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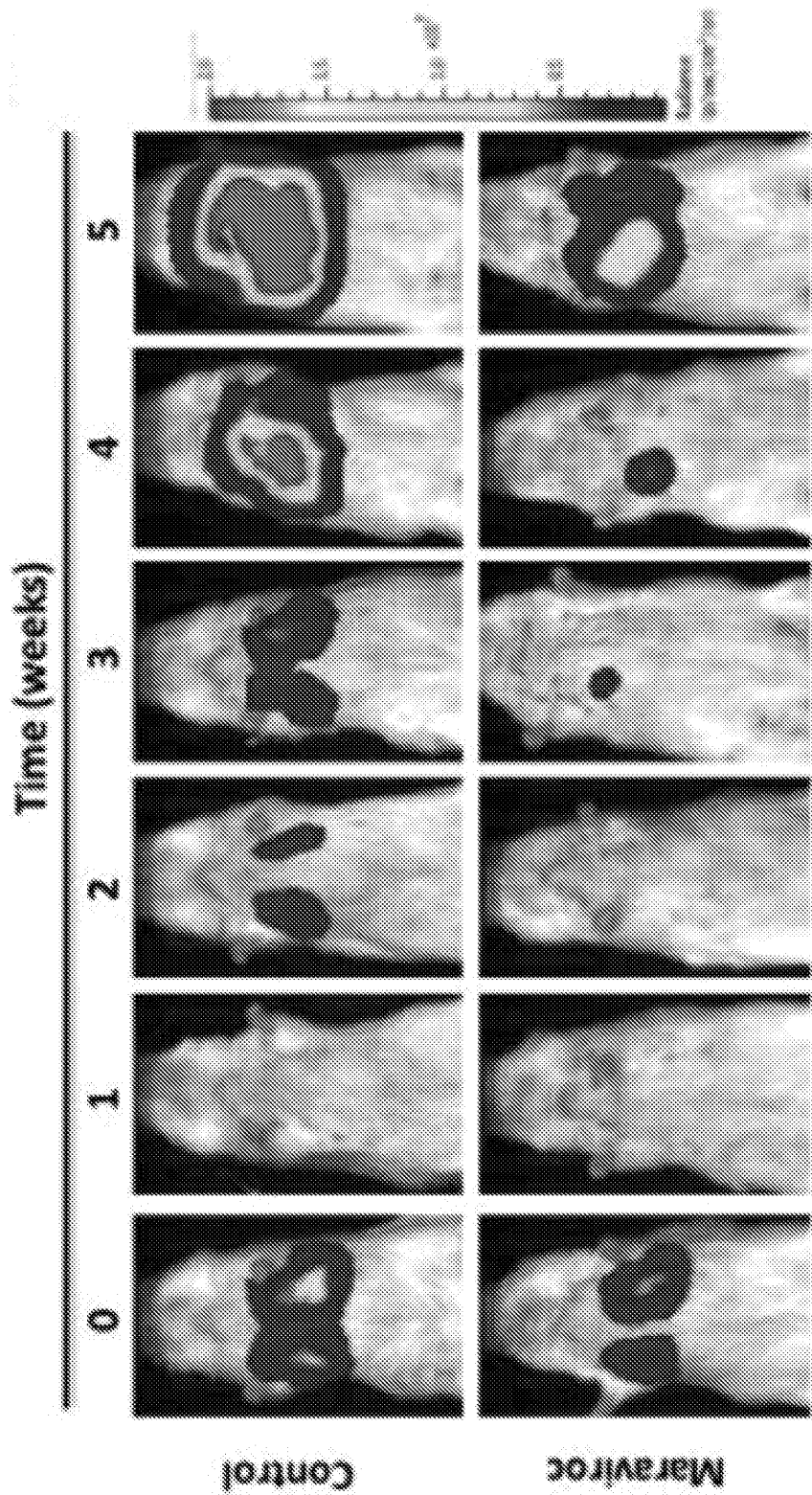


Fig. 1A

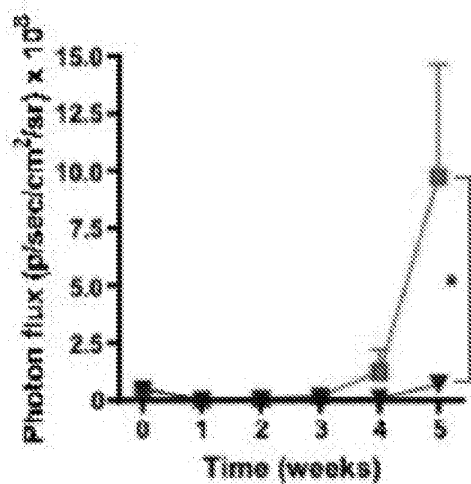


Fig. 1B

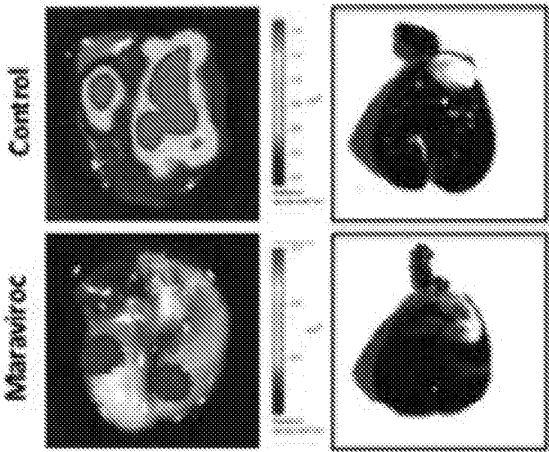


Fig. 1C

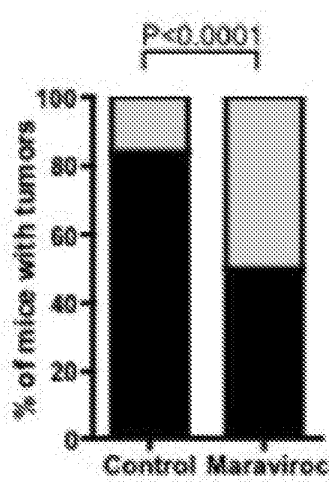


Fig. 1D

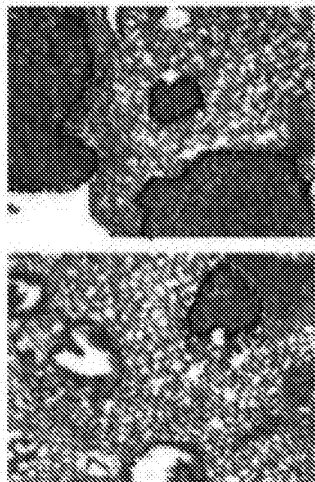


Fig. 1E

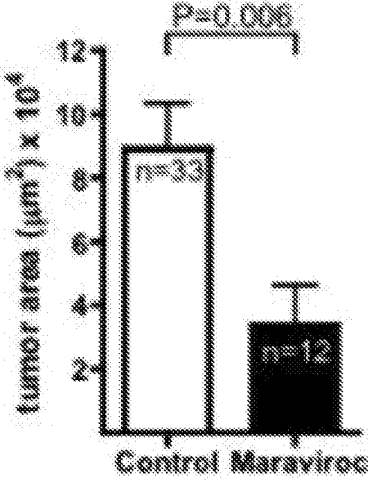


Fig. 1F

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CCR5 Cytoplasmic
Node-negative breast
cancer (537 patients)

Overall survival
P=0.0013

Teal – Low CCR5
Grey – High CCR5

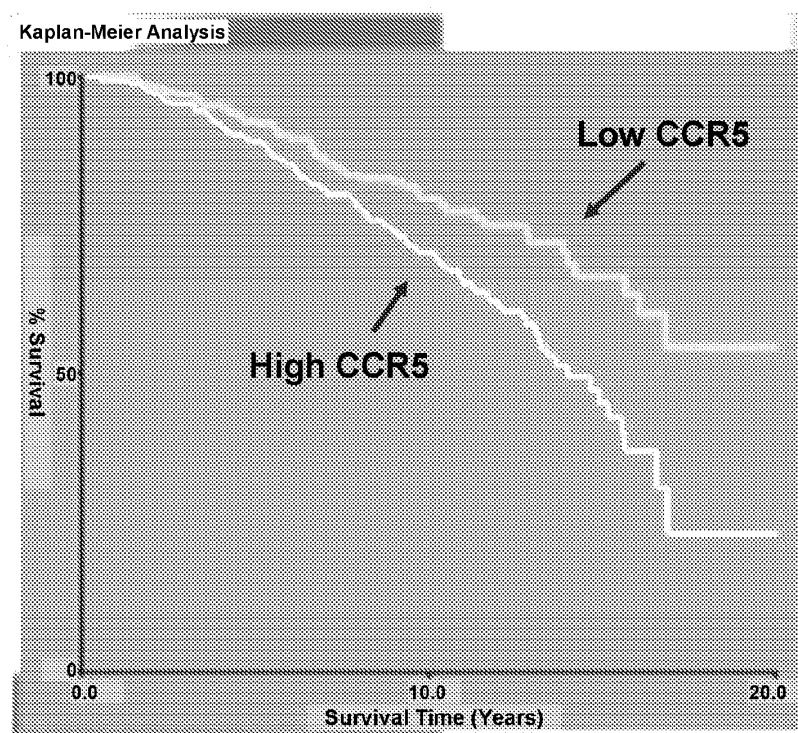


Fig. 2

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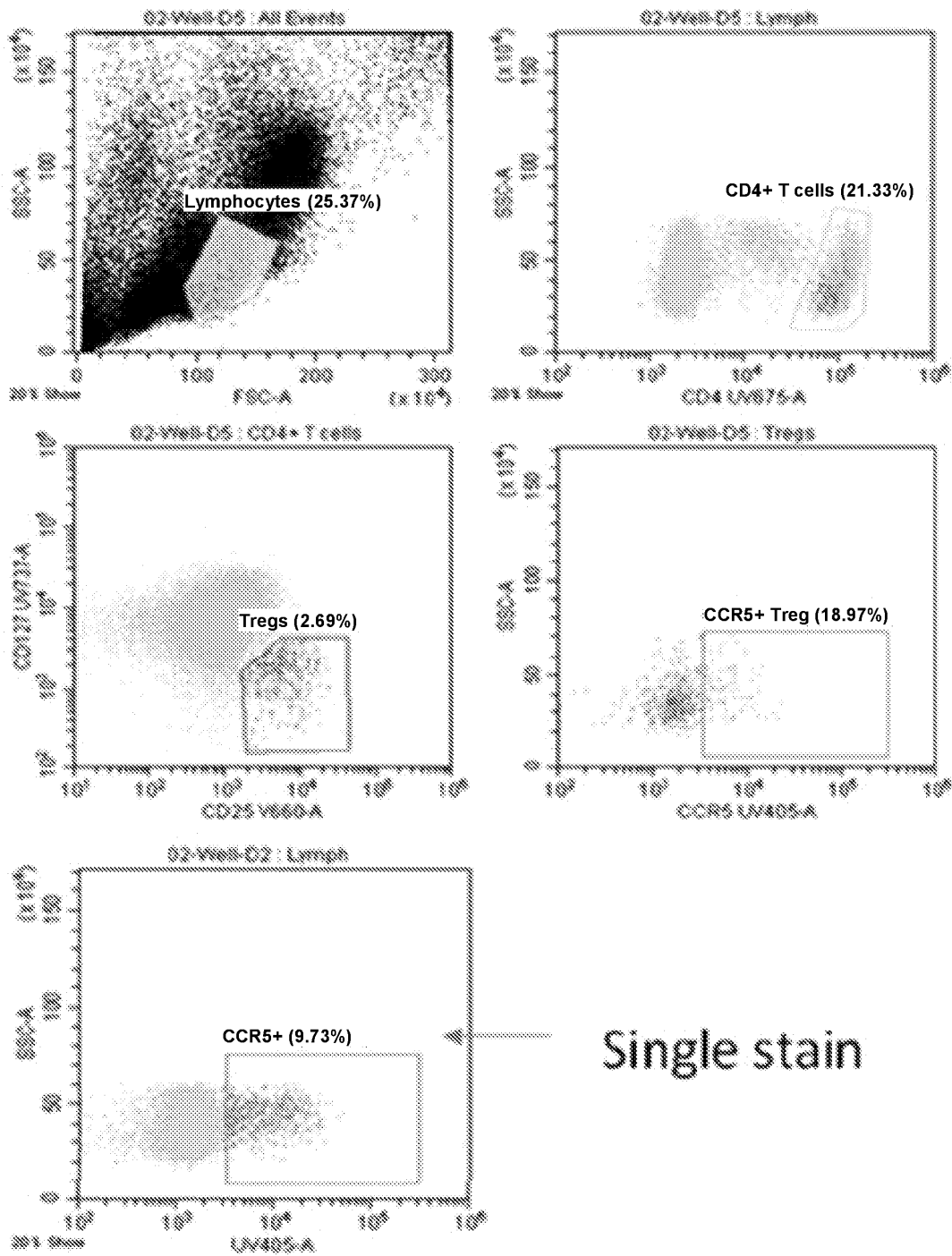


Fig. 3A

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Tube Name: 02-Well-05

Sample ID:

Population	Events	% Total	% Parent
▼ ● All Events	347706	100.00 %	100.00 %
▼ ● Lymph	88221	25.37 %	25.37 %
▼ ● CD4+ T cells	18815	5.41 %	21.33 %
▼ ● Tregs	506	0.15 %	2.69 %
● CCRS+ Treg	94	0.03 %	18.97 %

Fig. 3B

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(A) Subject 1: Representative images of IHC for CCR5

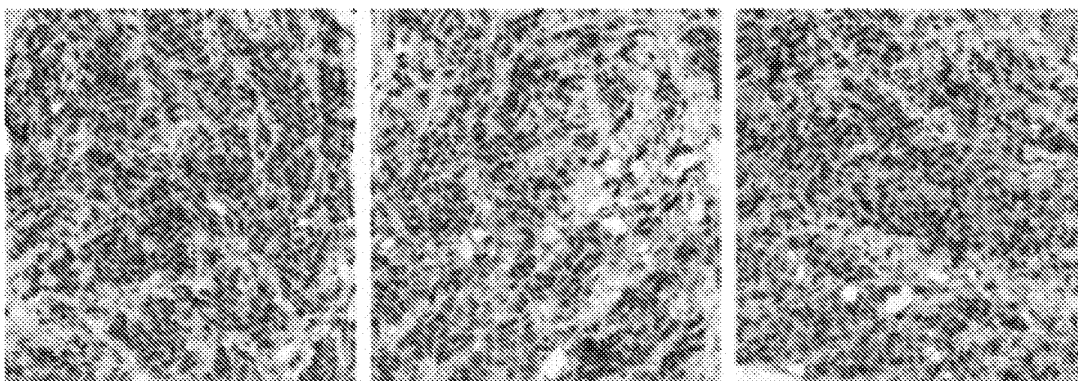


Fig. 4A

(B) Negative Control CCR5

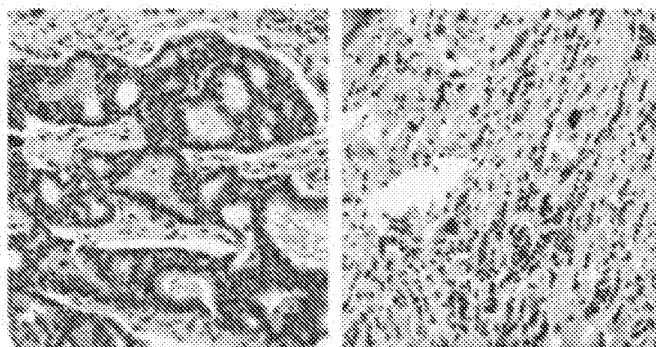


Fig. 4B

(C) Positive Control CCR5

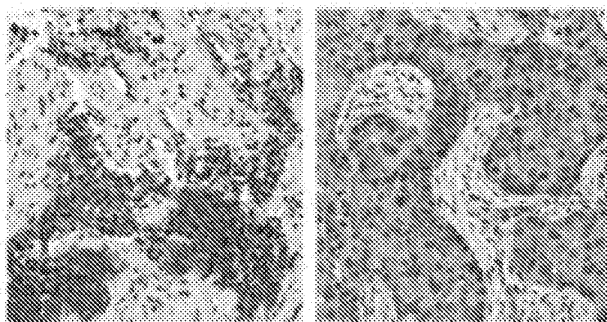


Fig. 4C

Patient D		T.P. = Time Point	
Breast Cancer (Breast Cancer) - Clinical Stage IV (AJCC v8) (TNM: cM1; ER Status: Negative; PR Status: Negative)			
A. 42 yo Stage IV Metastatic breast CA triple negative to Lung/hilar LN dx		after completing ddAC->taxol	
T.P. A presented with cough and chest xray with 2.4 cm R perihilar mass. CT chest		T.P. B 2.5 cm R hilar soft tissue density and R hilar adenopathy	
PETCT with RUL lung nodule and R hilar LN SUV=		Negative BRCA	
No liver, bone mets			
T.P. C s/p EBUS and biopsy			
PR negative <1% and HER2 IHC negative 0			
Pending PD1 testing			
T.P. D Brain MRI negative			
Mammogram TOMO T.P. E normal and US normal			
T.P. E labs Vid 8 33 CMP normal CBC normal			
PLAN			
T.P. I			
Decadron 4 BID started T.P. and IV today with Carbo densitization today on Triple negative cytodyn trial. Will continue steroids post x 3 days			
T.P. H PETCT reviewed and continued response target lung lesion 2.1 x 1.6 cm (from 2.4x1.9 just on T.P. F) SUV down significantly from 15 to 6.			
Having some fasting glucose elevations with steroids as fasting glucose for PET was 120, Did have some gestational diabetes managed with diet. Will avoid Xmas sweets and check at home am/pm.			
		26% reduction in tumor size	

Fig. 5

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Patient A				
CHEST				
Date	A	B	C	D
Time Point A	1.8 x 1.6 cm	3.2 x 2.3 cm	2.2 x 1.4 cm	1.2 x 1.1 cm
Time Point B	1.3 x 1.0 cm	2.5 x 2.3 cm	1.6 x 1.0 cm	1.1 x 0.9 cm
Time Point C	1.2 x 0.9 cm	2.0 x 1.7 cm	1.5 x 0.7 cm	0.7 x 0.6 cm
Time Point D	1.8 x 1.0 cm	2.3 x 1.1 cm	1.1 x 0.5 cm	0.6 x 0.6 cm
Time Point E	1.4 x 0.7 cm	2.8 x 1.3 cm		0.6 x 0.6 cm
Time Point F	Unchanged	2.6 x 1.0 cm	1.1 x 0.4 cm	6 mm
Time Point G	1.8 x 1.1 cm			
Time Point H	1.8 x 1.2 cm	2.6 x 1.0 cm	4 mm	5 mm
Time Point I	2.5 x 2.2 cm	2.6 x 0.9 cm	4 mm	5 mm
Time Point J	2.6 x 2.2 cm	2.7 x 0.8 cm		
Time Point K	Extra 5 mm			
Time Point L	Extra 6 mm			
Time Point M	Extra 7 mm			
A=Inferior right breast lesion				
B=Left upper lobe nodule				
C=Left upper lobe nodule				
D=Right lower lobe nodule				

Fig. 6

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Patient A CCR5 Time Point #1						
				tube 2		
			Number of CTCs	0		
			Number of Apoptotic CTCs	0		
			Number of EMTs	0		
			Number of CAMLs	17		
			Largest CAML	111 μ m		
	<u>CCR5 INT</u>	<u>CCR5</u> <u>Background</u>	<u>CCR5</u> <u>expression</u>	<u>CCR5 score</u>	<u>Number</u> <u>of CCR5</u> <u>Dots</u>	<u>CAML size</u>
CAML	402	233	169		6	34
CAML	562	230	332		34	38
CAML	303	233	70		13	60
CAML	332	227	105		16	56
CAML	292	232	60		14	57
CAML	296	226	70		10	71
CAML	360	222	138		23	33
CAML	288	225	63		18	47
CAML	307	219	88		5	34
CAML	304	215	89		24	100
CAML	280	210	70		13	47
CAML	644	285	359		8	38
CAML	375	214	161		11	105
CAML	296	212	84		6	79
CAML	309	224	85		40	111
CAML	612	494	118		16	79
CAML	338	245	93		31	63

Fig. 7A

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Patient A PD-L1 Time Point #1					
				tube 1	
			Number of CTCs	0	
			Number of Apoptotic CTCs	0	
			Number of EMTs	0	
			Number of CAMLs	17	
			Largest CAML	219 μ m	
	<u>PDL1 INT</u>	<u>PDL1 Background</u>	<u>PDL1 expression</u>	<u>PDL1 score</u>	<u>CAML size</u>
CAML	432	260	172	1	219
CAML	443	233	210	1	60
CAML	416	227	189	1	73
CAML	420	255	165	1	88
CAML	911	272	639	2	31
CAML	295	195	100	1	201
CAML	476	259	217	1	53
CAML	443	269	174	1	147
CAML	388	274	114	1	39
CAML	299	223	76	1	45
CAML	298	223	75	1	61
CAML	475	241	234	1	34
CAML	355	245	110	1	45
CAML	337	223	114	1	52
CAML	397	223	174	1	66
CAML	350	300	50	1	70
CAML	351	228	123	1	207

Fig. 7B

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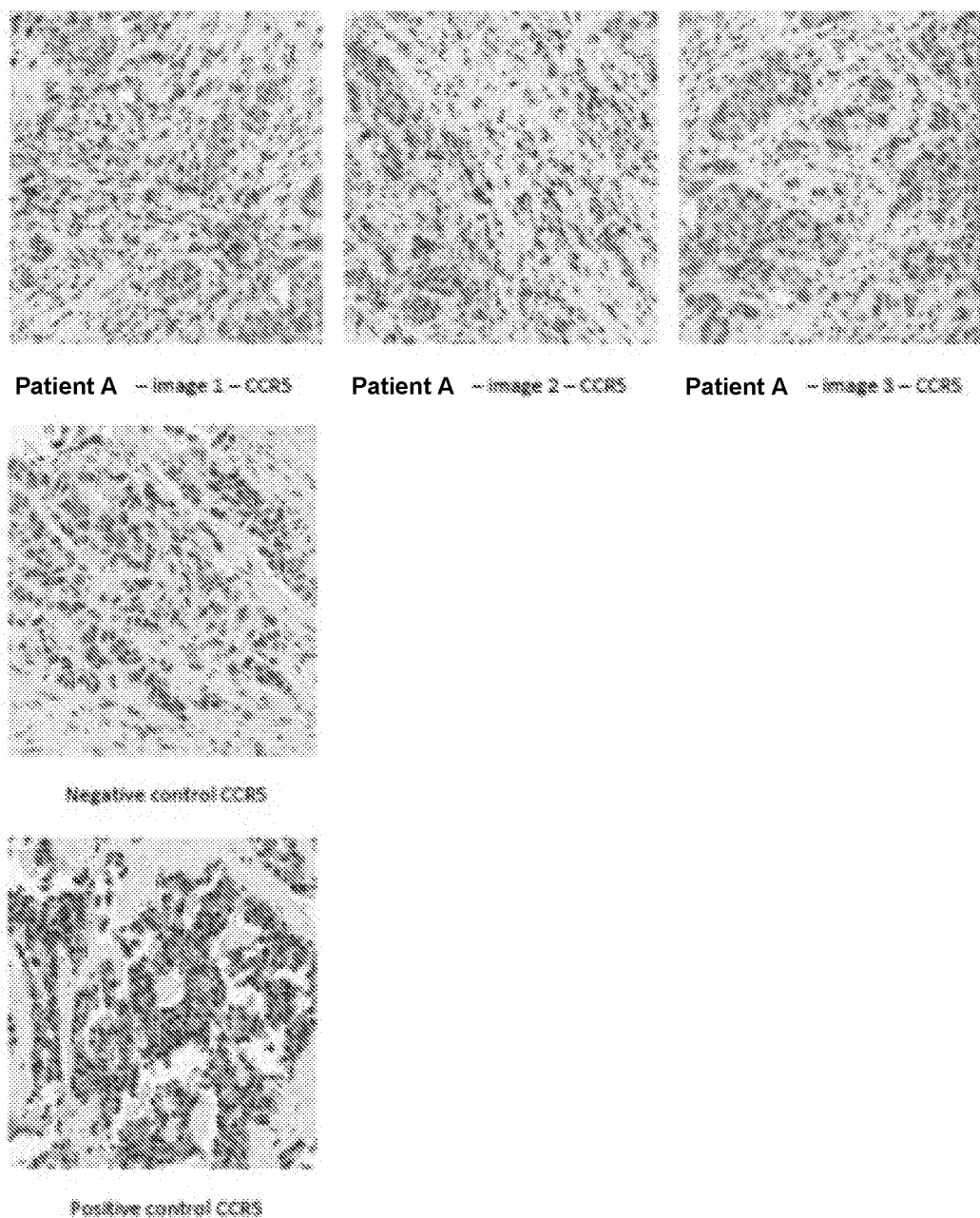


Fig. 8

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30 60
TCTAGACCACCATGAAGTTGCCTGTTAGGCTGTTGGTGCTGATGTTCTGGATTTCCTGCTT
M K L P V R L L V L M P W I P A

90 120
CCAGCAGTGATATTGTGATGACCCAATCTCCACTCTCCCTGCCTGTCACCTCCTGGAGAGC
S S S D I V M T Q S P L S L P V T P G E

150 180
CAGCCTCCATCTCTTGCAGATCTAGTCAGCGCCTTCTGAGCAGTTATGGACATACCTATT
P A S I S C R S S O R L L S S Y G H T Y

210 240
TACATTGGTACCTACAGAAGCCAGGCCAGTCTCCACAGCTCCTGATCTACGAAGTTTCCA
L H W Y L Q K P G Q S P Q L L I Y E V S

270 300
ACCGATTTTCTGGGGTCCCAGACAGGTTTCAGTGCGCAGTGGGTCAGGGACAGATTTACAC
N R E S G V P D R P S G S G S G T D F T

330 360
TTAAGATCAGTAGAGTGGAGGCTGAGGATGTGGGAGTTTATTACTGCTCTCAAAGTACAC
L X I S R V E A E D V G V Y Y C S O S T

390 420
ATGTTCTCTCACGTTCCGACAGGGGACCAAGGTGGAATAAAACGTAAGTAGTCTTCTC
H V P L T P G Q G T K V E I K (SEQ. ID NO: 1)

429
AACTCTAGA (SEQ. ID NO: 2)

Fig. 9

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30 59
 ACGCGTCCACCATGGAATGGAGCGGAGTCTTTATCTTTCTCCTGTCAGTAACTGCAGGT
 M E W S G V F I F L L S V T A G

89 118
 GTCCACTCCGAGGTGCAGCTGGTGGAGTCTGGTGGAGGCTTGGTAAAGCCTGGAGGTTC
 V H S E V Q L V E S G G G L V K P G G S

148 177
 CCTTAGACTCTCCTGTGCAGCCTCTGGTTACACTTTCAGTAACTATTGGATCGGATGGG
 L R L S C A A S G Y T F S N Y W I G N

207 236
 TCCGCCAGGCTCCAGGCAAAGGGCTGGAGTGGATTGGCGATATCTACCCTGGAGGGAAC
 V R Q A P G K G L E W I G D I Y P G G N

266 295
 TACATCAGGAACAATGAGAAGTTCAGGACAAGACCACCCTGTCAGCAGATACTTCCAA
Y I R N N E K F K D K T T L S A D T S K

325 354
 GAACACAGCCTATCTGCAAATGAACAGCCTGAAAACCGAGGACACAGCCGTGTATTACT
 N T A Y L Q M N S L K T E D T A V Y Y

384 413
 GTGGAAGCAGCTTCGGTAGTAACTACGTGTTTCGCCTGGITTACTTACTGGGGCCAAGGG
 C G S S F G S N Y V F A W F T Y W G Q G

443 457
 ACTCTGGTCACAGTCTCCTCAGGTGAGTCCTTAAAACCTCTAGA (SEQ. ID NO: 4)
 T L V T V S S (SEQ. ID NO: 3)

Fig. 10

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30 60
TCTAGACCACCATGGAATGGAGCGGGTCTTTATCTTTCTCCTGTCAGTAACTGCAGGTG
M E W S S V F I F L L S V T A G

90 120
TCCACTCCCAGGTCCAACCTGGTGCAGTCTGGACCTGATGTGAAAAAGCCTGGGACTTCAA
V H S Q V Q L V Q S G F D V K K P G T S

150 180
TGAAGATGTCCTGCAAGACGTCTGGATACACCTTCAGTAACTATTGGATCGGATGGGTTA
M K M S C K T S G Y T F S N Y W I G W V

210 240
GCCAGGCGCCTGGACAAGGCCTTGAGTGGATGGAGATATTTACCCTGGAGGGAACATA
R Q A P G Q G L E W I G D I Y P G G N Y

270 300
TCAGGAACAATGAGAAGTTCAAGGACAAGACCACACTGACGGCAGACACATCGACCAGCA
I R N N E K F K D K T T L T A D T S T S

330 360
CGGCCTACATGCAACTTGGCAGCCTGAGATCTGAAGACACTGCCGTCTATTACTGTGGAA
T A Y M Q L G S L R S E D T A V Y Y C G

390 420
GCAGCTTCGGTAGTAACTACGTGTTCCGCTGGTTTACTTACTGGGGCCAAGGGACTCTGG
S S F G S N Y V F A W F T Y W G Q G T L

450 457
TCACAGTCTCCTCAGGTGAGTCTTAAAACCTCTAGA (SEQ. ID NO: 6)
V T V S S (SEQ. ID NO: 5)

Fig. 11