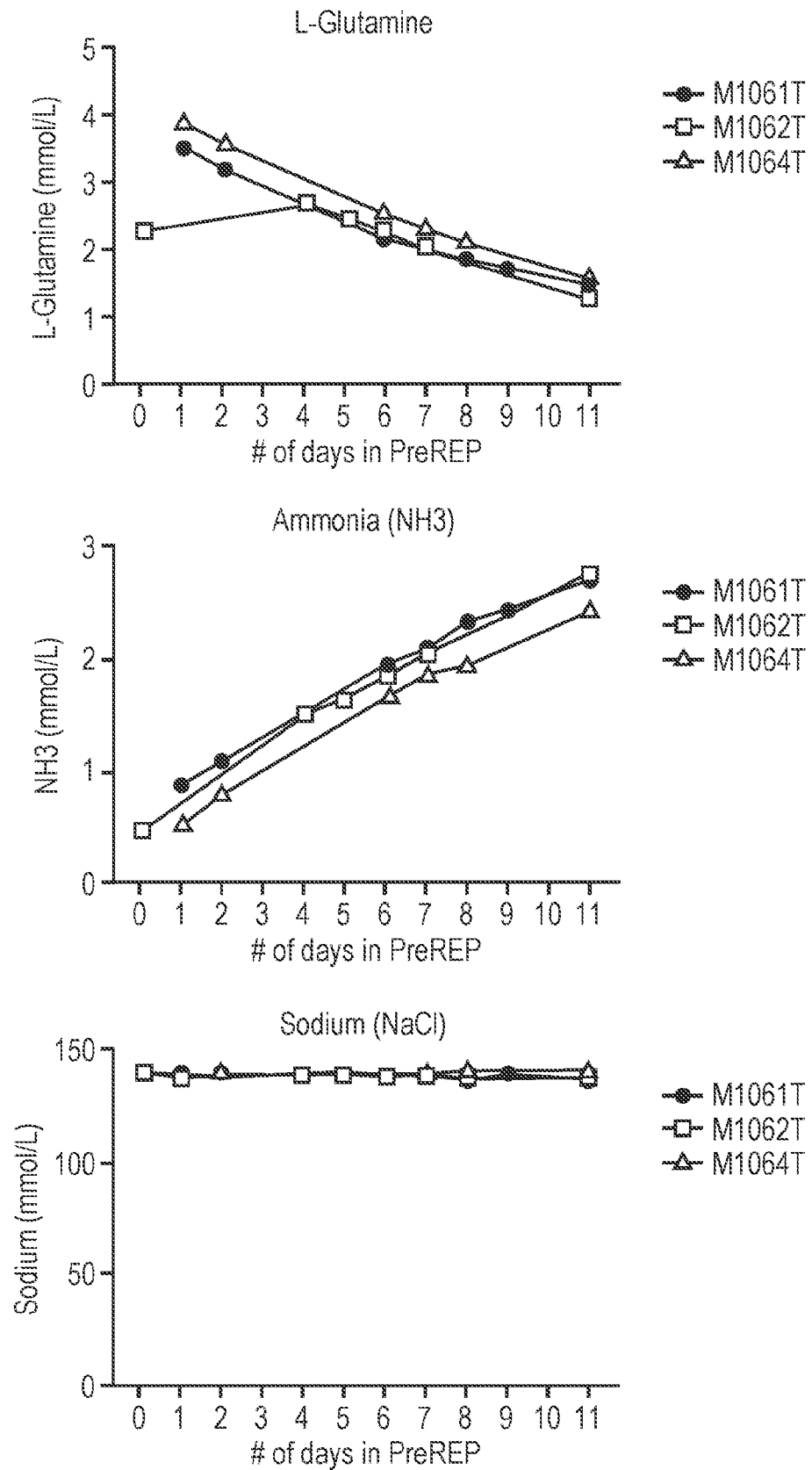
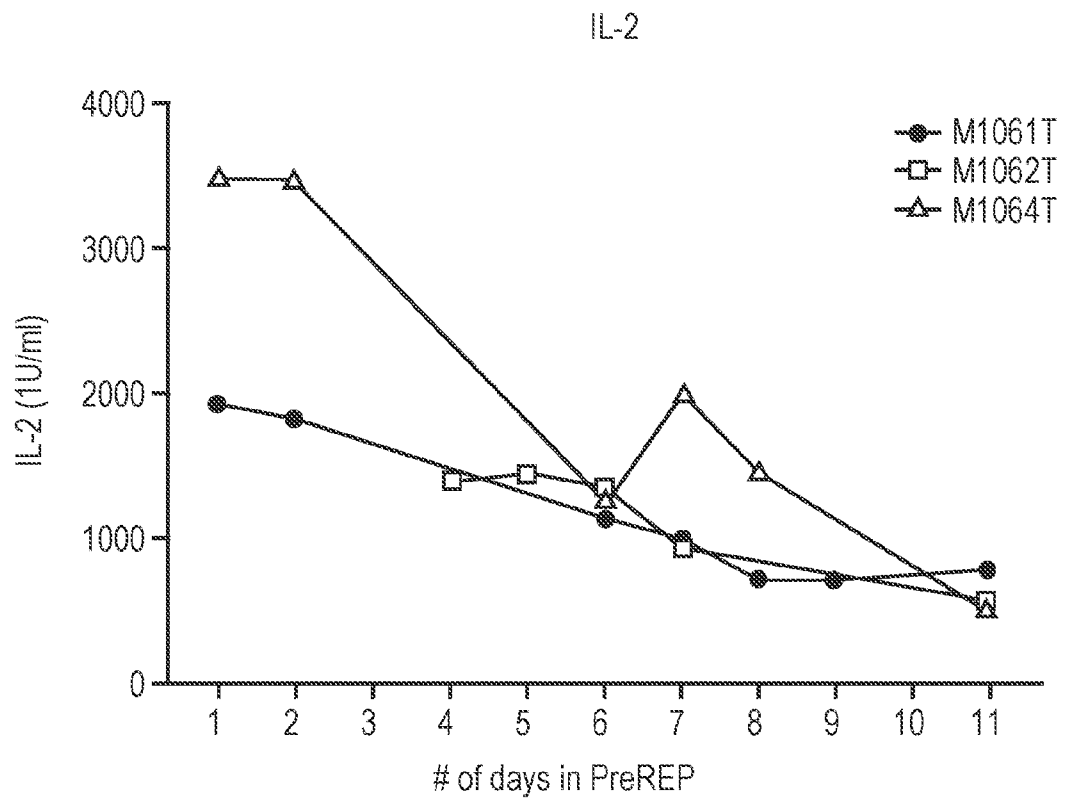
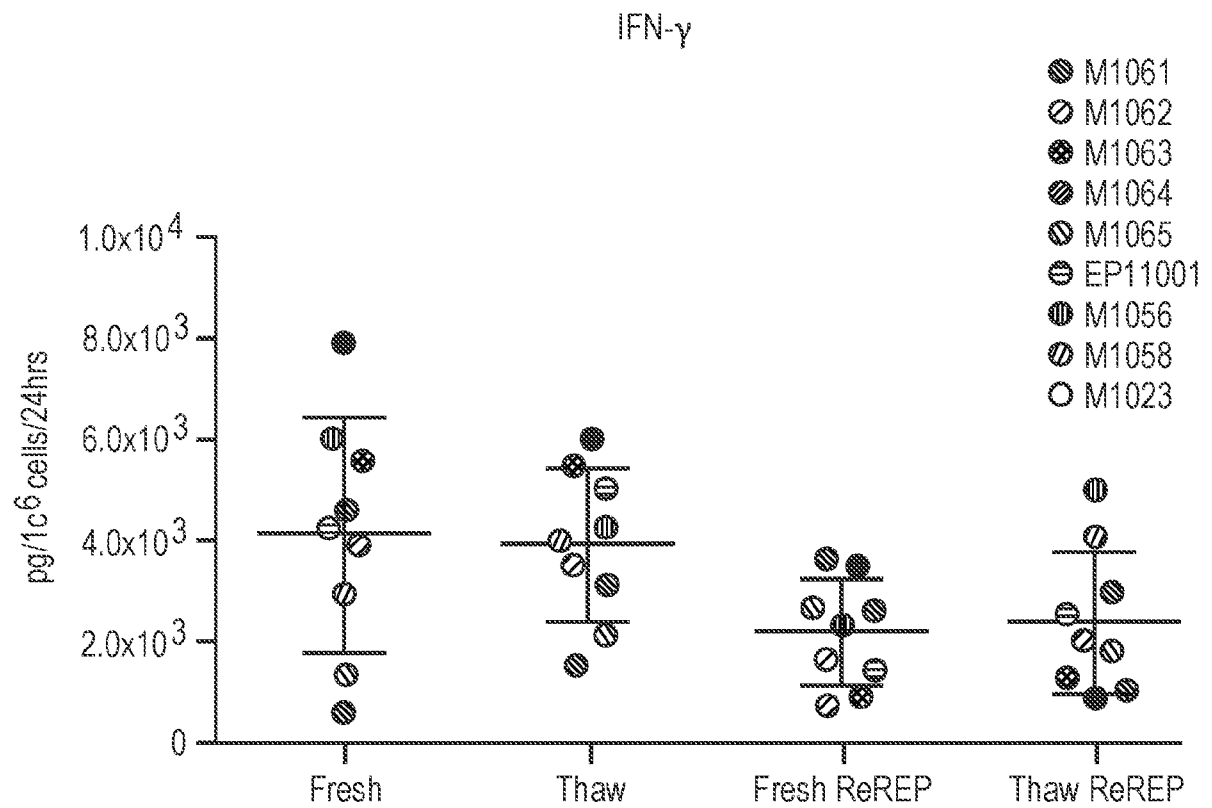


Figure 33A

*Figure 33B*

*Figure 34*

*Figure 35*

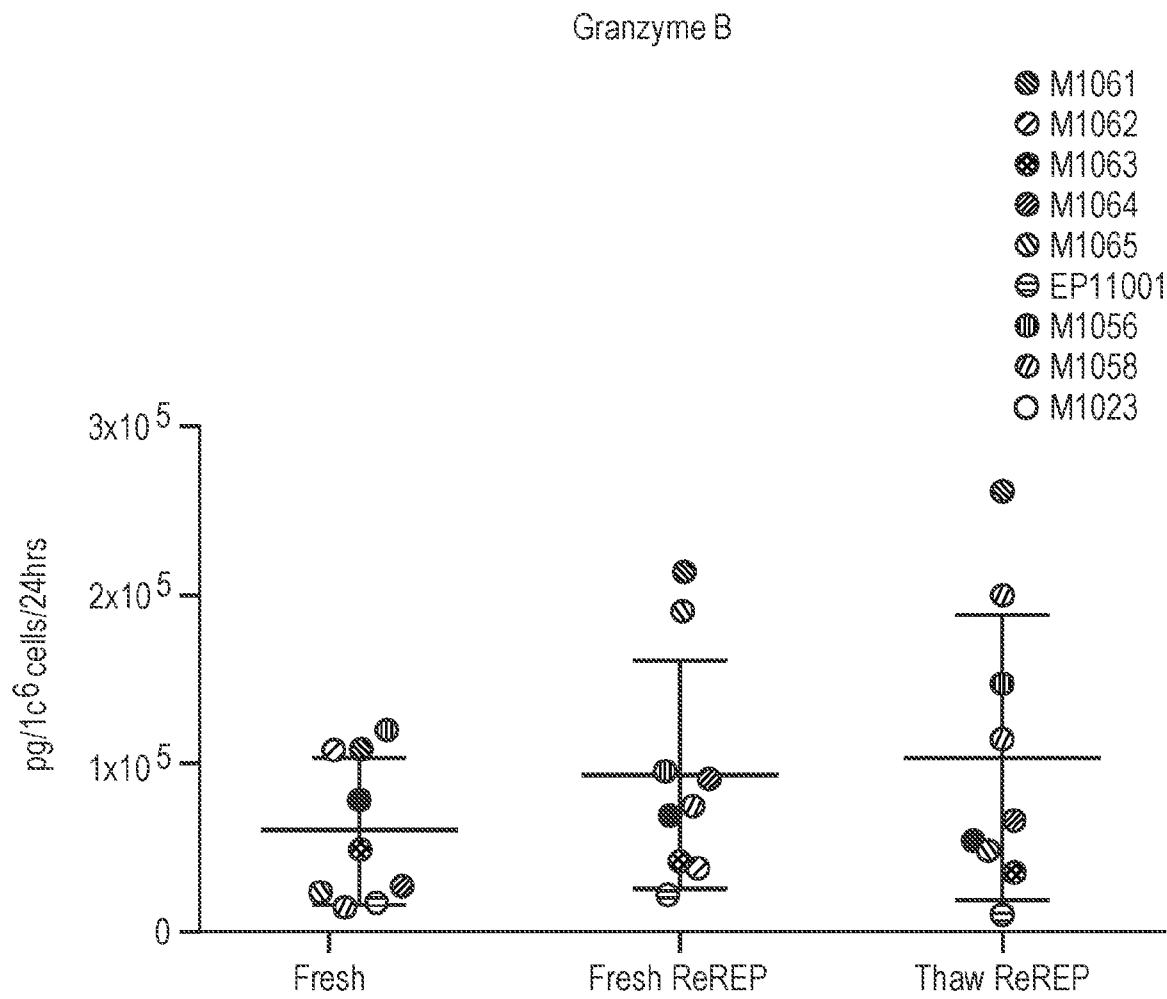
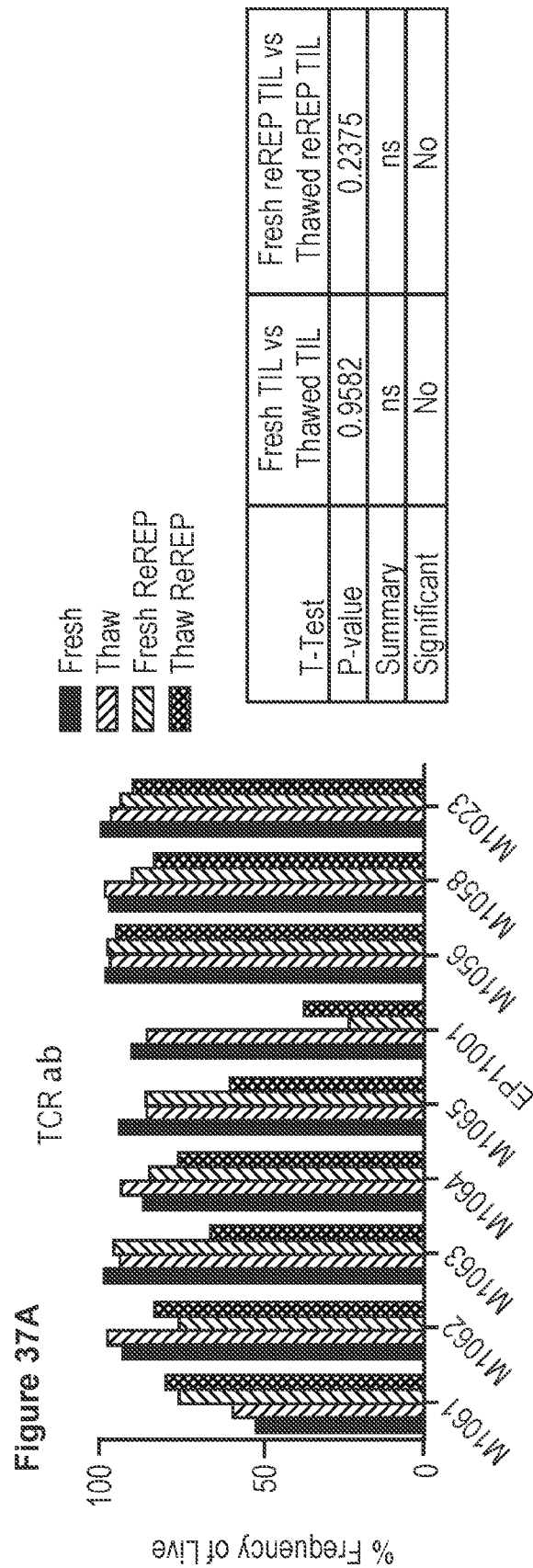
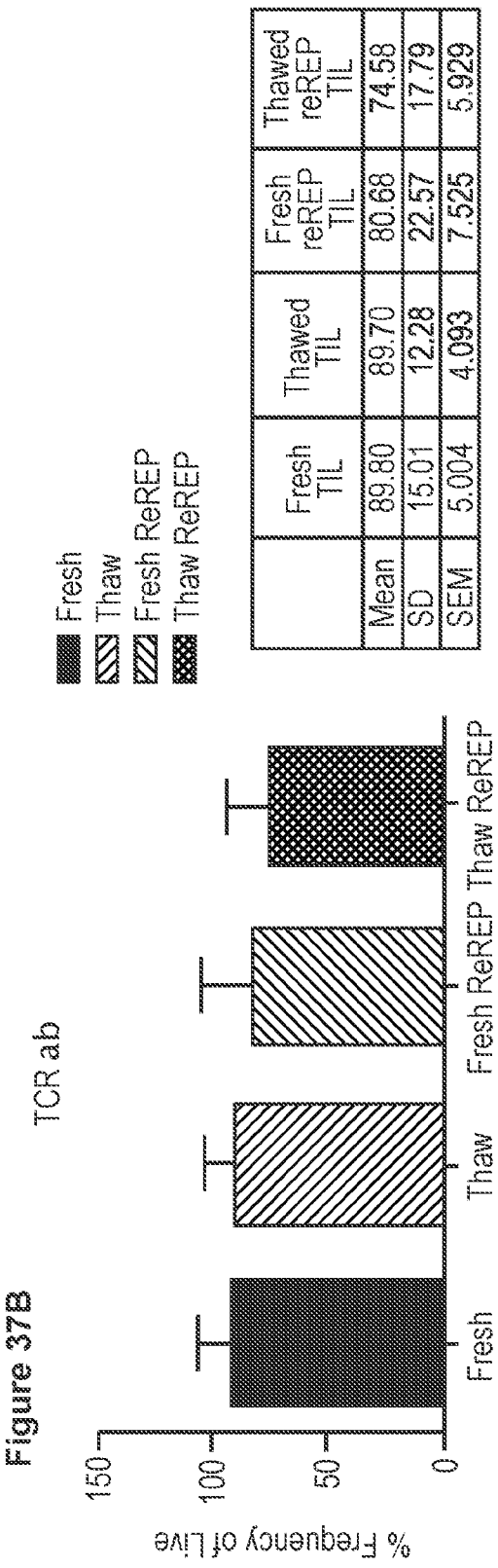


Figure 36



T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.9582	0.2375
Summary	ns	ns
Significant	No	No



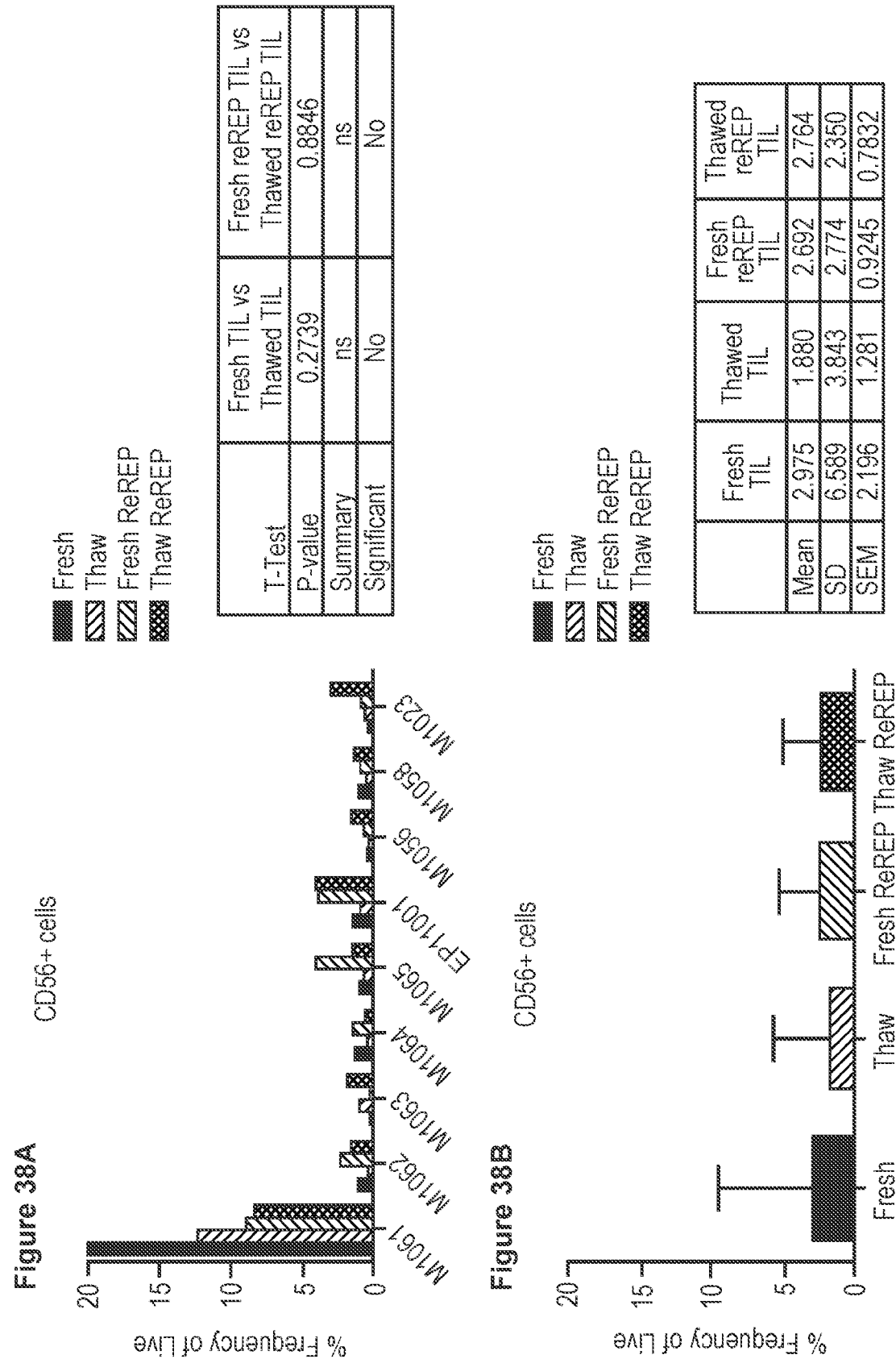


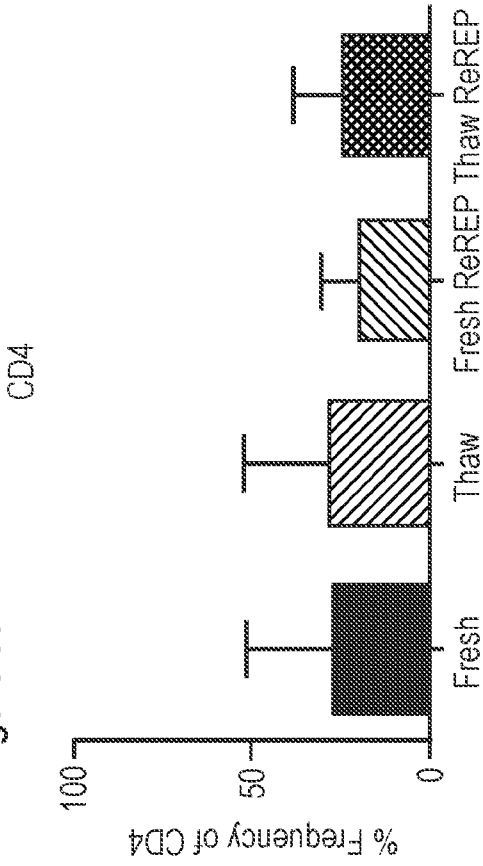
Figure 39A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

SUBSTITUTE SHEET (RULE 26)

Figure 39B

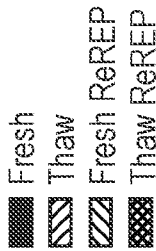
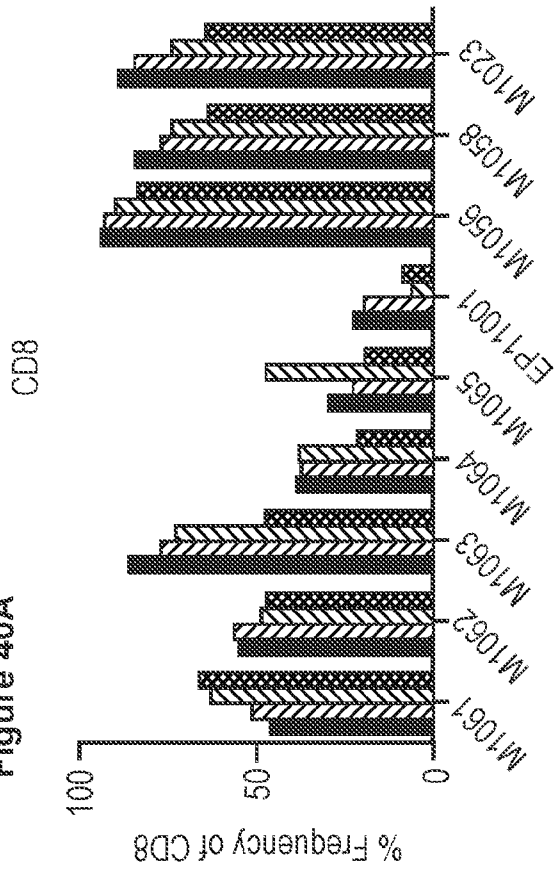


Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.5218	0.0110
Summary	ns	*
Significant	No	No

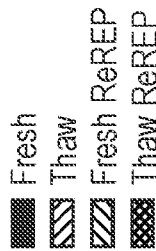
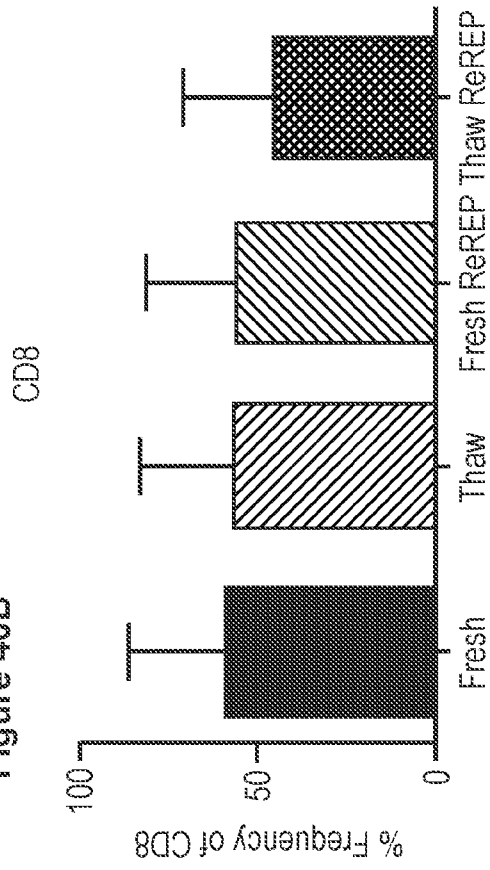
	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	27.28	28.08	19.42	24.49
SD	24.92	24.28	10.84	13.63
SEM	8.308	8.094	3.612	4.542

Figure 40A



T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.0952	0.0264
Summary	ns	*
Significant	No	Yes

Figure 40B



	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	60.13	57.13	57.16	46.75
SD	28.04	27.06	25.32	25.2
SEM	9.348	9.021	8.441	8.401

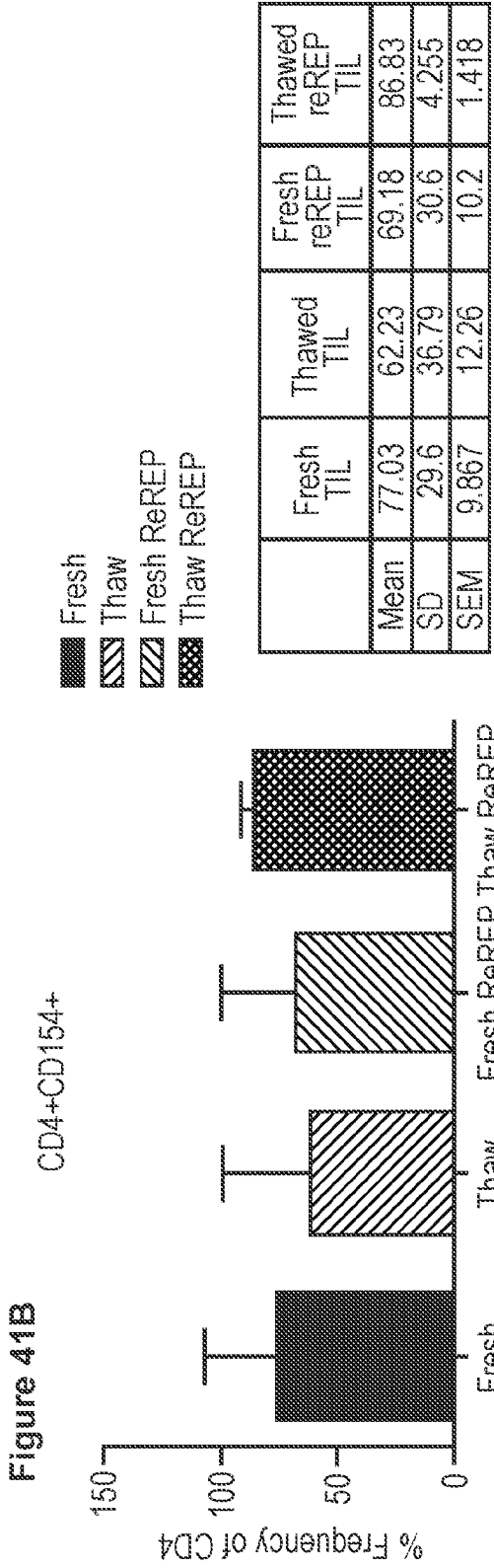
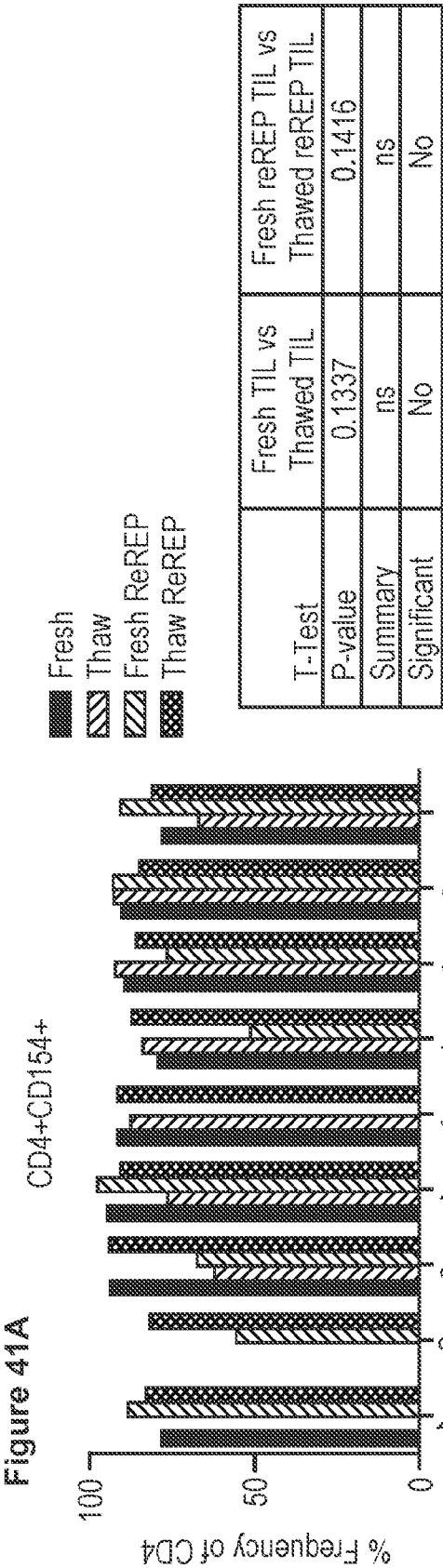
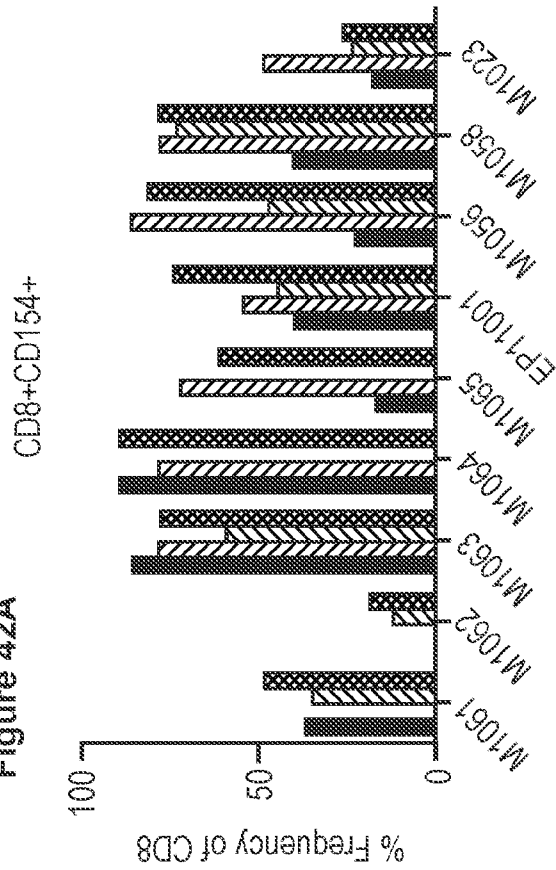


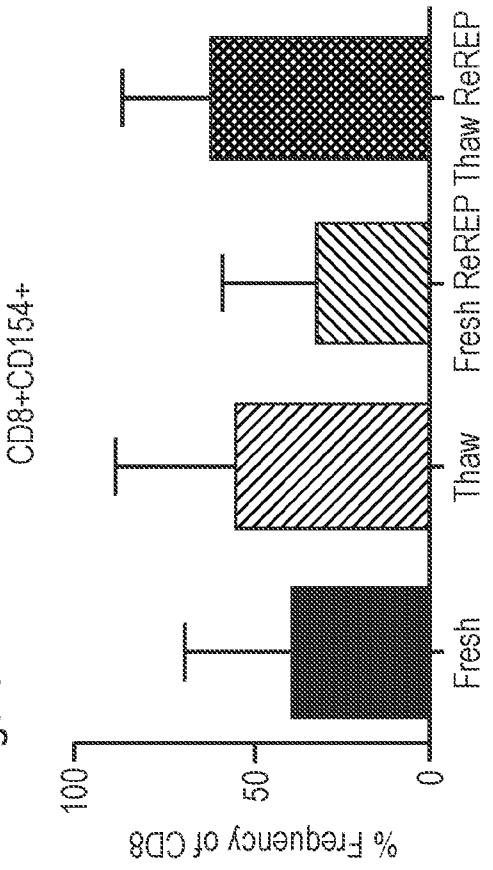
Figure 42A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.0534	0.0181
Summary	ns	*
Significant	No	No

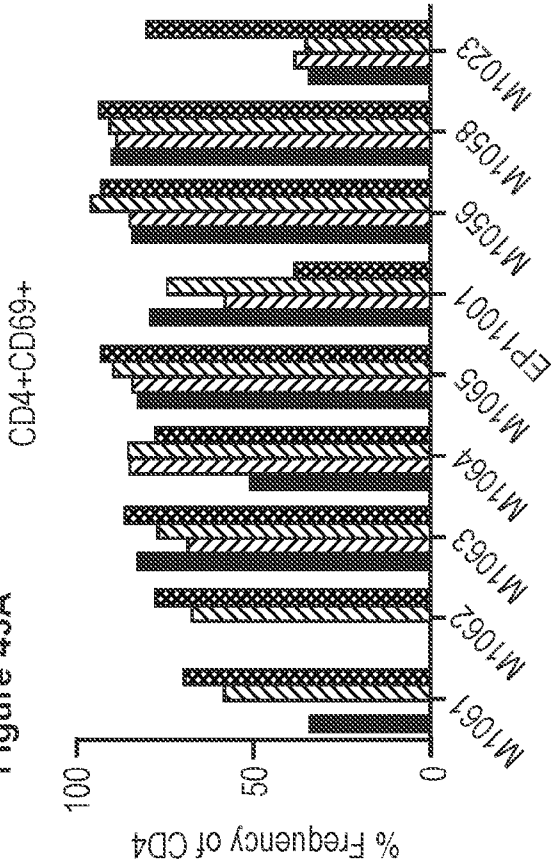
Figure 42B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	44.79	70.9	33.07	62.18
SD	30.75	13.84	25.9	25.23
SEM	11.62	5.23	8.633	8.41

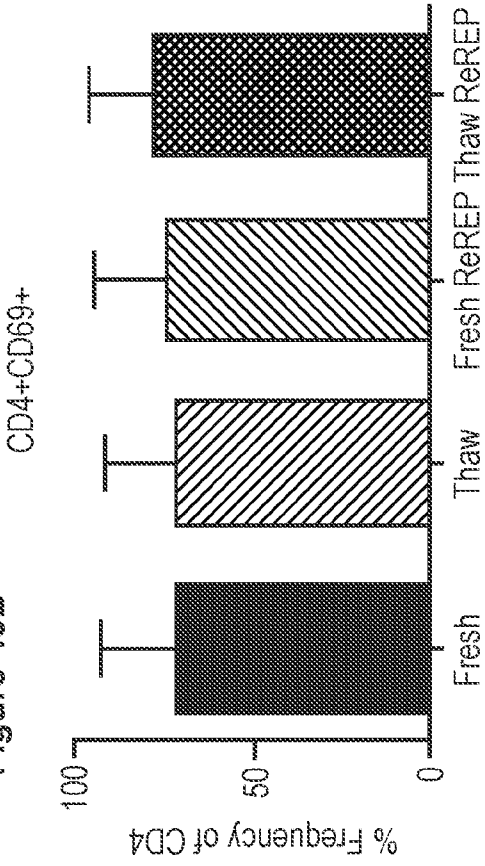
Figure 43A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.8951	0.8243
Summary	ns	ns
Significant	No	No

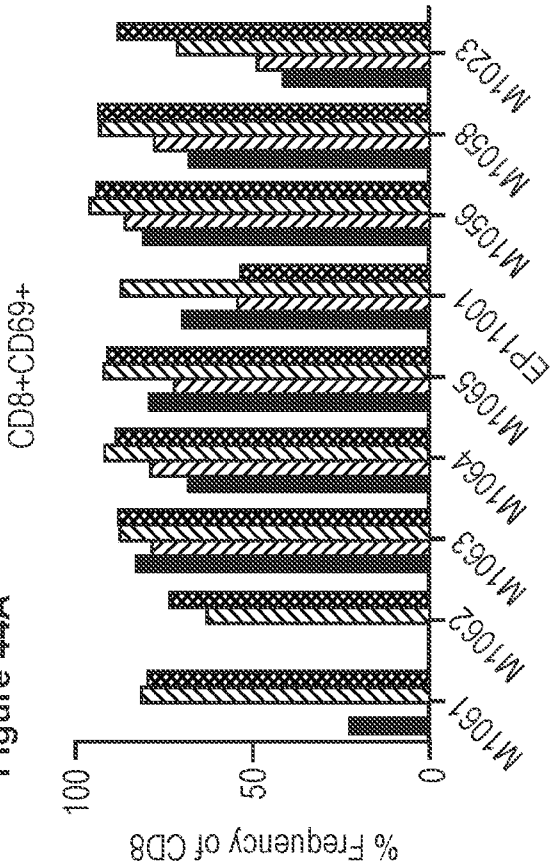
Figure 43B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	71.76	72.64	75.2	79.14
SD	20.84	18.54	19.2	17.25
SEM	7.876	7.009	6.4	5.749

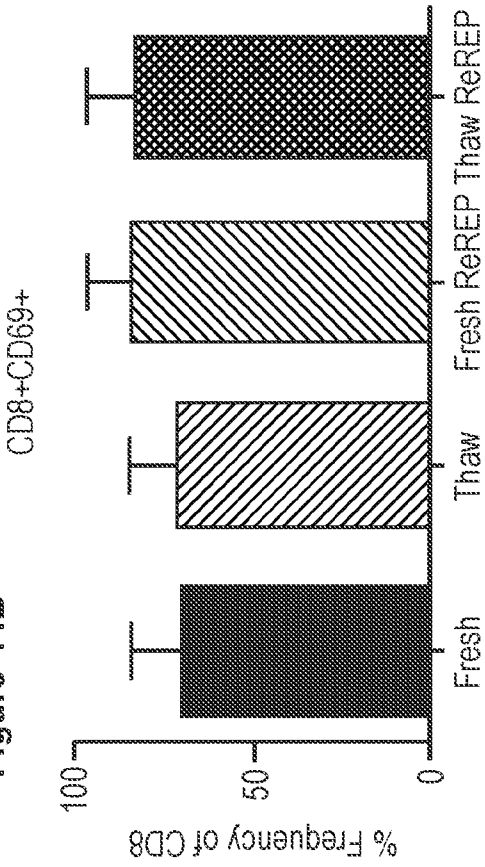
Figure 44A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.6788	0.7638
Summary	ns	ns
Significant	No	No

Figure 44B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	56.8	55.14	84.66	83.19
SD	29.12	33.48	11.1	13.15
SEM	9.707	11.16	3.699	4.383

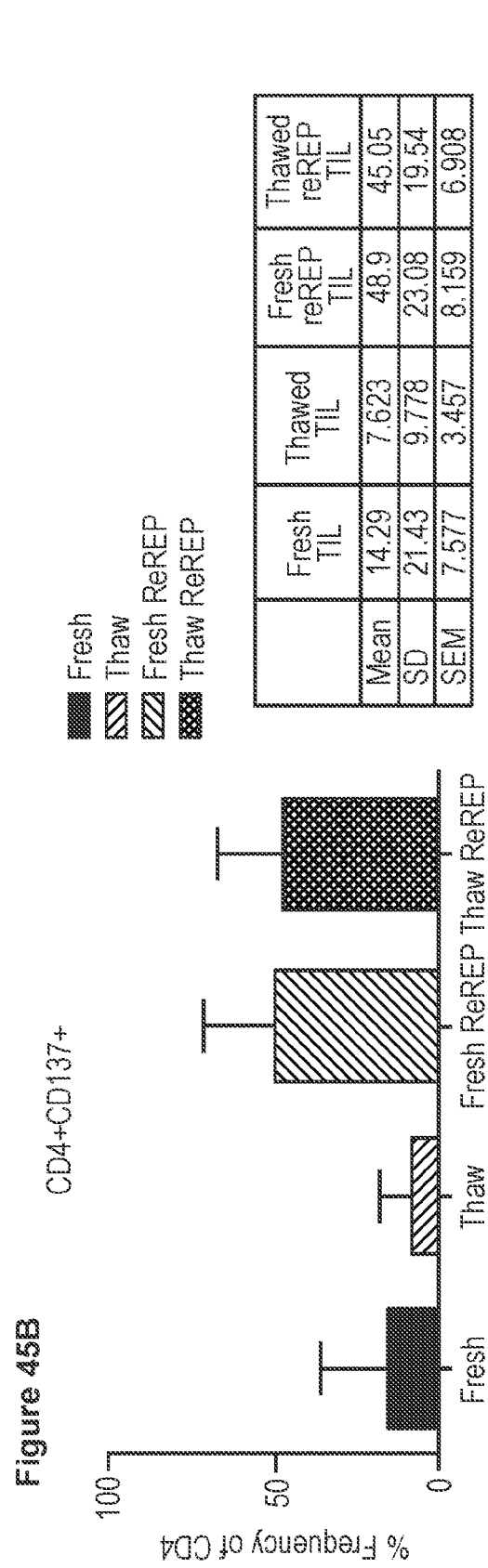
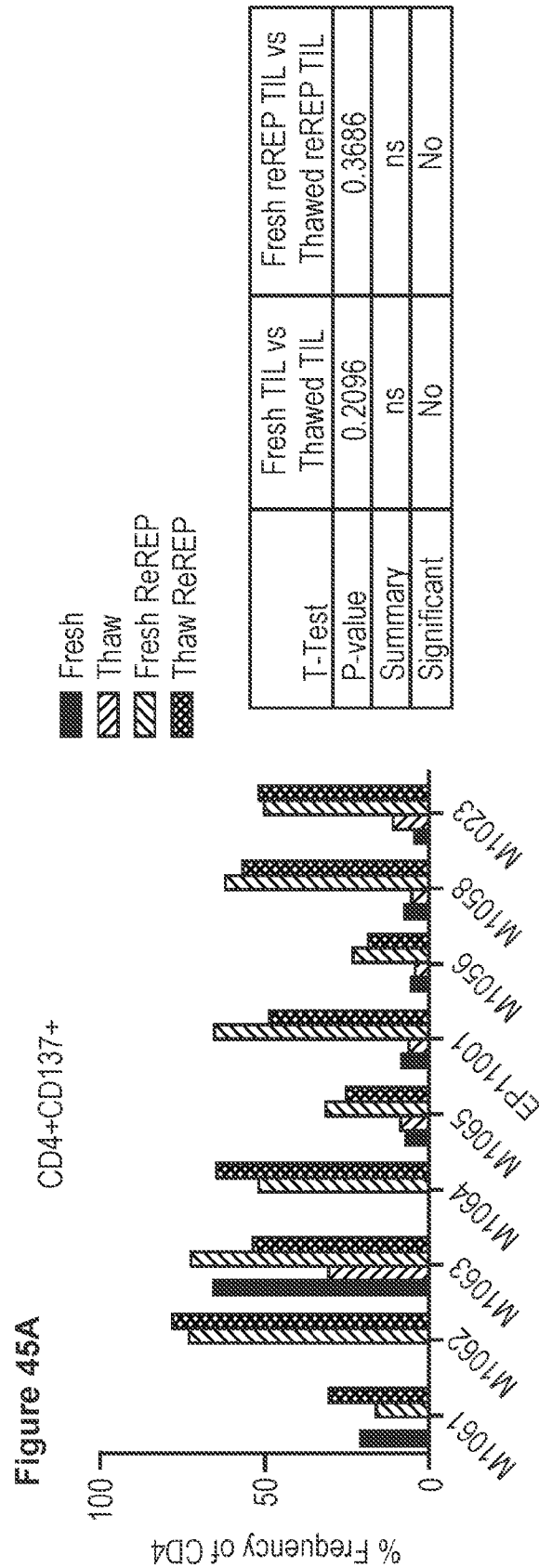
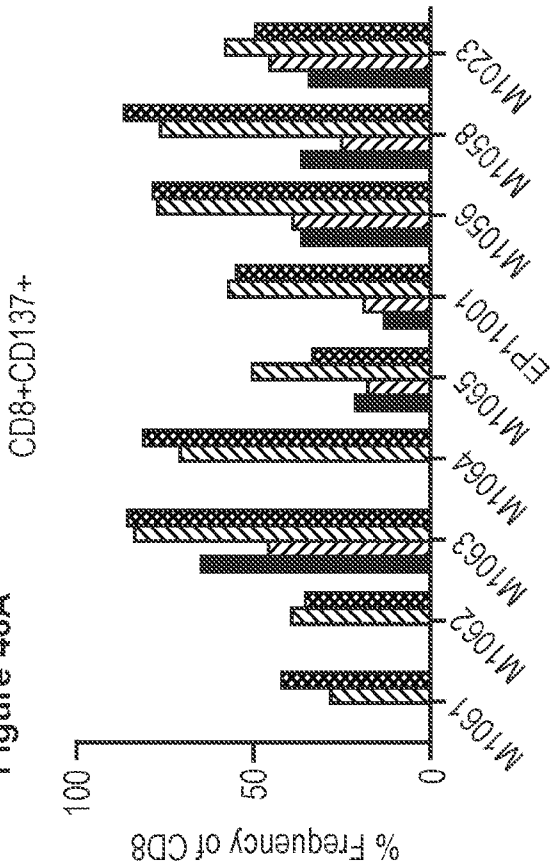


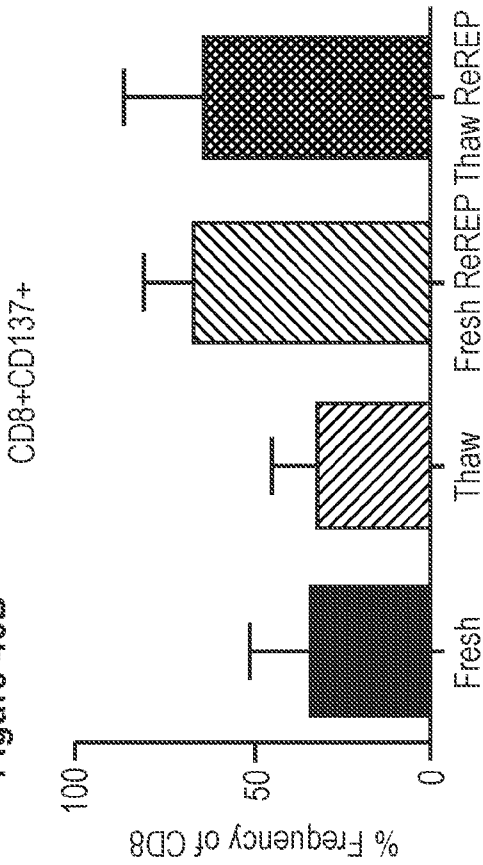
Figure 46A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.6563	0.5484
Summary	ns	ns
Significant	No	No

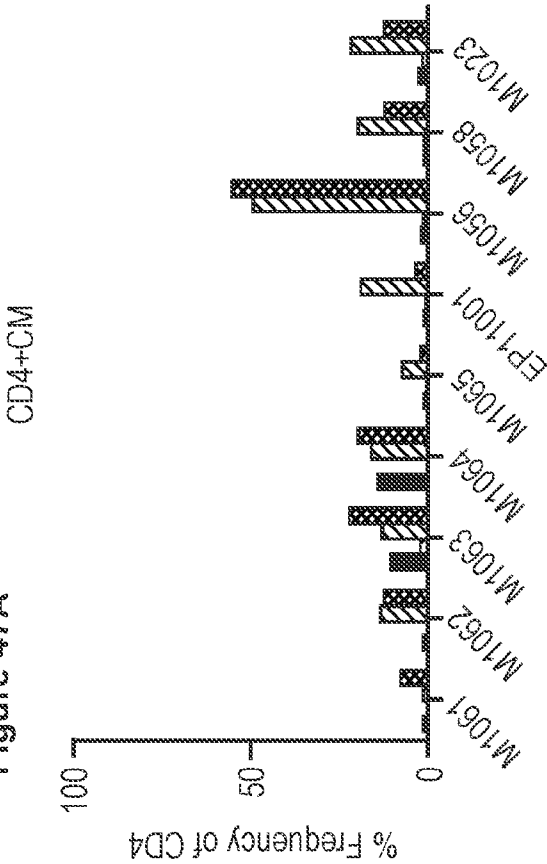
Figure 46B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	34.03	31.88	67.47	65.03
SD	17.53	13.05	13.71	21.91
SEM	7.156	5.328	5.597	8.945

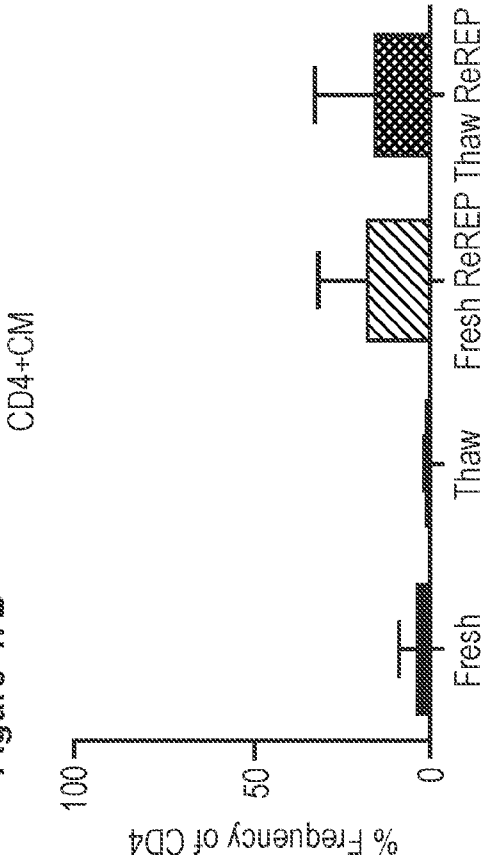
Figure 47A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
T-Test		
P-value	0.1658	0.5535
Summary	ns	ns
Significant	No	No

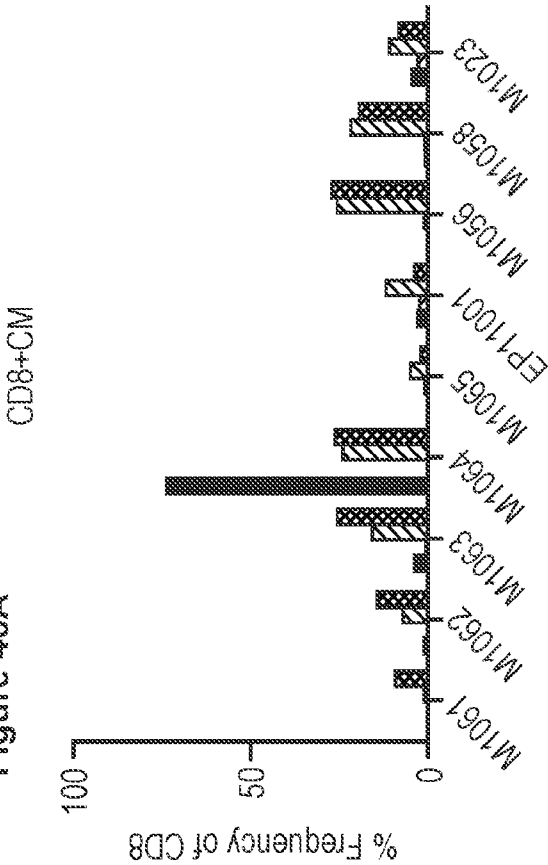
Figure 47B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	3.668	1.043	18.13	16.46
SD	5.094	0.8127	13.37	16.02
SEM	1.698	0.2709	4.456	5.341

Figure 48A

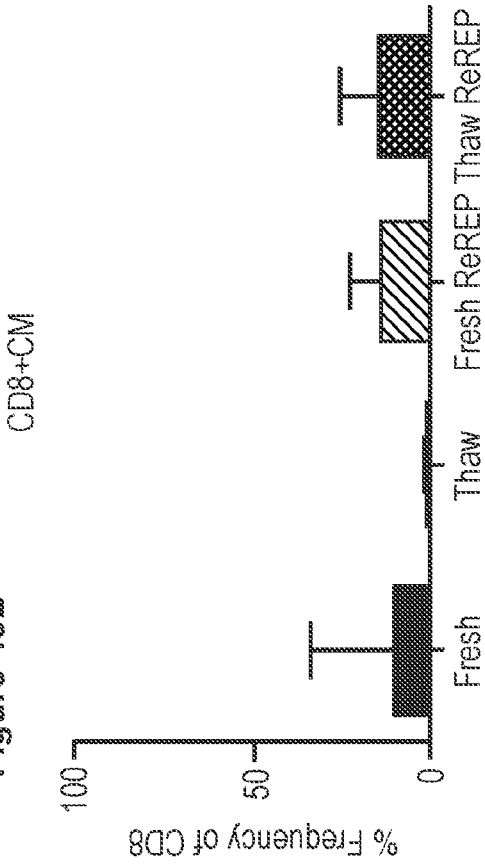


Fresh
Thaw
Fresh ReREP
Thaw ReREP

SUBSTITUTE SHEET (RULE 26)

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.3086	0.5768
Summary	ns	ns
Significant	No	No

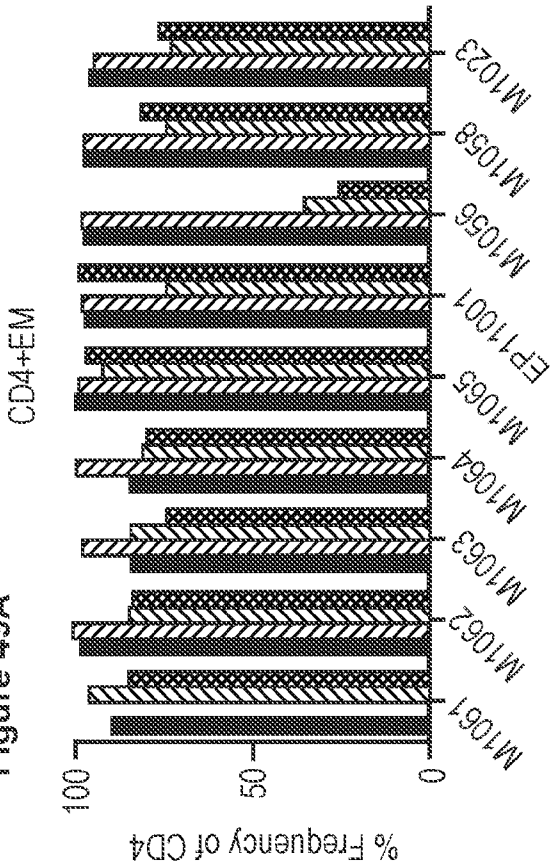
Figure 48B



Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	9.529	0.7811	13.69	14.87
SD	23.92	0.7532	8.678	9.912
SEM	7.972	0.2511	2.893	3.304

Figure 49A

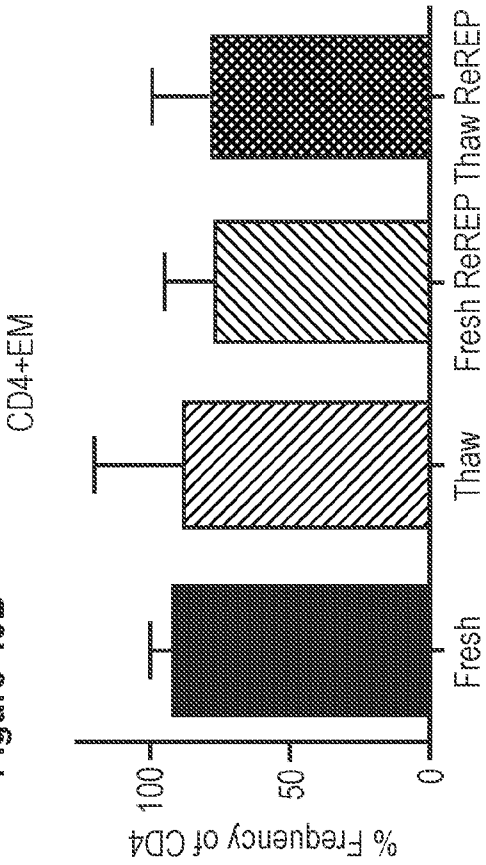


Fresh
Thaw
Fresh ReREP
Thaw ReREP

SUBSTITUTE SHEET (RULE 26)

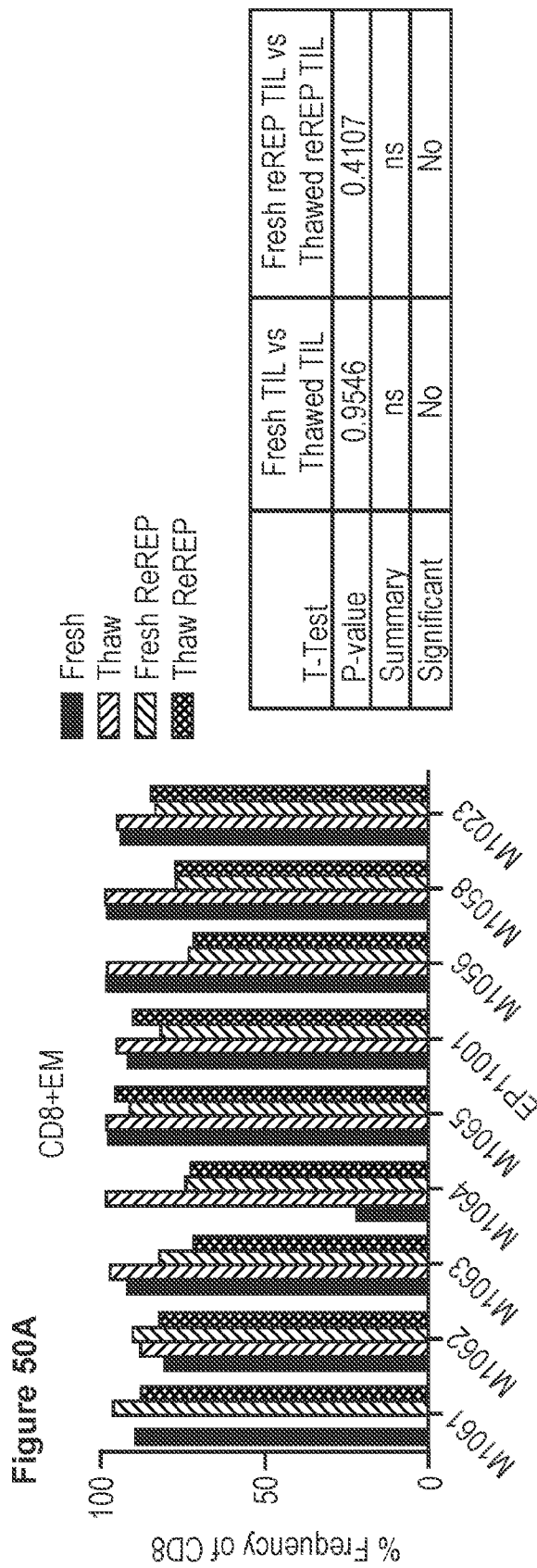
T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.5539	0.8411
Summary	ns	ns
Significant	No	No

Figure 49B

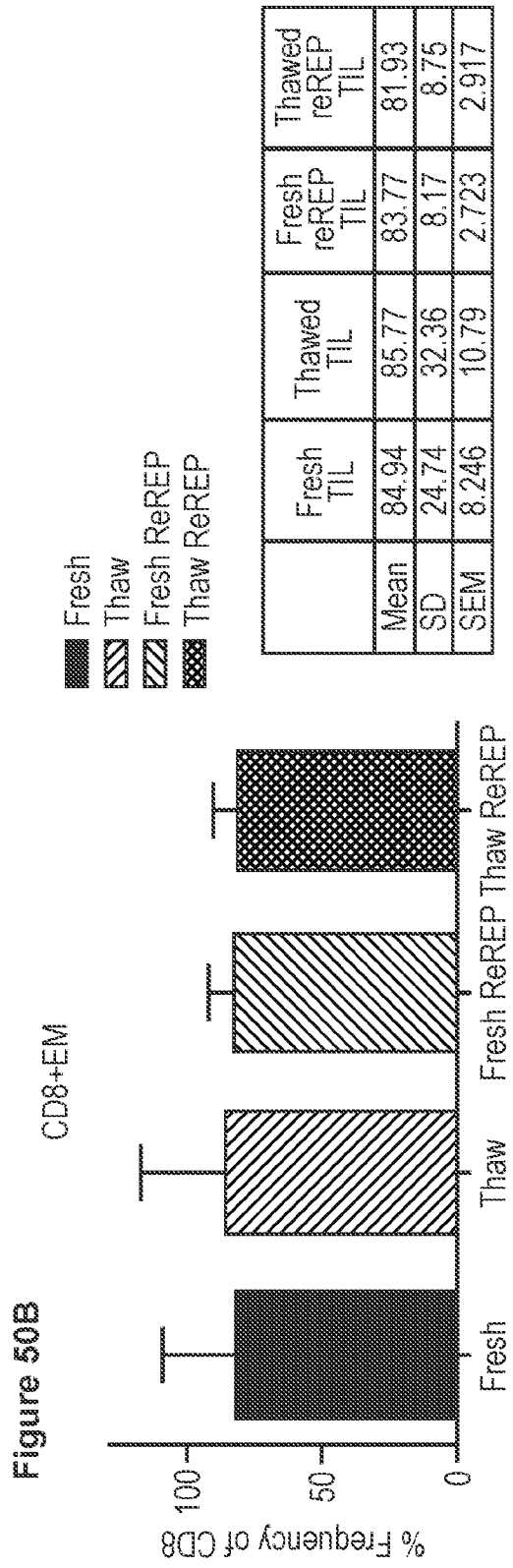


Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	93.61	87.04	77.13	77.92
SD	6.055	32.67	17.25	21.38
SEM	2.018	10.89	5.751	7.127

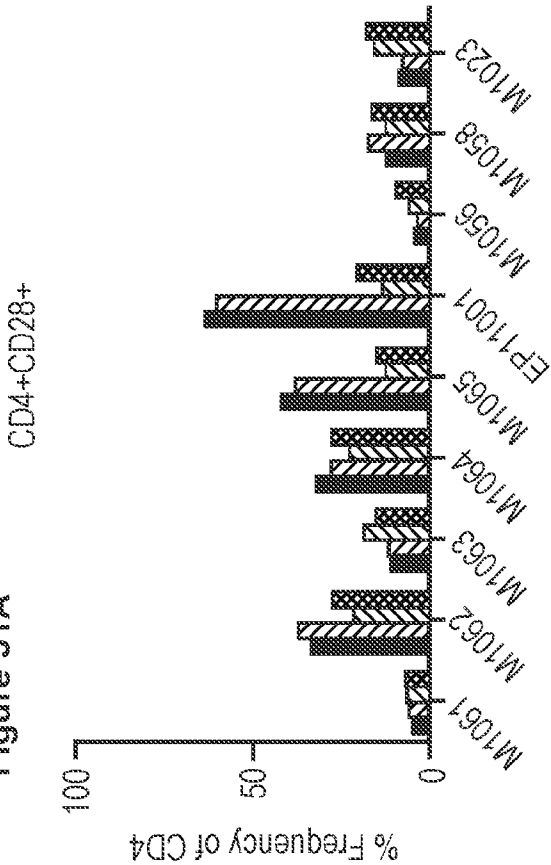


T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.9546	0.4107
Summary	ns	ns
Significant	No	No



	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	84.94	85.77	83.77	81.93
SD	24.74	32.36	8.17	8.75
SEM	8.246	10.79	2.723	2.917

Figure 51A

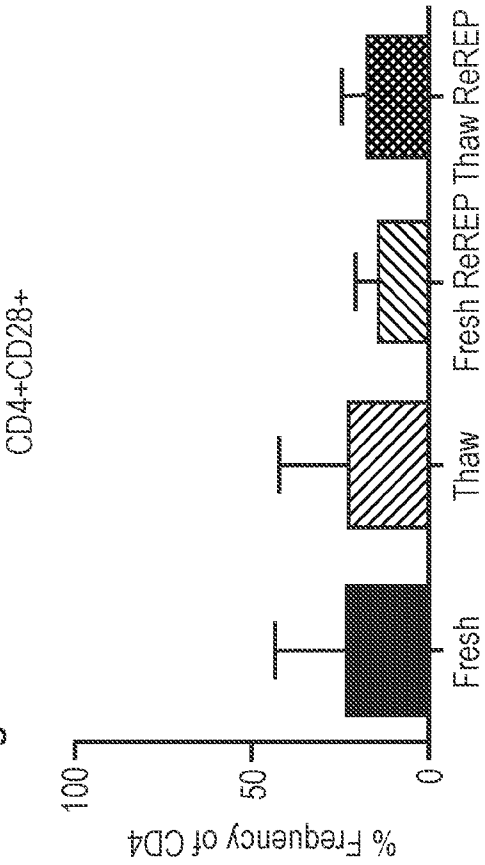


Fresh
Thaw
Fresh ReREP
Thaw ReREP

SUBSTITUTE SHEET (RULE 26)

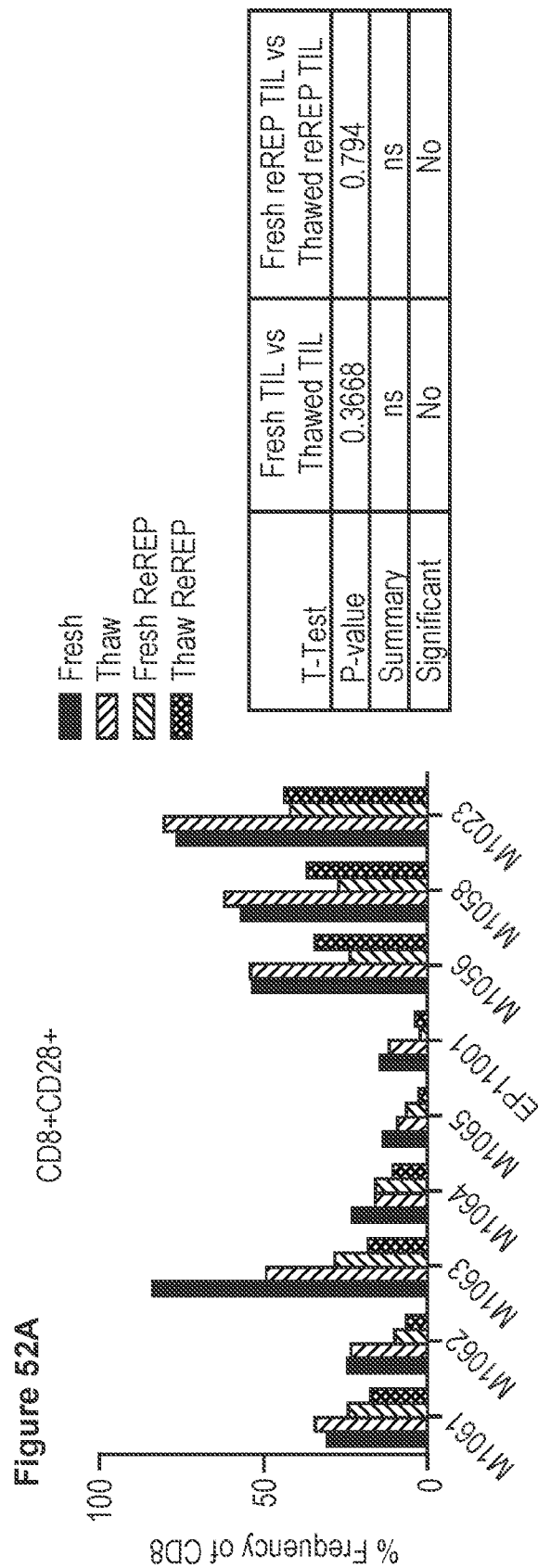
T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.8745	0.0205
Summary	ns	*
Significant	No	Yes

Figure 51B

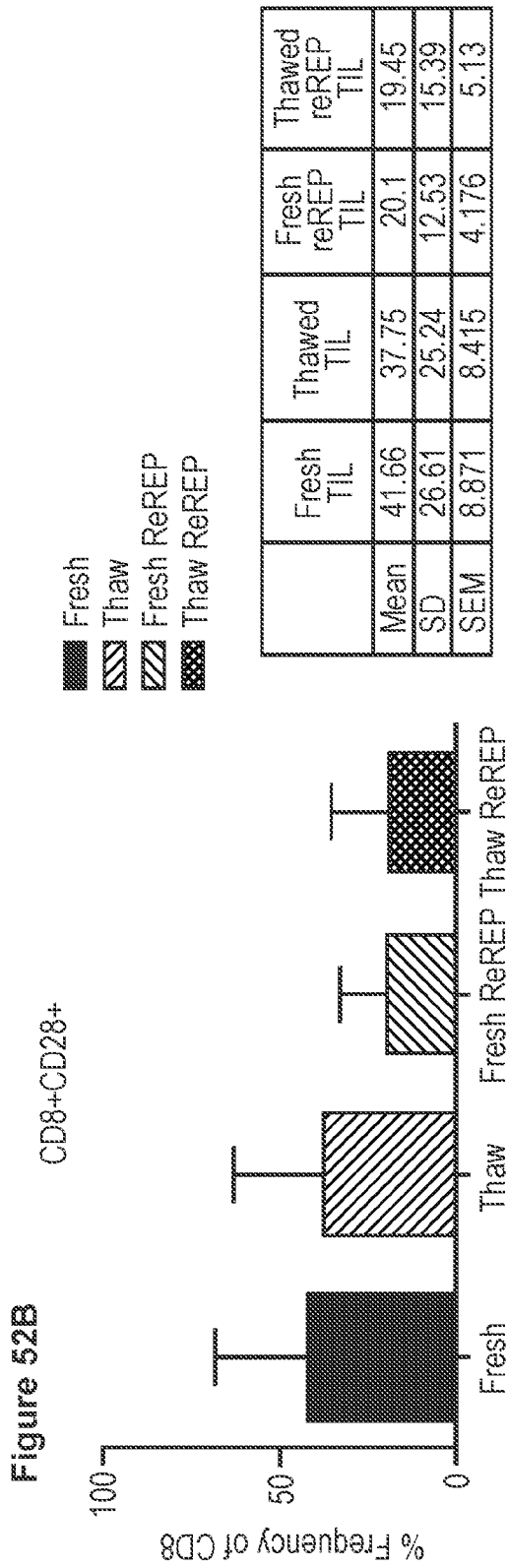


Fresh
Thaw
Fresh ReREP
Thaw ReREP

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	23.28	23.1	14.39	17.39
SD	20.43	19.02	5.915	7.078
SEM	0.81	0.341	1.372	2.359

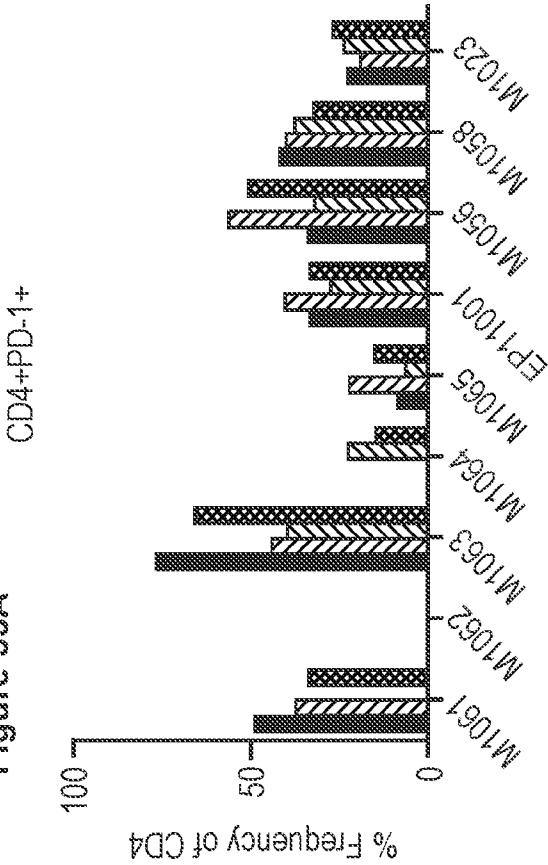


T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.3668	0.794
Summary	ns	ns
Significant	No	No



	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	41.66	37.75	20.1	19.45
SD	26.61	25.24	12.53	15.39
SEM	8.871	8.415	4.176	5.13

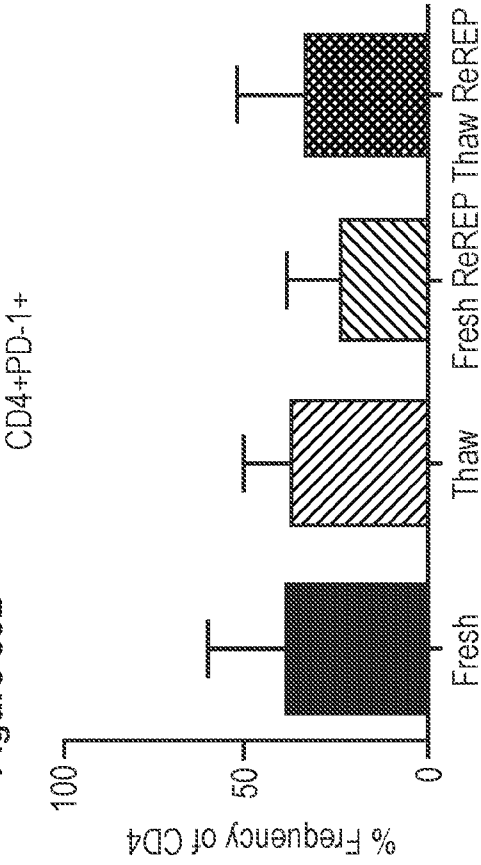
Figure 53A



Fresh
Thaw
Fresh ReREP
Thaw ReREP

SUBSTITUTE SHEET (RULE 26)

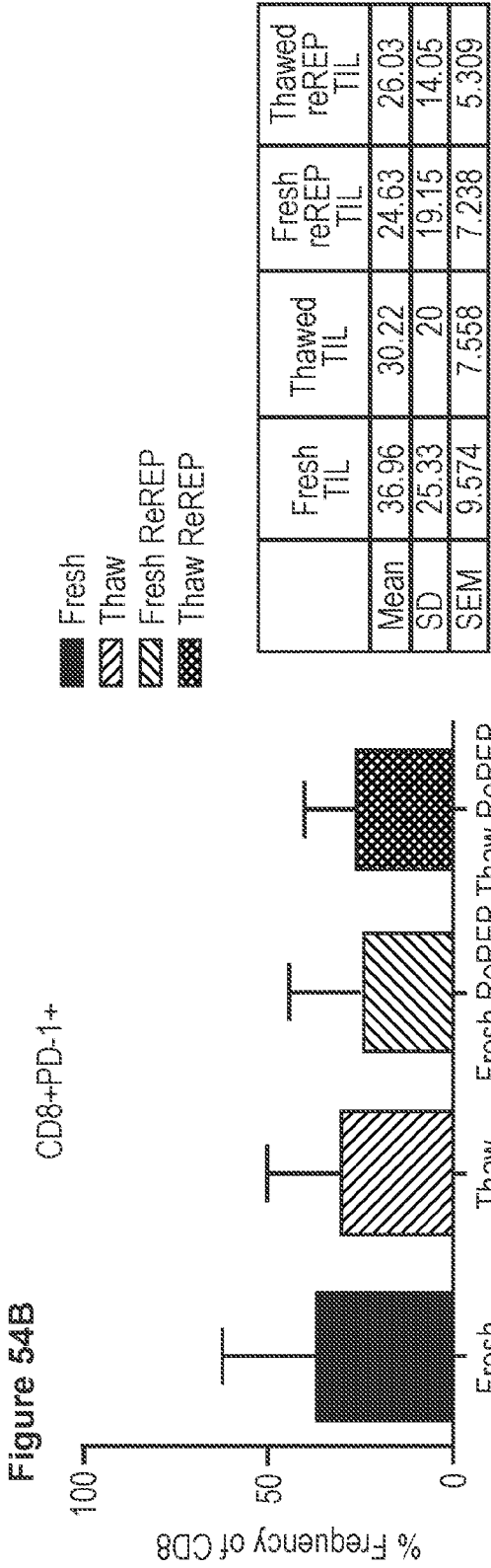
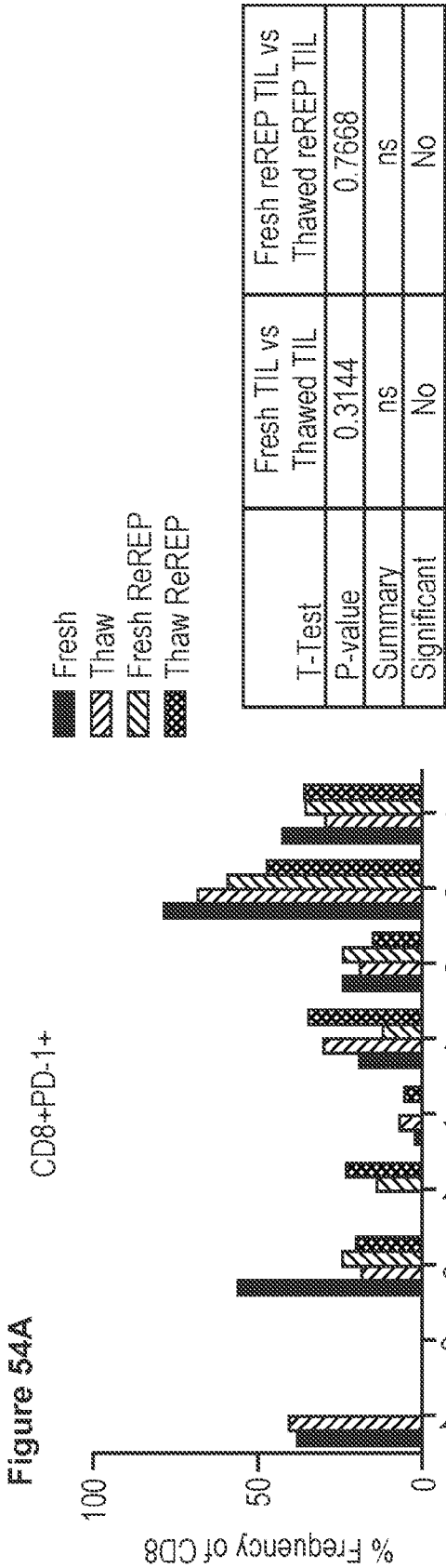
Figure 53B

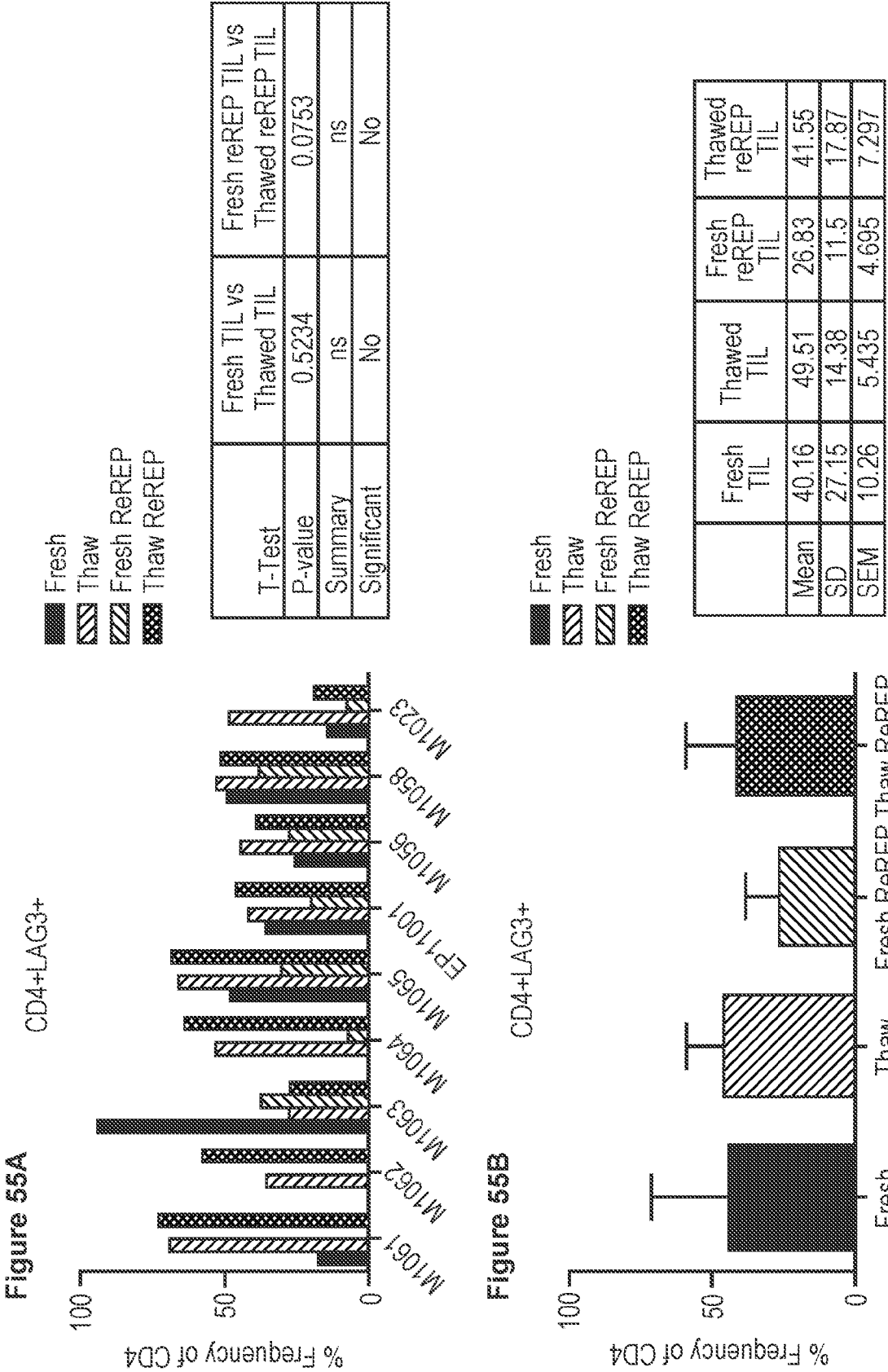


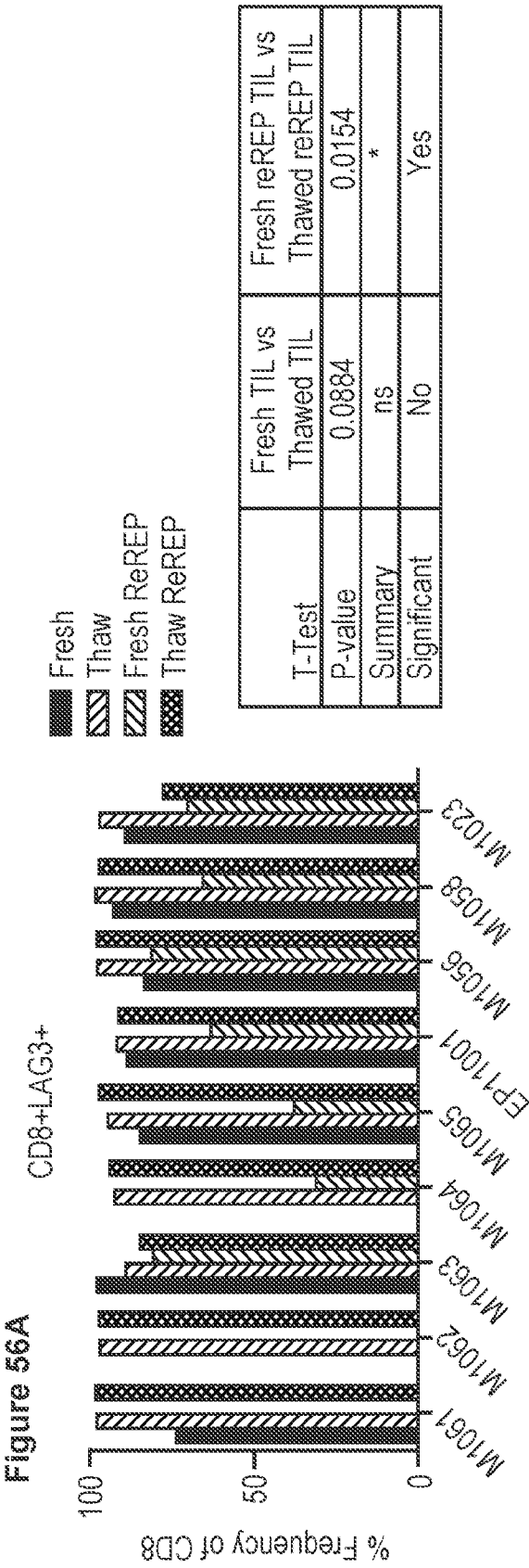
Fresh
Thaw
Fresh ReREP
Thaw ReREP

T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.9089	0.0912
Summary	ns	ns
Significant	No	No

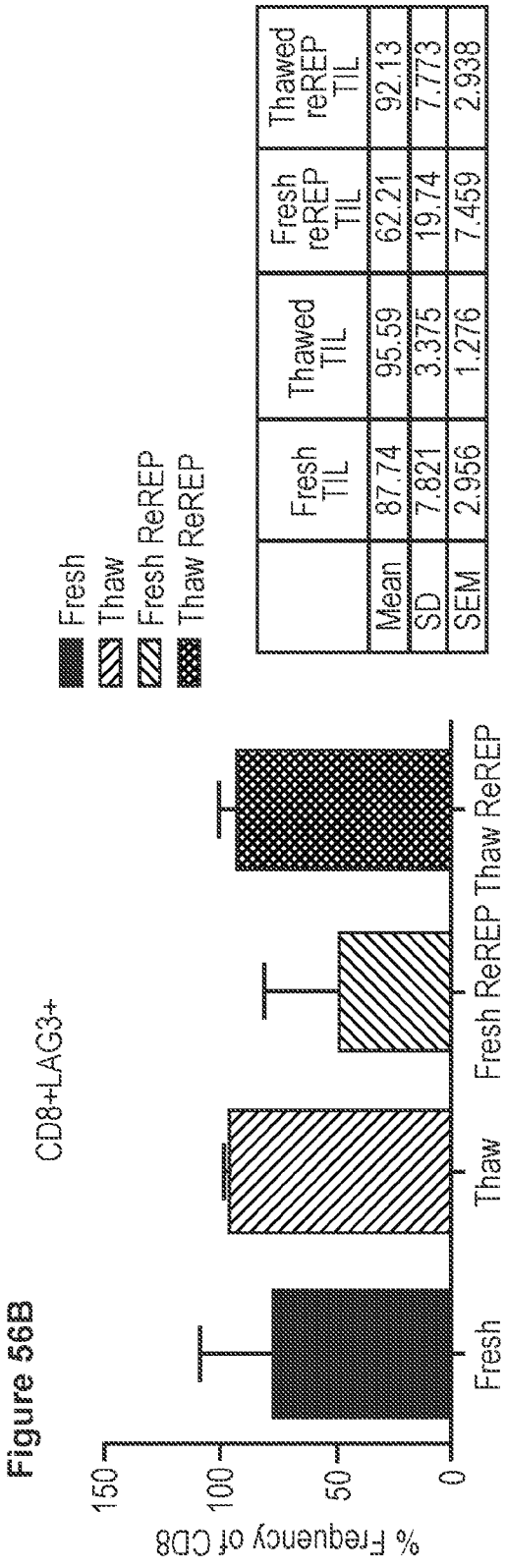
	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	37.85	37.03	24.13	34.34
SD	21.7	12.75	14.27	17.29
SEM	8.202	4.819	5.047	6.113



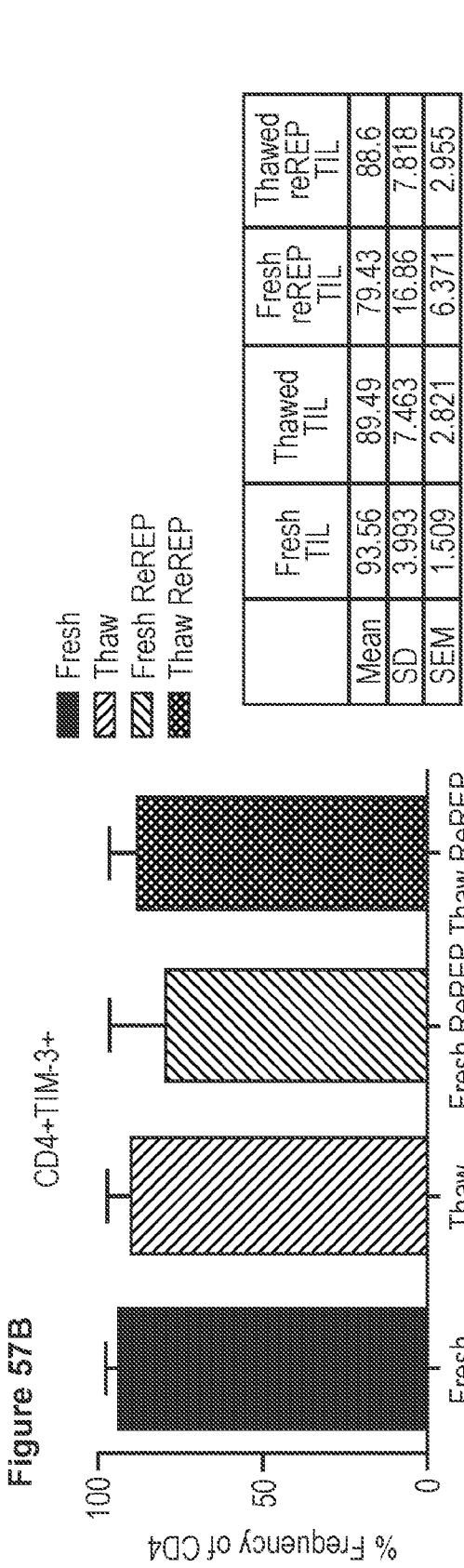
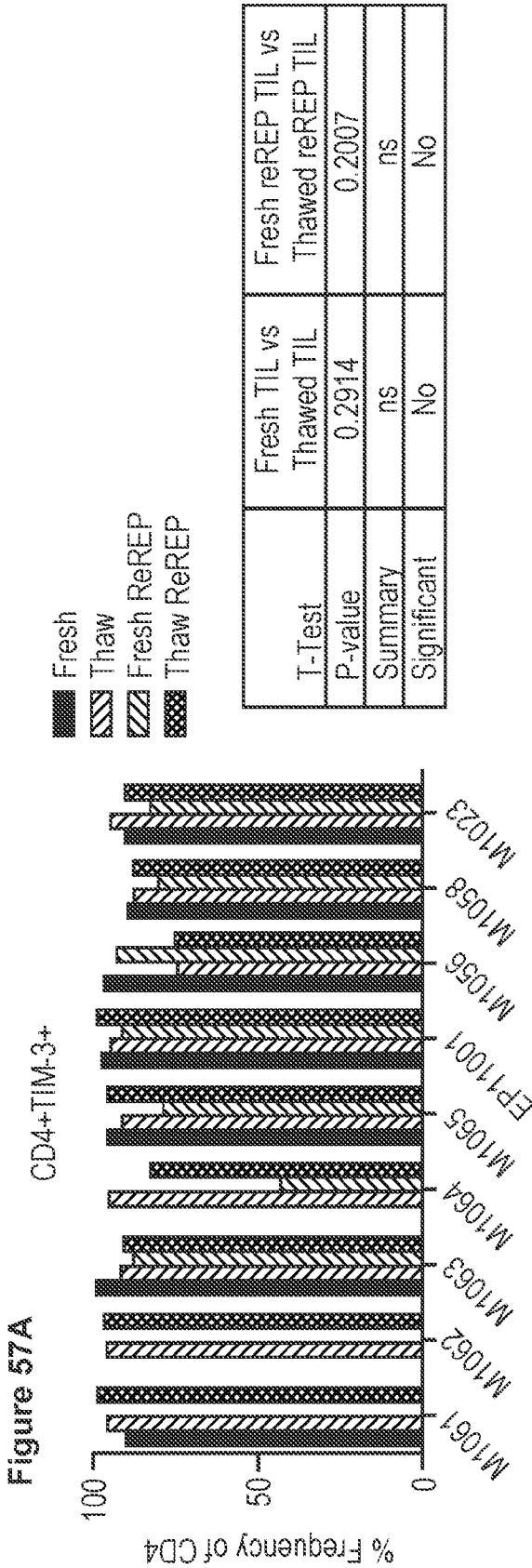




T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.0884	0.0154
Summary	ns	*
Significant	No	Yes

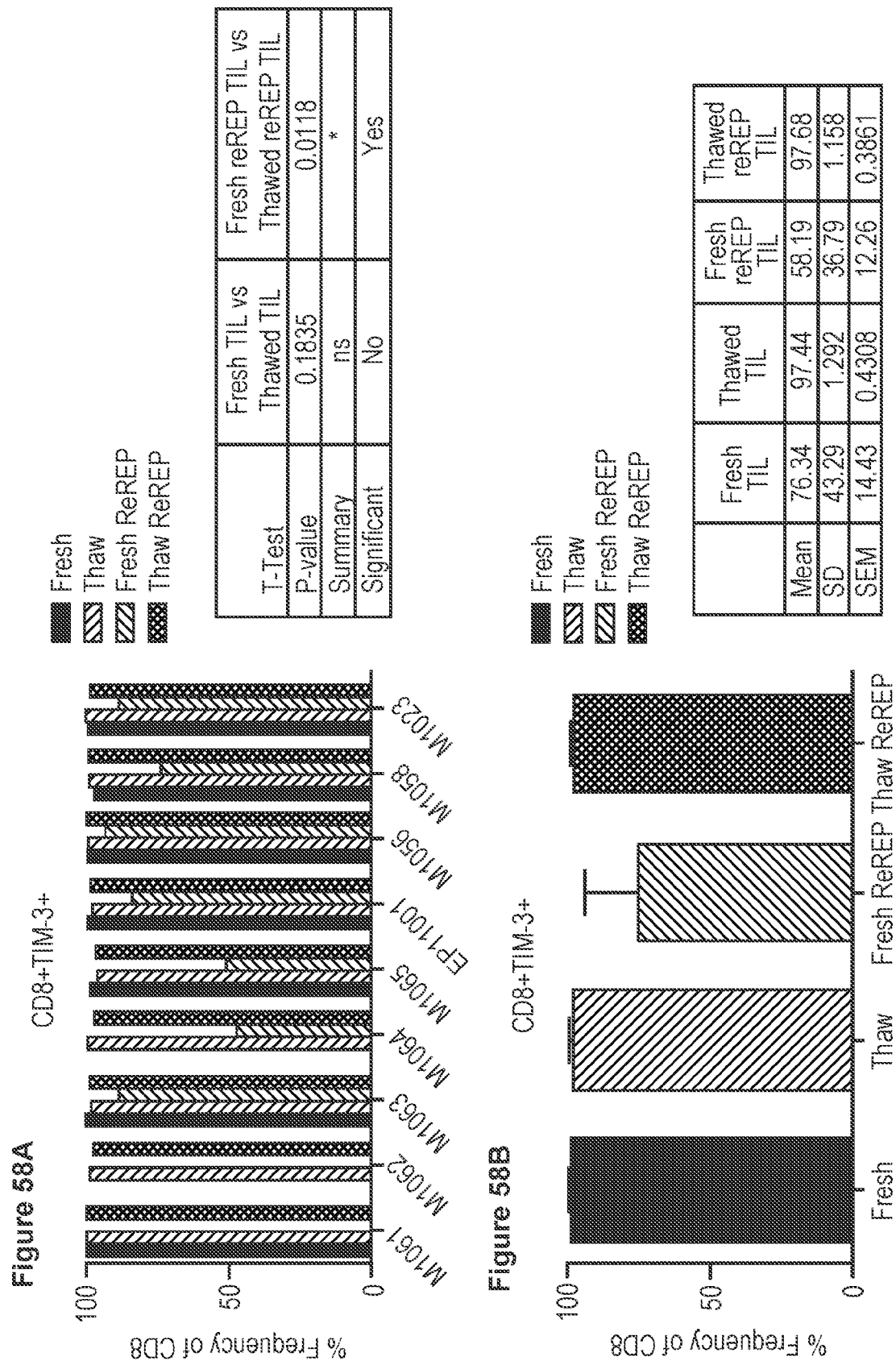


	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	87.74	95.59	62.21	92.13
SD	7.821	3.375	19.74	7.773
SEM	2.956	1.276	7.459	2.938



T-Test	Fresh TIL vs Thawed TIL	Fresh reREP TIL vs Thawed reREP TIL
P-value	0.2914	0.2007
Summary	ns	ns
Significant	No	No

	Fresh TIL	Thawed TIL	Fresh reREP TIL	Thawed reREP TIL
Mean	93.56	89.49	79.43	88.6
SD	3.993	7.463	16.86	7.818
SEM	1.509	2.821	6.371	2.955



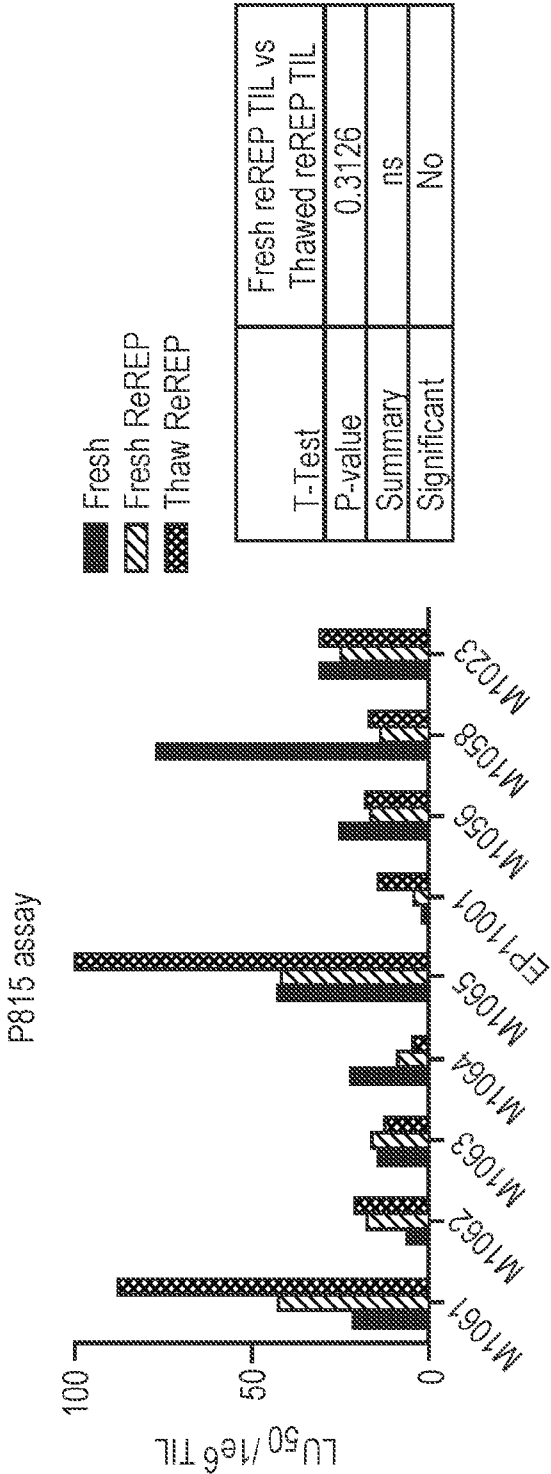


Figure 59

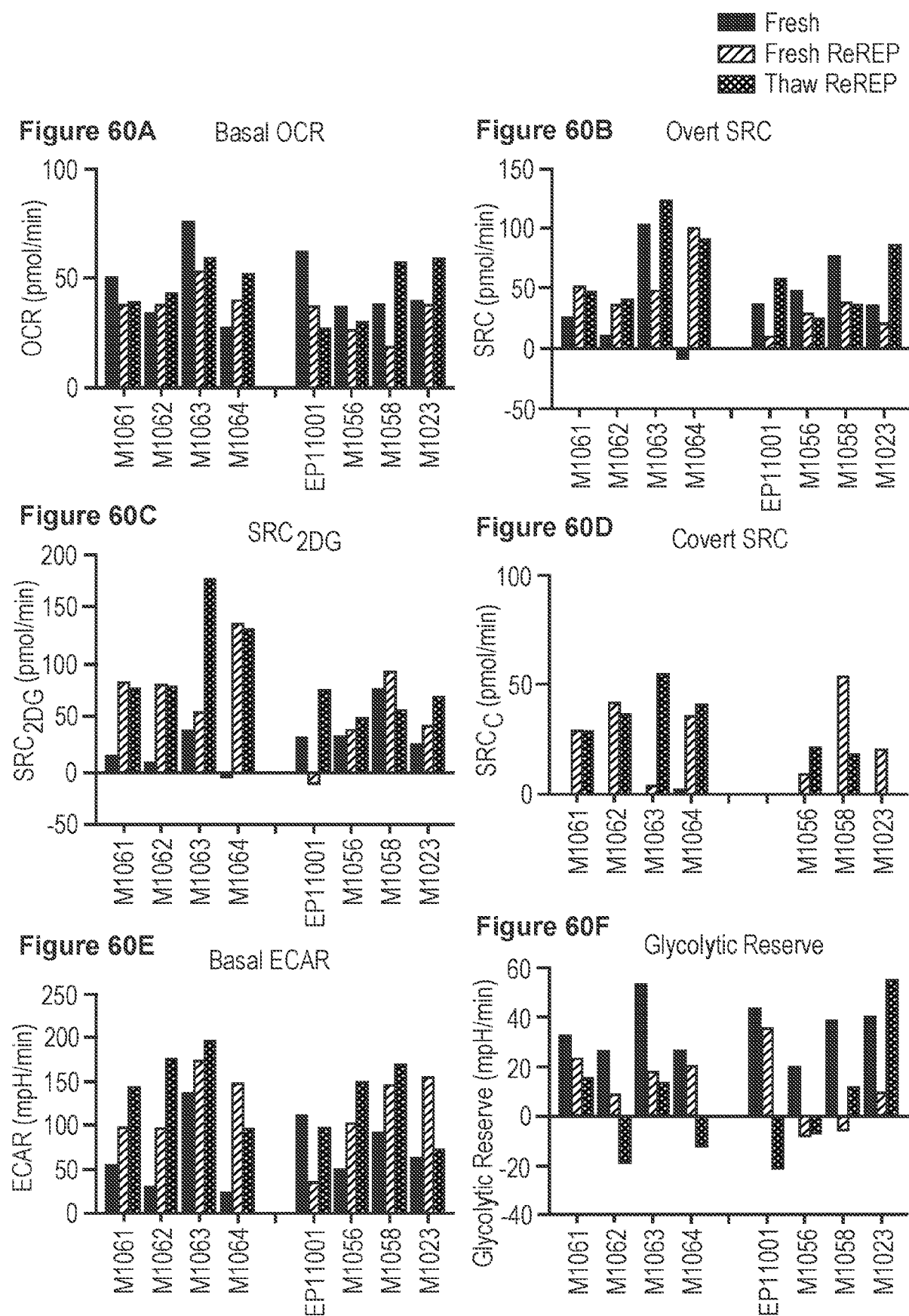


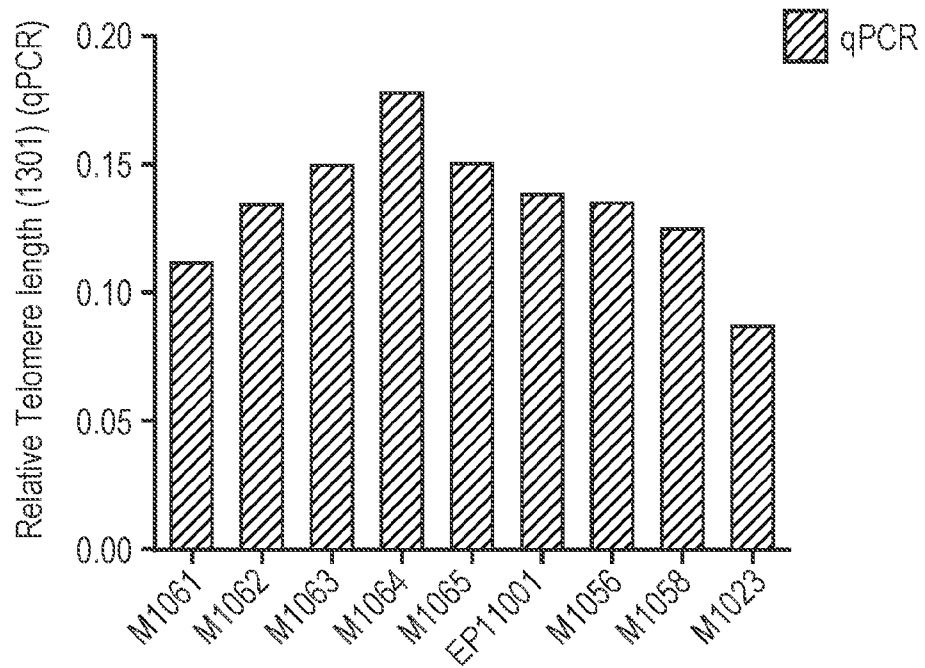
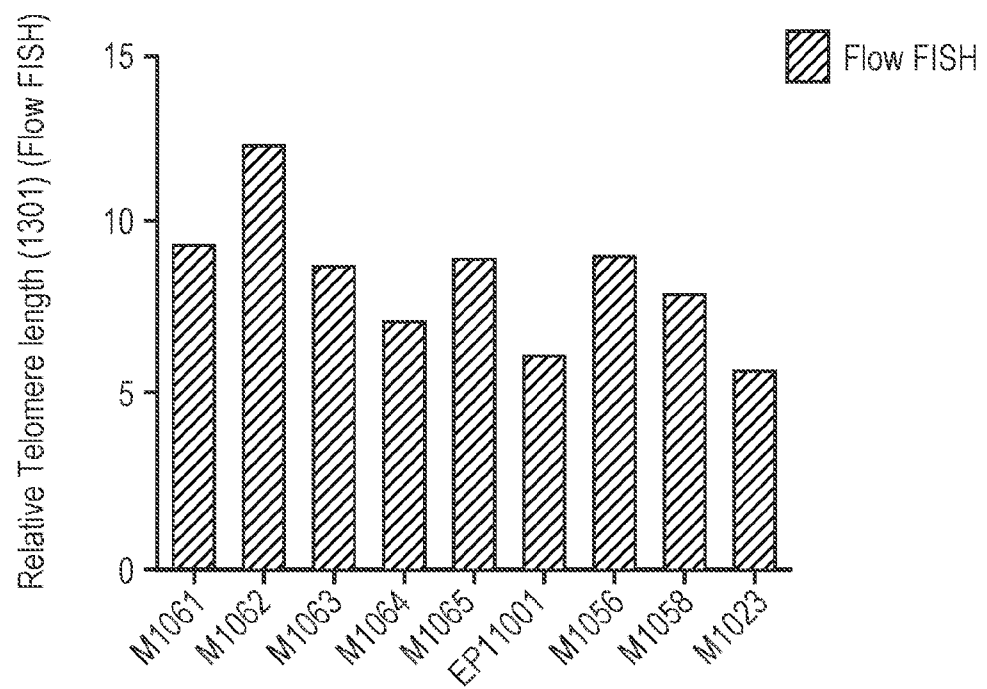
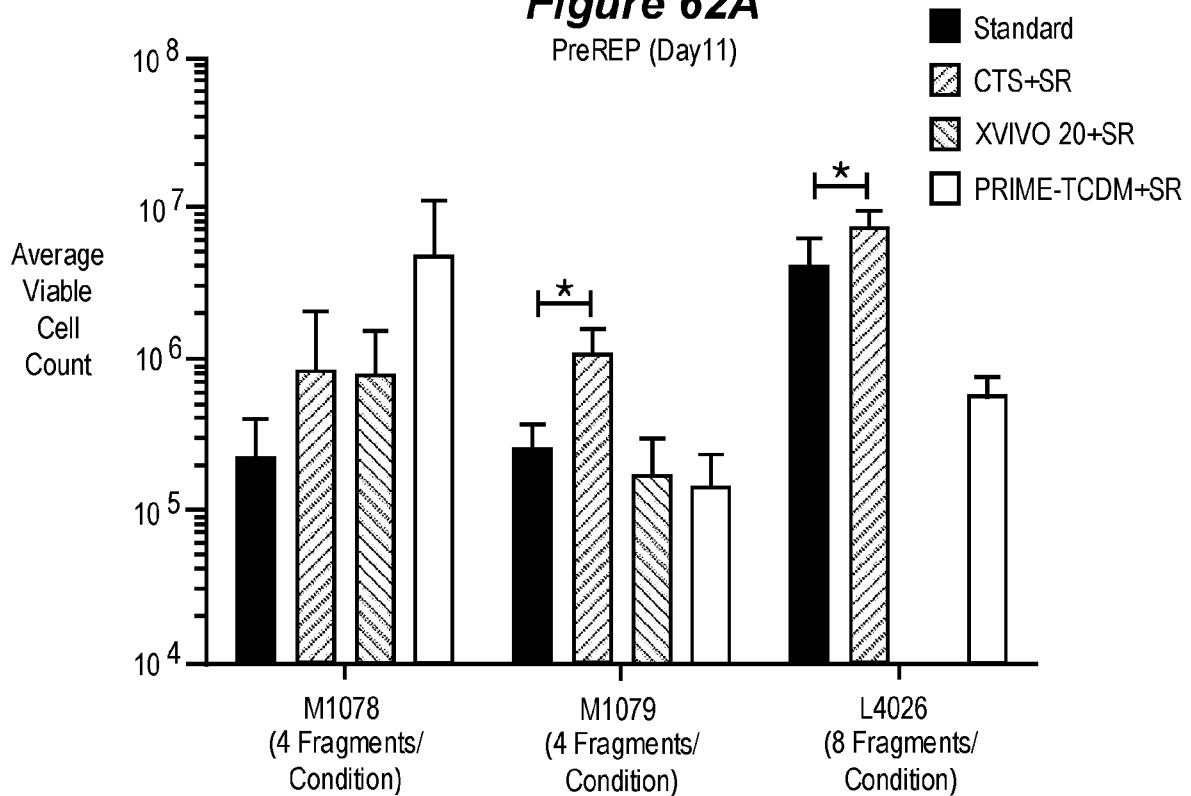
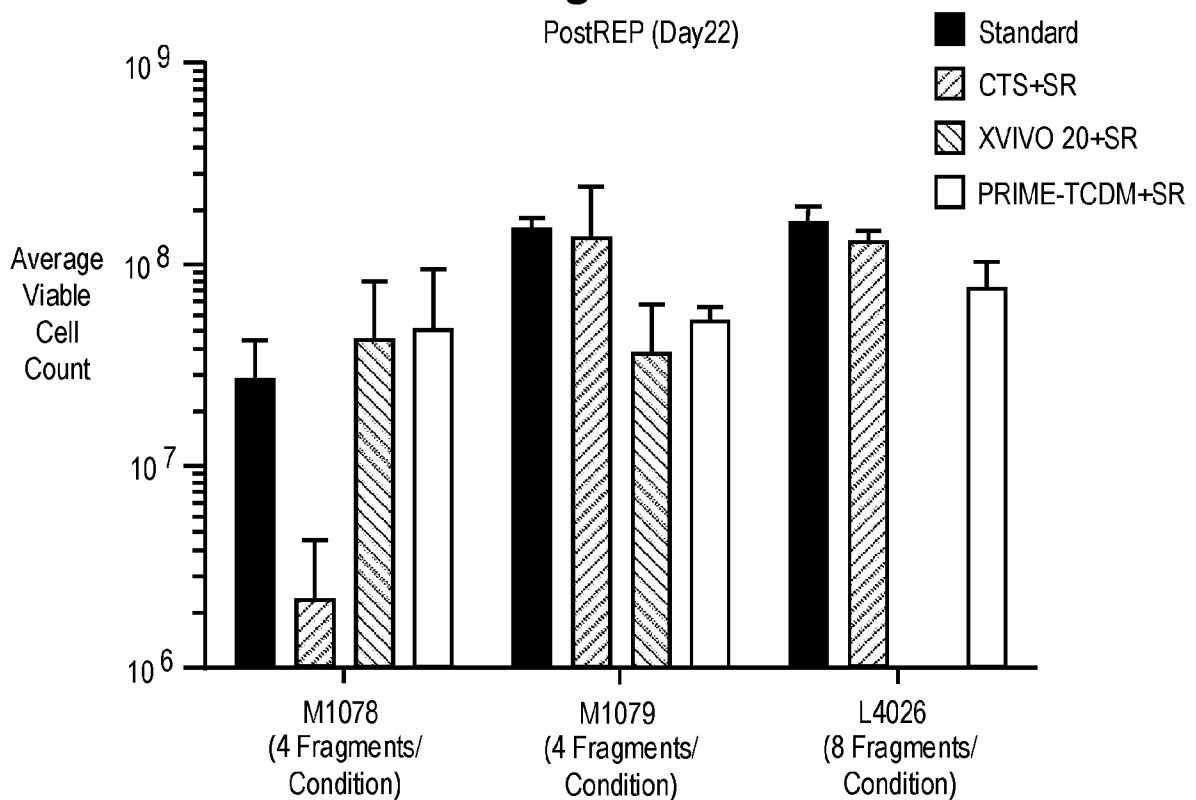
Figure 61A**Figure 61B**

Figure 62A

PreREP (Day11)

**Figure 62B**

PostREP (Day22)



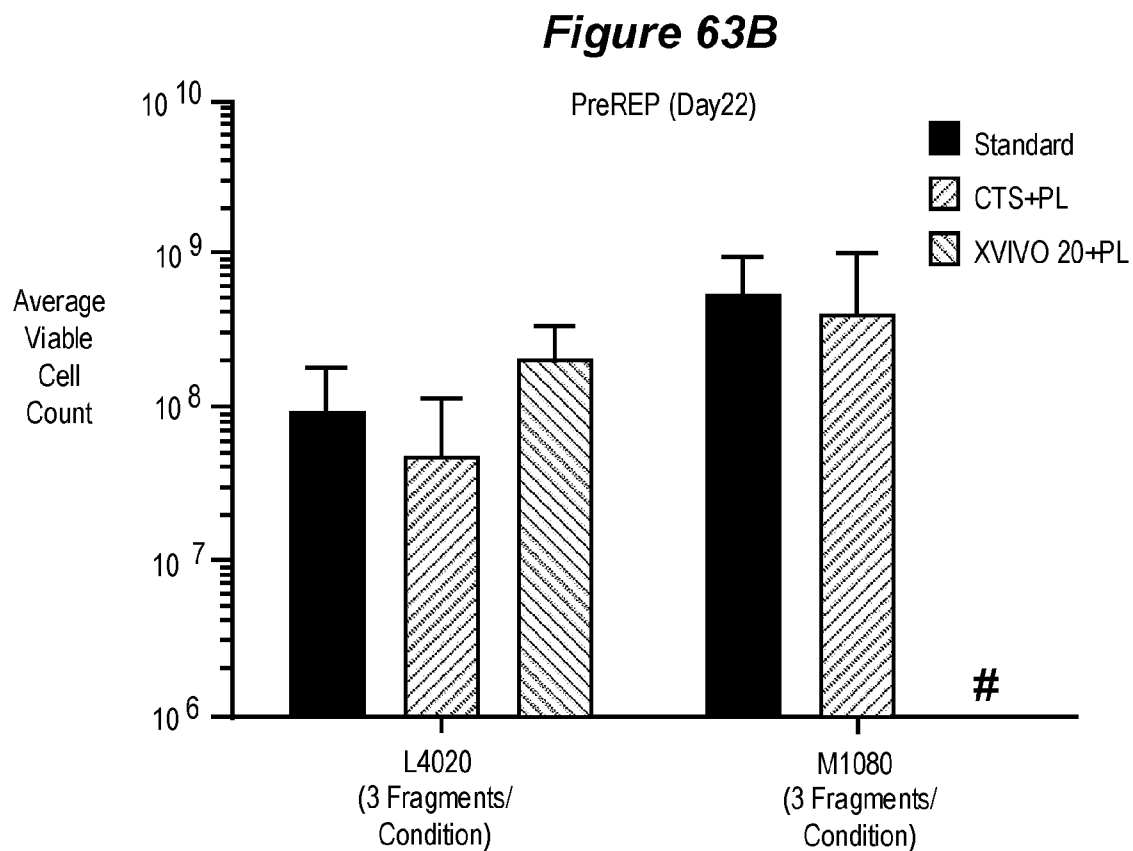
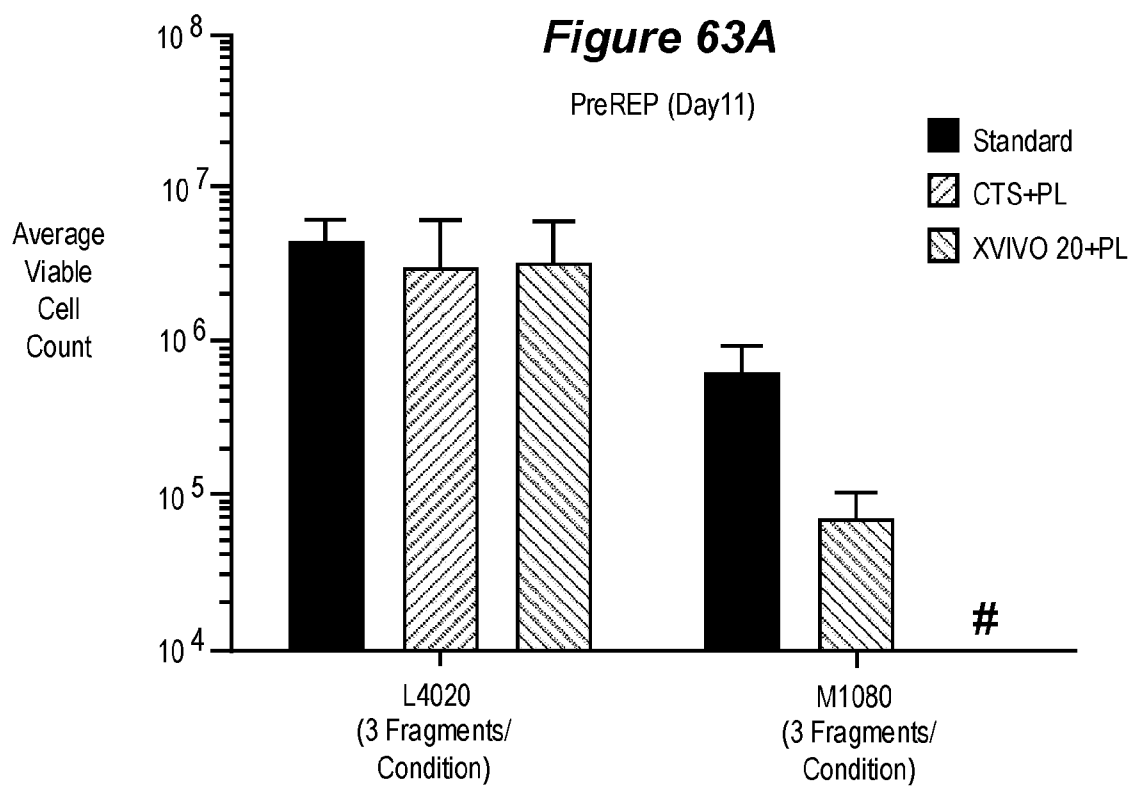


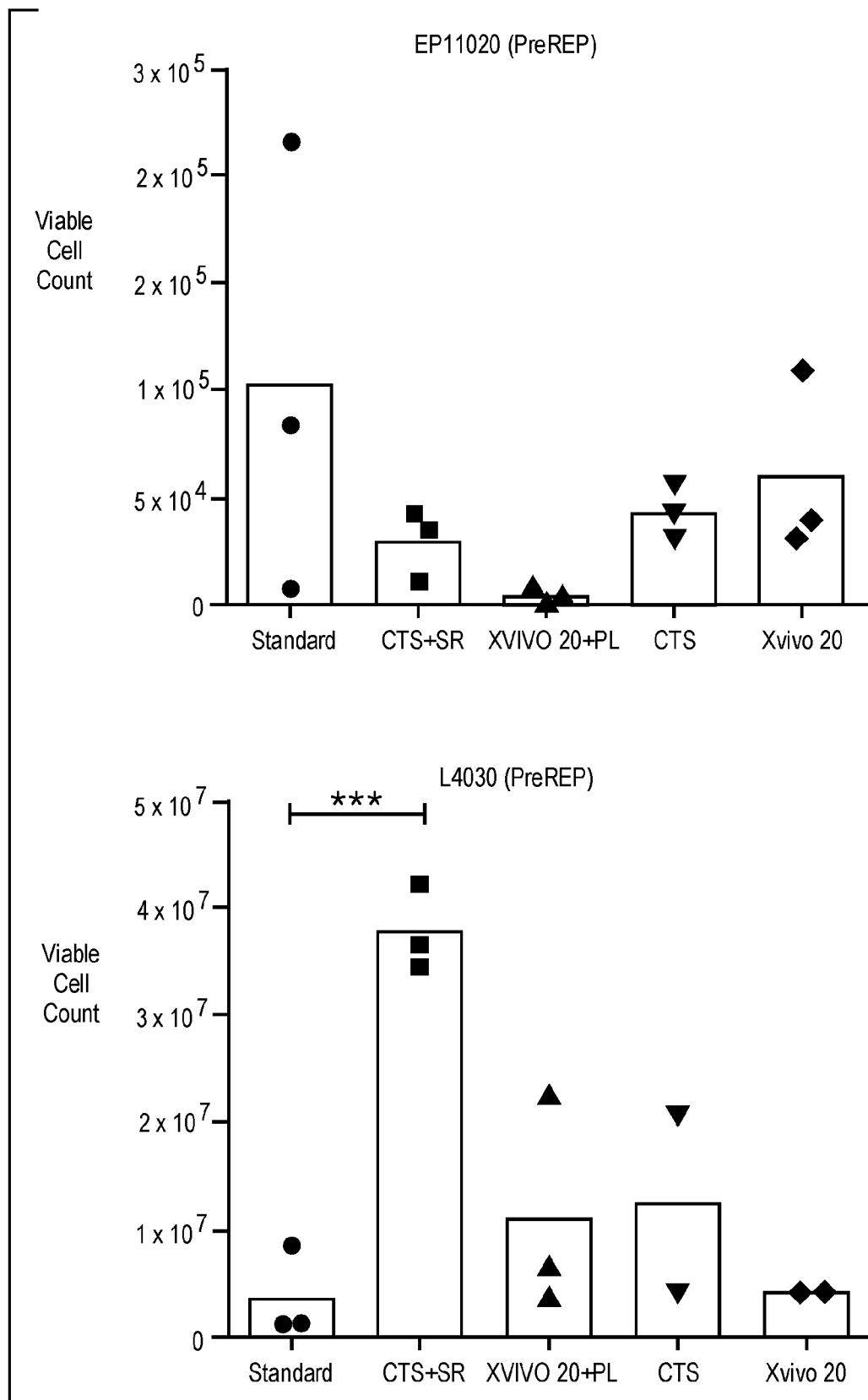
Figure 64A

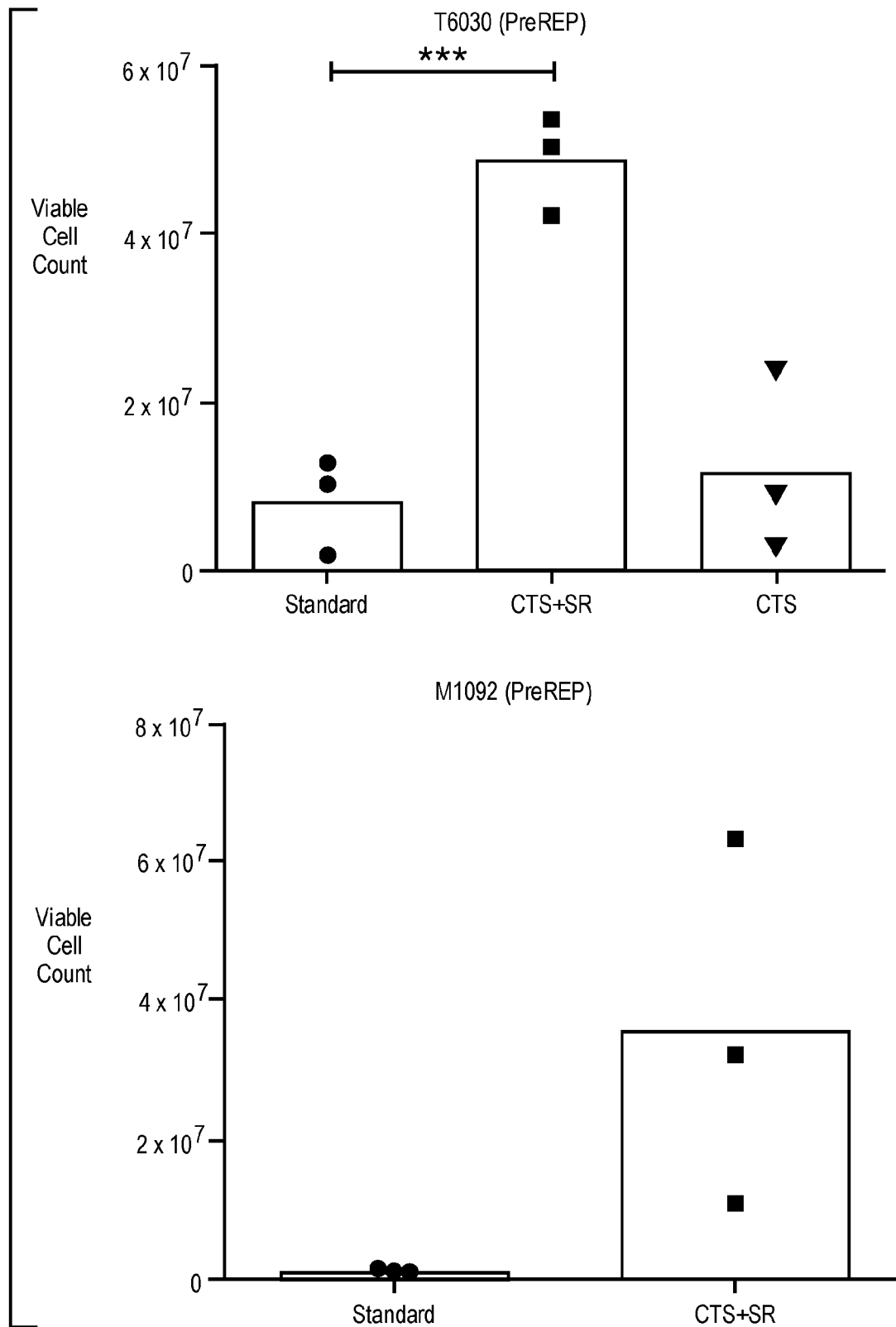
Figure 64A Continued

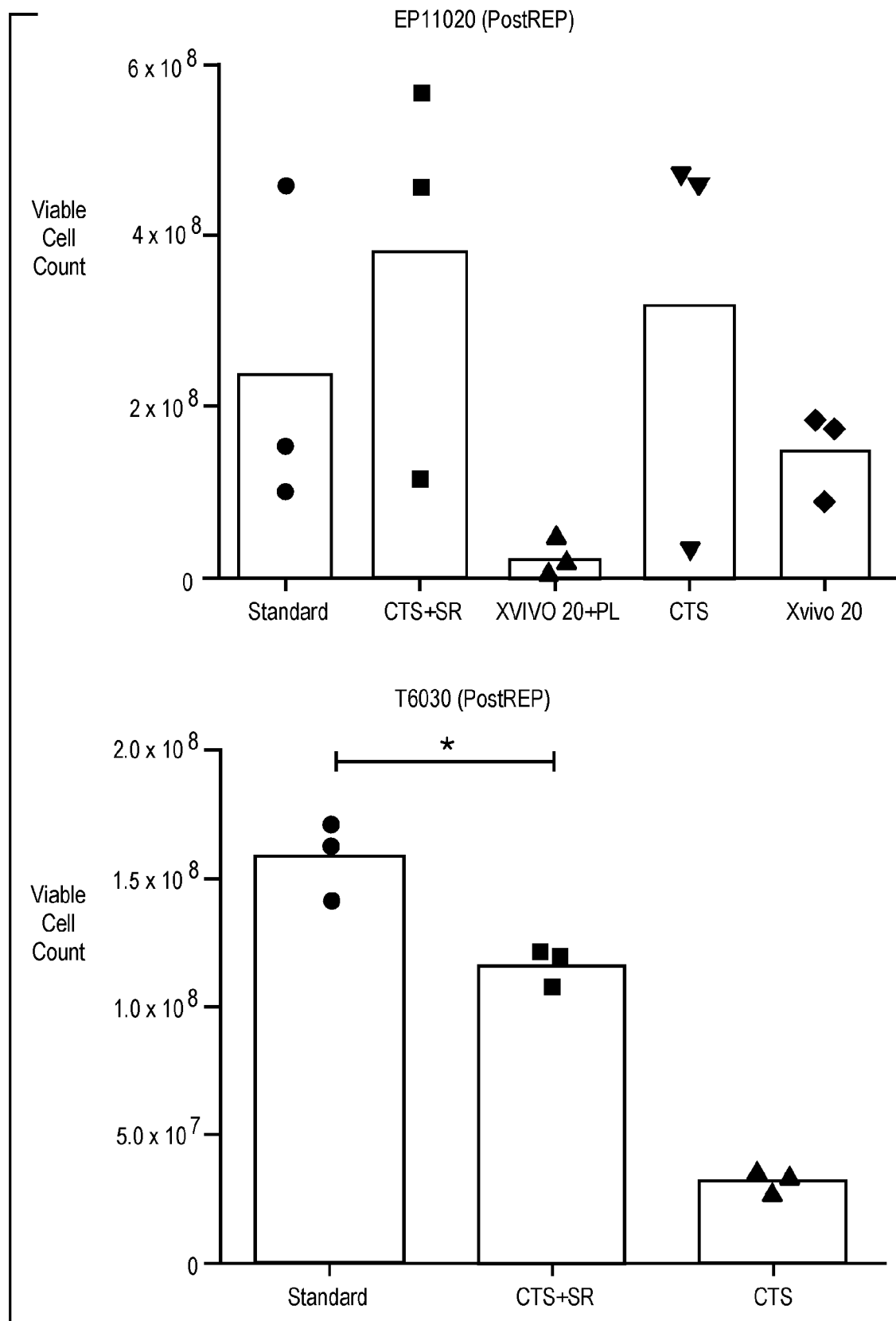
Figure 64B

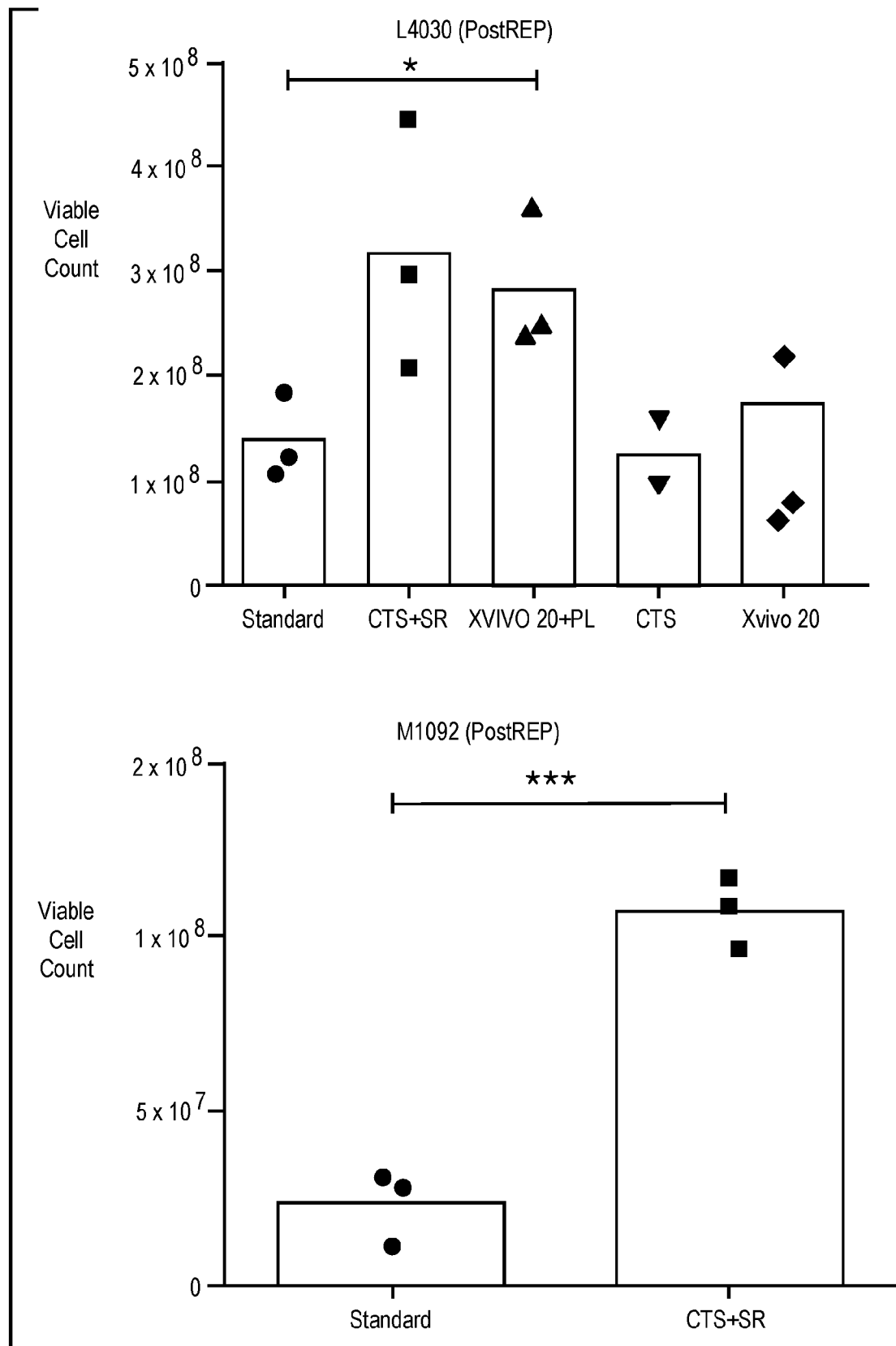
Figure 64B Continued

Figure 65A

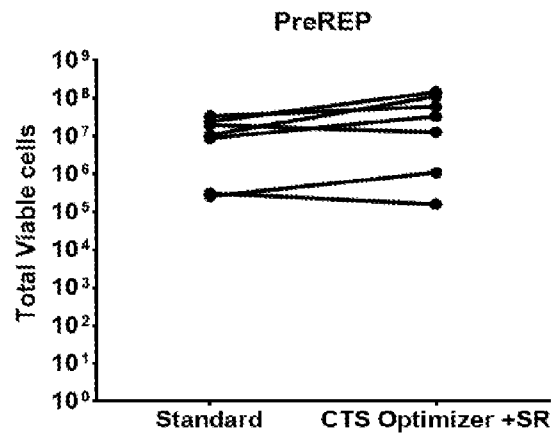


Figure 65B

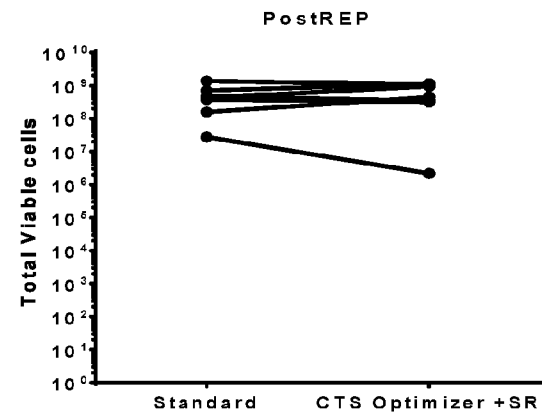


Figure 65C

	Pre-REP Cell count		Post-REP Cell count	
	Standard	CTS Optimizer +SR	Standard	CTS Optimizer +SR
M1078	8.82E+07	3.38E+08	3.46E+09	2.73E+08
M1079	2.60E+06	1.09E+07	1.99E+10	5.61E+10
M1080				
L4020	1.98E+08	1.27E+08	4.75E+10	3.99E+10
L4026	1.68E+08	3.02E+08	8.63E+10	6.69E+10
L4030	7.05E+07	7.48E+08	2.63E+10	5.96E+10
EP11020	2.04E+06	1.06E+06	4.44E+10	7.14E+10
T6030	1.61E+08	9.64E+08	2.98E+10	2.18E+10
M1092	2.00E+07	7.05E+08	4.41E+09	2.02E+10

Figure 66

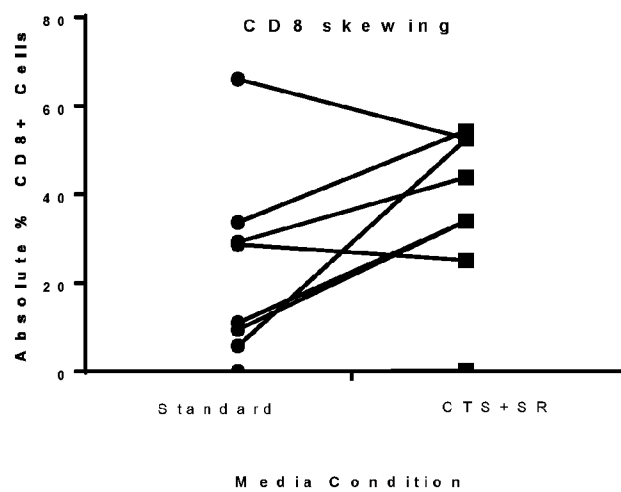
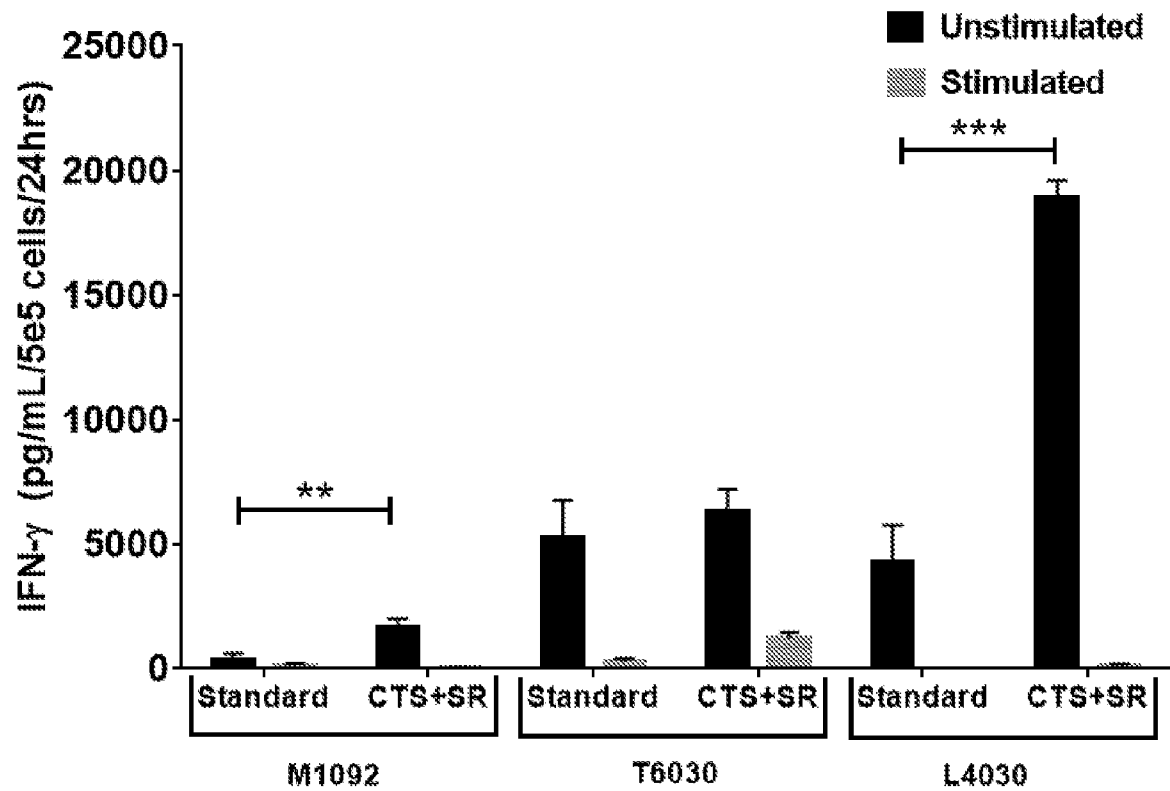


Figure 67

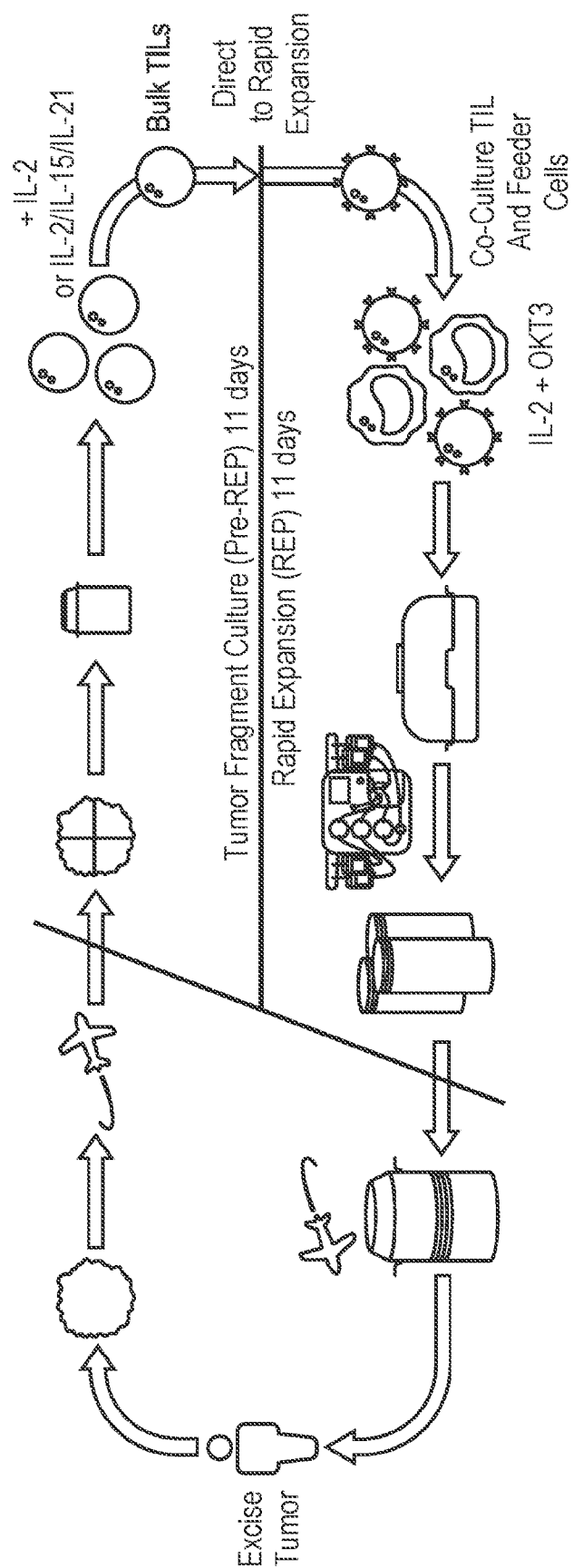


Figure 68

Figure 69A

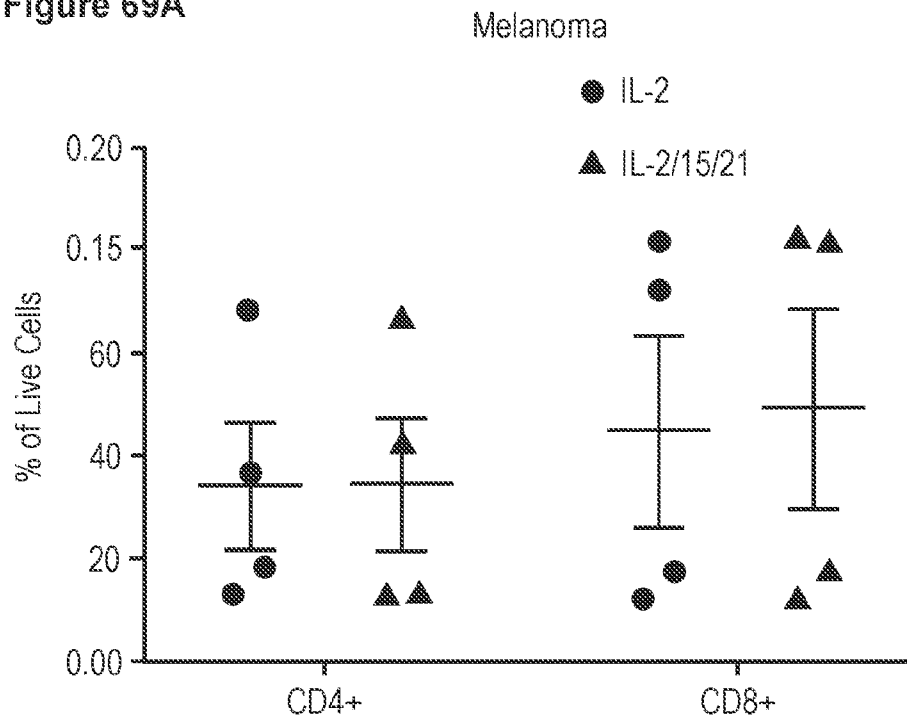


Figure 69B

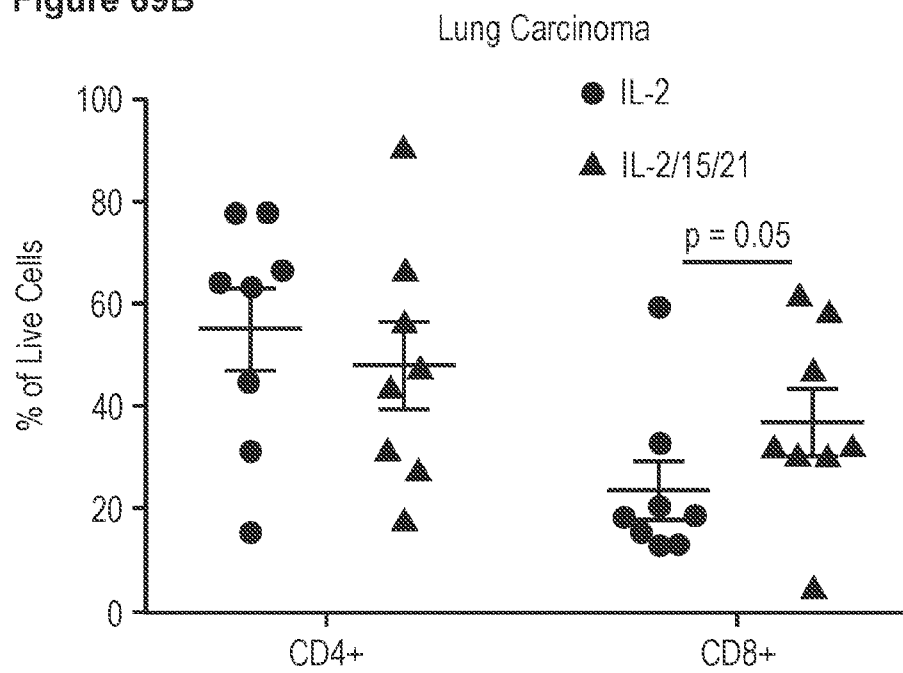


Figure 70A

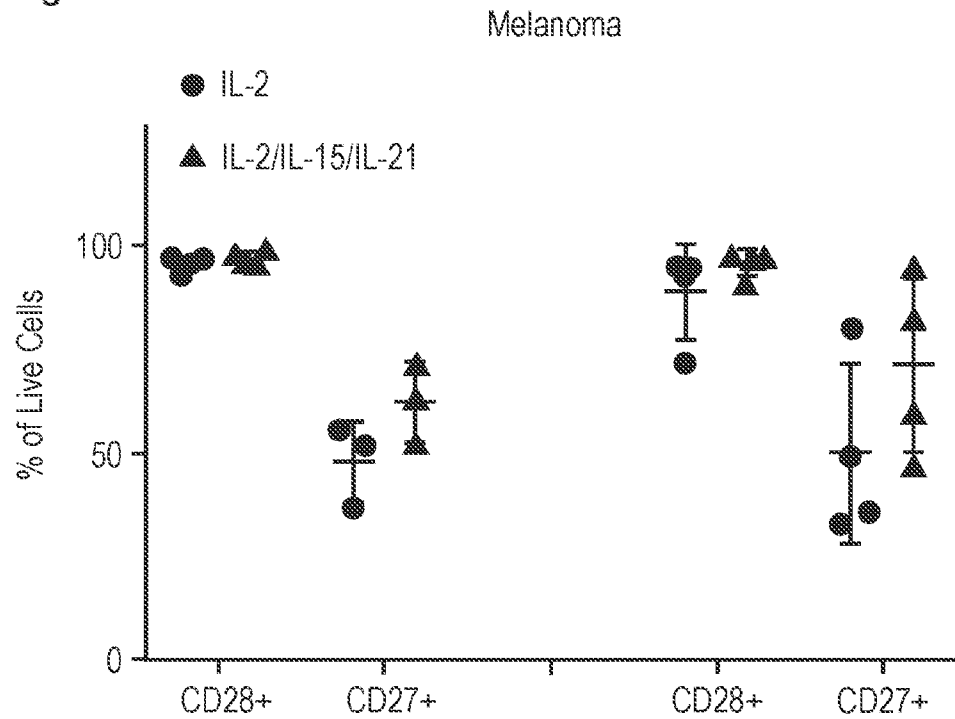


Figure 70B

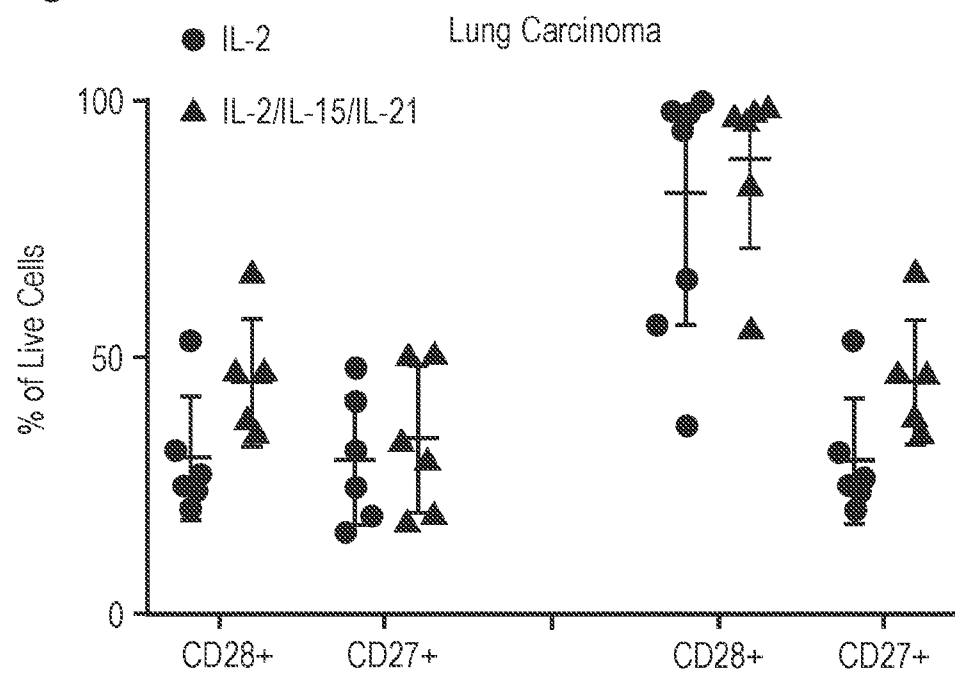


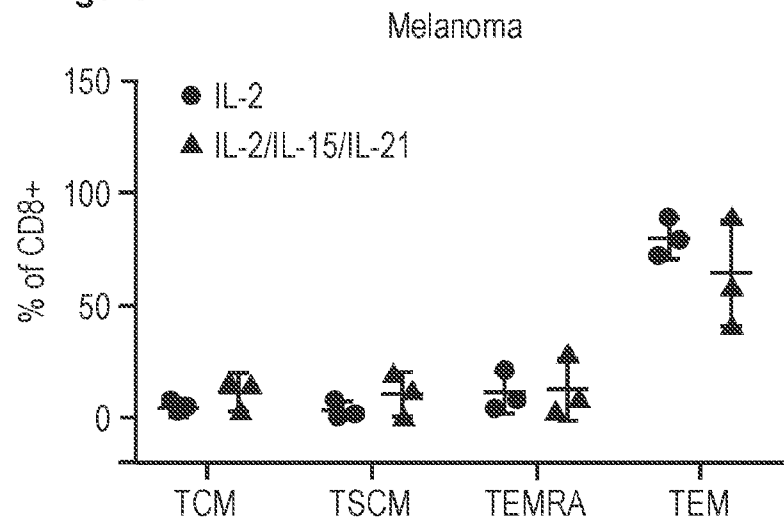
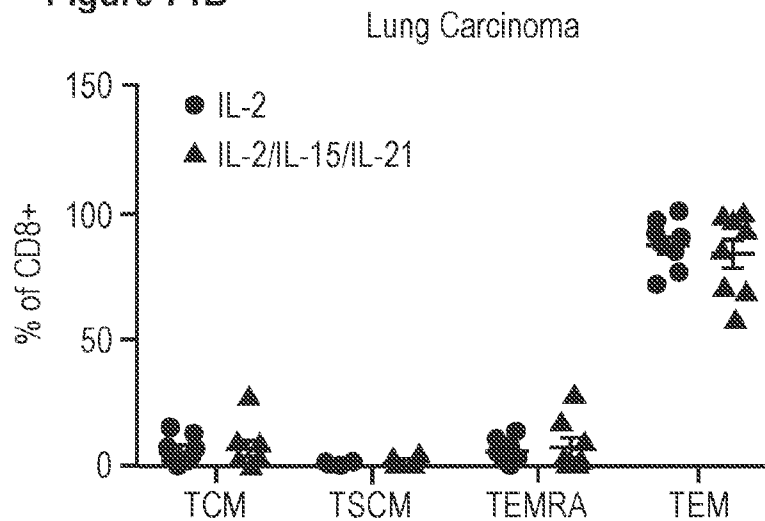
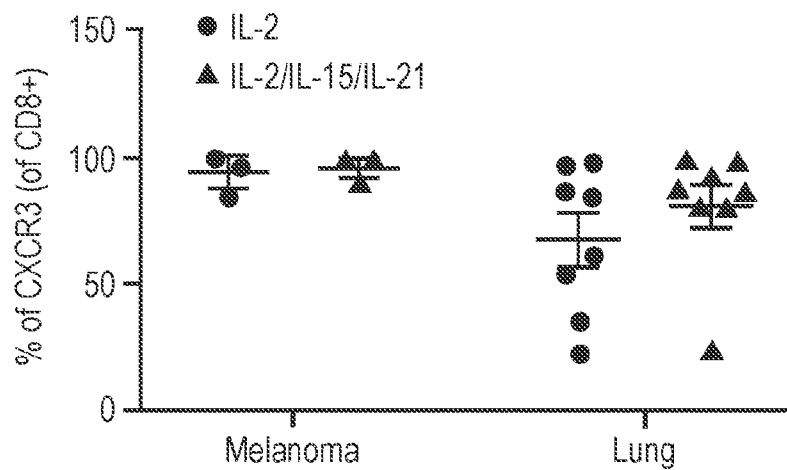
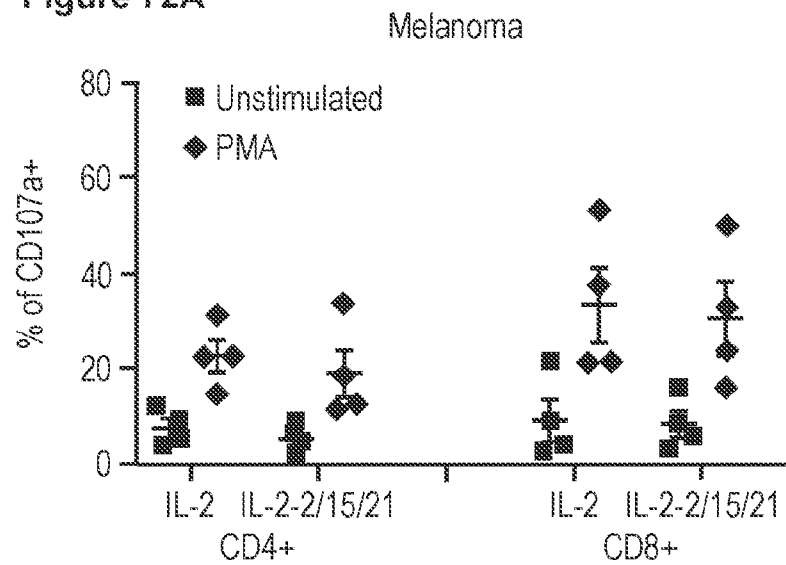
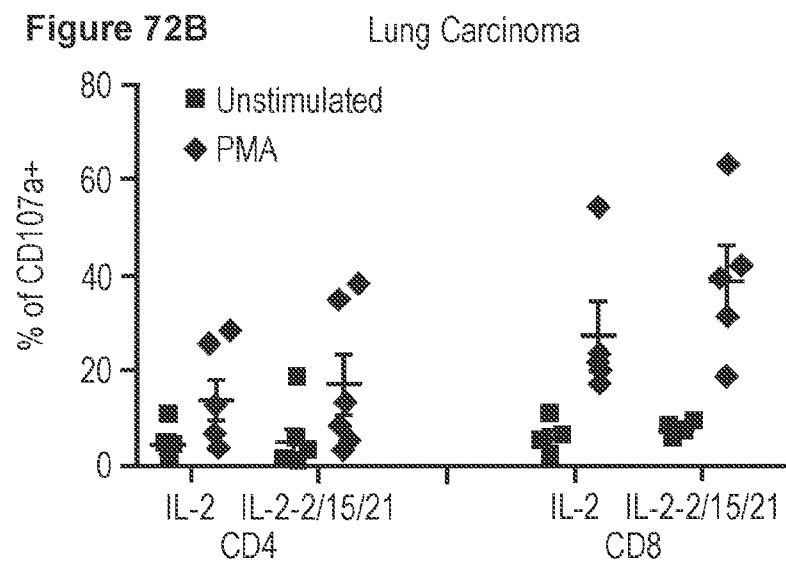
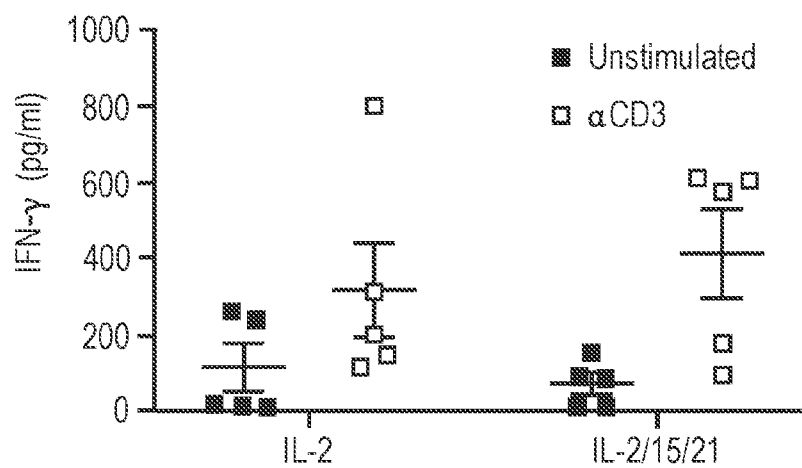
Figure 71A**Figure 71B****Figure 71C**

Figure 72A**Figure 72B****Figure 72C**

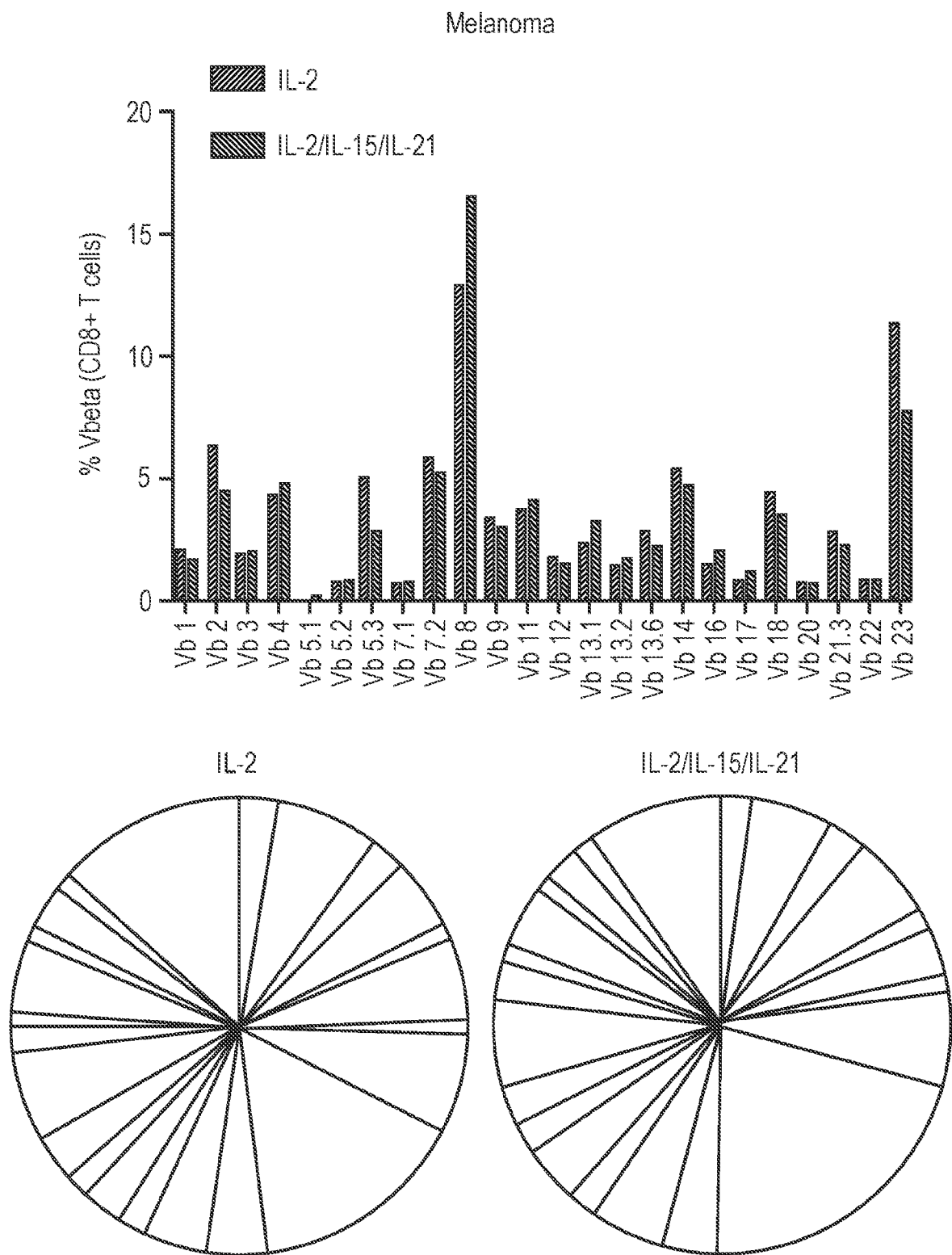


Figure 73A

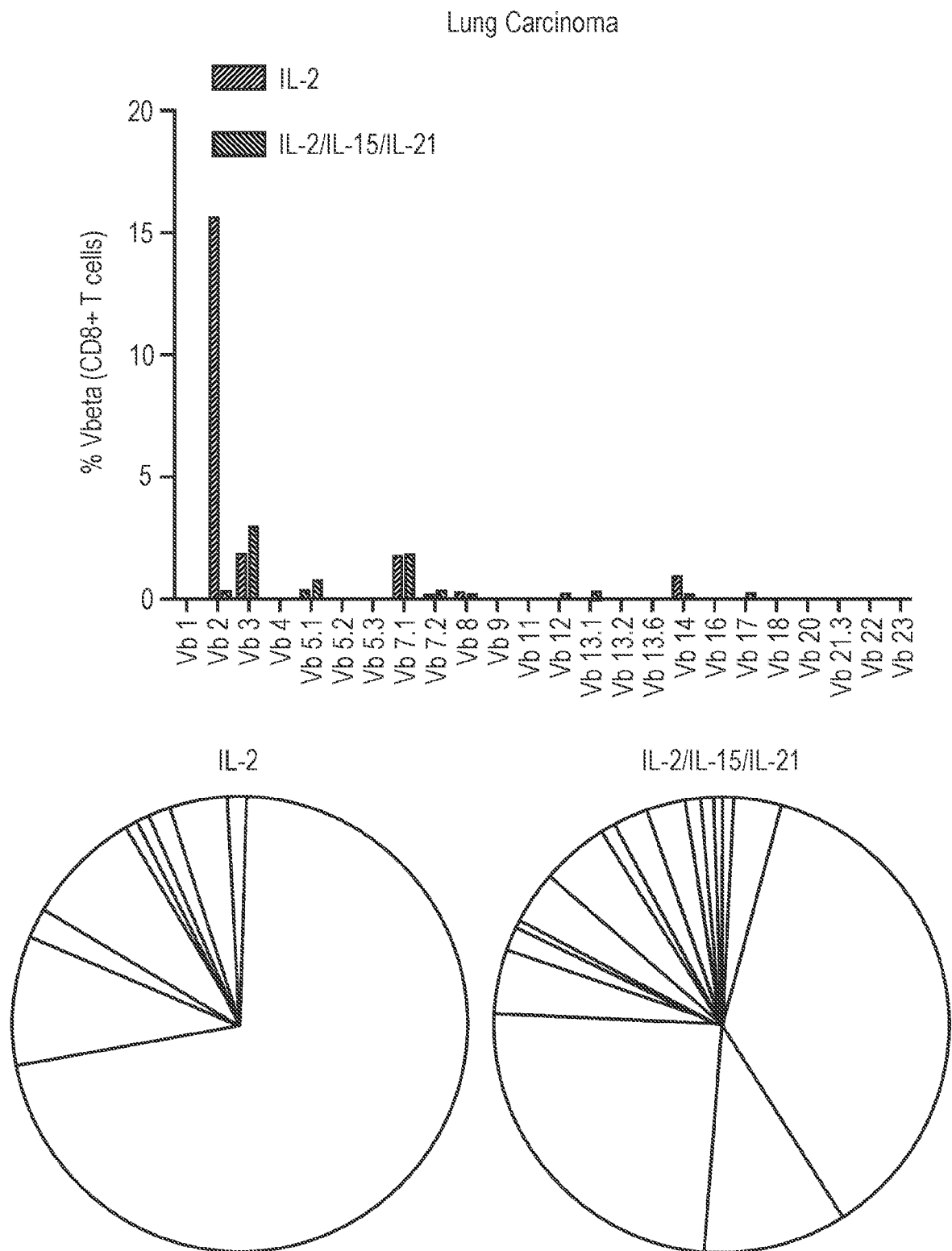


Figure 73B

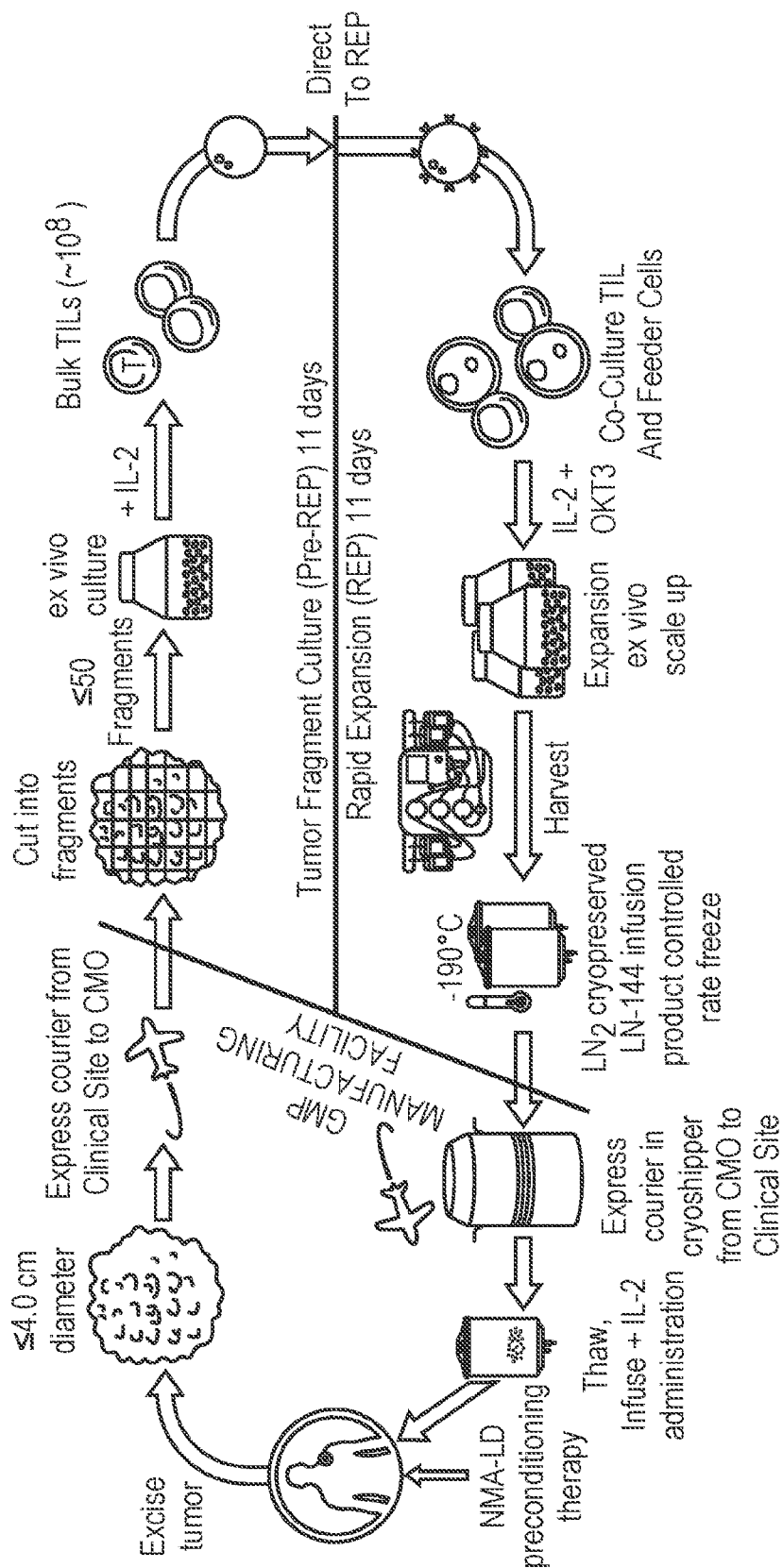


Figure 74

Figure 75B

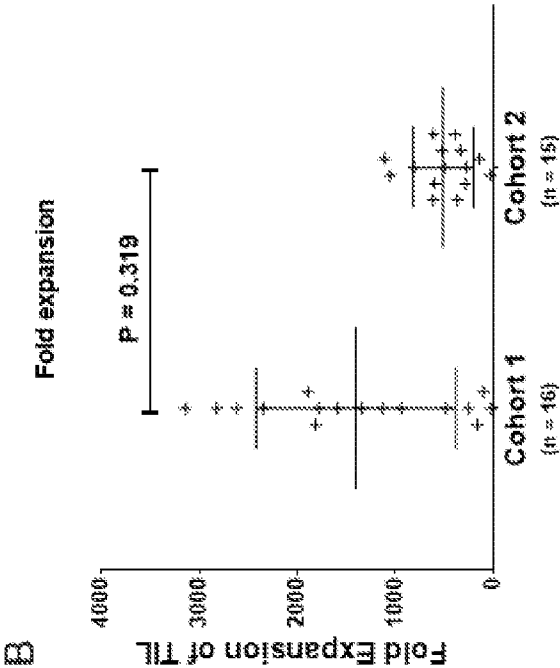


Figure 75A

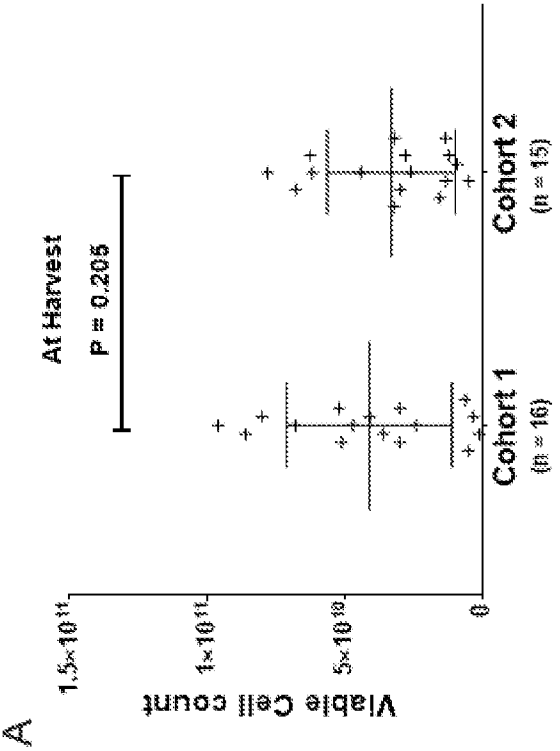


Figure 76

%CD45 CD3: Gen 1 vs. Gen 2

p=0.3 (ns)

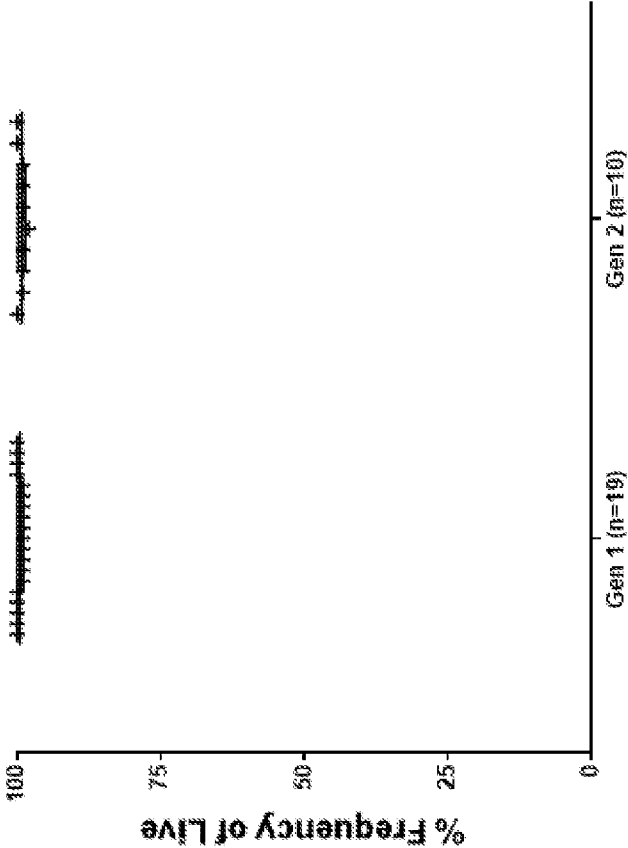


Figure 77B

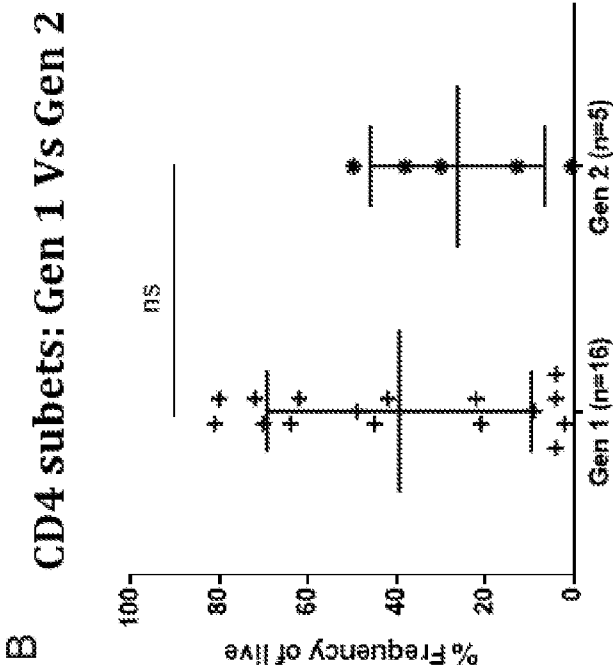


Figure 77A

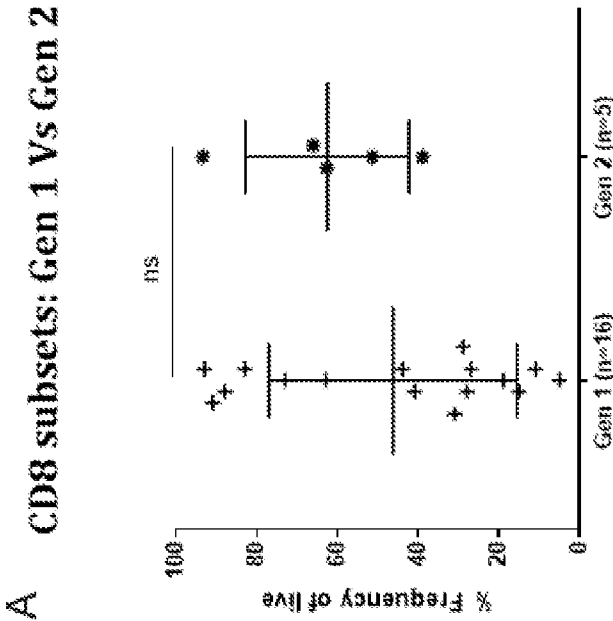


Figure 78B

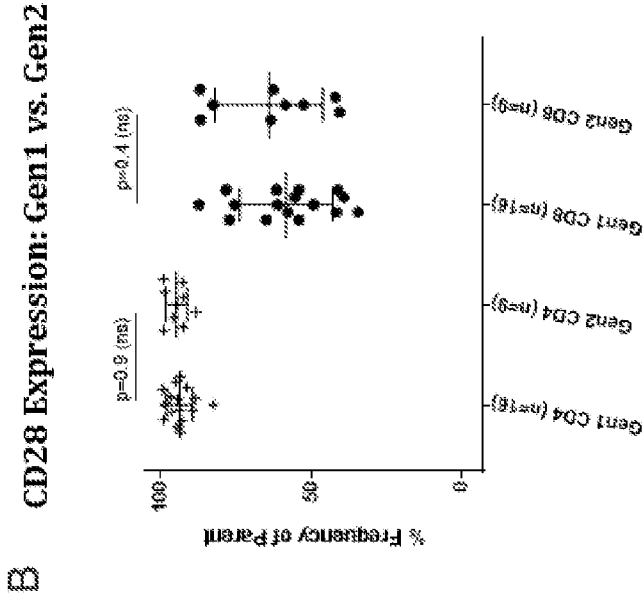


Figure 78A

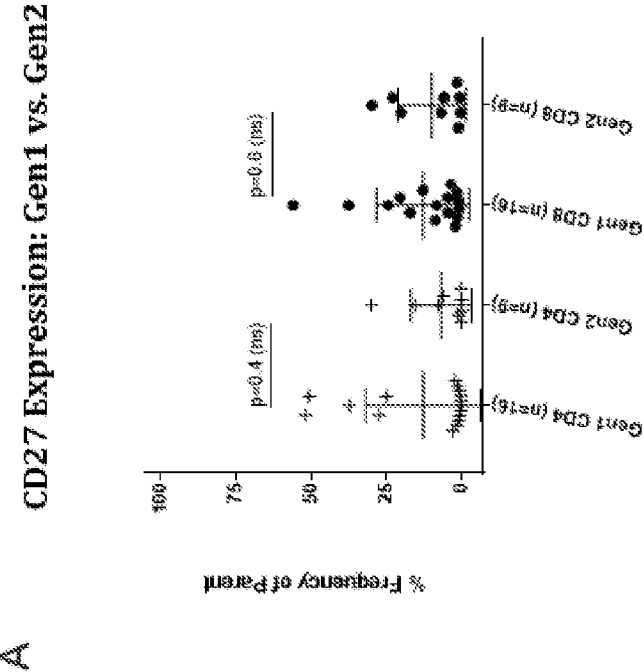


Figure 79

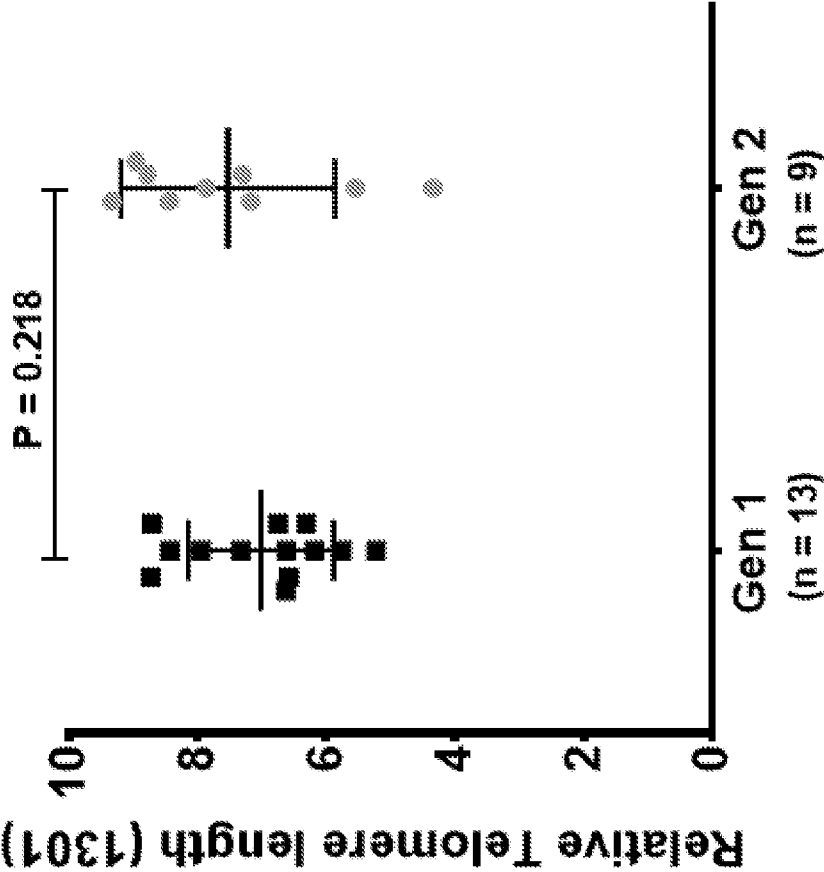


Figure 80

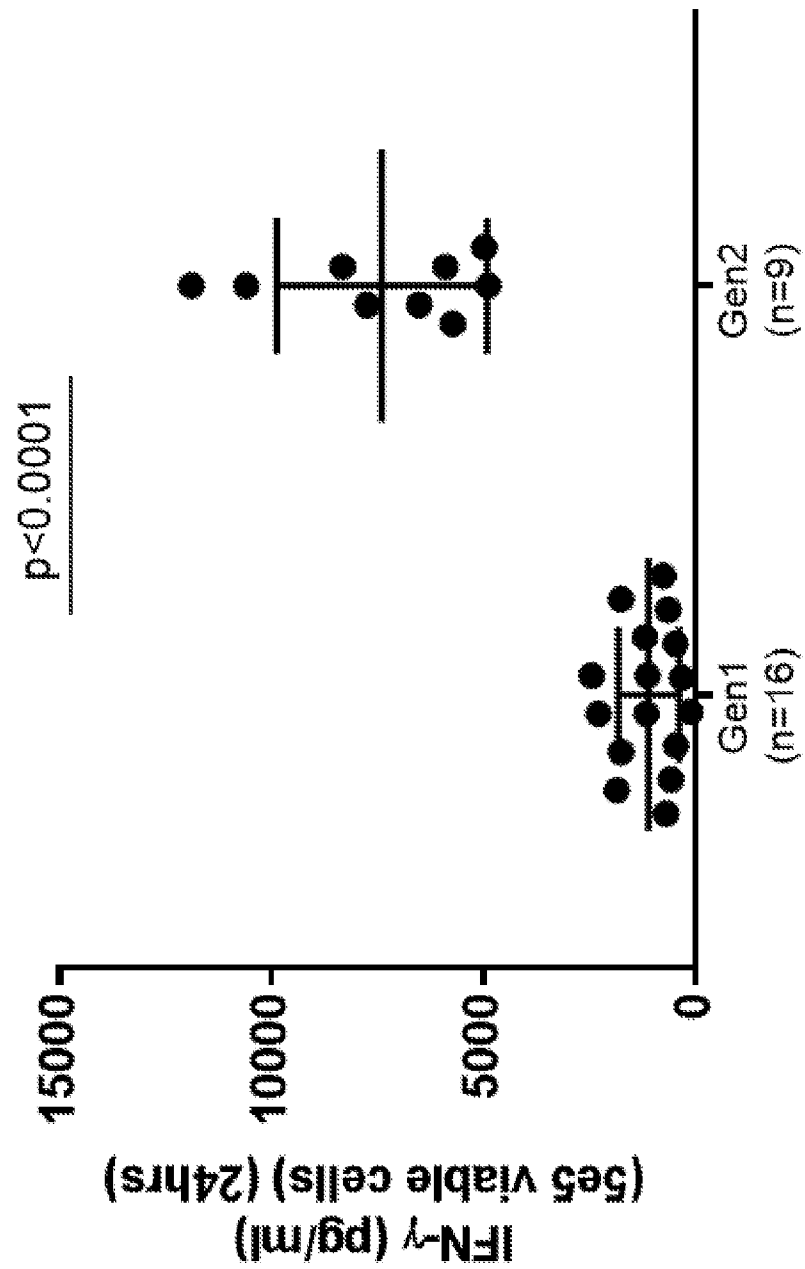


Figure 81B

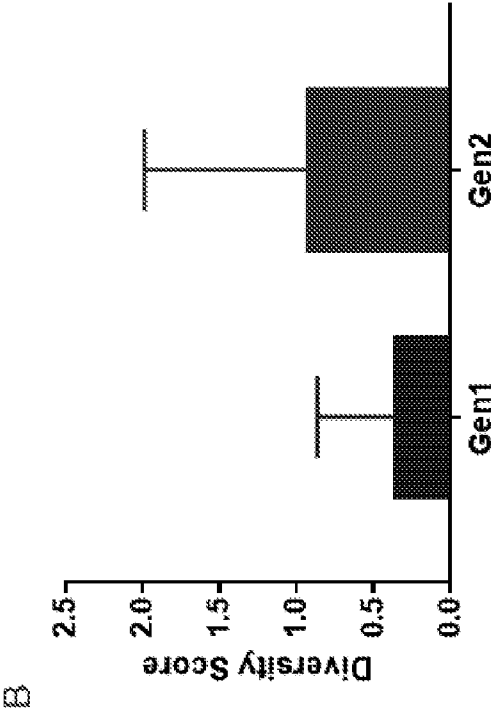
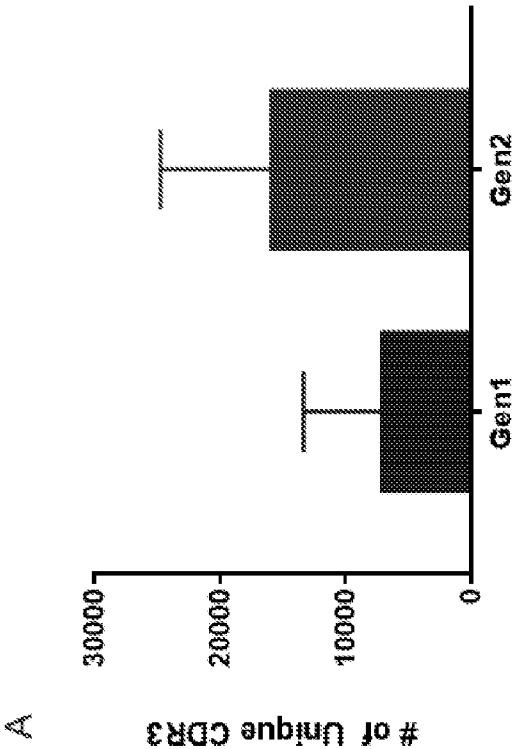


Figure 81A



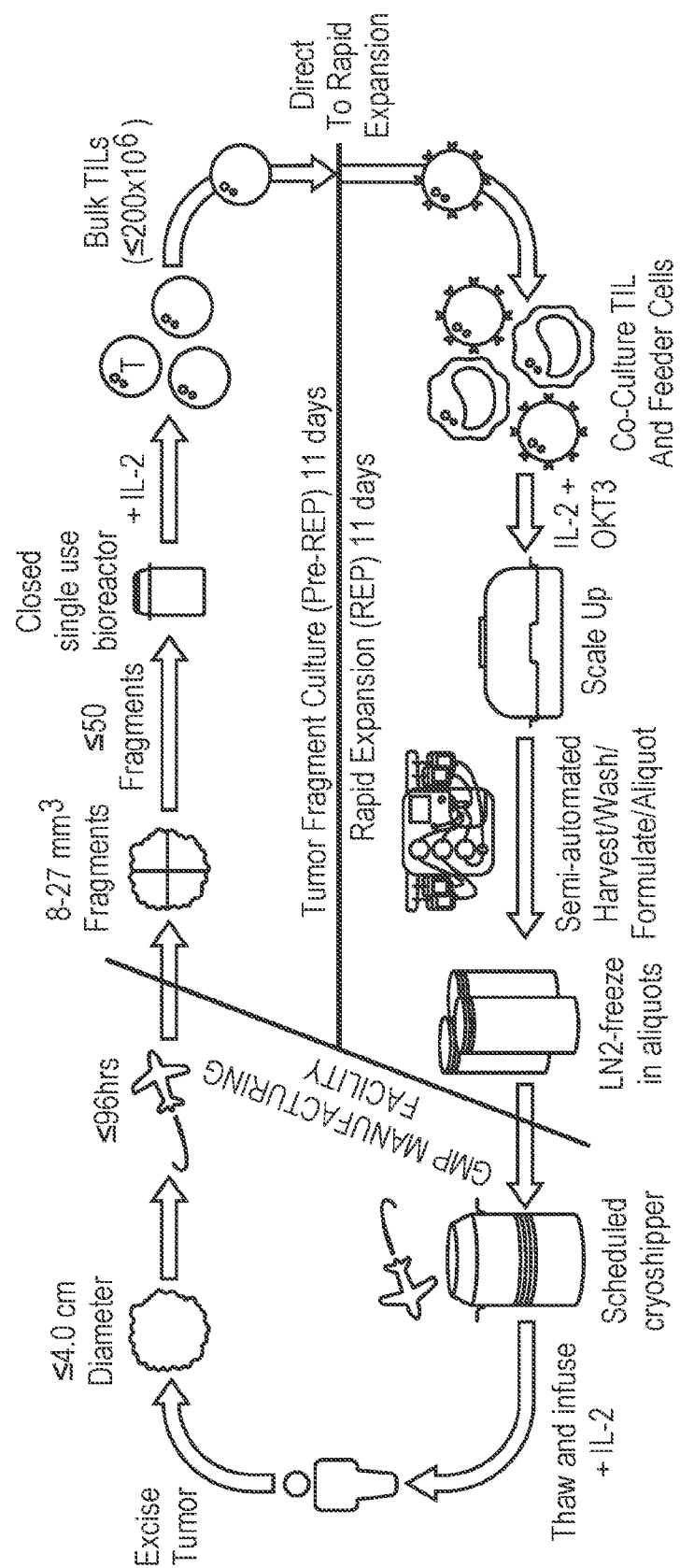


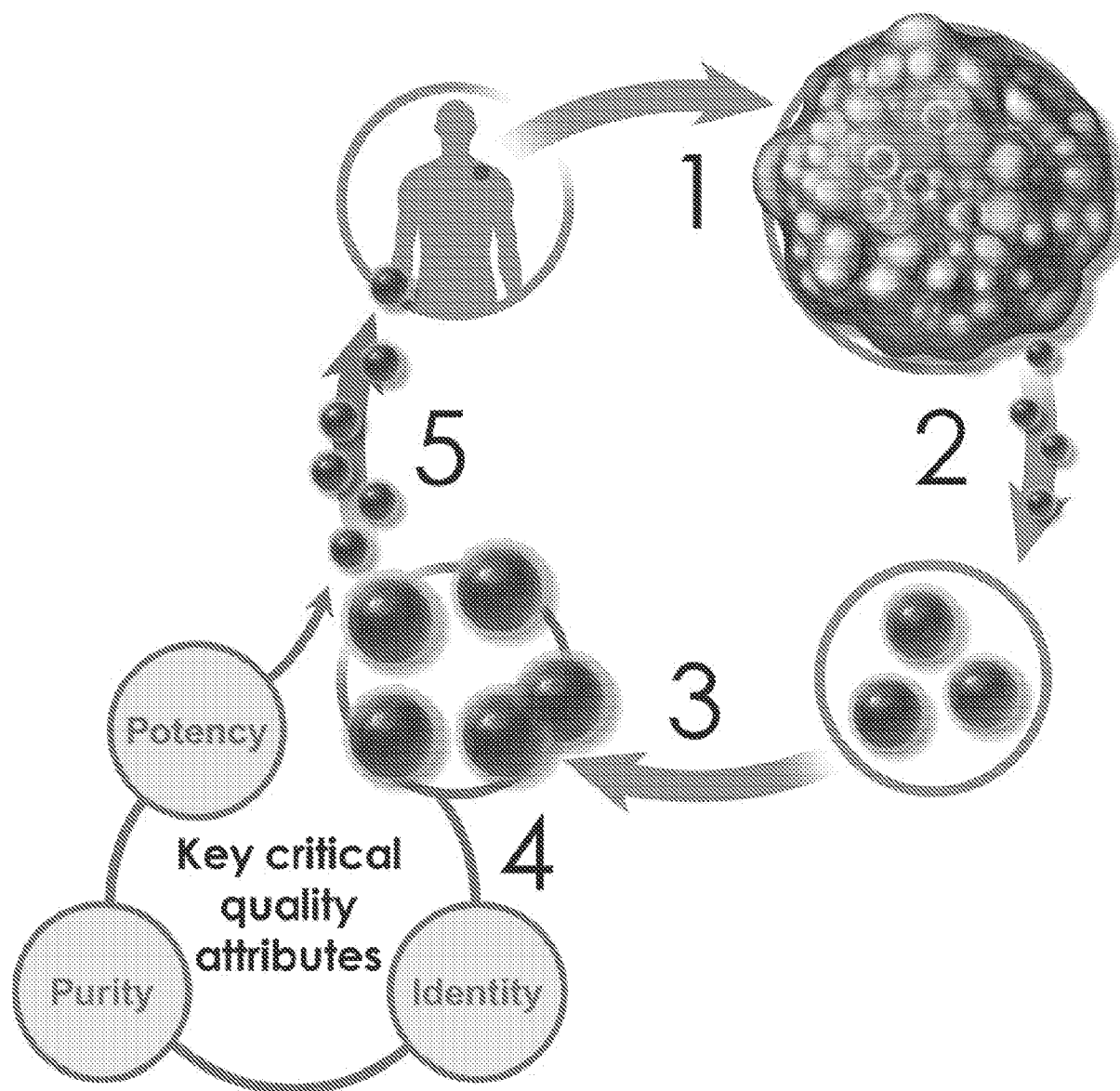
Figure 82

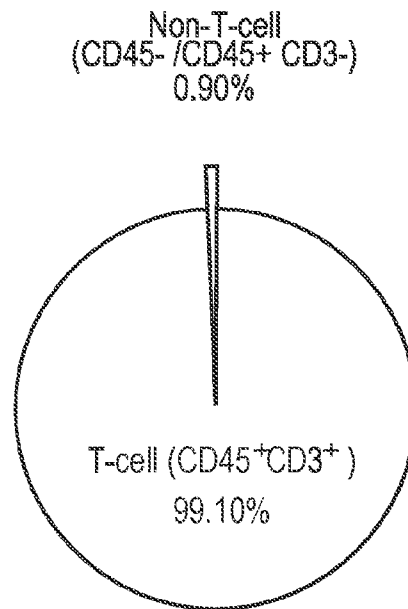
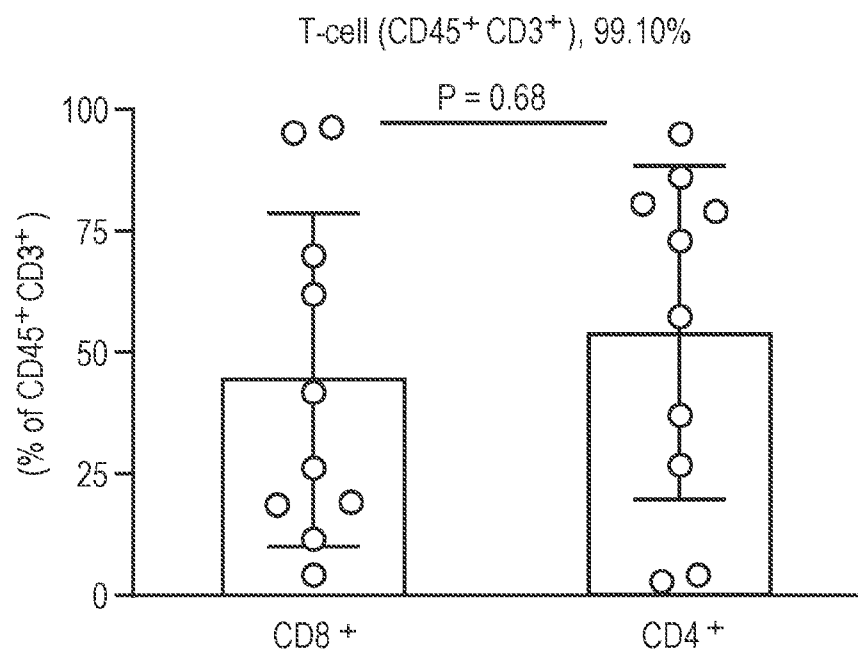
Figure 83

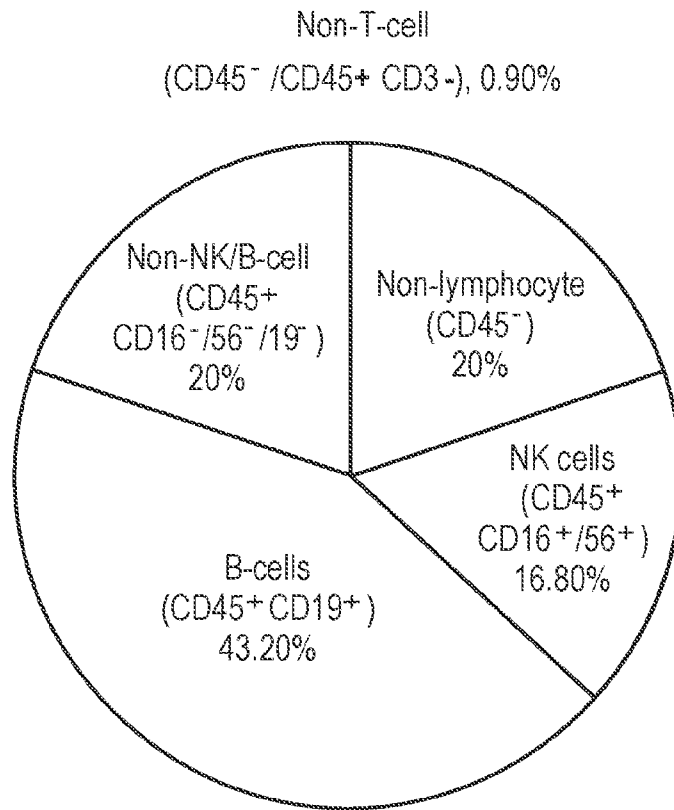
Process 1C: 43-55 Days for Steps A - E	Process 2A: about 22 days from Steps A - E
1. <u>STEP A</u> Obtain Patient Tumor Sample	1. <u>STEP A</u> Obtain Patient Tumor Sample
2. <u>STEP B</u> Fragmentation and First Expansion 11 days to 21 days	2. <u>STEP B</u> Fragmentation and First Expansion 3 days to 14 days
3. <u>STEP C</u> First Expansion to Second Expansion Transition Optional Storage until Selection	3. <u>STEP C</u> First Expansion to Second Expansion Transition No Storage and Closed System
4. <u>STEP D</u> Second Expansion IL-2, OKT-3, antigen-presenting feeder cells Optionally repeat one or more times	4. <u>STEP D</u> Second Expansion IL-2, OKT-3, and antigen-presenting feeder cells Closed System
5. <u>STEP E</u> Harvest TILS from Step D	5. <u>STEP E</u> Harvest TILS from Step D Closed System
6. <u>STEP F</u> Final Formulation and/or Transfer to Infusion Bag	6. <u>STEP F</u> Final Formulation and/or Transfer to Infusion Bag (optionally cryopreserve)

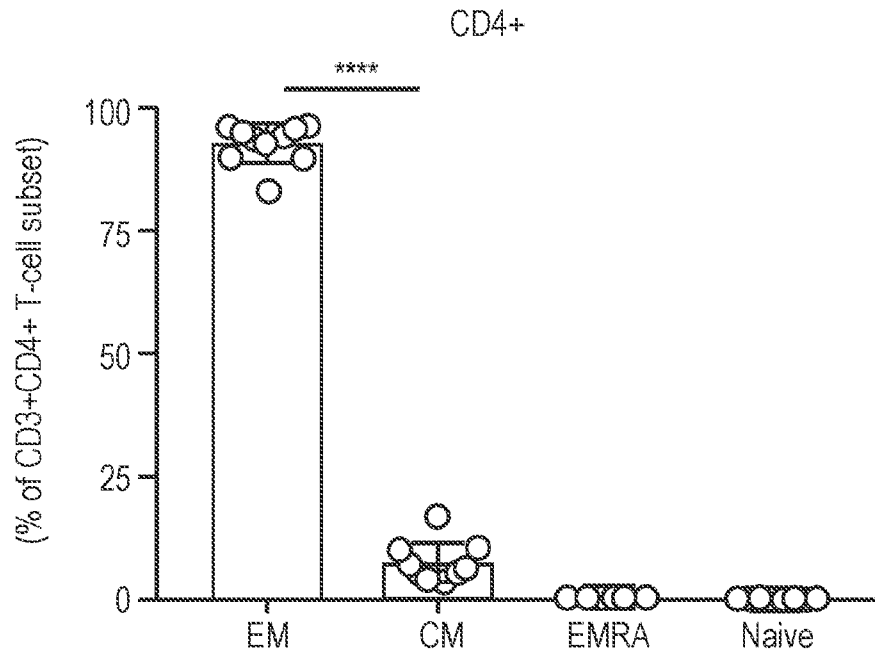
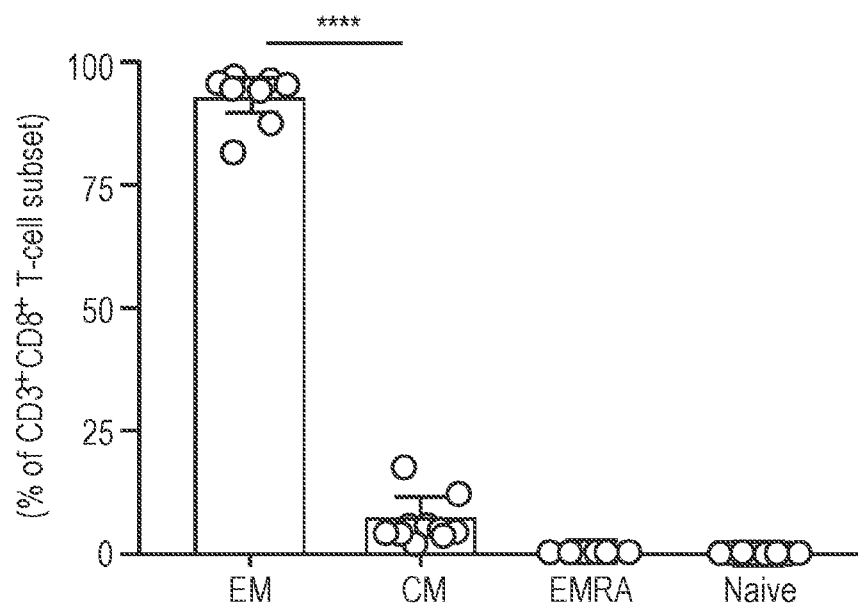
Figure 84

Process Step	Process 1C Embodiment	Process 2A Embodiment	Advantages
Pre-REP	4 fragments per 10 GREX-10 flasks 11-21 day duration	40 fragments per 1 GREX-100M flask 11 day duration	- Increased tumor fragments per flask - Shortened culture time - Reduced number of steps - Amenable to closed system
Pre-REP to REP Transition	- Pre-REP TIL are frozen until phenotyped for selection then thawed to proceed to the REP (~day 30) - REP requires $>40 \times 10^6$ TIL	- Pre-REP TIL directly move to REP on day 11 - REP requires 25-200×10^6 TIL	- Shortened pre-REP-to-REP process - Reduced number of steps - Eliminated phenotyping selection - Amenable to closed system
REP	6 GREX-100M flasks on REP day 0 5×10^6 TIL and 5×10^8 PBMC feeders per flask on REP day 0 - Split to 18-36 flasks on REP day 7 14 day duration	1 GREX-500M flask on day 11 $25-200 \times 10^6$ TIL and 5×10^9 PBMC feeders on day 11 - Split to ≤ 6 GREX-500M flasks on day 16 11 day duration	- Reduced number of steps - Shorter REP duration - Closed system transfer of TIL between flasks - Closed system media exchanges
Harvest	TIL harvested via centrifugation	TIL harvested via LOVO automated cell washing system'	- Reduced number of steps - Automated cell washing - Closed system - Reduced loss of product during wash
Final Formulation	- Fresh product in Hypothermosol - Single infusion bag - Limited shipping stability	- Cyropreserved product in PlasmaLyte-A + 1% HSA and CS10 stored in LN₂ - Multiple aliquots - Longer shipping stability	- Shipping flexibility - Flexible patient scheduling - More timely release testing
Overall Estimated Process Time	43-55 days	22 days	Faster turnaround to patient

Figure 85

*Figure 86A**Figure 86B*

*Figure 86C*

*Figure 87A**Figure 87B*

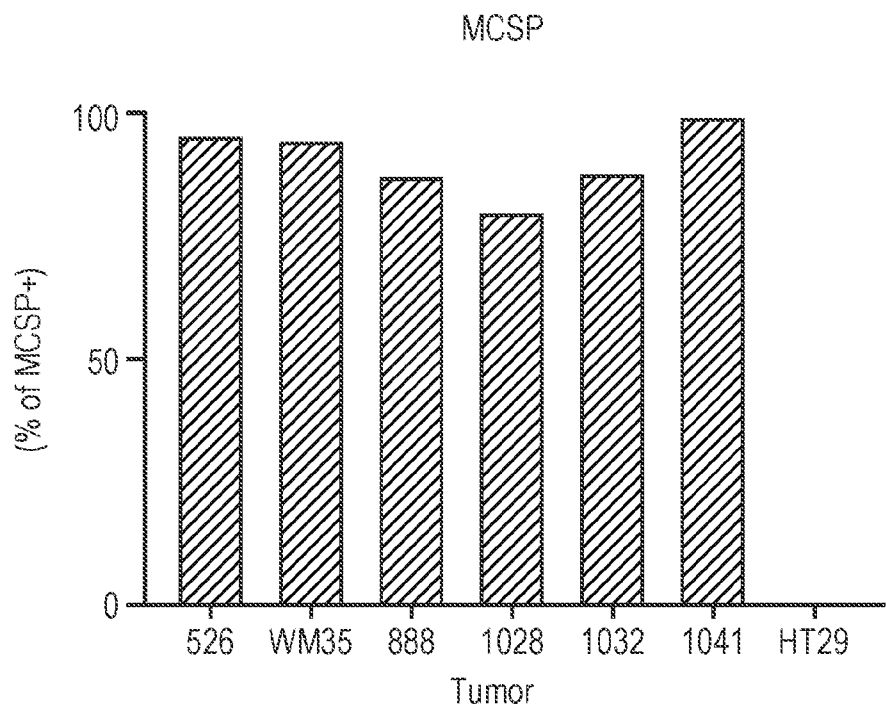


Figure 88A

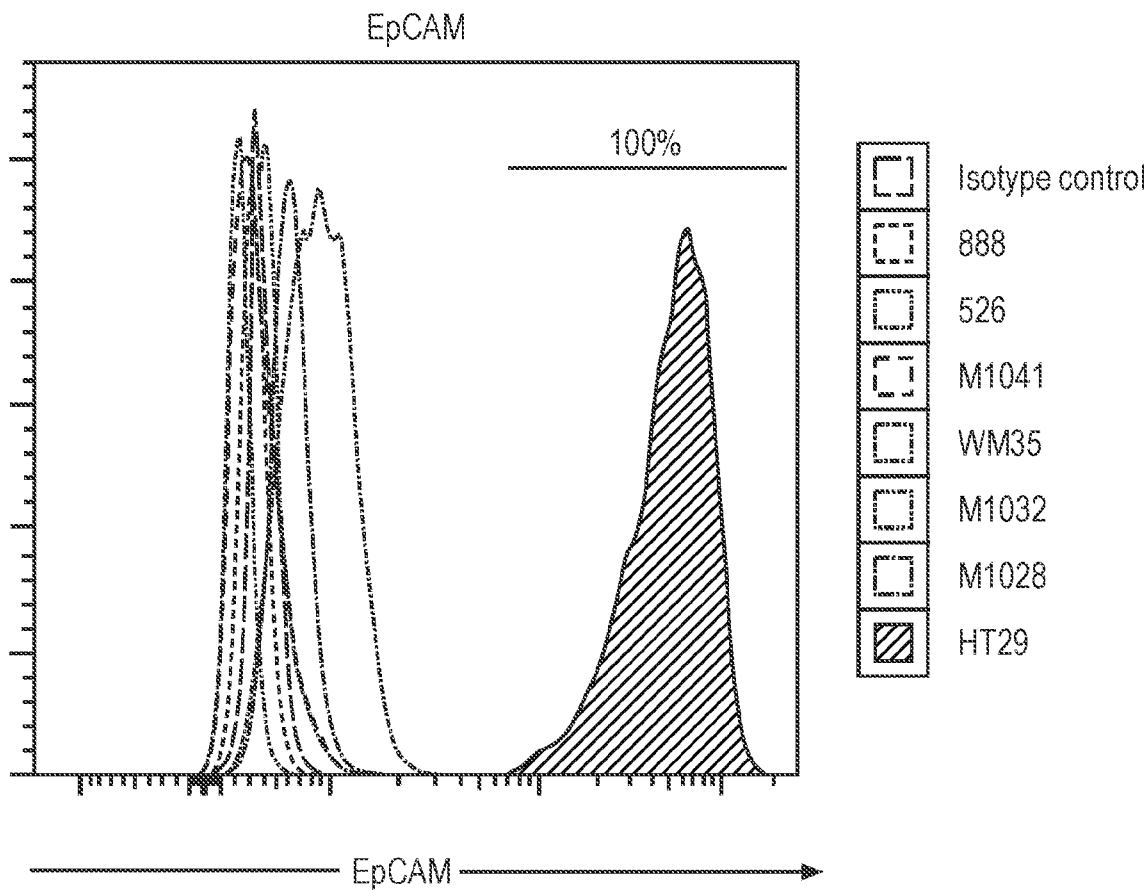


Figure 88B

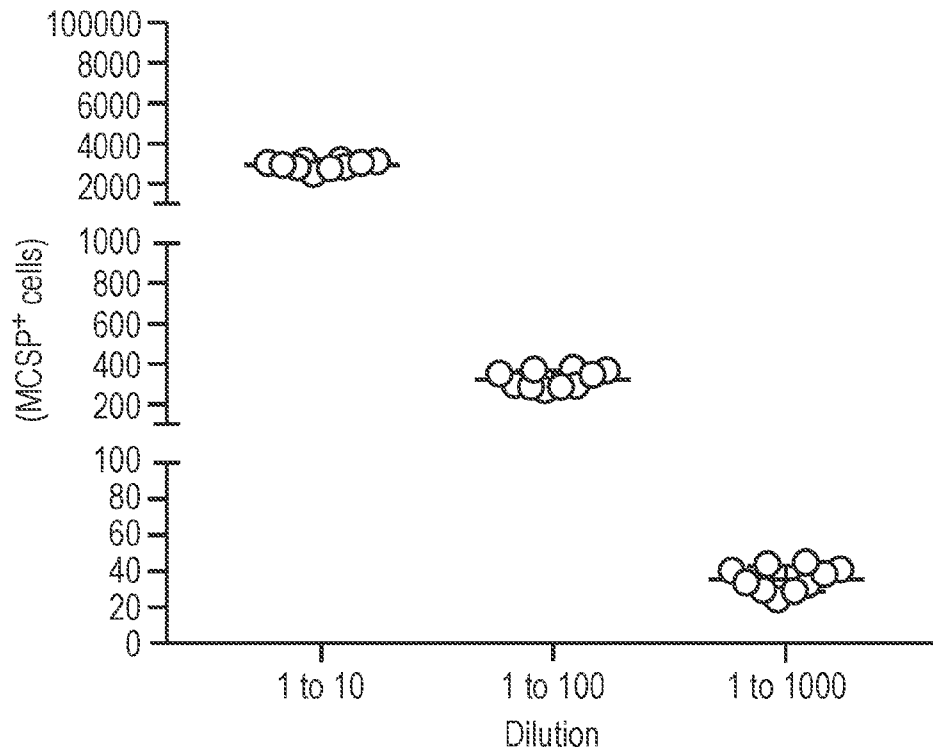
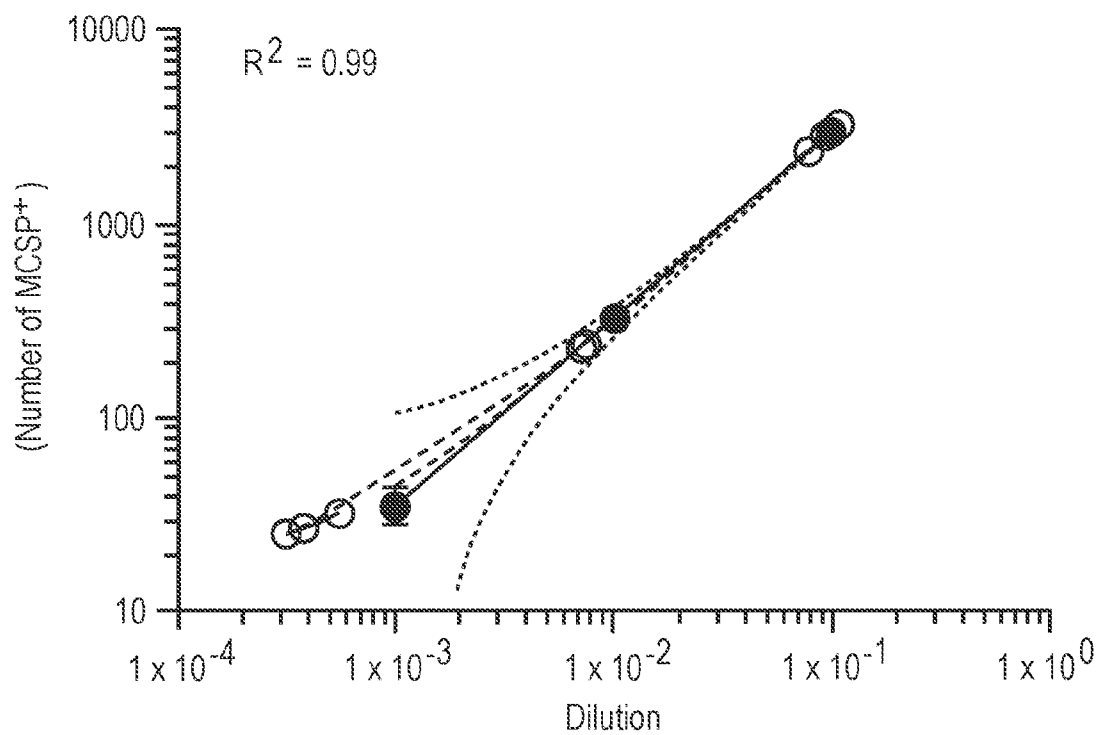


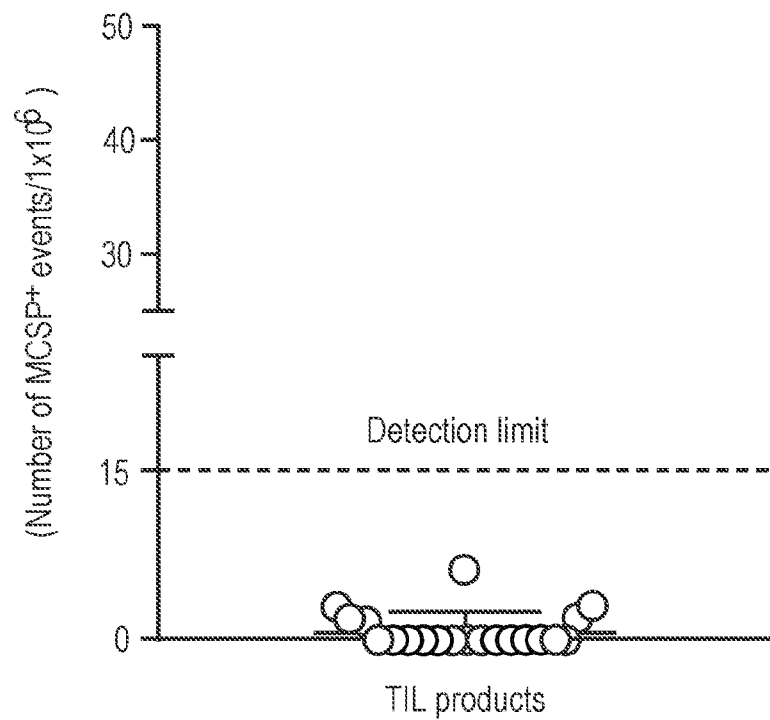
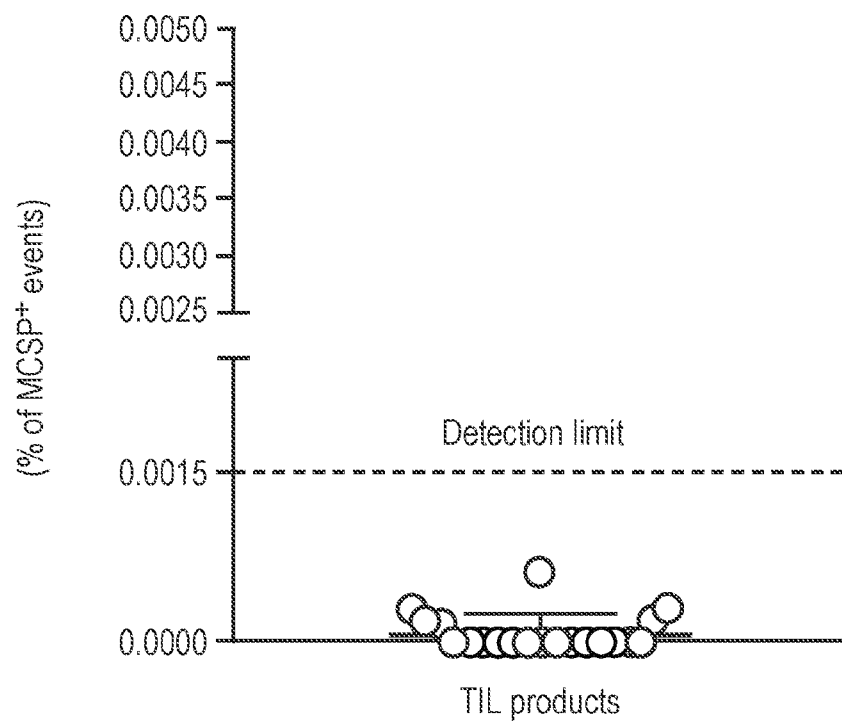
Figure 89A

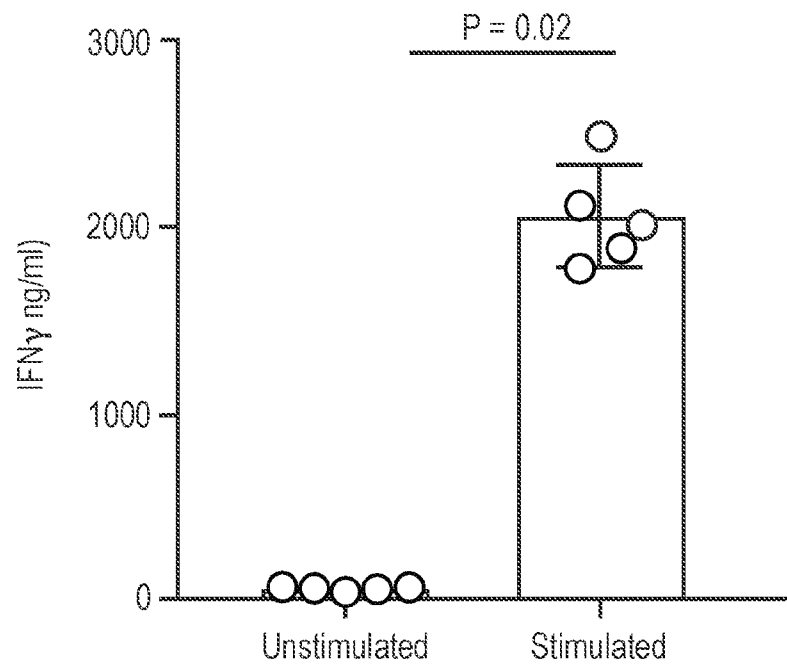
DILUTION	AV	SD	UPPER LIMIT (AV + 3SD)	LOWER LIMIT (AV - 3SD)
1 to 10	2976	203	3585	2367
1 to 100	322	39	440	204
1 to 1000	36	7	56	16

Figure 89B

DILUTION	RANGE (UPPER- LOWER)	EXP#1 (AV)	EXP#2 (AV)	EXP#3 (AV)
1 to 10	3585-2367	2814	3282	2367
1 to 100	440-204	227	320	239
1 to 1000	56-16	27	25	32

Figure 90A*Figure 90B*

*Figure 91A**Figure 91B*

*Figure 92*

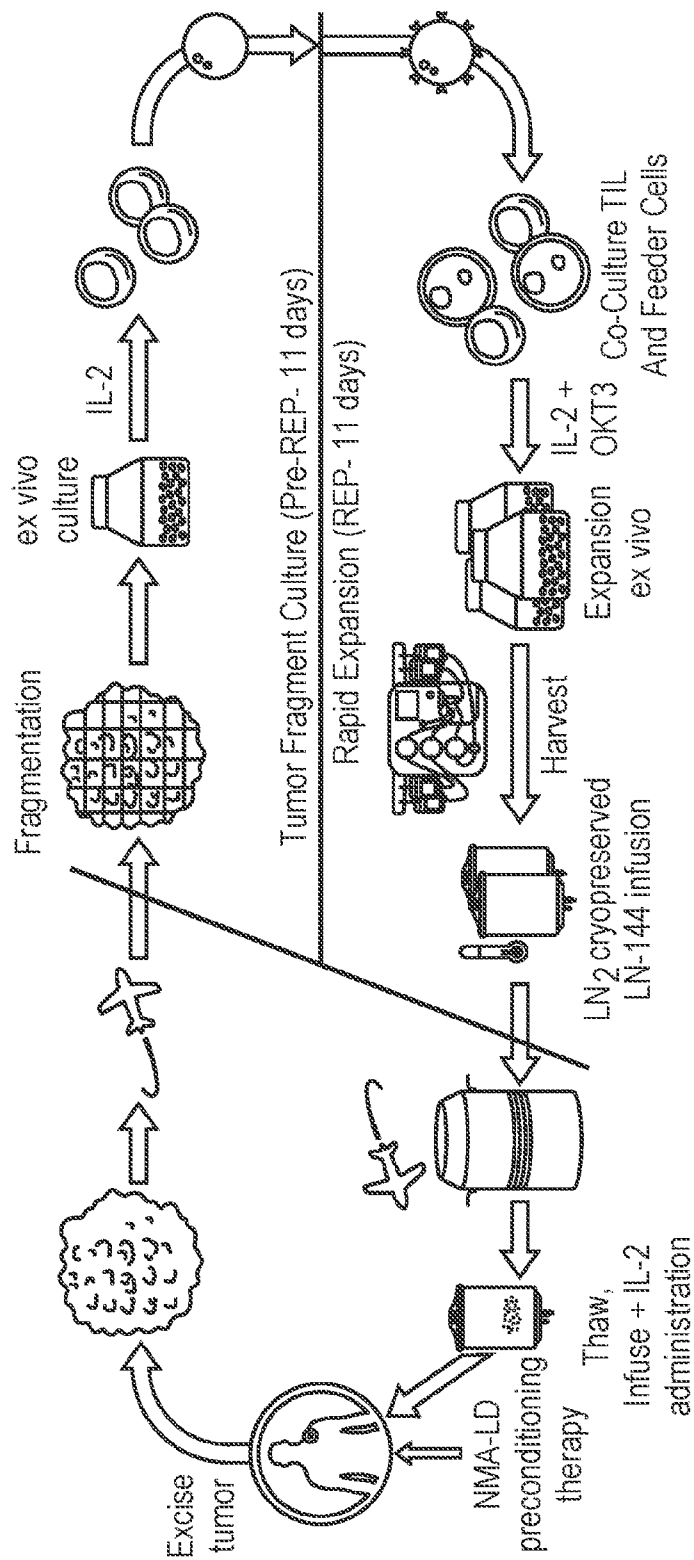


Figure 93

Figure 94

PROCESS STEP	GEN 1	GEN 2	IMPACT
Fragment Culture	≤21 days, multiple bioreactors, multiple operator interventions	≤11 days, single closed bioreactor, no intervention	Shortens culture, reduces interventions
TIL selection	IL-2 expanded TIL cryopreserved, tested, selection based on phenotype, thaw, rest, co-culture	Bulk TIL direct to co-culture	Reduces steps, eliminates testing, increases clonal diversity
Harvest/ Wash	Manual volume reduction and harvest. Manual wash and concentration	Closed semi-automated volume reduction and harvest. Automated wash and concentration	Reduces operator interventions, reduces processing time, maintains functionally closed system
Formulation	Fresh hypothermic product (2- 8°C)	Cryopreserved product (≤ -150°C)	Allows for global trials through increased flexibility in shipping and patient scheduling
Manufacturing Time	38 day process time	22 day process time	Turnaround to patient, clean room throughput, lower cost of goods

Figure 95A

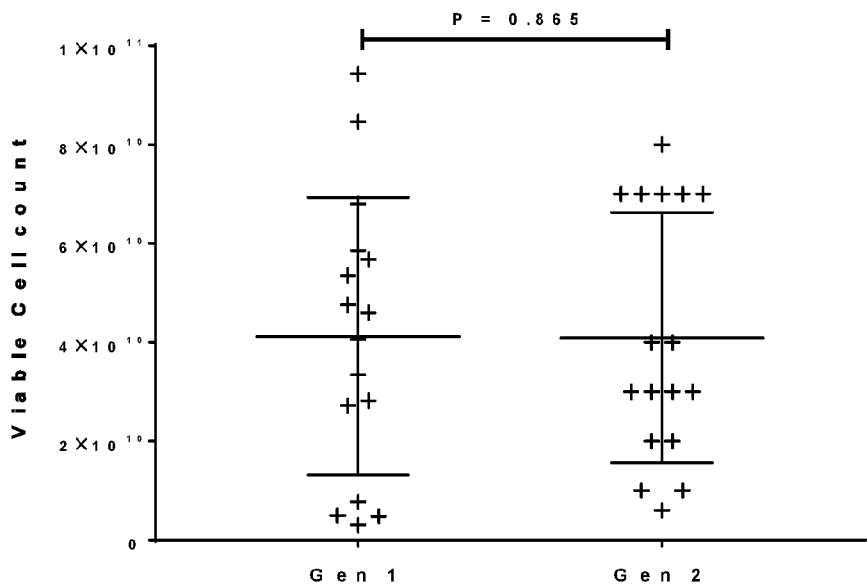


Figure 95B

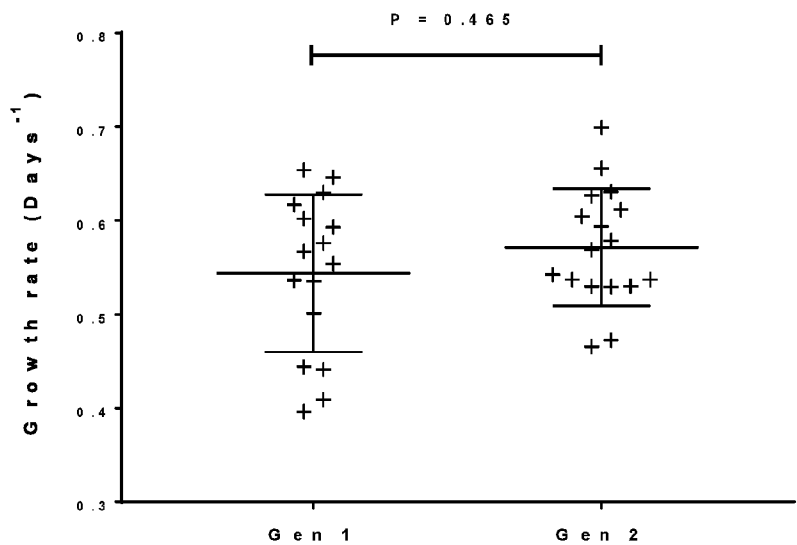


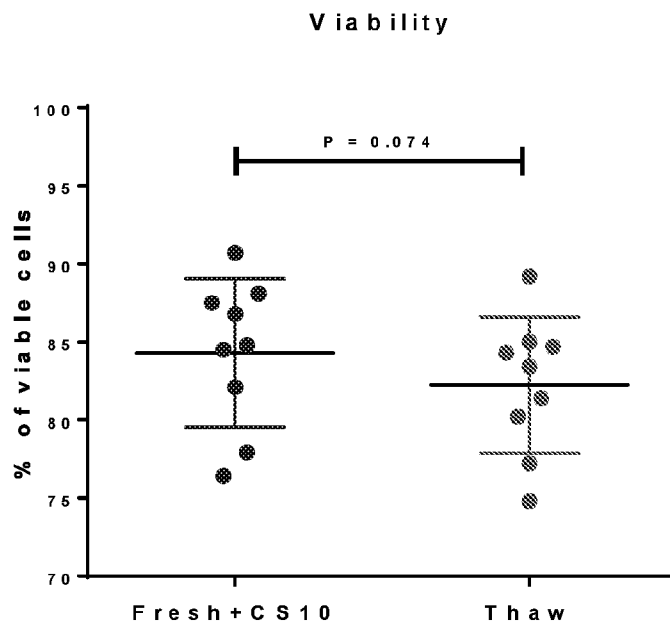
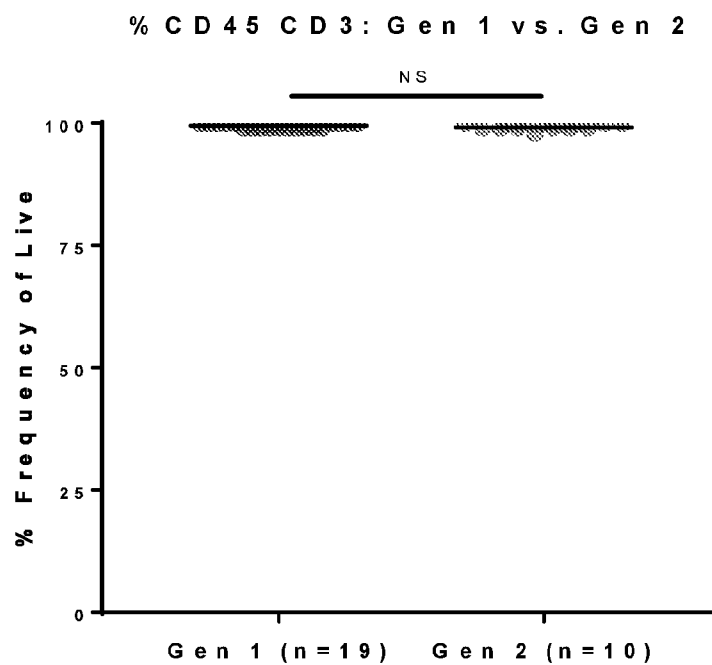
Figure 95C**Figure 96A**

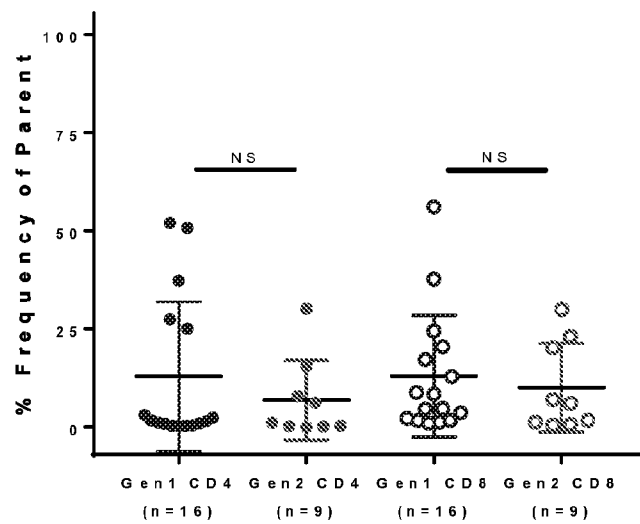
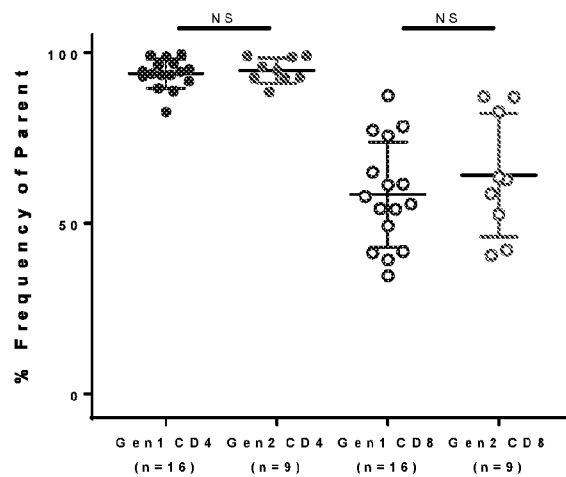
Figure 96B**CD 27 Expression: Gen 1 vs. Gen 2****Figure 96C****CD 28 Expression: Gen 1 vs. Gen 2**

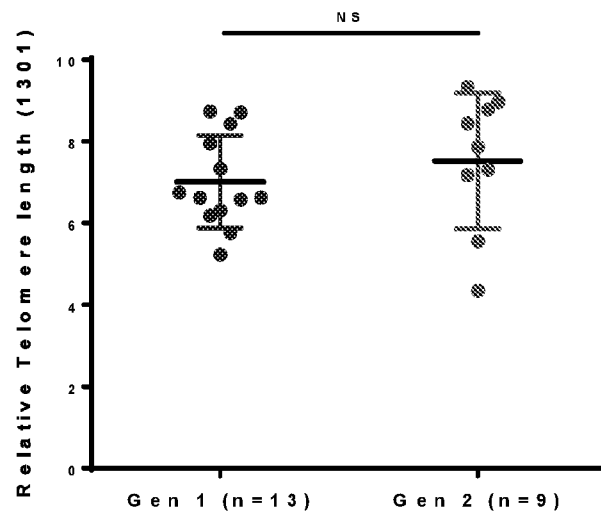
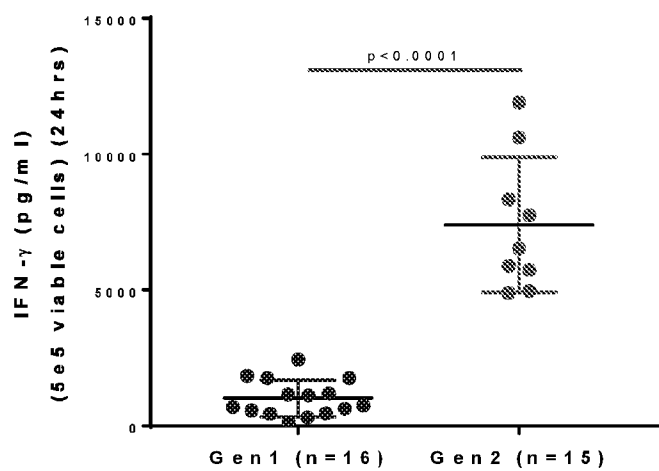
Figure 97**Figure 98**

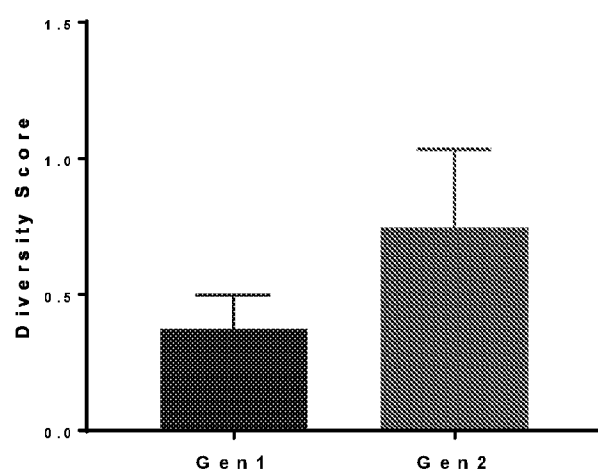
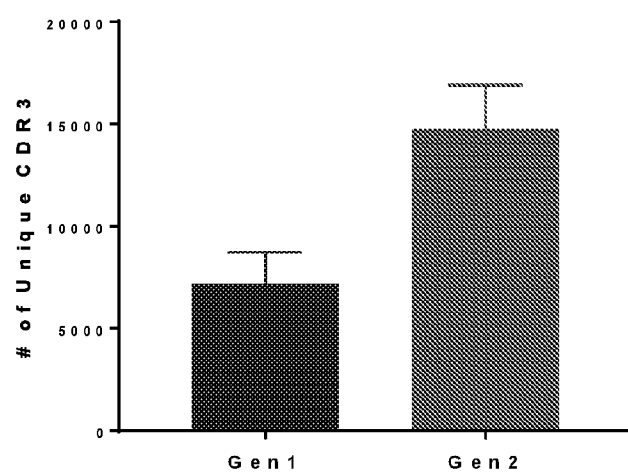
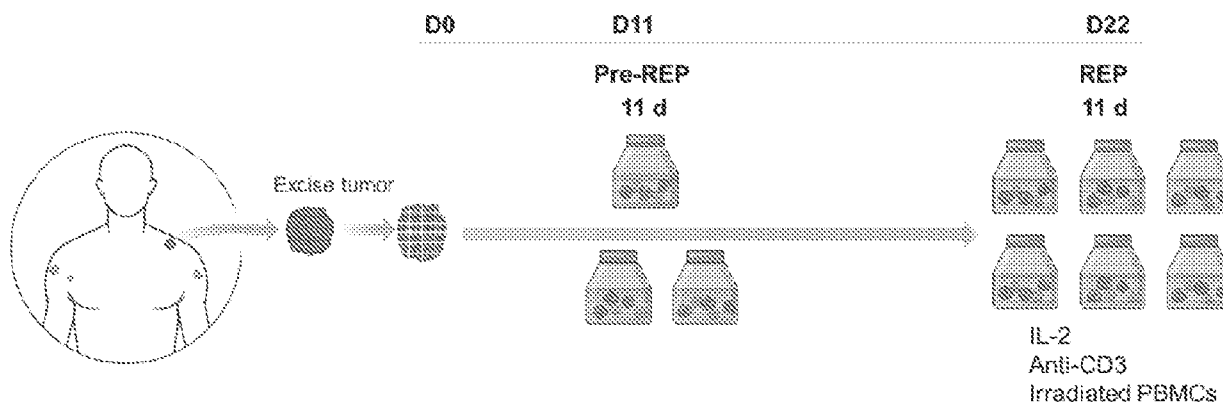
Figure 99A*Figure 99B*

Figure 100**Figure 101**

Tumor Histology	# of studies demonstrating >20% enhancement of growth using IL-2/IL-15/IL-21 (compared to IL-2)
Melanoma	1/5(20%)
Lung	3/8 (38%)
Colorectal	7/11 (63%)
Cervical	1/1 (100%)
Pancreatic	2/2 (100%)
Glioblastoma	1/1 (100%)
Triple Negative Breast	1/2 (50%)

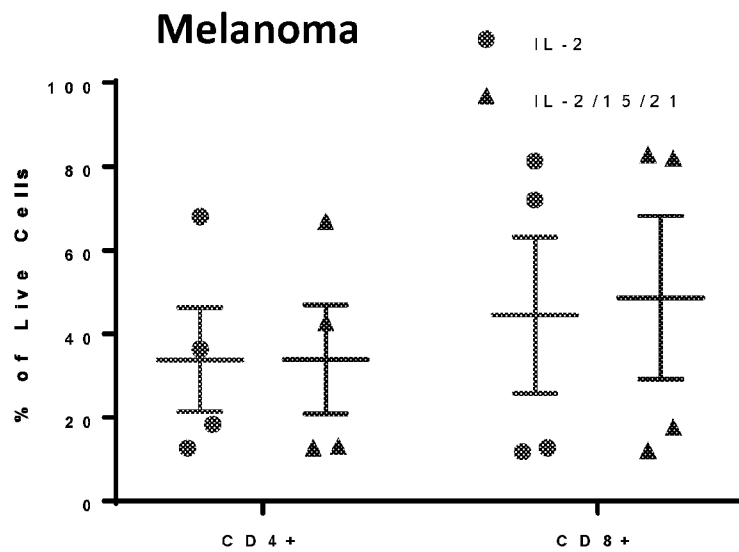
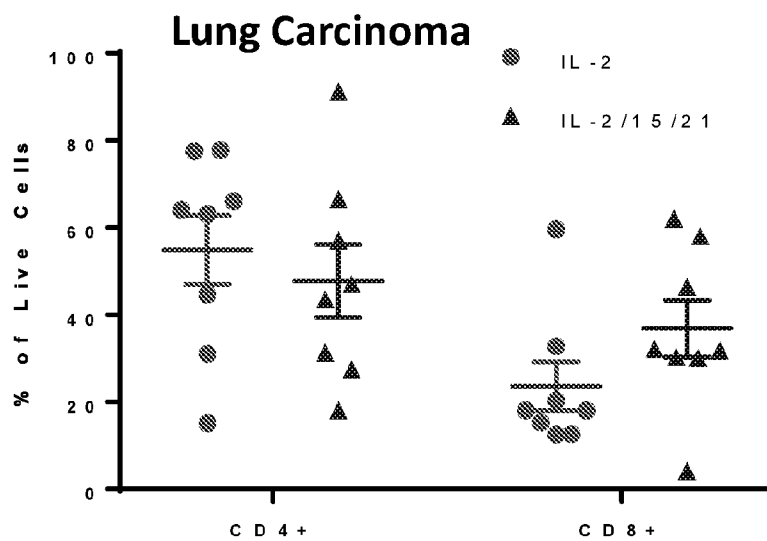
Figure 102A*Figure 102B*

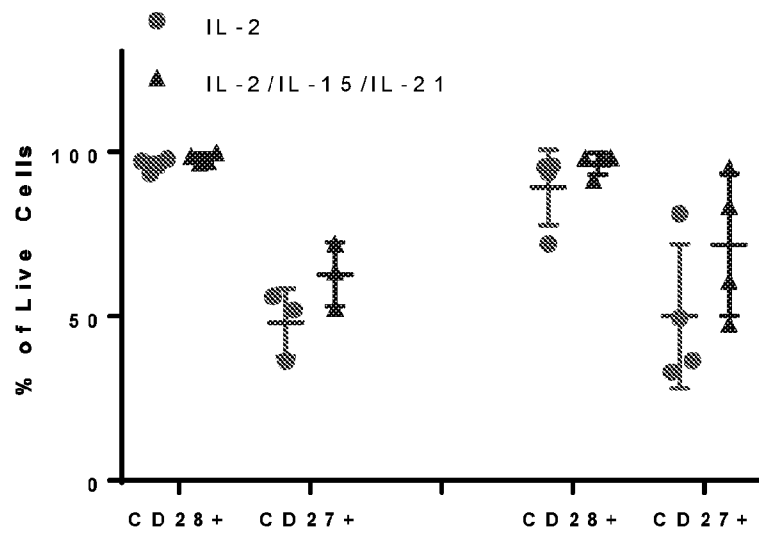
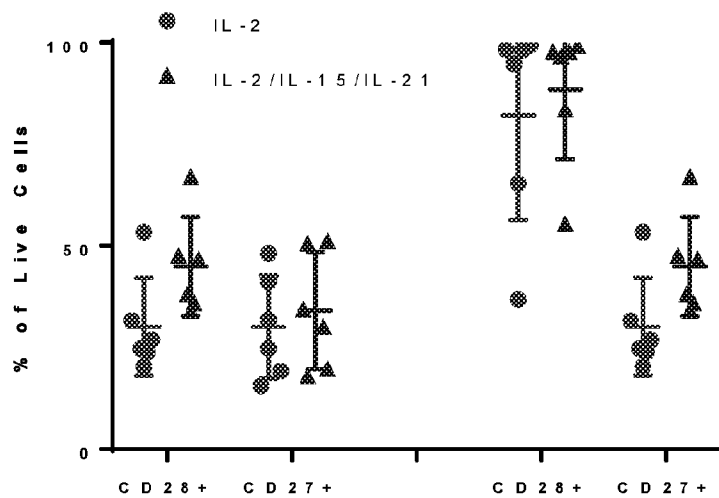
Figure 103A**Melanoma****Figure 103B****Lung Carcinoma**

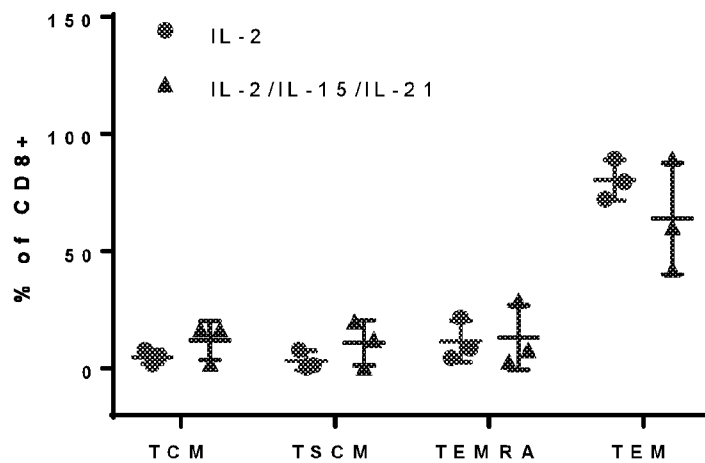
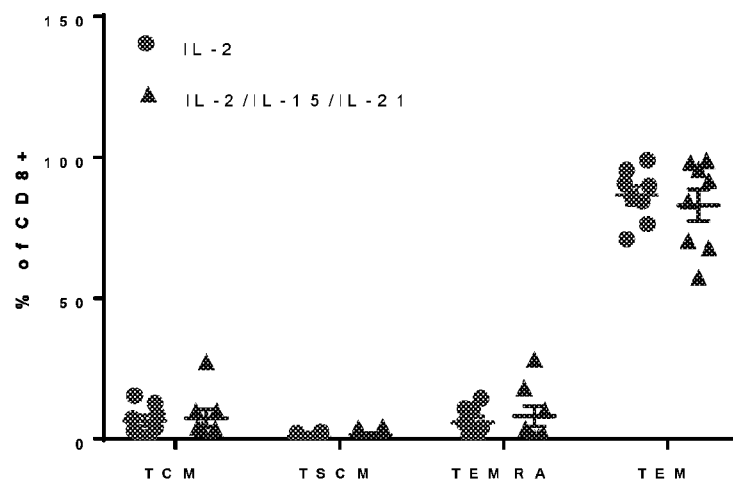
Figure 104A**Melanoma****Figure 104B****Lung Carcinoma**

Figure 105A

Melanoma

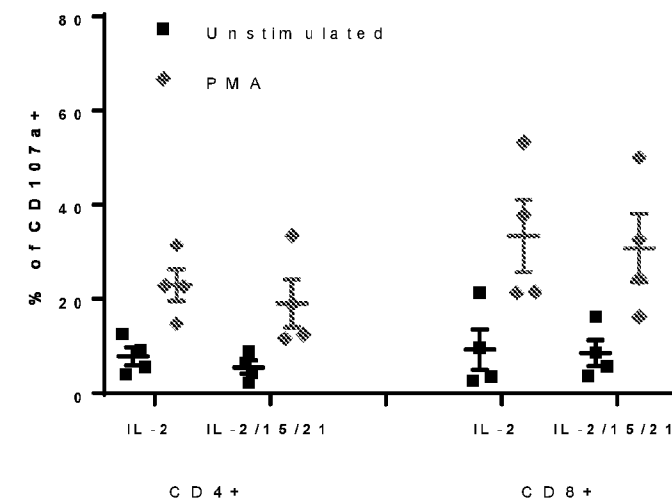


Figure 105B

Lung Carcinoma

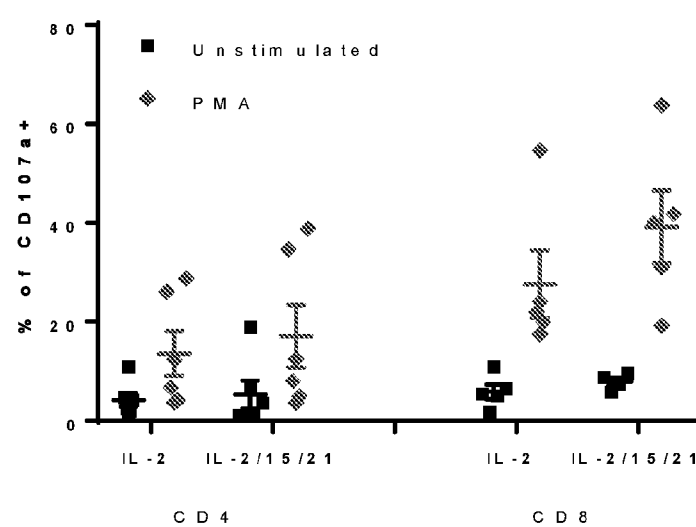
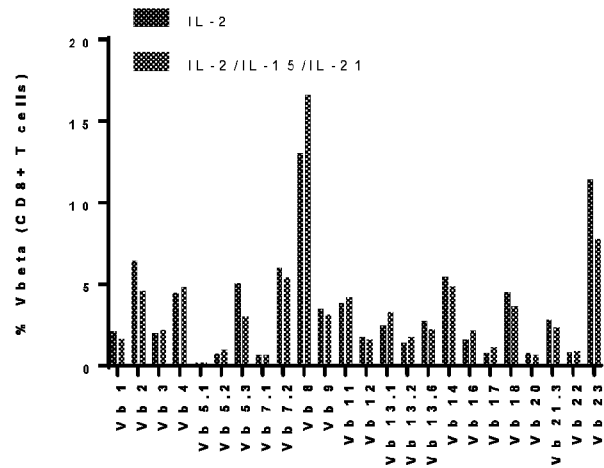
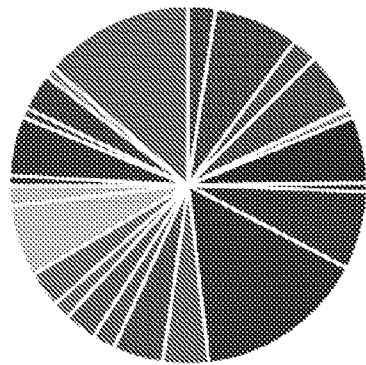


Figure 106A
Melanoma



IL-2



IL-2/IL-15/IL-21

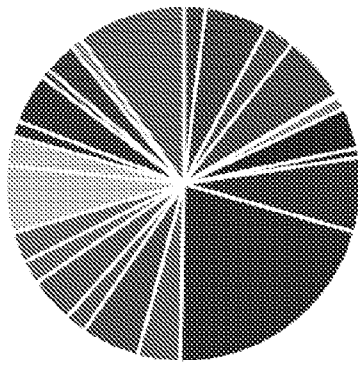
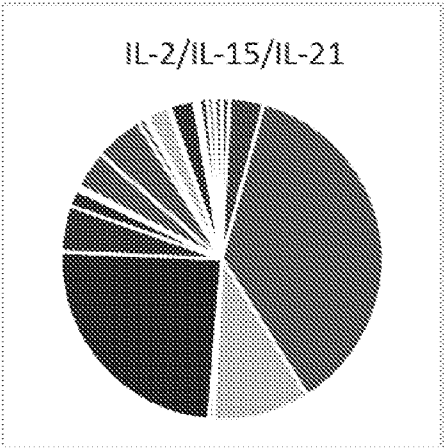
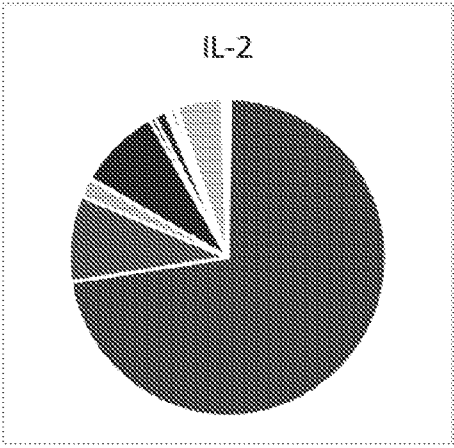
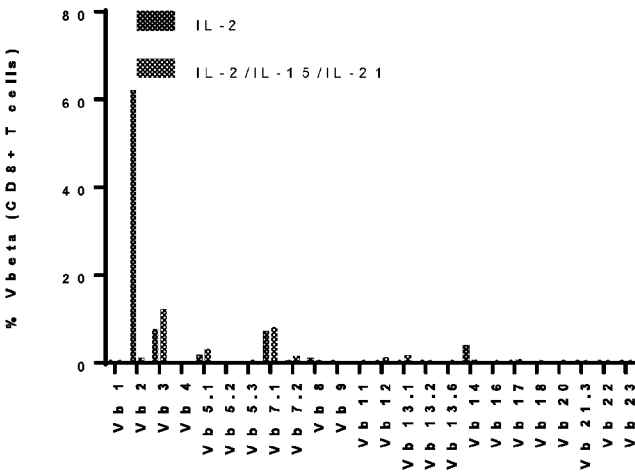


Figure 106B

Lung Carcinoma



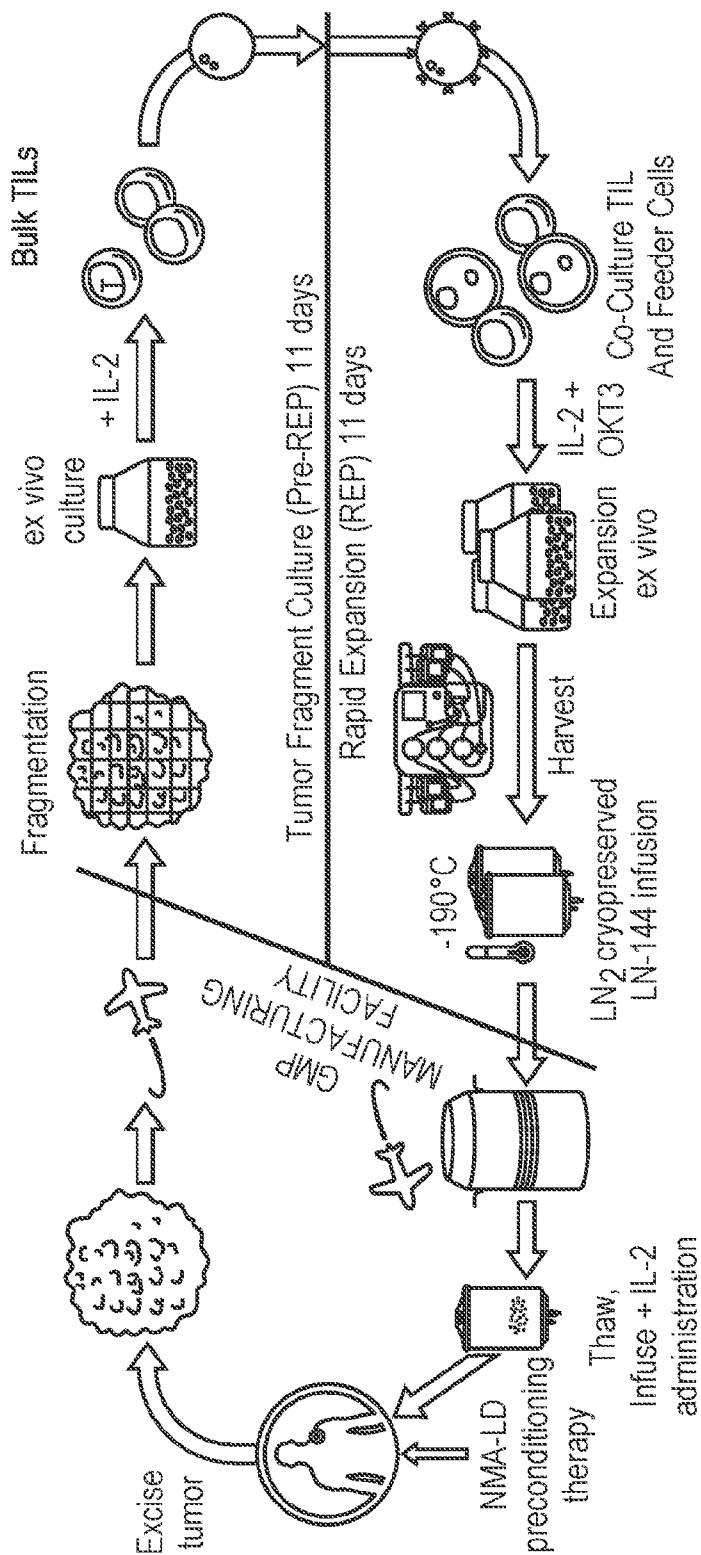
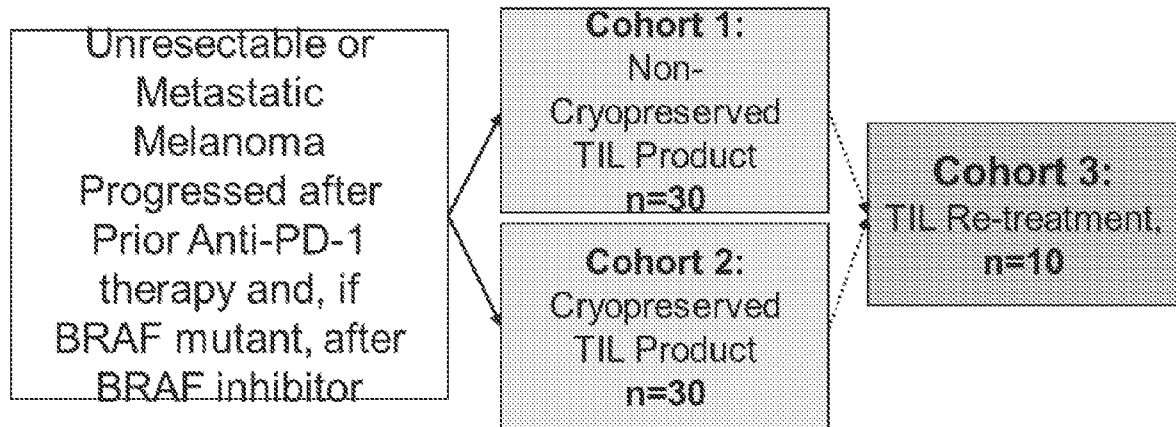


Figure 107

Figure 108

CHARACTERISTIC	Historical Cohort 1* N = 16, (%)	Cohort 2 N = 13, (%)
Gender, n (%)		
Male	7 (44)	5 (39)
Female	9 (56)	8 (62)
Age		
Median	55	54
Min, Max	41, 72	35, 66
Prior therapies, n (%)		
Mean # prior systemic therapies	3	4
Anti-CTLA-4	14 (88)	13 (100)
Anti-PD-1	21 (100)	13 (100)
Target Lesion Sum of Diameter (mm)		
Mean (SD)	104 (68)	141 (102)
Min, Max	15, 225	38, 342
CHARACTERISTIC	Historical Cohort 1* N = 16, (%)	Cohort 2 N = 13, (%)
Baseline ECOG score, n (%)		
0	9 (56)	8 (62)
1	7 (44)	5 (39)
BRAF Status, n (%)		
Mutated	9 (56)	6 (46)
Wild Type	7 (44)	7 (54)
Baseline LDH (U/L [SD])		
1-2 times ULN	7 (44)	7 (54)
Min, Max	1 (6)	2 (15)
Number of Target & Non-Target Lesions (at Base Line)		
>3	12(75)	10(77)
Mean	5.6	5.5

Figure 109

PREFERRED TERM	Historical Cohort 1 (N = 16)			Cohort 2 (N = 13)		
	Any Grade n (%)	Grade 3/4 n (%)	Grade 5 n (%)	Any Grade n (%)	Grade 3/4 n (%)	Grade 5 n (%)
Number of patients reporting at least one Treatment-Emergent AE	14 (87.5)	14 (87.5)	0	12 (85.7)	11 (78.6)	0
Nausea	14 (87.5)	0	0	7 (53.8)	0	0
Platelet count decreased	12 (75.0)	12 (75.0)	0	7 (53.8)	6 (46.2)	0
Anaemia	11 (68.8)	8 (50.0)	0	8 (61.5)	7 (53.8)	0
Neutrophil count decreased	11 (68.8)	11 (68.8)	0	6 (46.2)	6 (46.2)	0
Febril neutropenia	10 (62.5)	10 (62.5)	0	7 (53.8)	6 (46.2)	0
White blood count decreased	10 (62.5)	10 (62.5)	0	6 (46.2)	6 (46.2)	0
Chills	9 (56.3)	0	0	6 (46.2)	1 (7.7)	0
Diarrhoea	8 (50.0)	1 (6.3)	0	4 (30.8)	0	0
Fatigue	7 (43.8)	0	0	7 (53.8)	0	0
Vomiting	7 (43.8)	0	0	2 (15.4)	0	0
Constipation	6 (37.5)	0	0	3 (23.1)	0	0
Decreased appetite	5 (31.3)	0	0	4 (30.8)	0	0
Headache	5 (31.3)	0	0	3 (23.1)	0	0
Hypocalcaemia	5 (31.3)	0	0	1 (7.7)	0	0
Hypokalaemia	5 (31.3)	0	0	3 (23.1)	0	0
Hypophosphataemia	5 (31.3)	5 (31.3)	0	4 (23.1)	1 (7.7)	0
Hypotension	5 (31.3)	2 (12.5)	0	3 (23.1)	3 (7.7)	0
Lymphocyte count decreased	5 (31.3)	5 (31.3)	0	3 (23.1)	3 (23.1)	0
Nasal Congestion	5 (31.3)	0	0	0	0	0
Pyrexia	5 (31.3)	0	0	9 (69.2)	1 (7.7)	0
Cough	4 (25.0)	0	0	4 (30.8)	0	0
Oedema peripheral	4 (25.0)	0	0	4 (30.8)	0	0
Pruritus	4 (25.0)	0	0	4 (30.8)	0	0

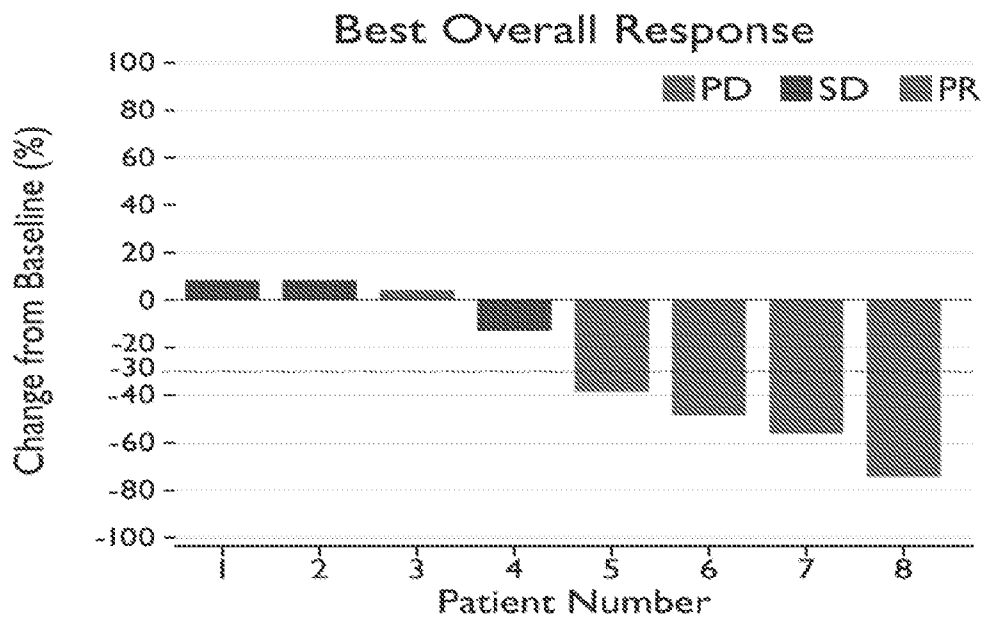
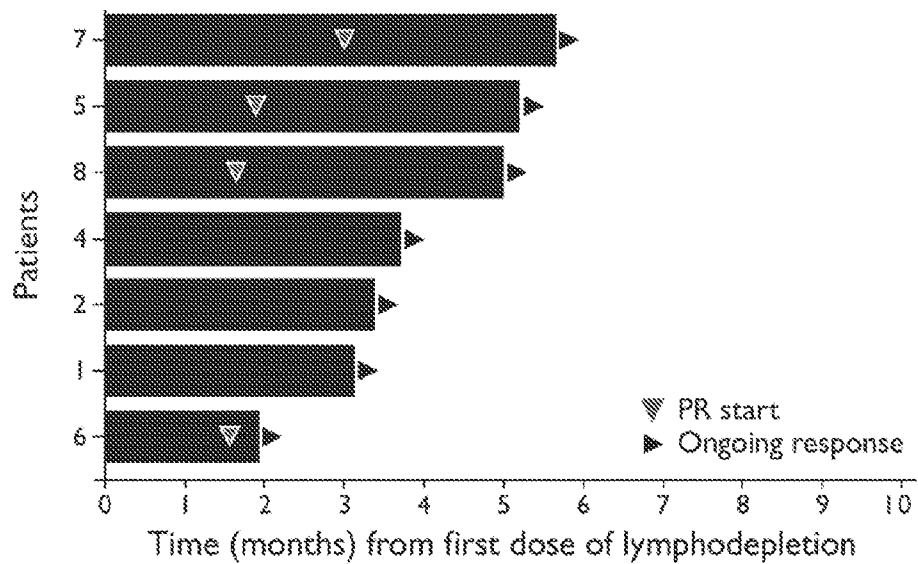
Notes: Adverse events are coded by MedDRA version 18.1.

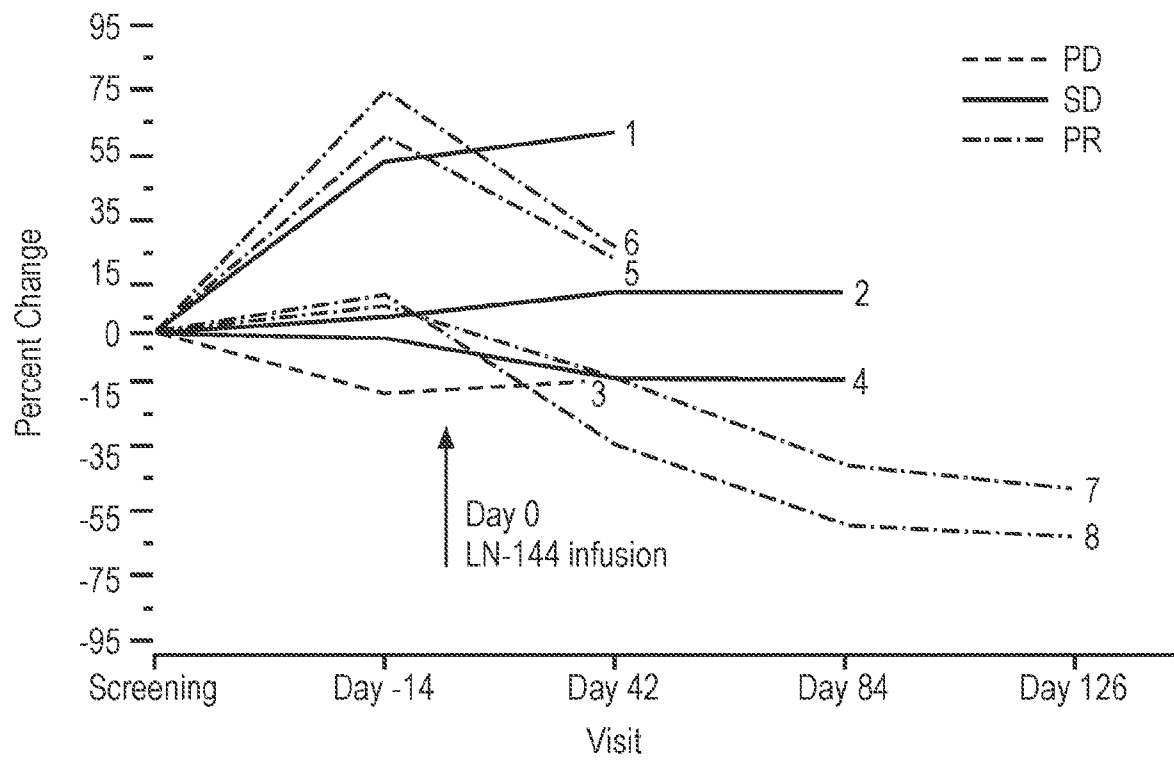
Patients with multiple events for a given preferred term are counted only once using the maximum grade under each preferred term.

Events are sorted by decreasing frequency of preferred term under SOC per any grade.

Treatment-Emergent Adverse Events refer to all AEs starting on or after the first dose date of pre-treatment chemotherapy(Fludarabine and Cyclophosphamide) up to the last dose of IL2 + 30 days.

Figure 110

Figure 111**Figure 112**

*Figure 113*

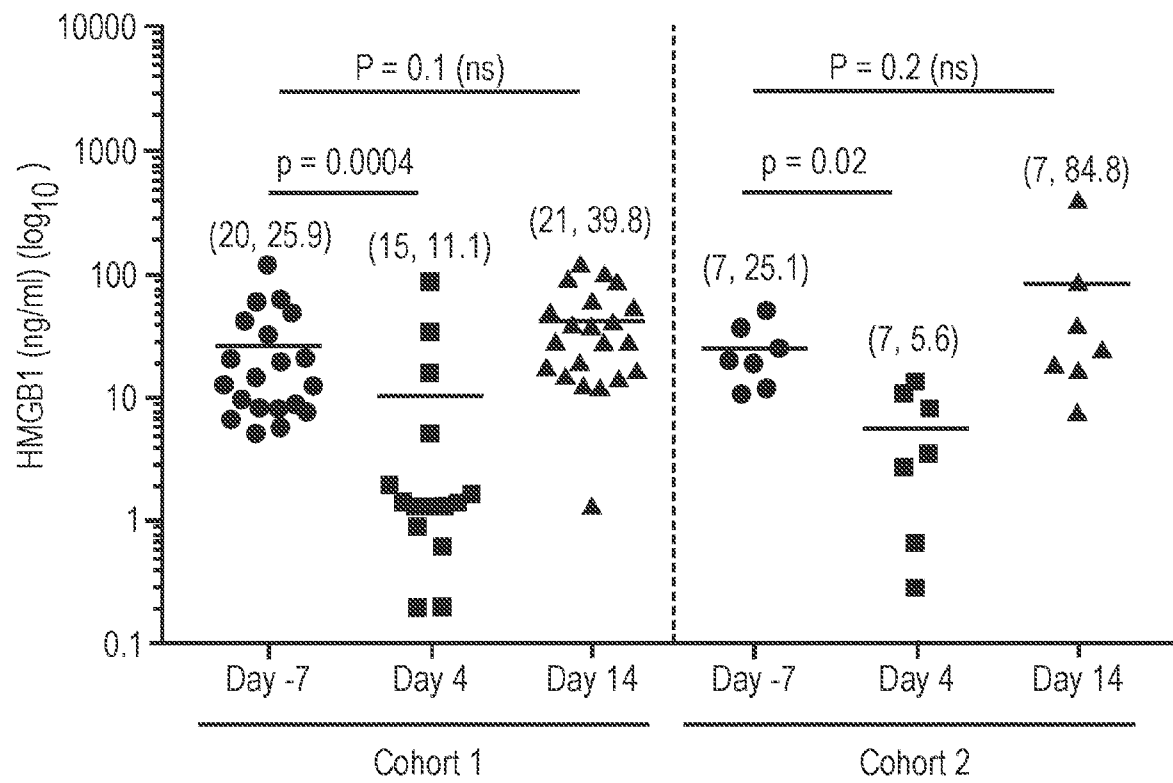


Figure 114

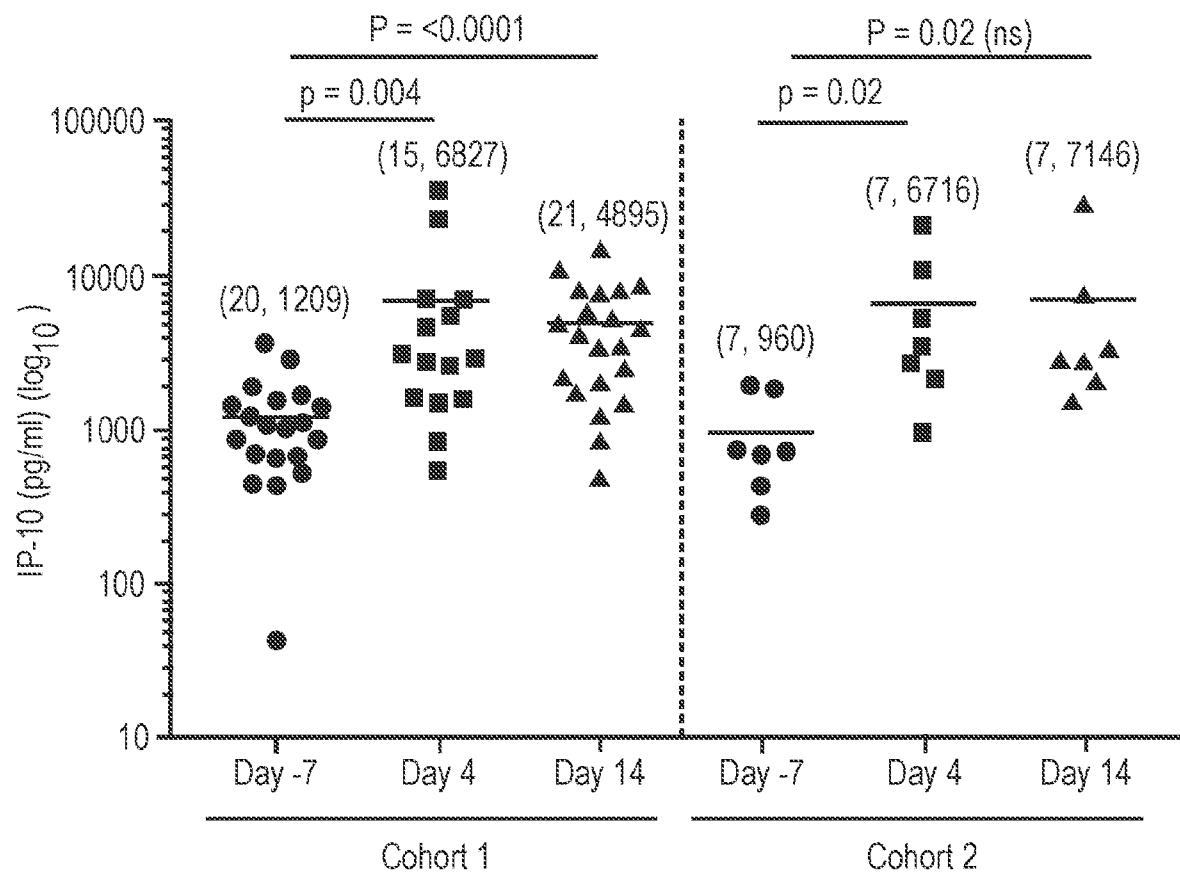


Figure 115

CHARACTERISTIC	Cohort 2 N = 17, (%)
Gender, n (%)	
Male	8 (47)
Female	9 (53)
Age	
Median	54
Min, Max	35, 66
Prior therapies, n (%)	
Mean # prior systemic therapies	3.6
Anti-CTLA-4	15 (88)
Anti-PD-1	16 (94)
Target Lesion Sum of Diameter (mm)	
Mean (SD)	140 (93)
Min, Max	38, 342
CHARACTERISTIC	Cohort 2 N = 17, (%)
Baseline ECOG, n (%)	
0	11 (65)
1	6 (35)
BRAF Status, n (%)	
Mutated	5 (29)
Wild Type	9 (53)
Unknown	3 (18)
Baseline LDH (U/L [SD])	
1-2 times ULN	8 (47)
> 2 times ULN	2 (12)
Number of Target & Non-Target Lesions (at Base Line)	
> 3	12 (71)
Mean	5.9

Cohort 2 has:

3.6 median prior therapies

High tumor burden at baseline as reflected by 140 mm sum of diameters for target lesions

Figure 116

PREFERRED TERM	Cohort 2 (N = 17)		
	Any Grade n (%)	Grade 3/4 n (%)	Grade 5 n (%)
Number of patients reporting at least one Treatment-Emergent AE	16 (94.1)	16 (94.1)	0
Pyrexia	13 (76.5)	1 (5.9)	0
Anaemia	11 (64.7)	10 (58.8)	0
Neutrophil count decreased	10 (58.8)	10 (58.8)	0
Platelet count decreased	10 (58.8)	8 (47.1)	0
Febrile neutropenia	10 (58.8)	8 (47.1)	0
Fatigue	10 (58.8)	0	0
Chills	9 (52.9)	1 (5.9)	0
Nausea	9 (52.9)	0	0
White blood cell count decreased	8 (47.1)	8 (47.1)	0
Lymphocyte count decreased	6 (35.3)	6 (35.3)	0
Diarrhoea	6 (35.3)	0	0
Decreased appetite	6 (35.3)	0	0

Notes: Patients with multiple events for a given preferred term are counted only once using the maximum grade under each preferred term. Treatment-Emergent Adverse Events refer to all AEs starting on or after the first dose date of pre-treatment chemotherapy (Fludarabine and Cyclophosphamide) up to the last dose of IL-2 + 30 days.

Figure 117

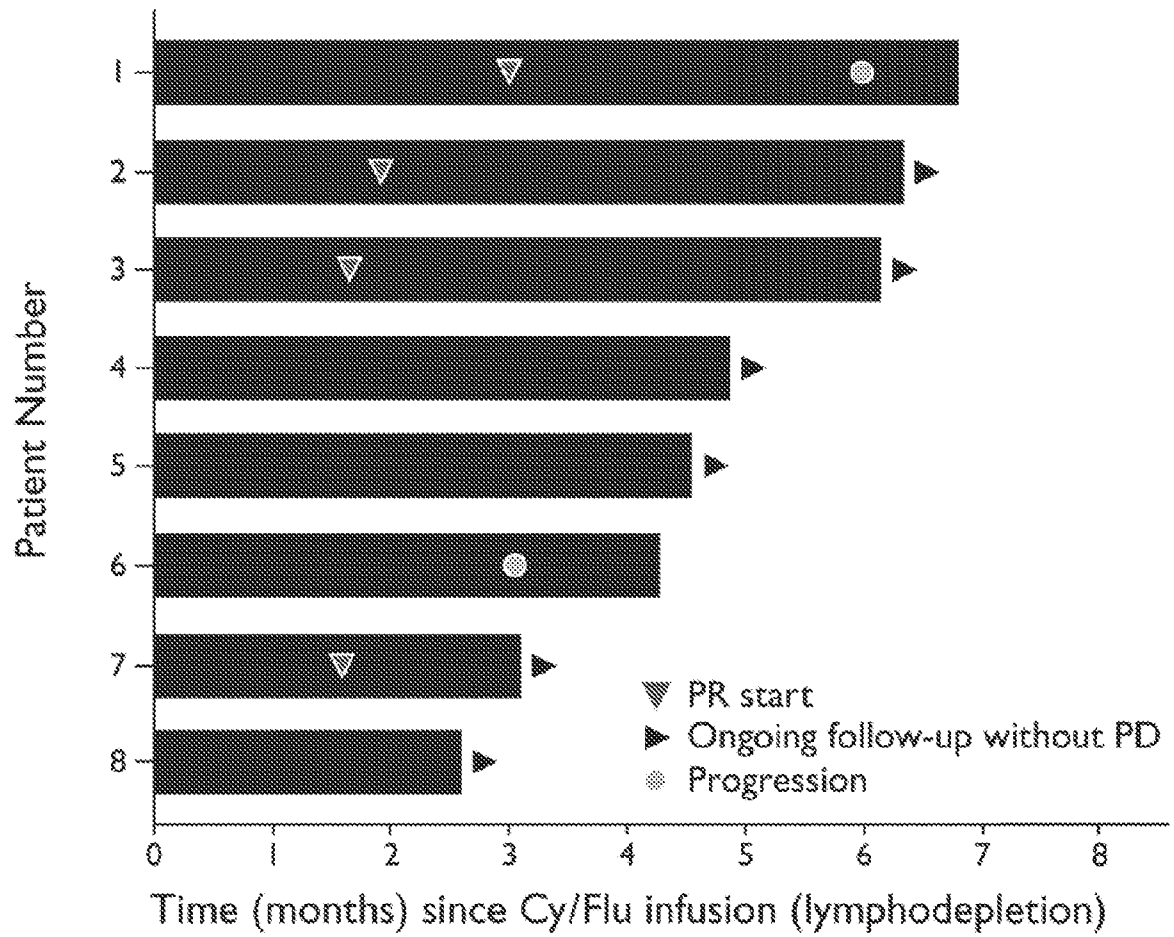
Figure 118

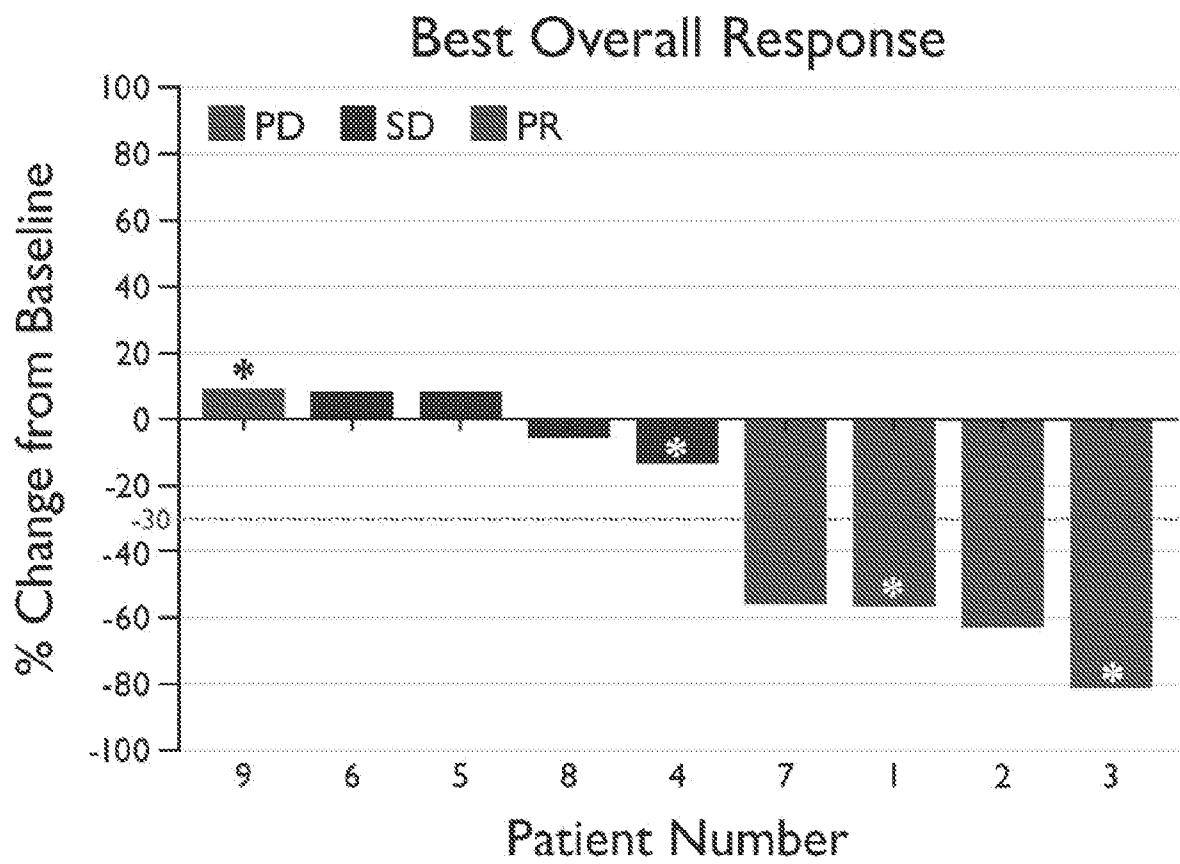
Figure 119

Figure 120

RESPONSE	PATIENTS, N=10 n (%)
Objective Response Rate	4 (40%)
Disease Control Rate	8 (80%)
Partial Response	4 (40%)
Stable Disease	4 (40%)
Progressive Disease	1 (10%)
Non-Evaluable*	1 (10%)

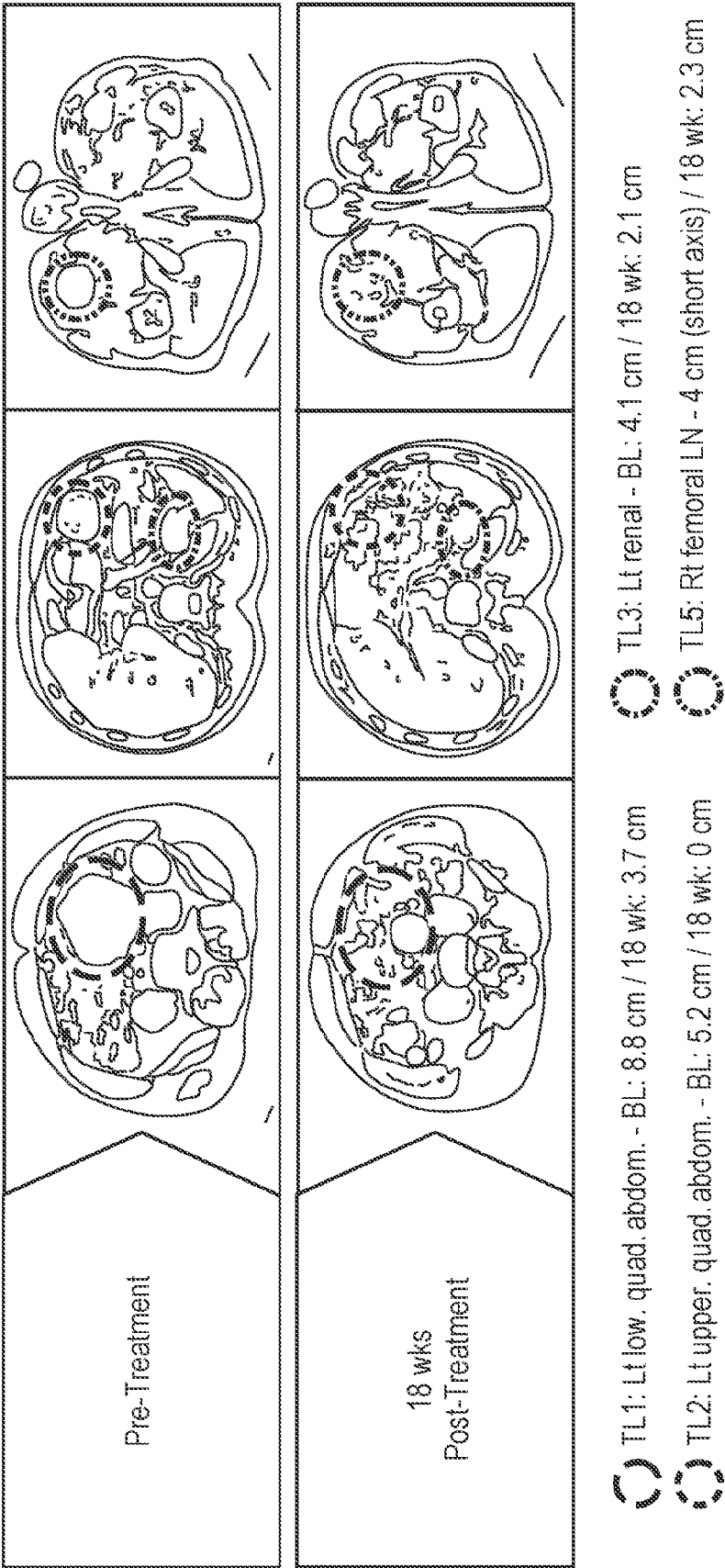
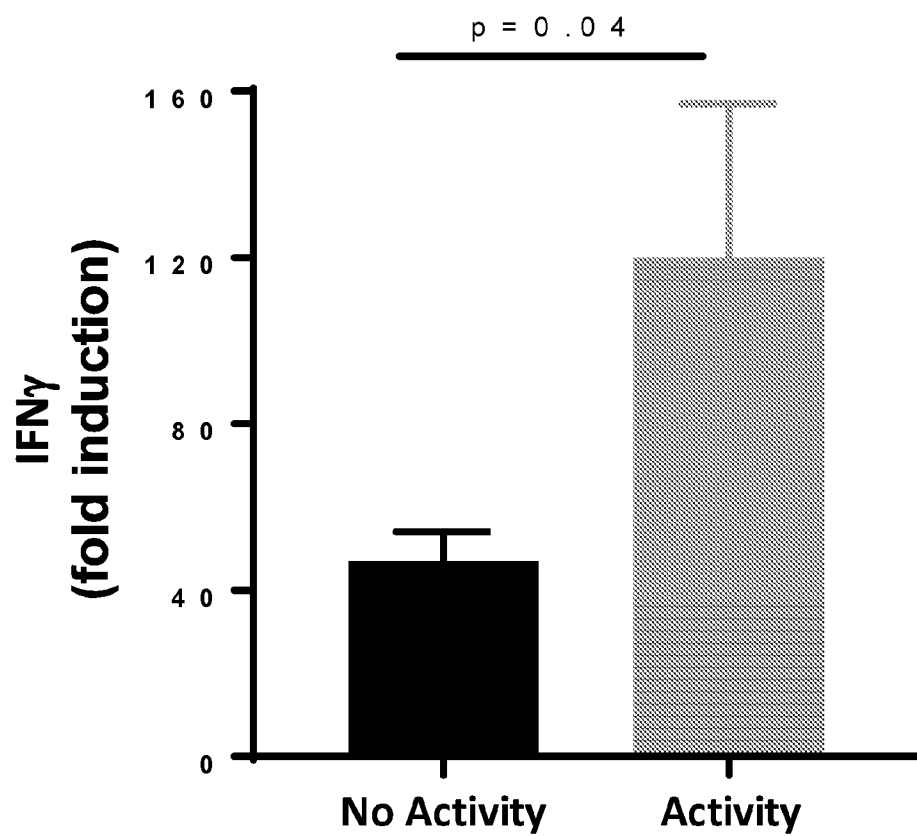


Figure 121

Figure 122

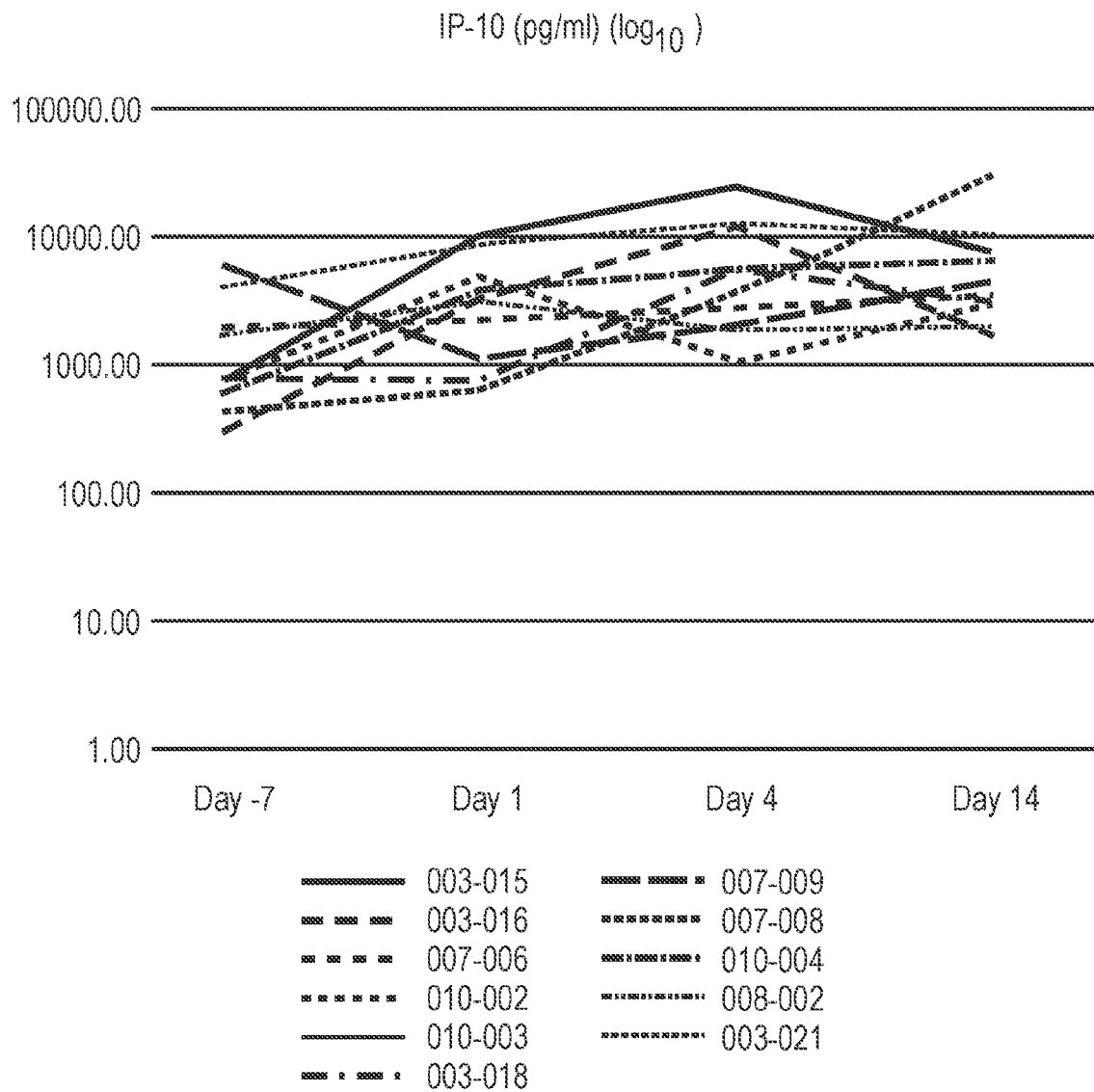


Figure 123

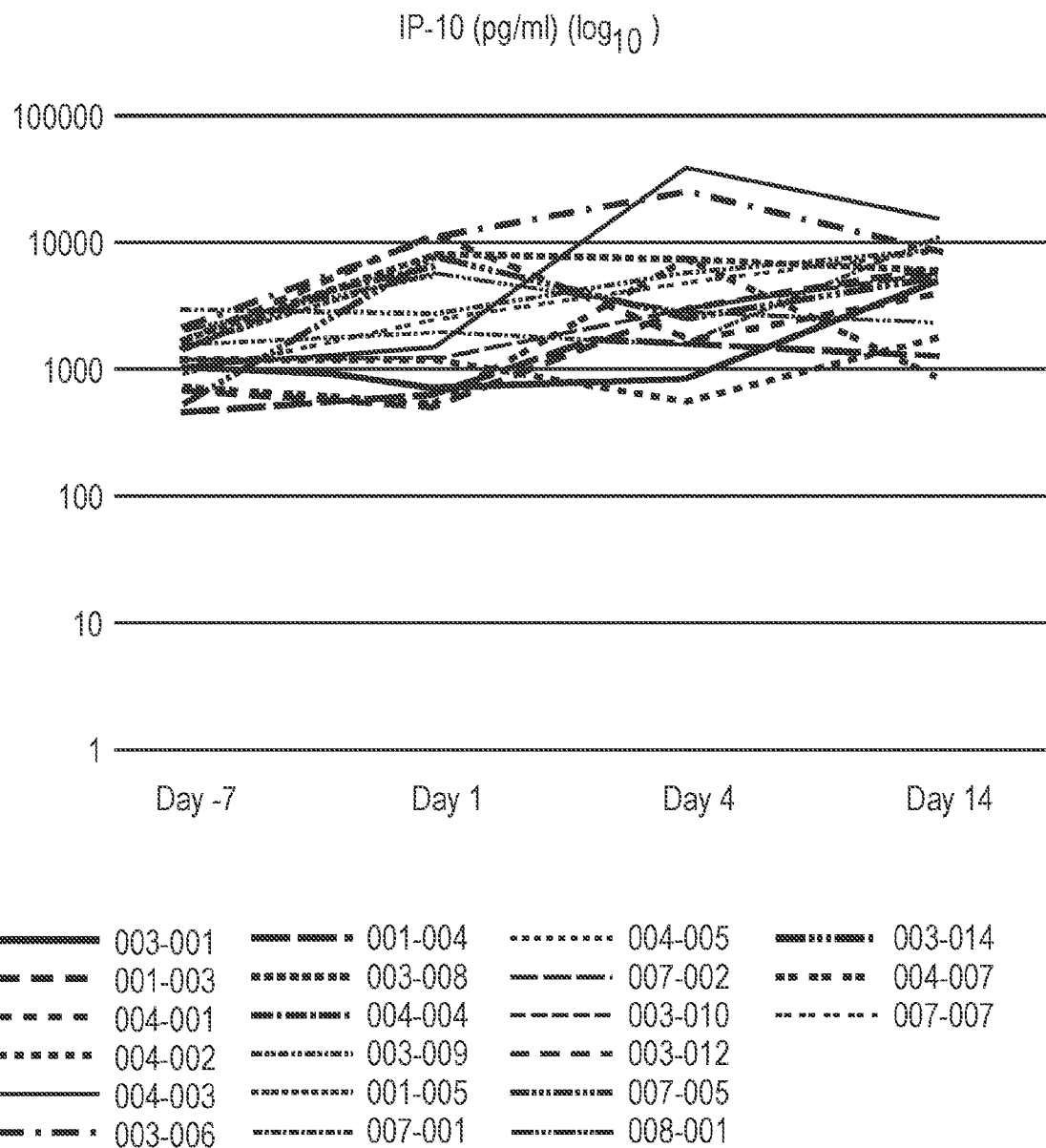


Figure 124

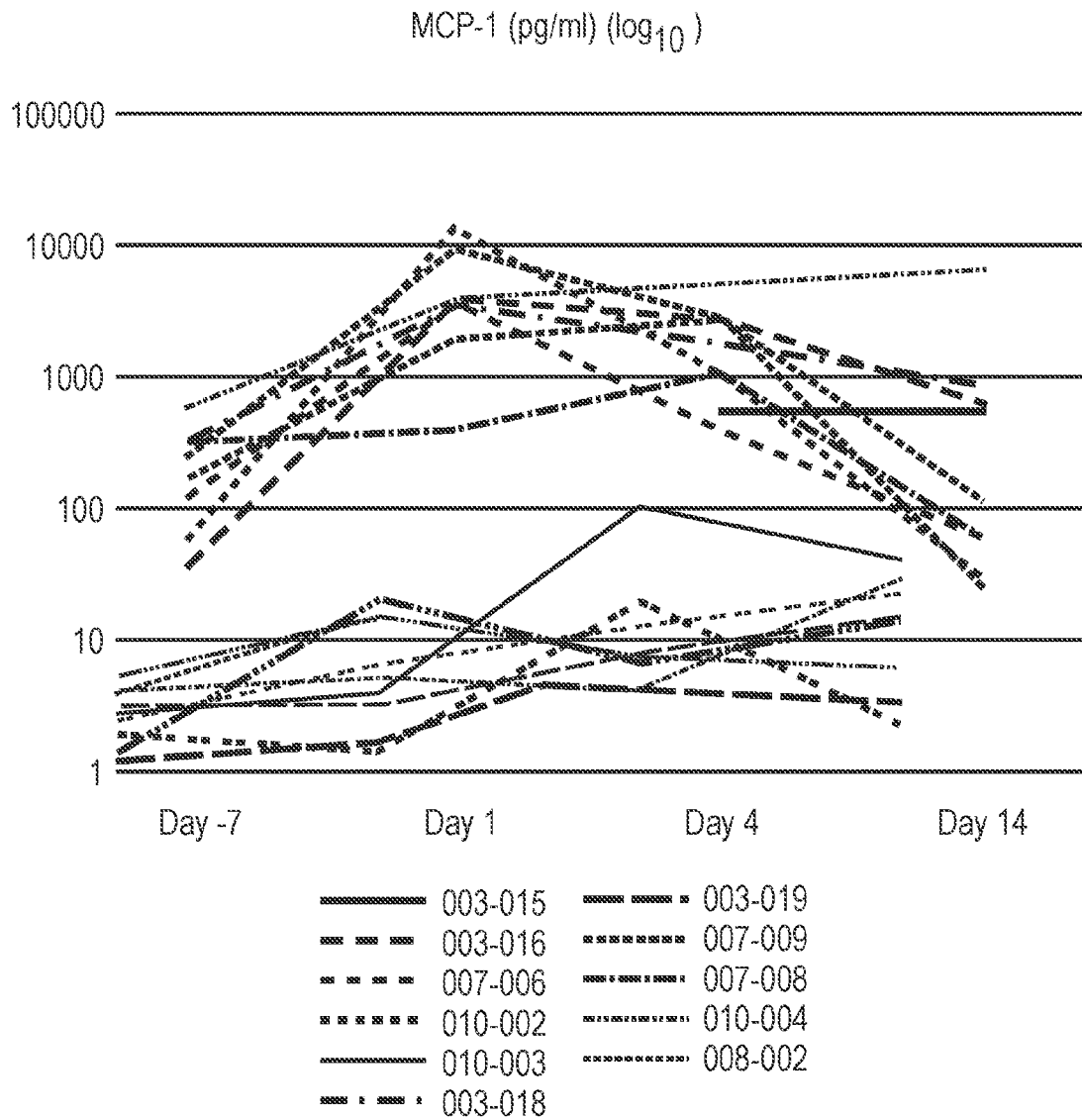


Figure 125

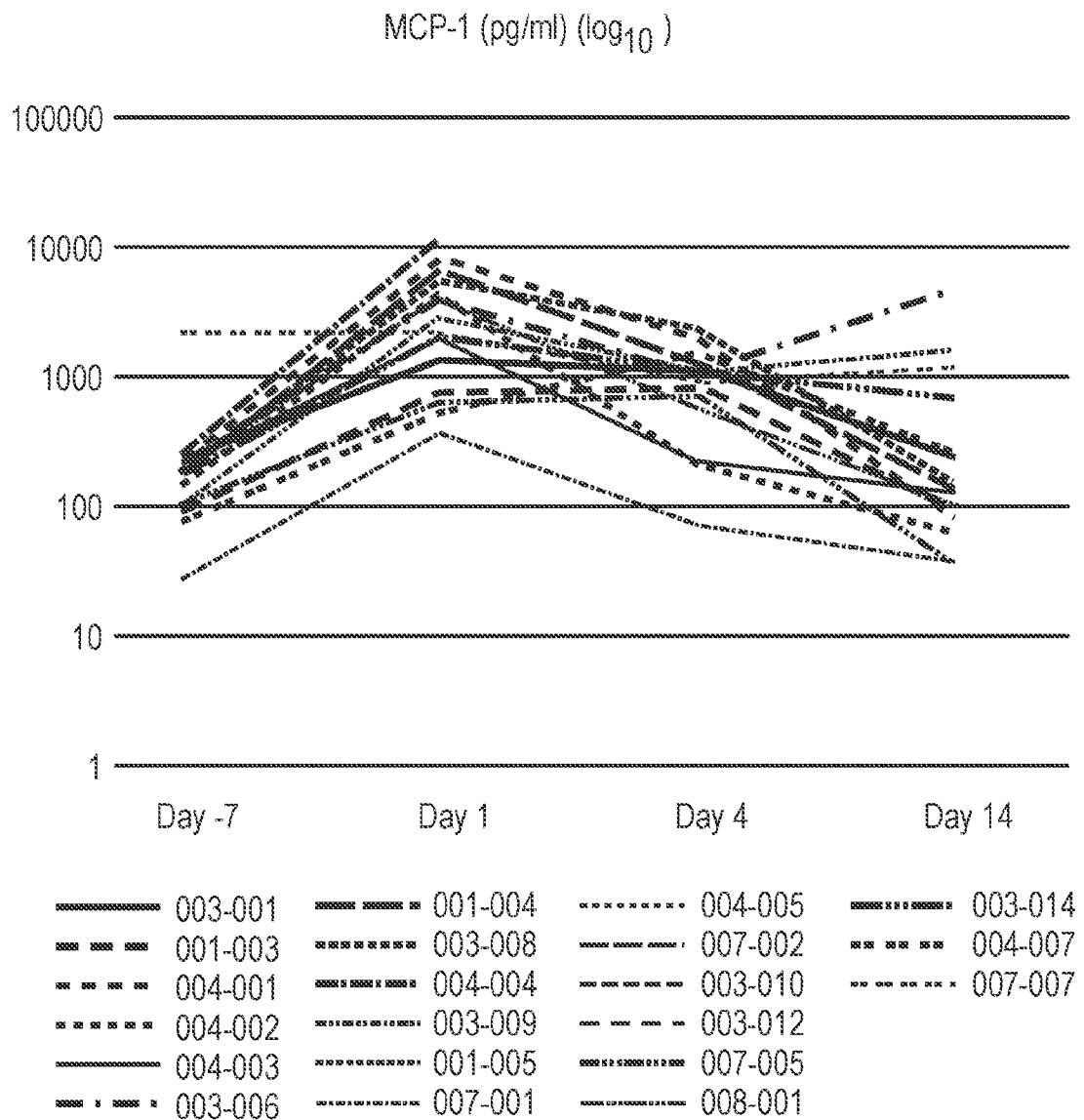


Figure 126

Cervical Carcinoma (C-145-04)									
Pt No	INFUSION	# CELLS INFUSED	RESPONSE DAY 42	RESPONSE DAY 84	RESPONSE DAY 126	RESPONSE AT 6 MONTHS	RESPONSE AT 9 MONTHS	BOR	
1	9-Aug-17	32.6 bil	PR	PR	-	-	-	-	-
2	19-Sep-17	41.4 bil	SD (needs confirmation)		-	-	-	-	-
HNSCC (C-145-03)									
Pt No	INFUSION	# CELLS INFUSED	RESPONSE DAY 28	RESPONSE DAY 56	RESPONSE DAY 84	RESPONSE AT 4 MONTHS	RESPONSE AT 6 MONTHS	BOR	
1	31-May-17	21 bil	SD	PD	Discon.	-	-	-	SD
2	20-Jun-17	21 bil	PR	SD	SD	Passed away.	-	-	SD
3	1-Aug-17	30 bil	PR	PR	PR	PD	-	-	PR
4	14-Sep-17	65 bil	PR	PR	-	-	-	-	PR
5	03-Nov-17	10 bil	-	-	-	-	-	-	-
6	07-Nov-17	37 bil	-	-	-	-	-	-	-
7	08-Nov-17	21.5 bil	-	-	-	-	-	-	-
Median Prior therapies for HNSCC: 4, all have had poor anti-PD-1. The data is live and subject to change.									

Figure 127

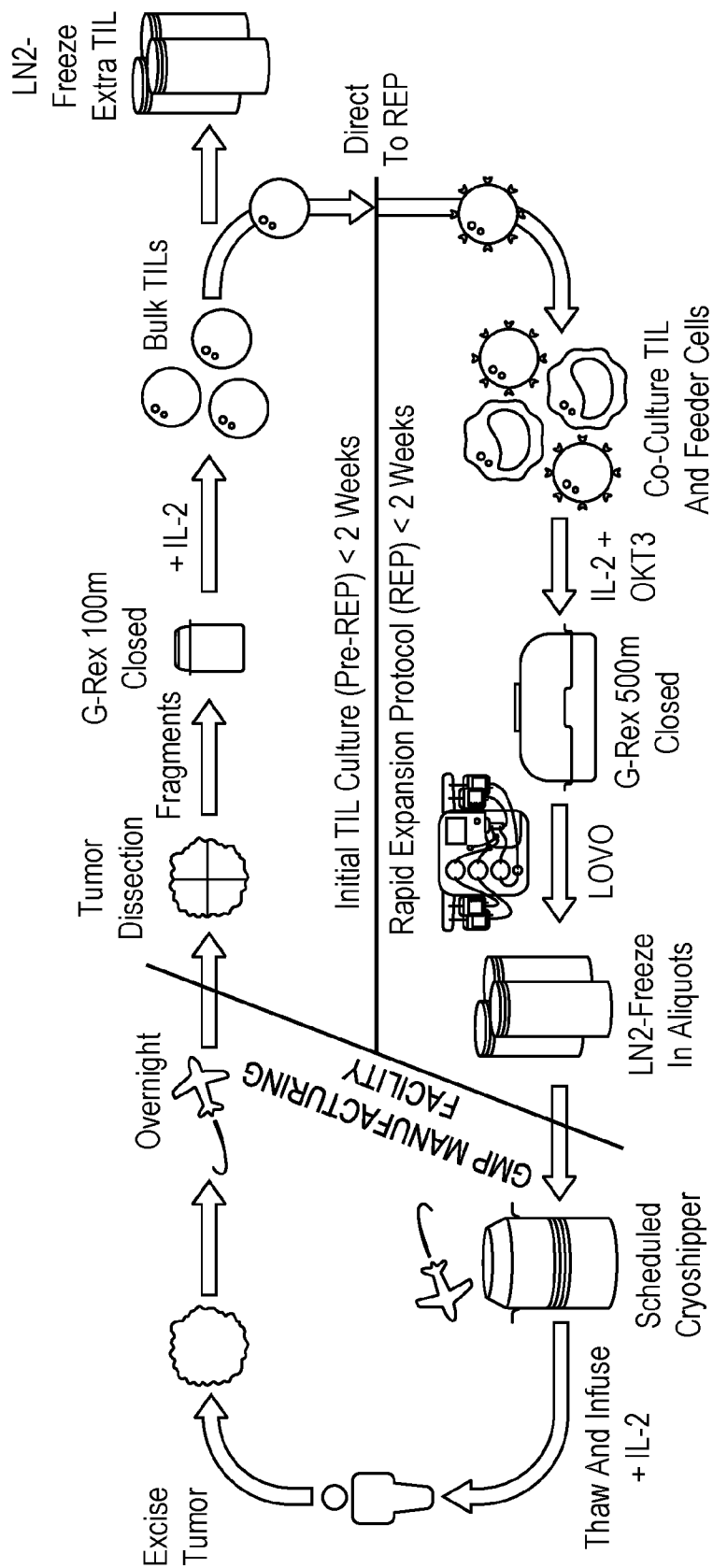


Figure 128

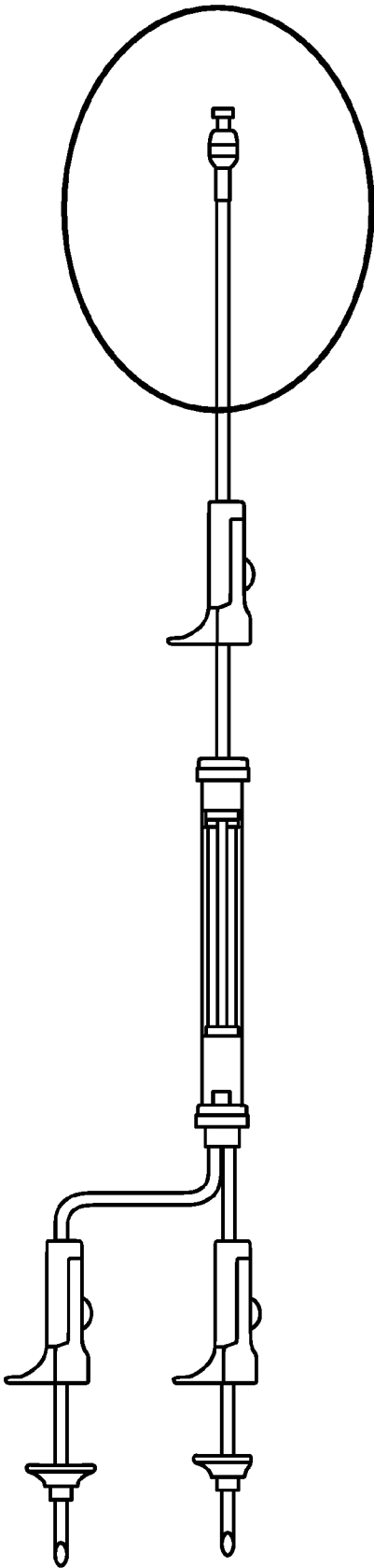


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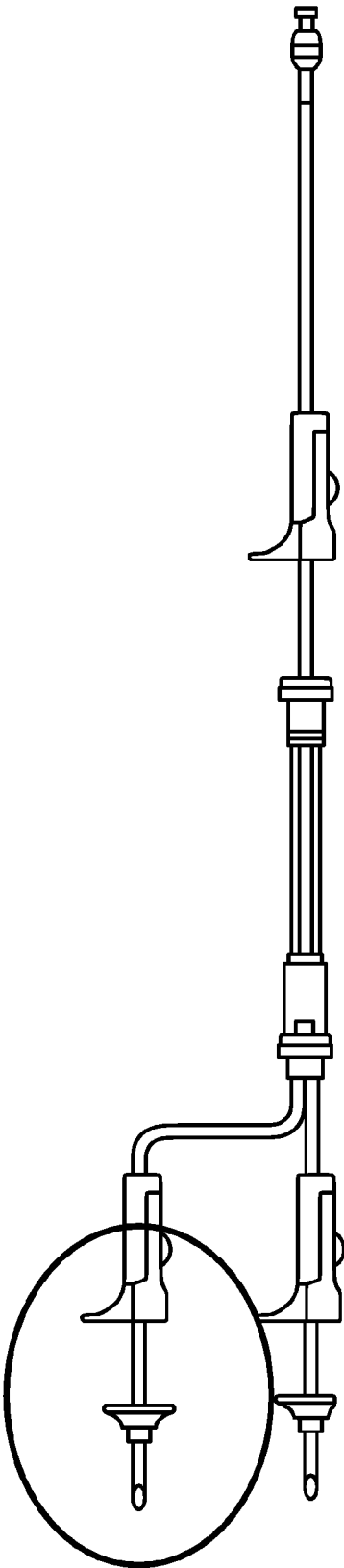


Figure 130

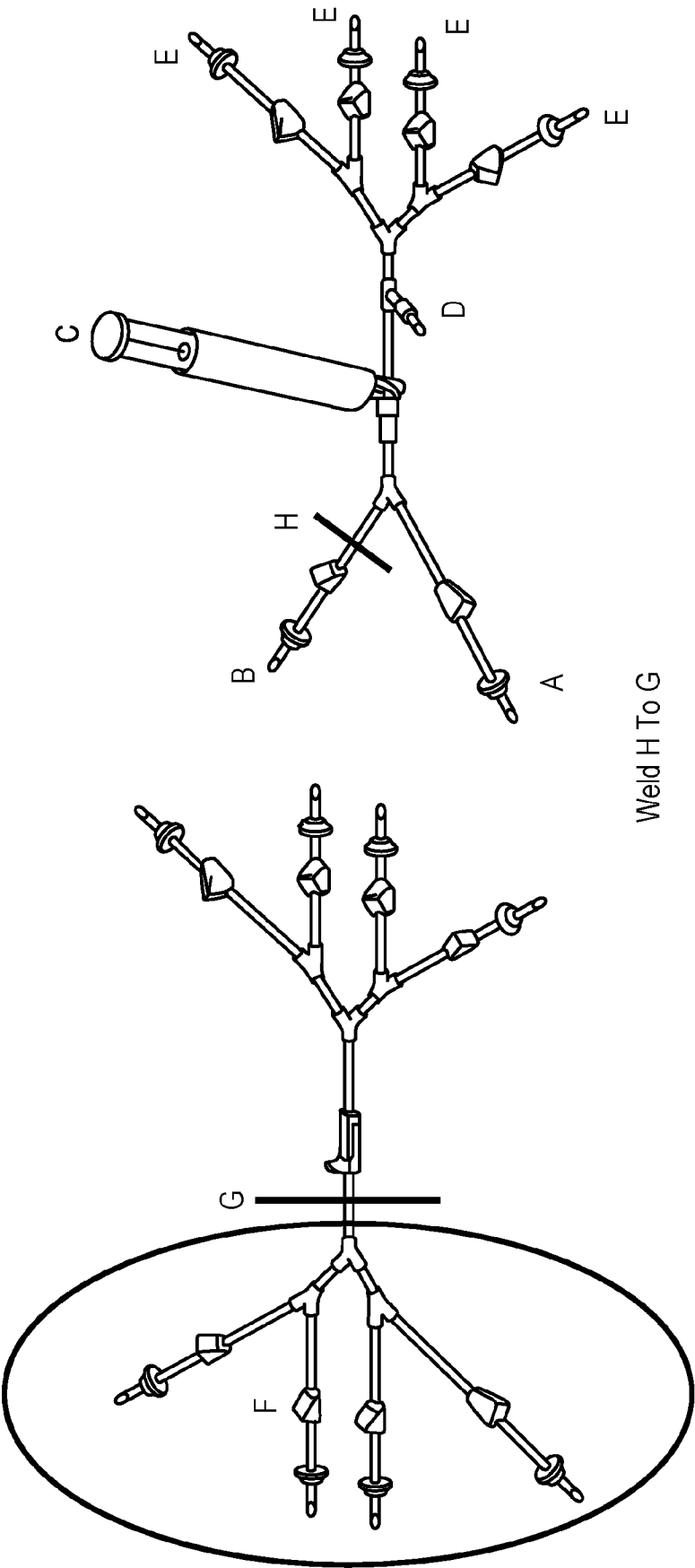


Figure 131

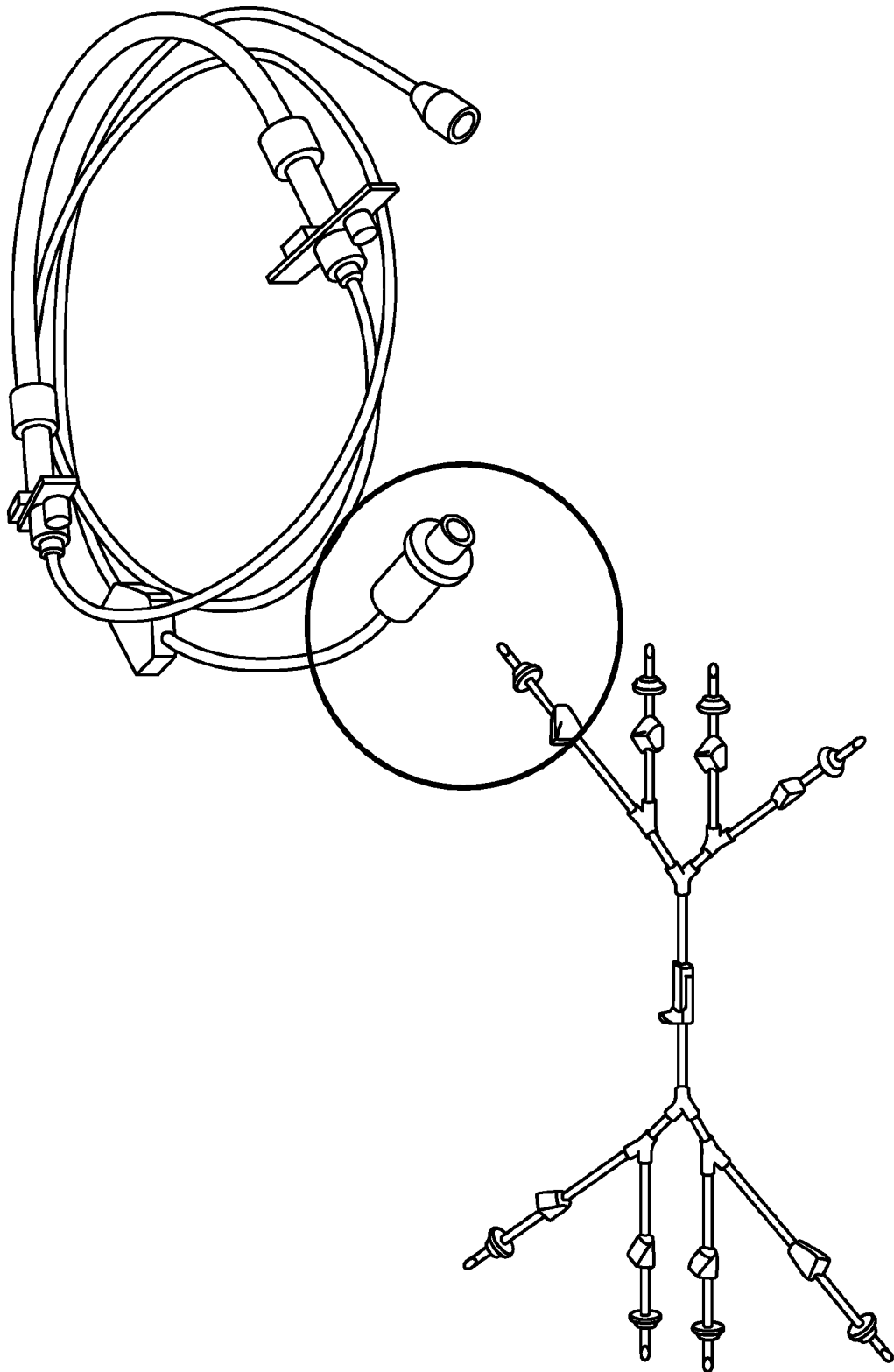


Figure 132

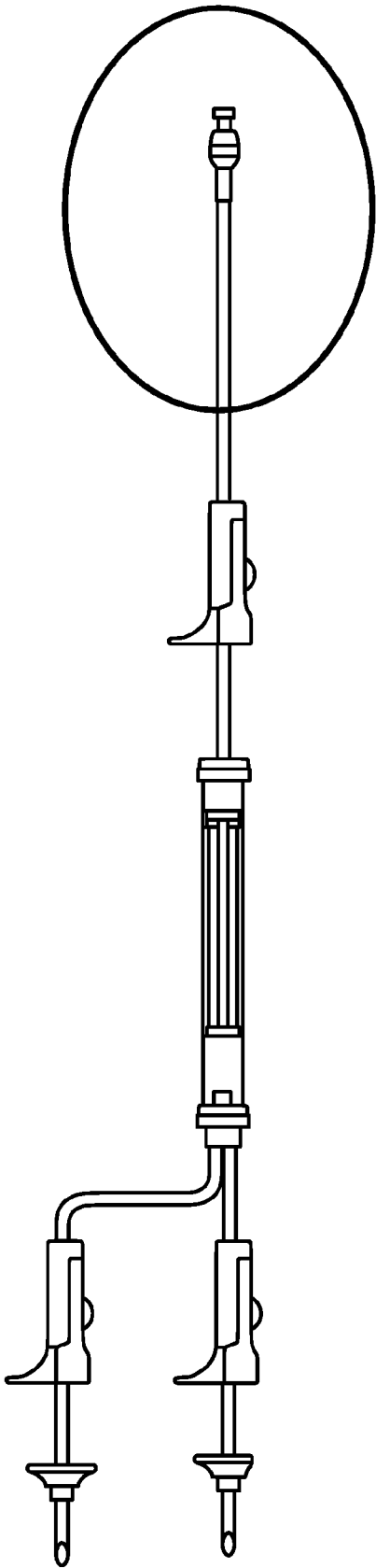


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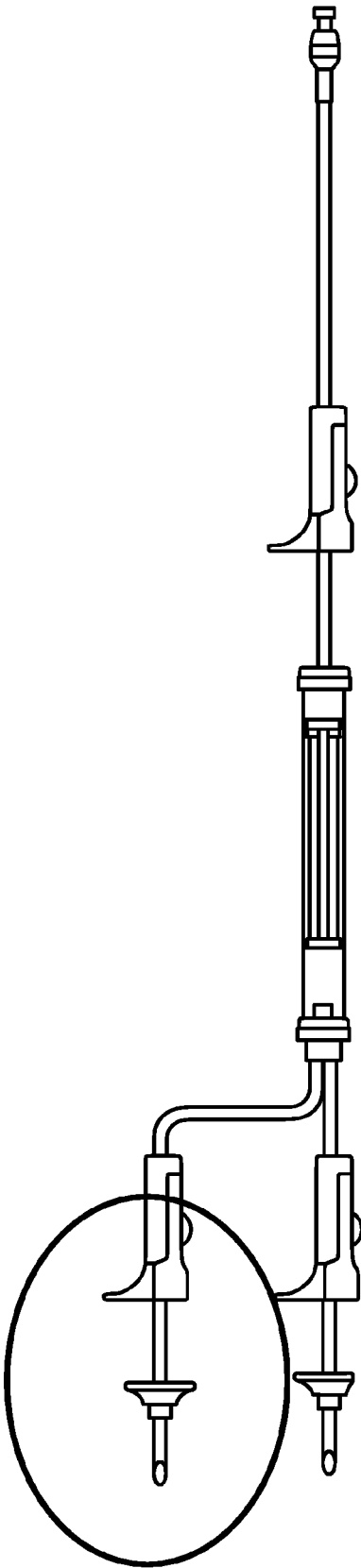


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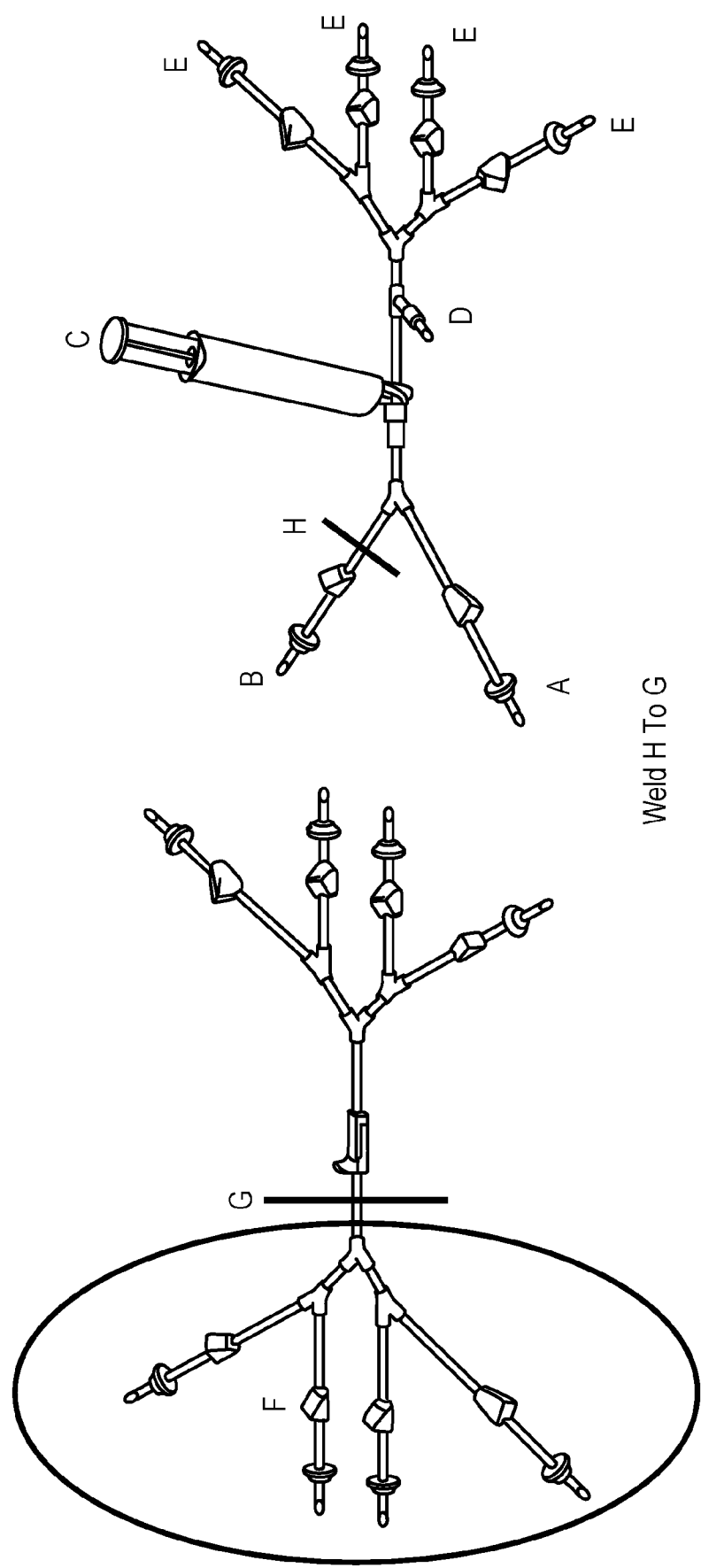


Figure 135

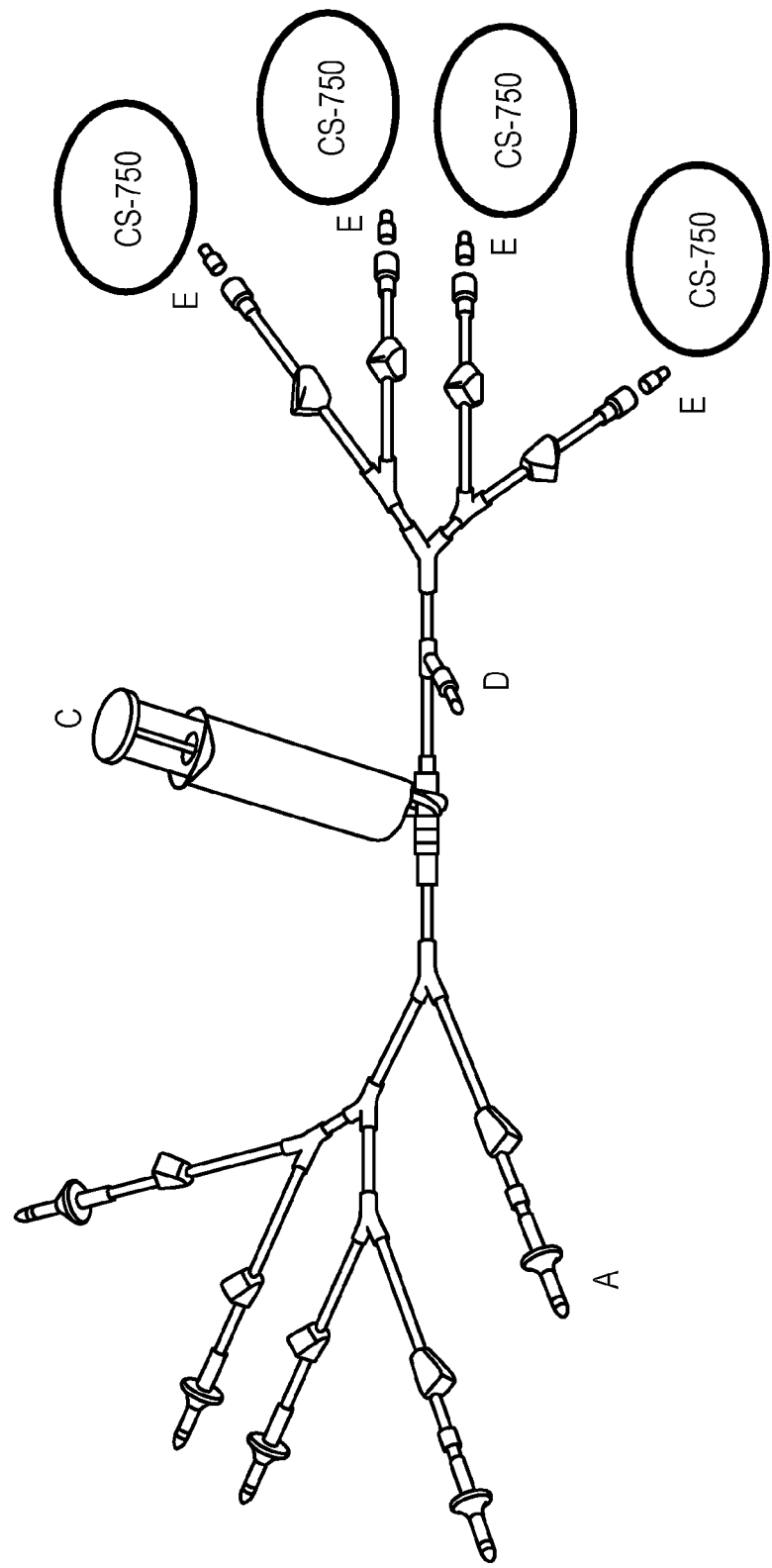


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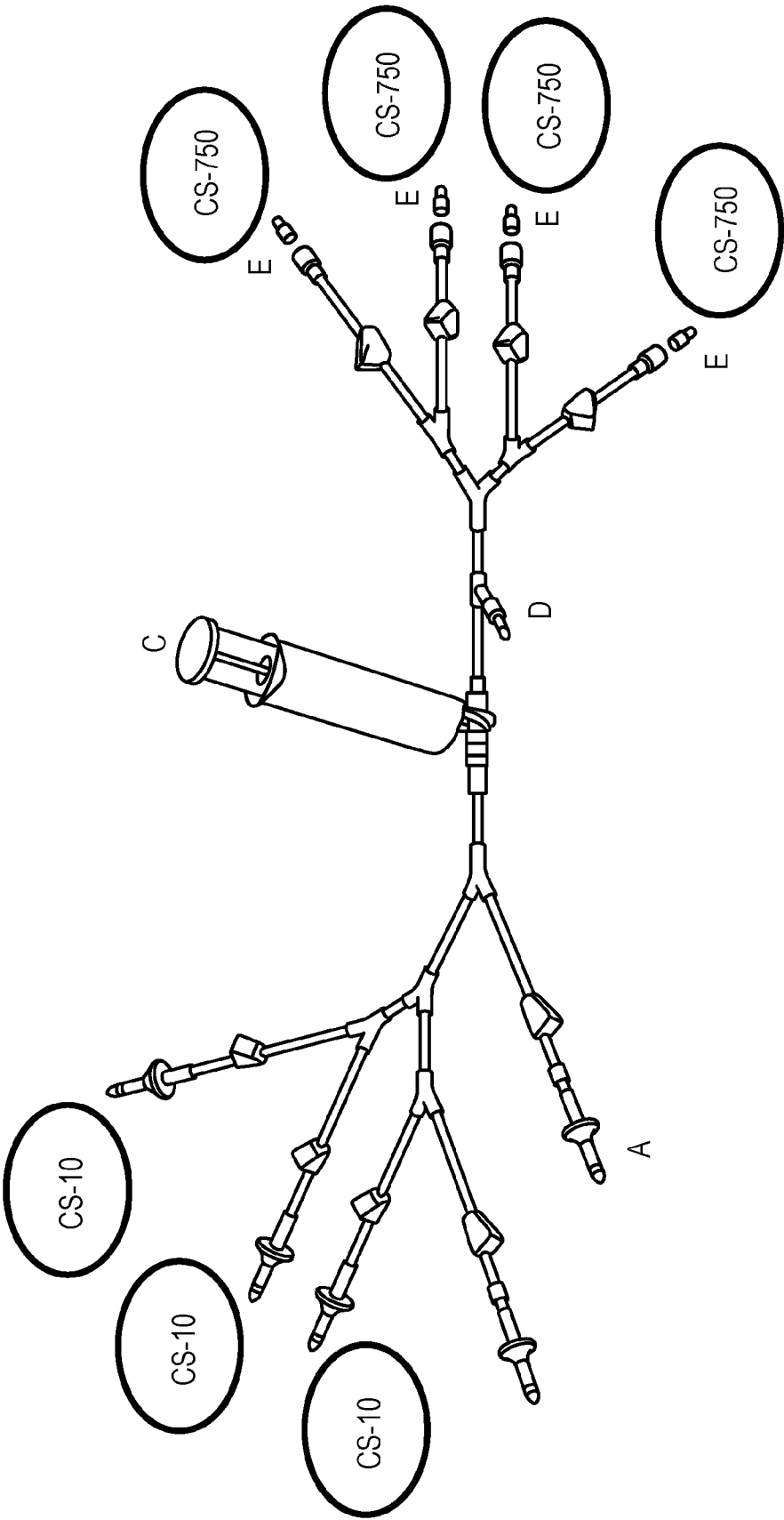


Figure 137

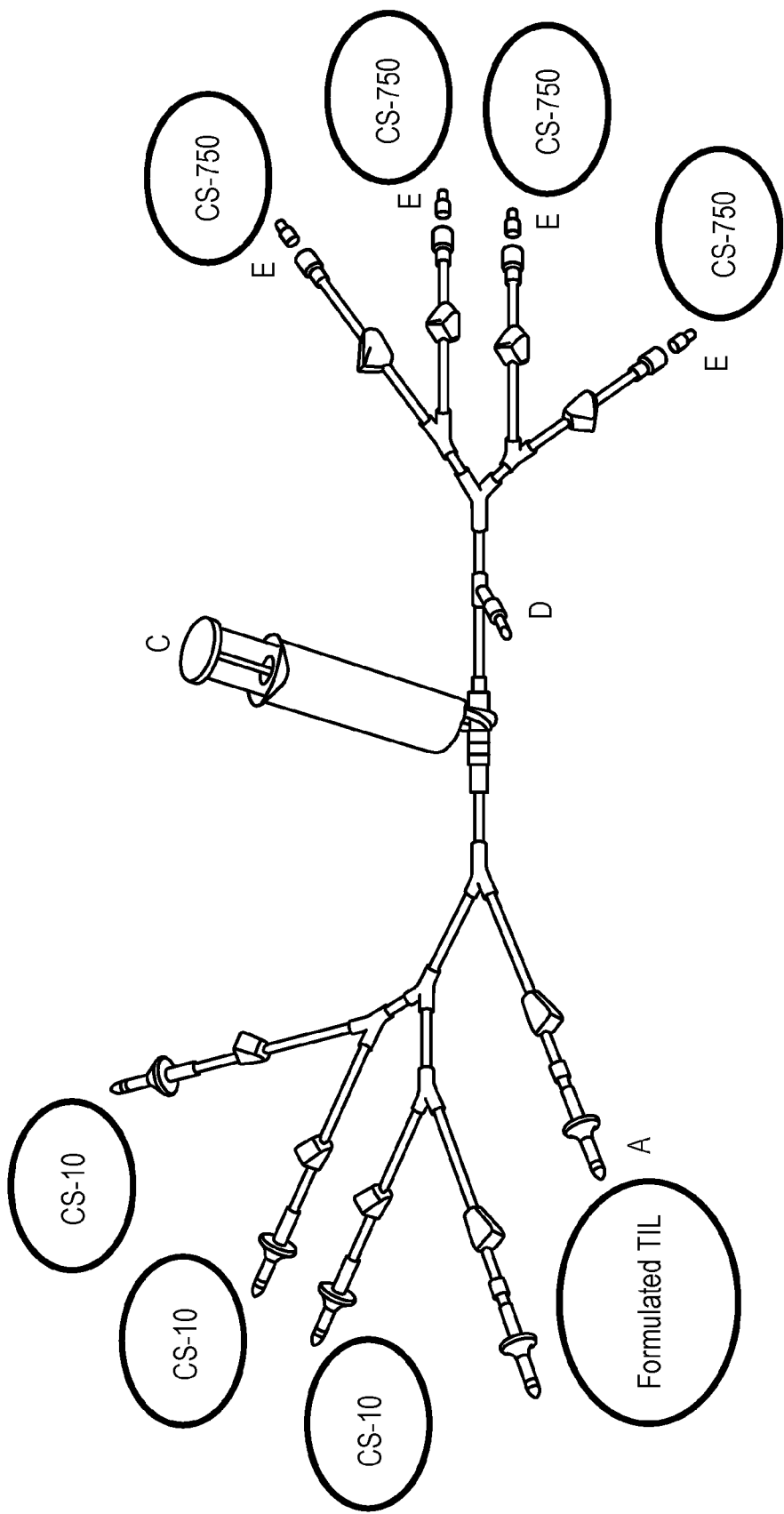


Figure 138

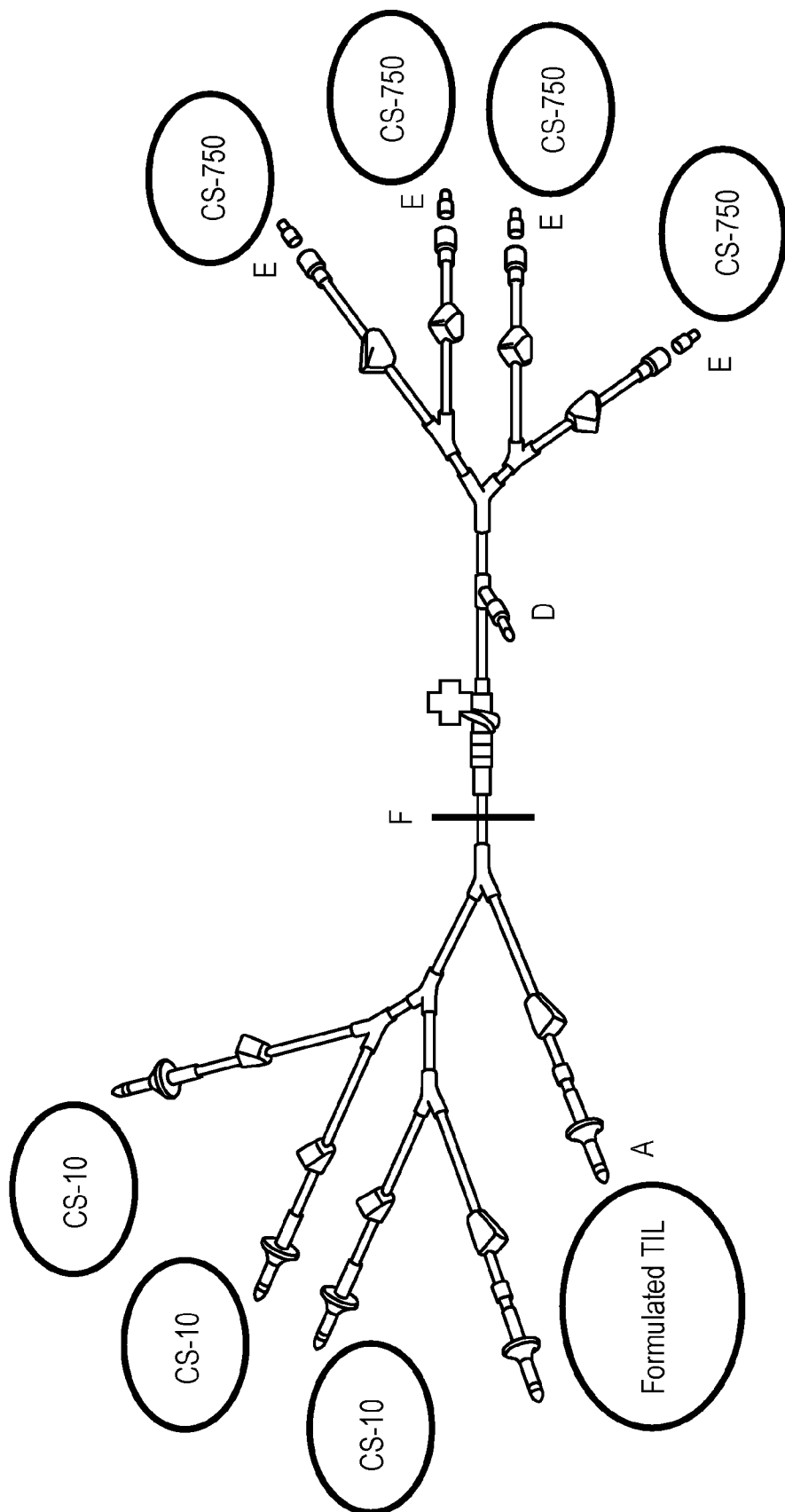
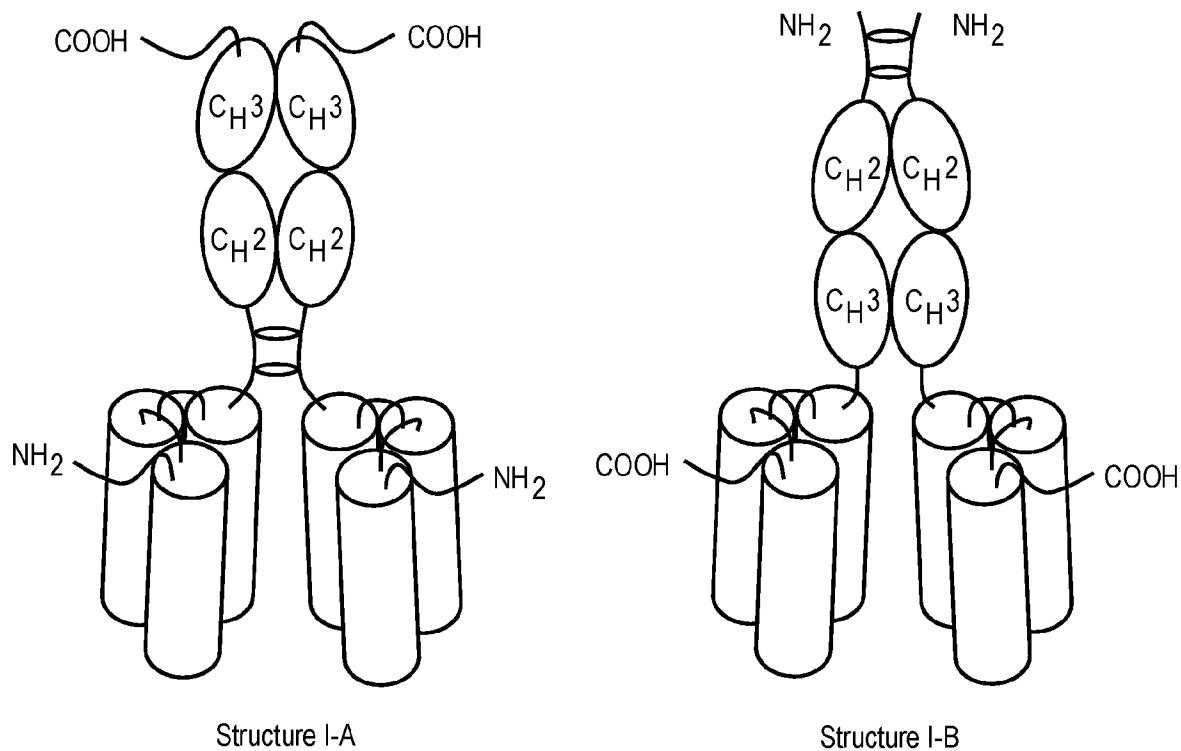
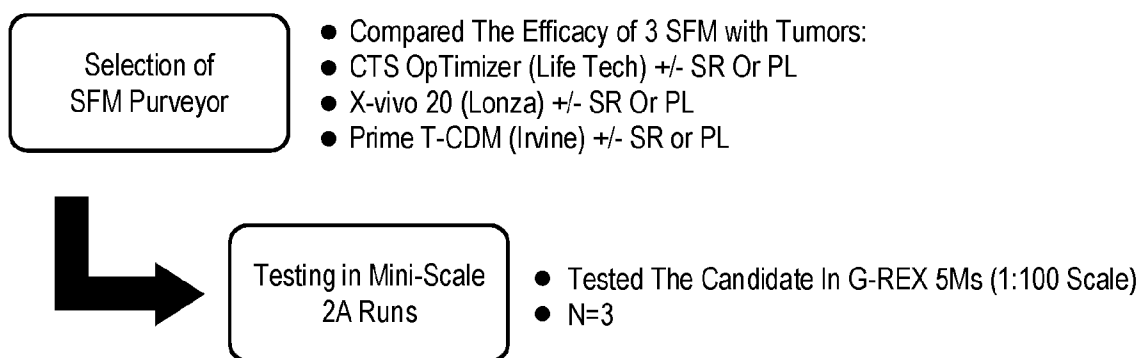


Figure 139

**Figure 140****Figure 141**