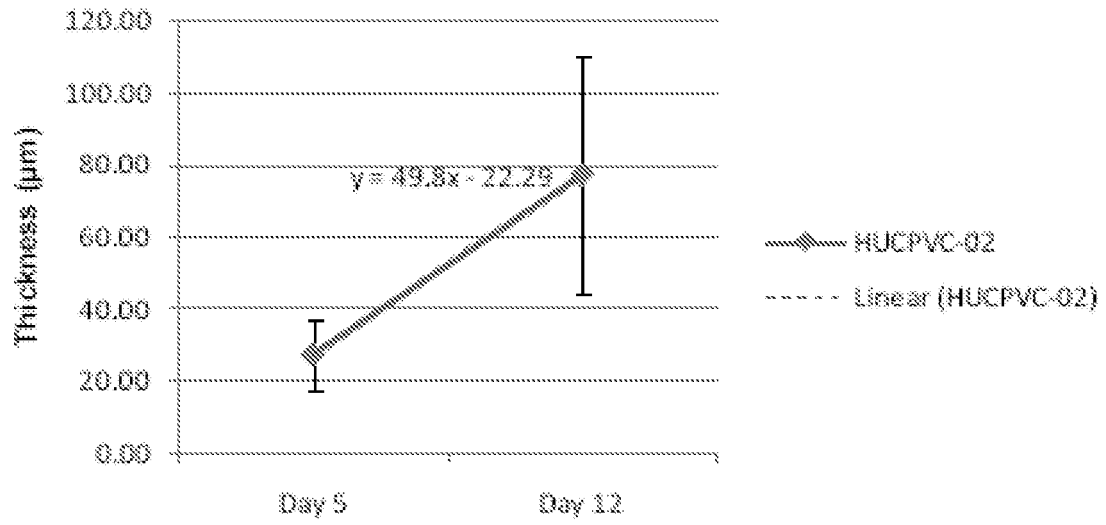


Figure 1

A



B

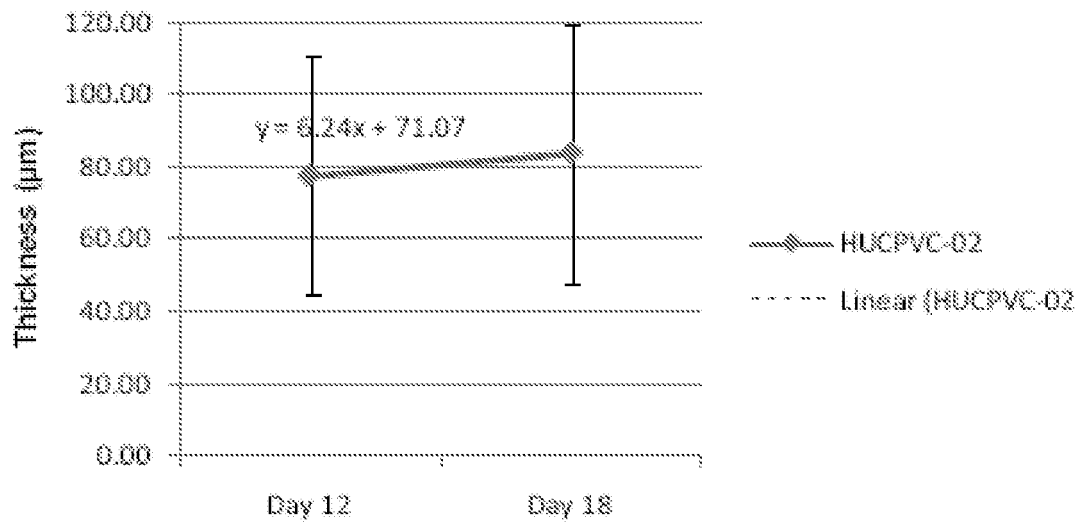


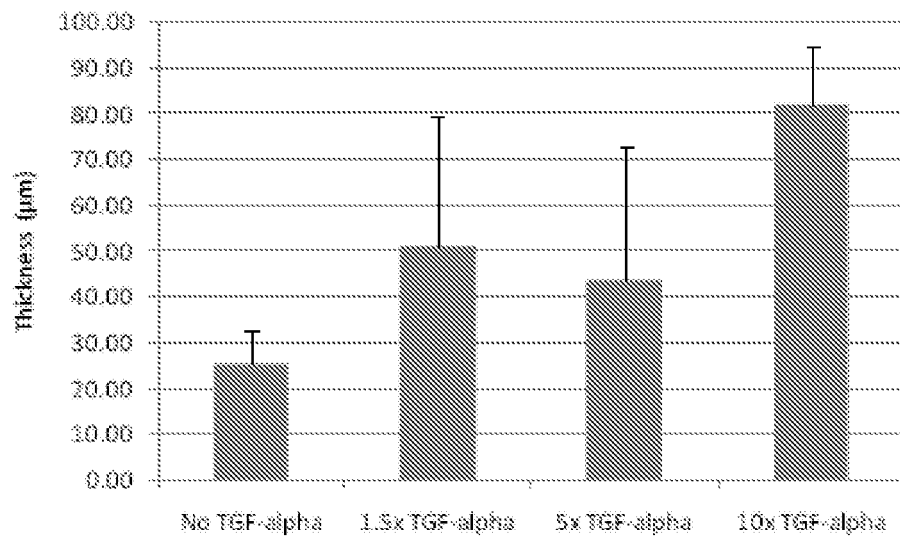
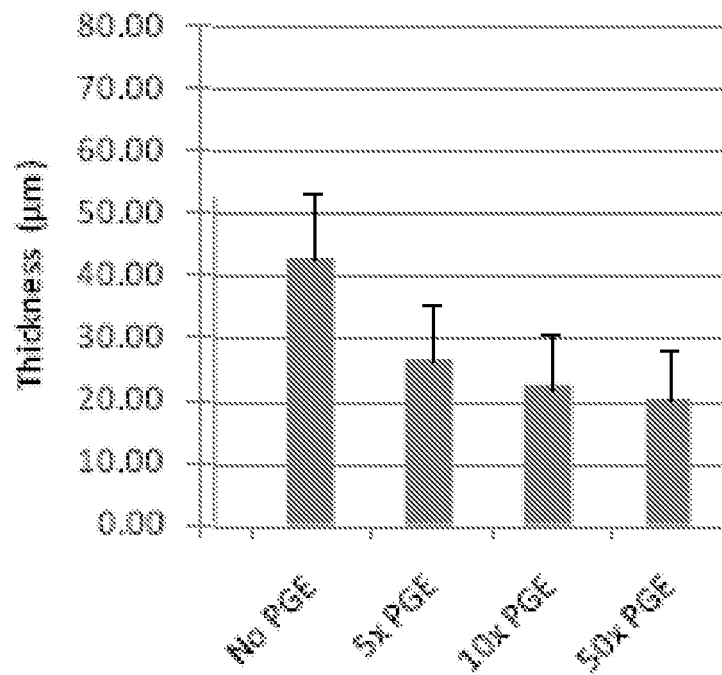
Figure 2**Figure 3**

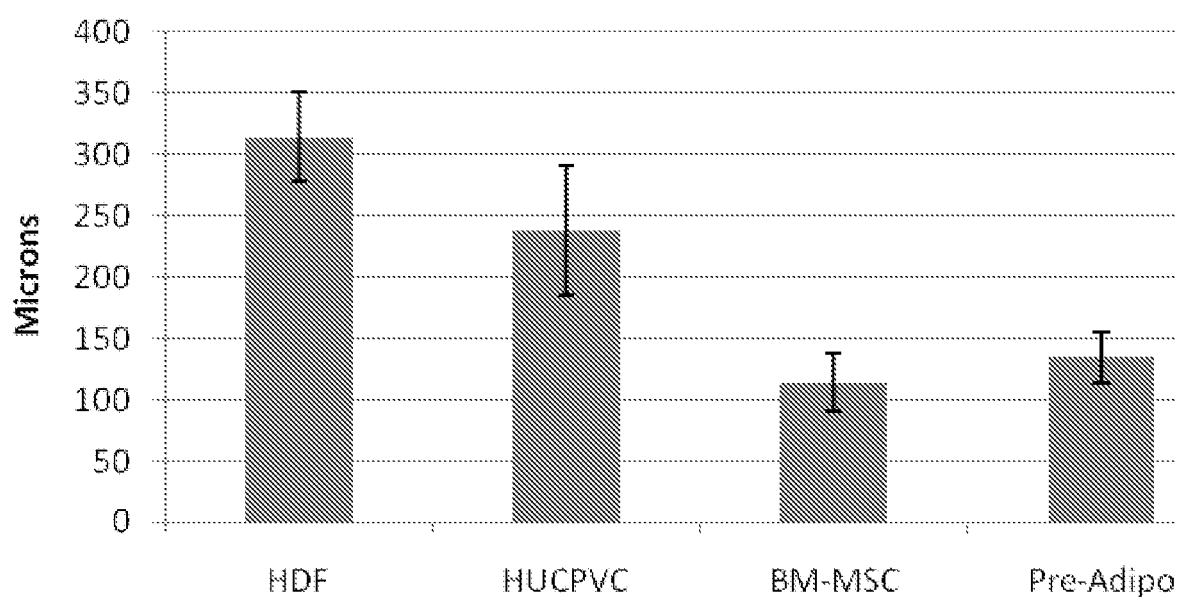
Figure 4

Figure 5

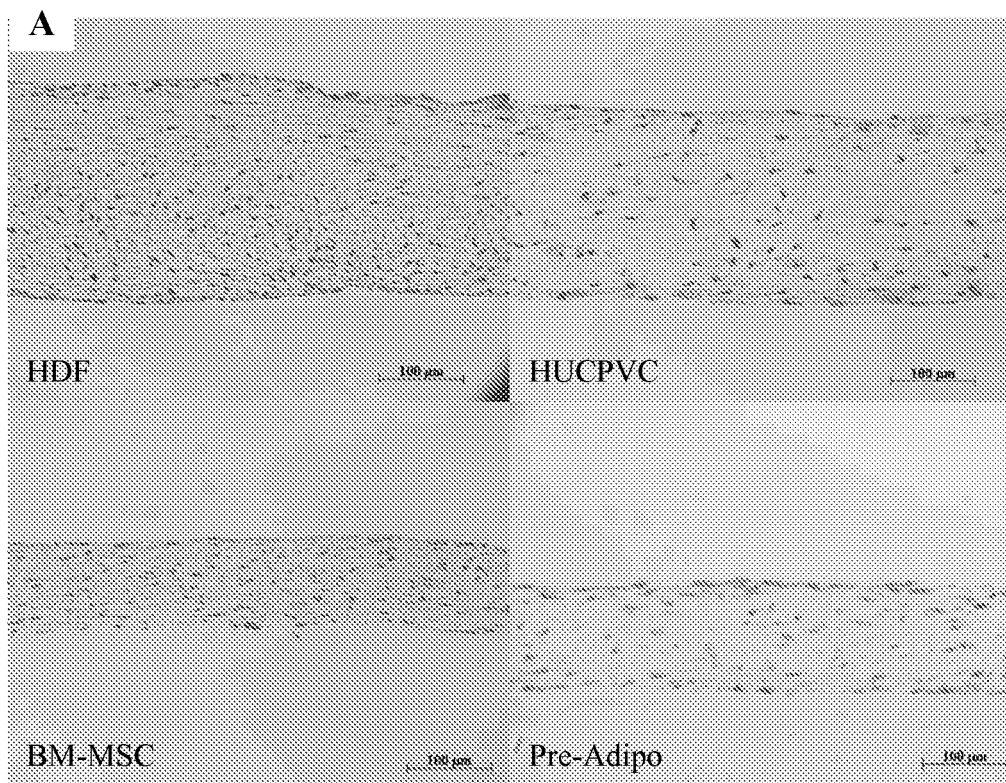
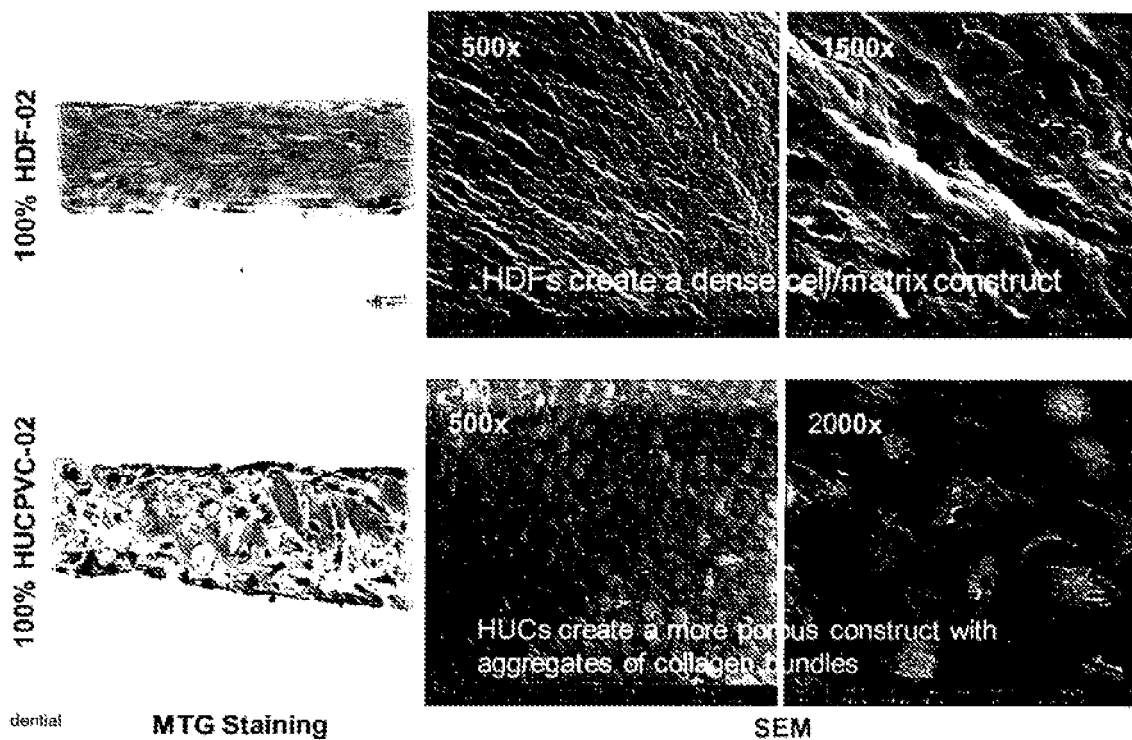
**B**

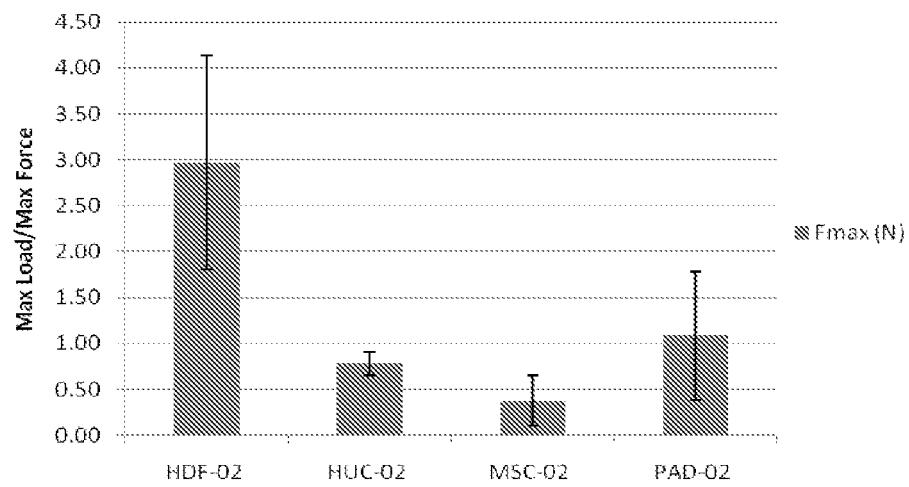
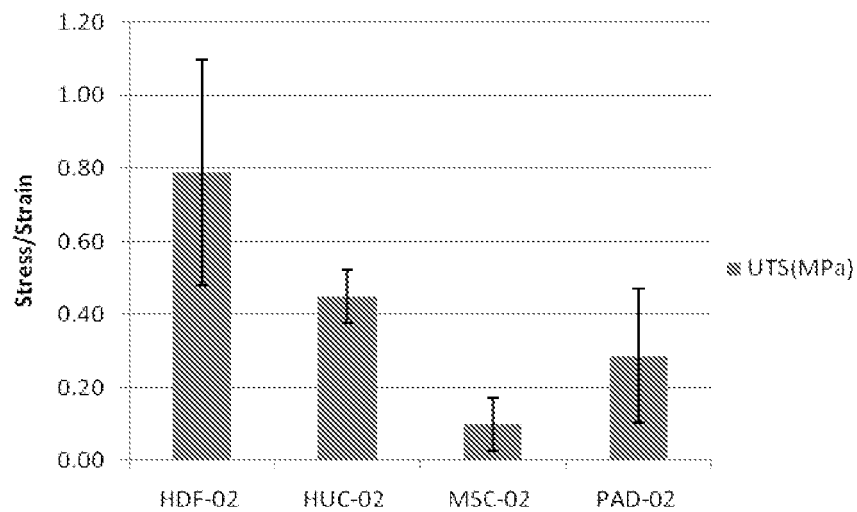
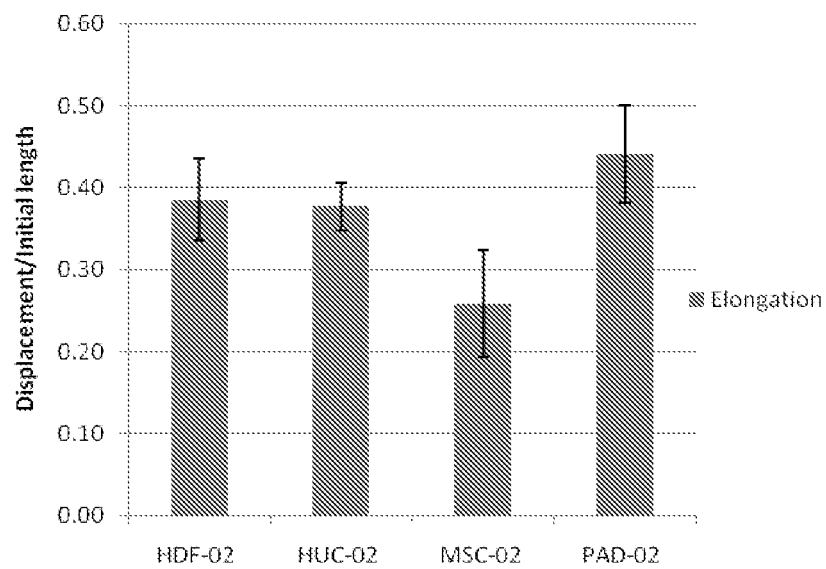
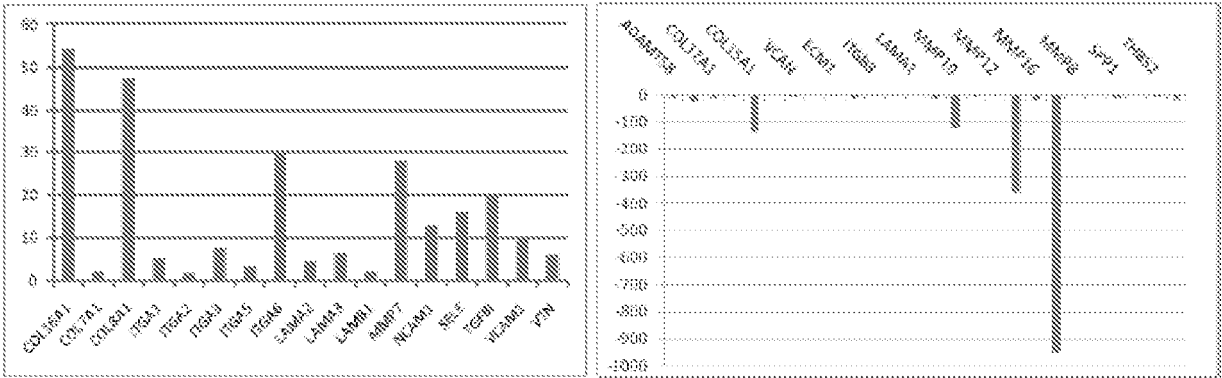
Figure 6**A****B****C**

Figure 7

A



B

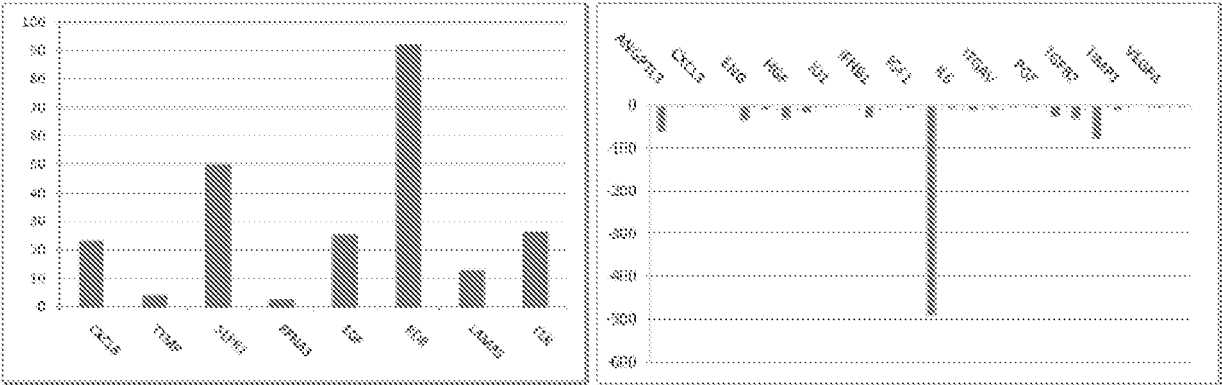
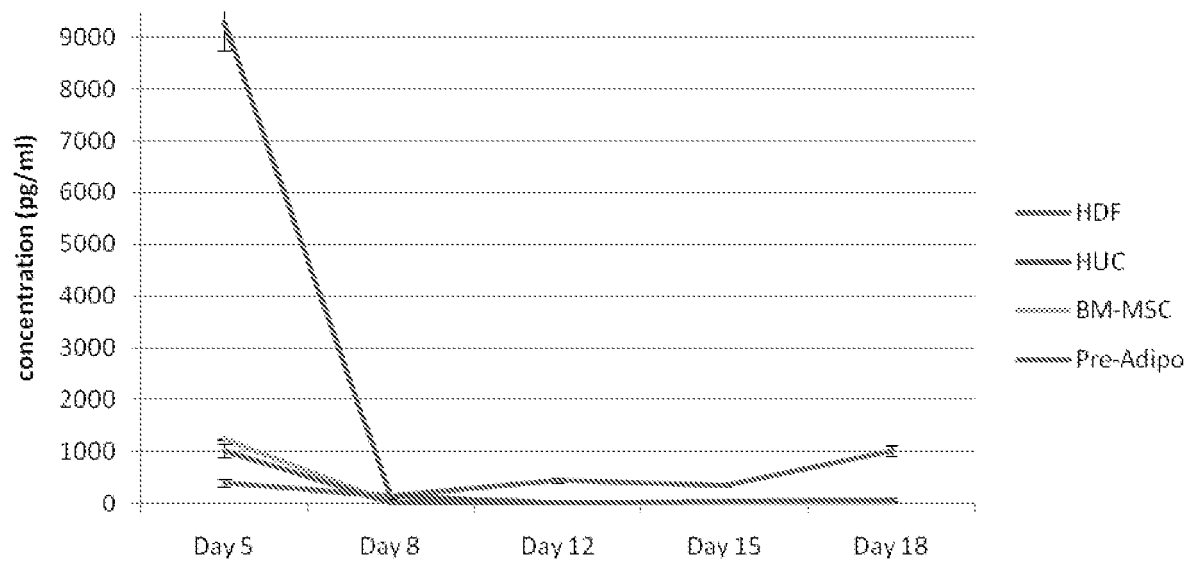
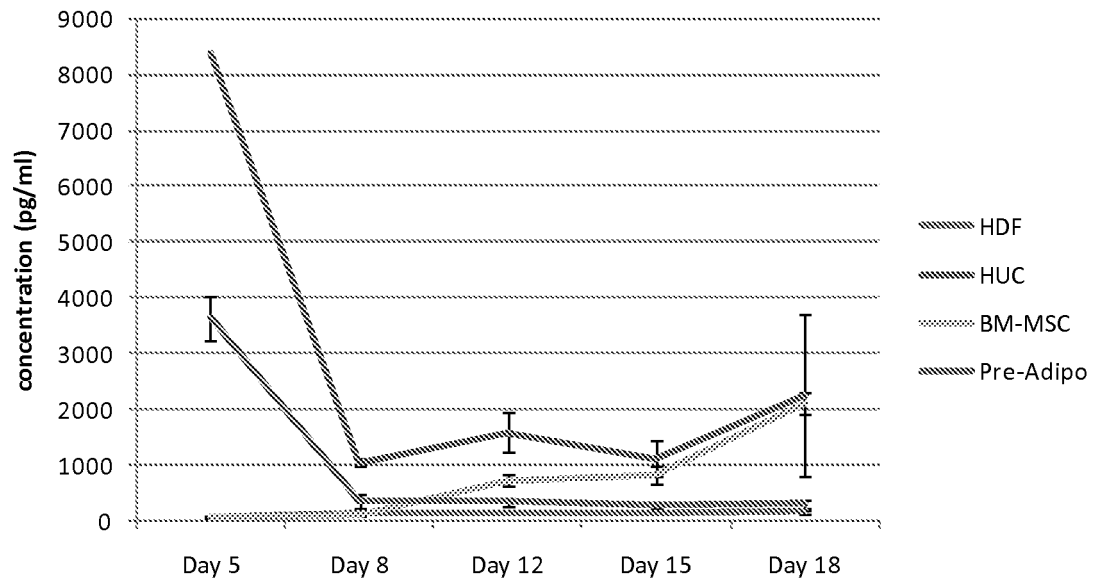


Figure 8**A****IL-6**

	Day 5		Day 8		Day 12		Day 15		Day 18	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
HDF	394.69	74.94	134.88	49.71	437.94	55.66	353.41	46.26	1020.66	108.56
HUC	9288.76	553.83	152.19	22.60	28.61	7.49	9.57	4.07	12.60	8.82
BM-MSC	1237.30	16.69	13.11	1.49	6.30	1.82	6.73	0.90	6.05	0.38
PAD	1018.62	122.30	12.32	46.36	12.32	2.71	38.29	13.12	71.85	39.23

Figure 8 (cont.)

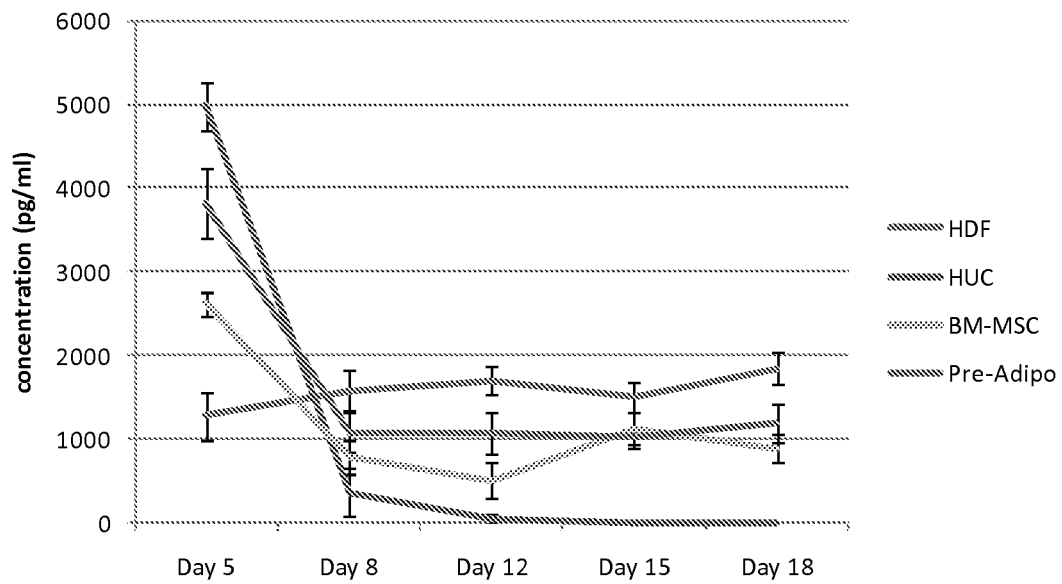
B**IL-8**

	Day 5		Day 8		Day 12		Day 15		Day 18	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
HDF	85.83	24.03	167.11	32.95	165.10	38.47	154.34	14.84	181.16	33.92
HUC	8386.27	0.00	1059.77	72.15	1589.65	357.67	1130.56	311.80	2247.12	1449.47
BM-MSC	81.73	13.16	115.97	28.91	736.53	96.94	840.62	155.40	2123.91	193.11
Pre-Adipo	3643.28	397.89	359.34	128.21	359.34	74.60	276.39	51.02	311.37	71.15

Figure 8 (cont.)

C

VEGF



	Day 5		Day 8		Day 12		Day 15		Day 18	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
HDF	1280.51	285.55	1588.32	234.22	1701.42	165.45	1507.86	184.49	1846.74	191.80
HUC	4978.54	278.26	367.37	283.38	47.33	54.40	9.26	13.10	2.45	1.80
BM-MS	2616.98	135.61	784.14	201.44	508.44	214.53	1118.02	213.38	890.62	169.78
Pre-Adipo	3815.19	416.97	1211.30	243.71	1083.62	253.49	1040.02	101.40	1196.41	233.68

Figure 8 (cont.)

D

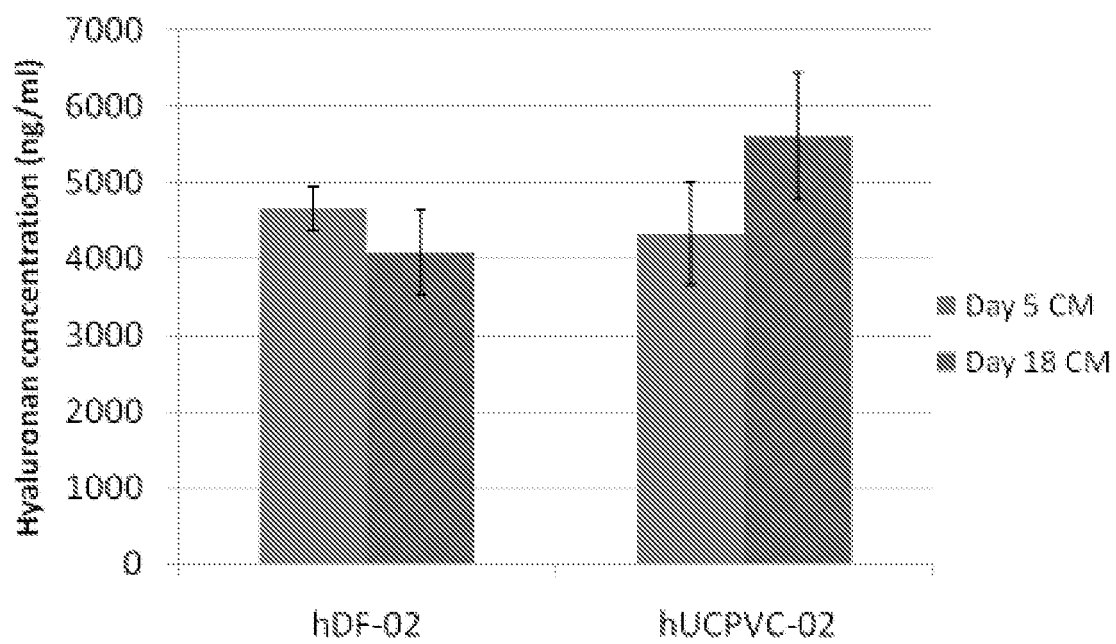


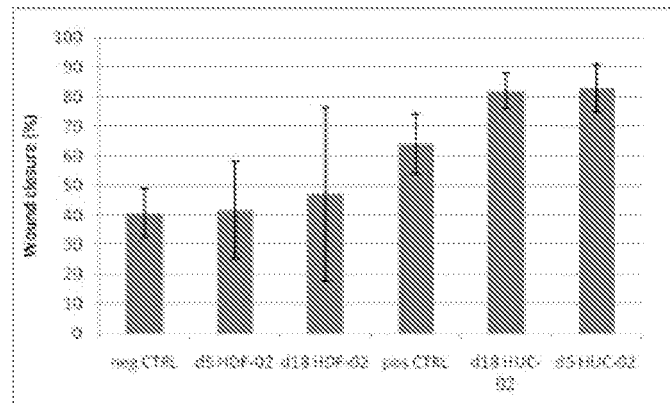
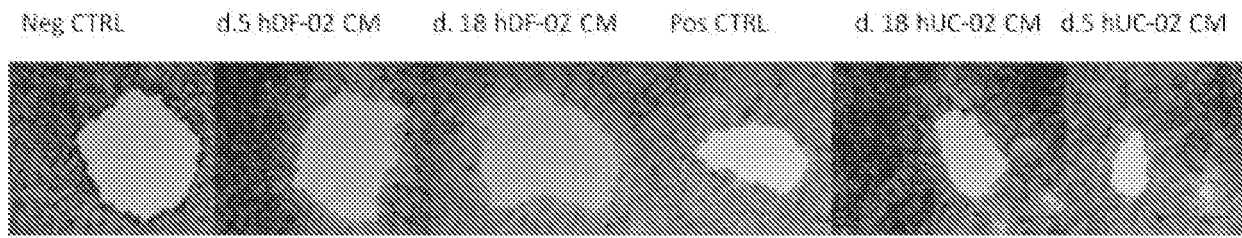
Figure 9

Figure 10

A

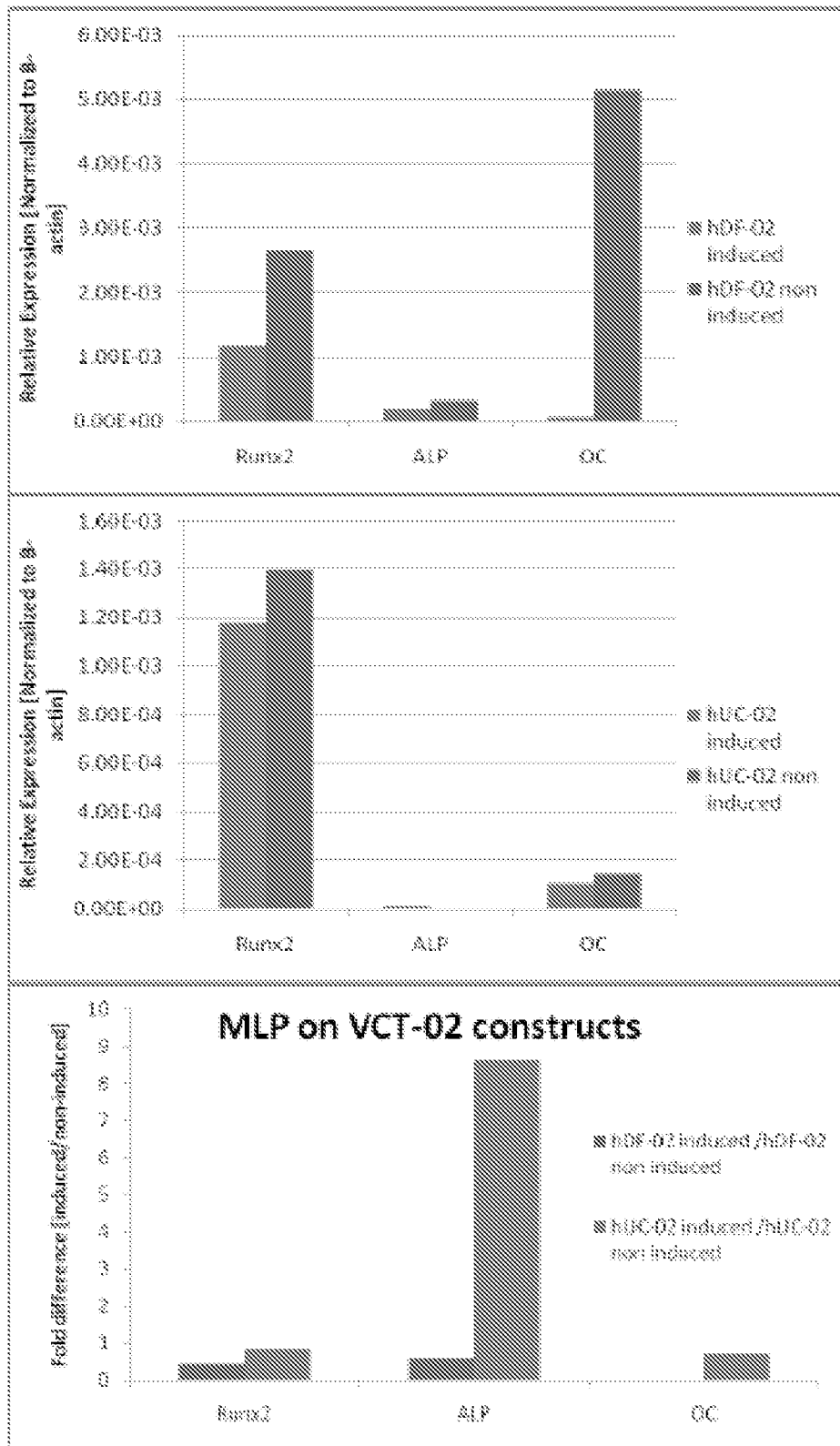


Figure 10 (cont.)

B

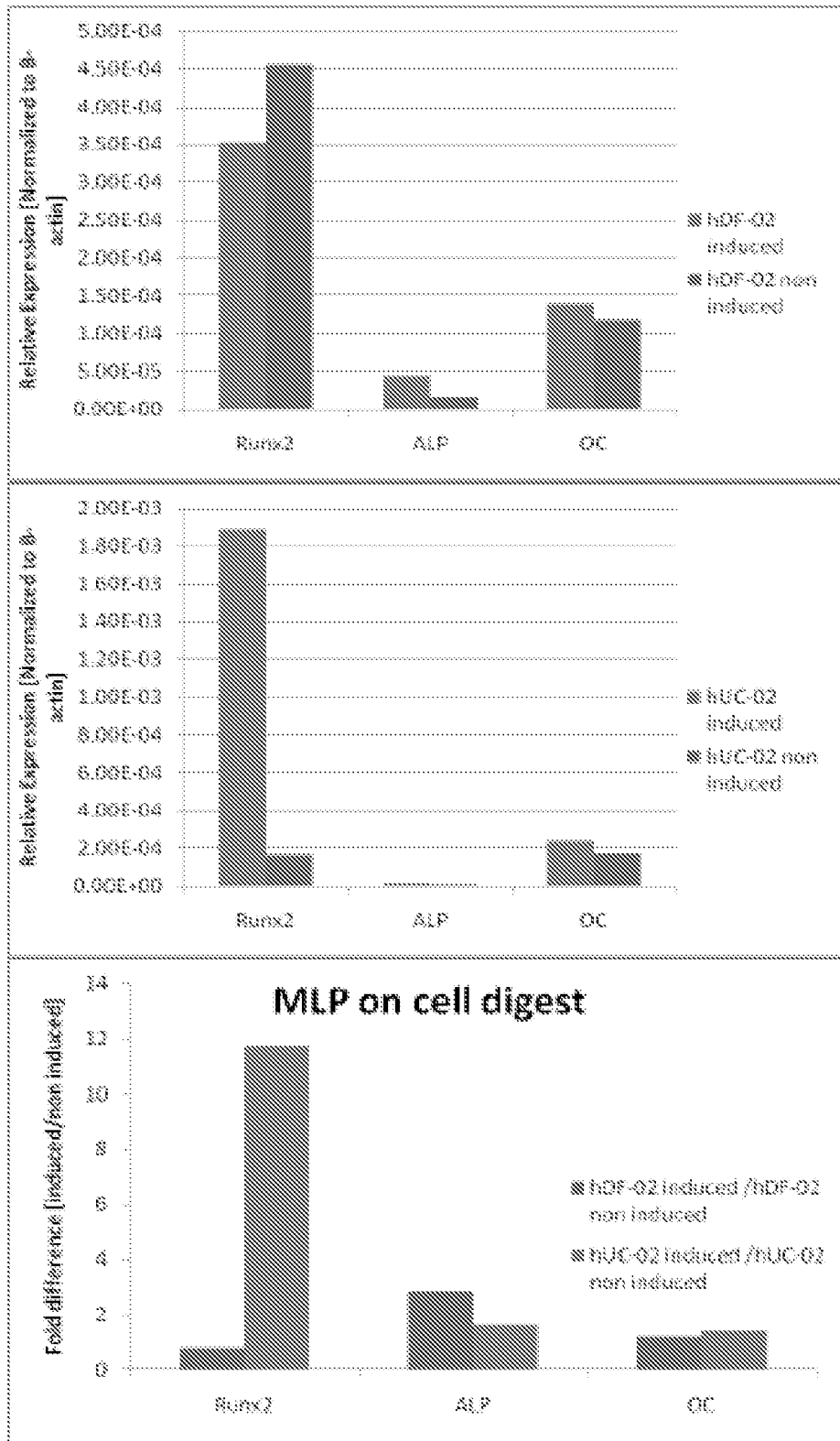


Figure 10 (cont.)

C

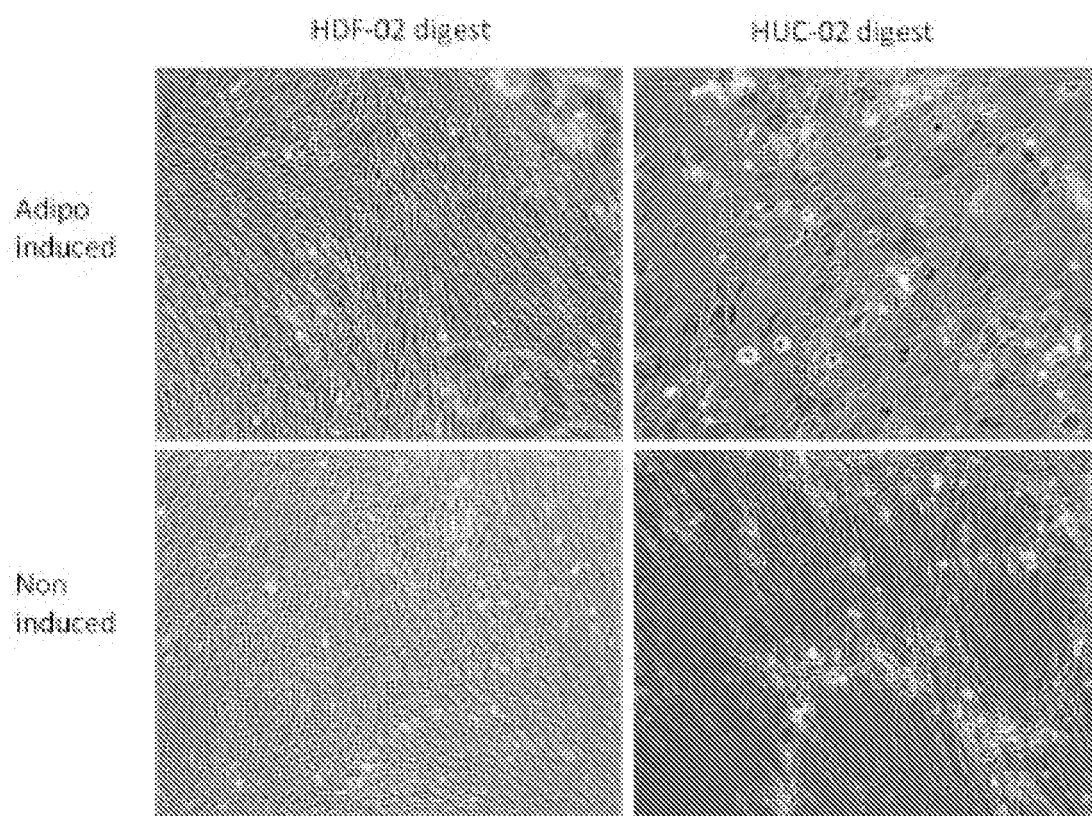


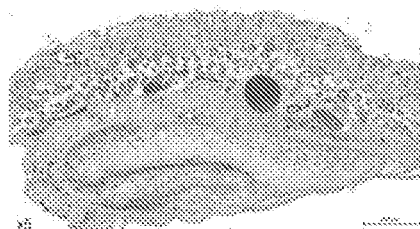
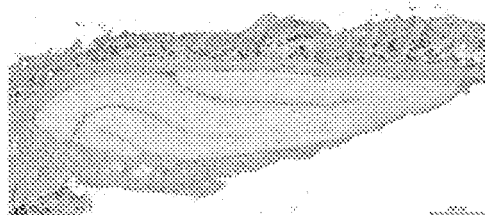
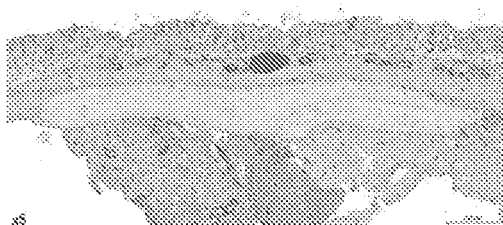
Figure 11**A**IVV10 - 1 week - SMA
A3 66028485**B**IVV10 - 1 week - SMA
B13 66035453

Figure 11 (cont.)

C

IVV10 - 1 week - SMA
C10 66034467

D

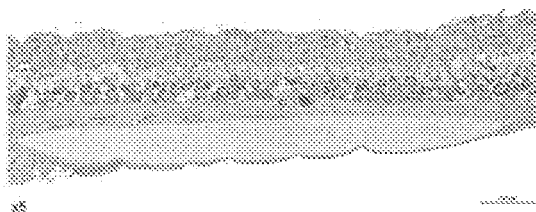
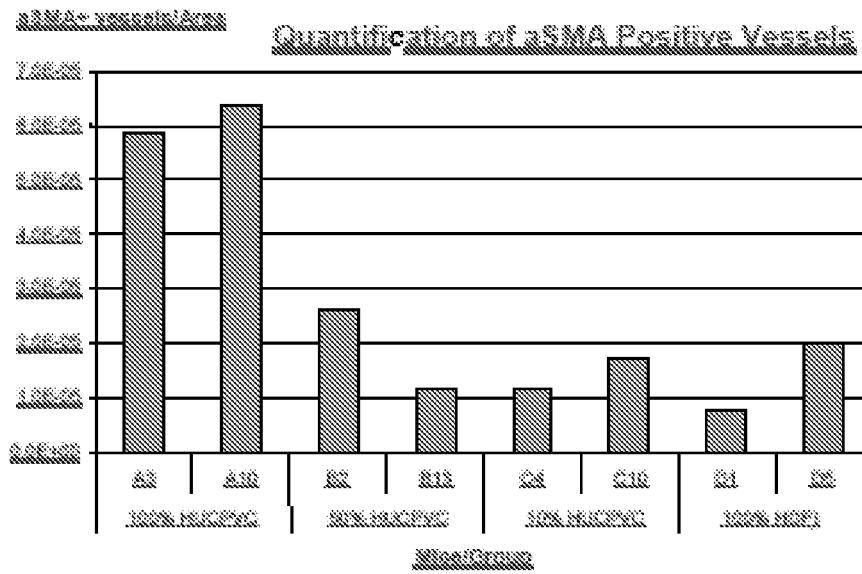
IVV10 - 1 week - SMA
D1 66029484

Figure 11 (cont.)

E



Treatment	Subgroup	α SMA+ Vessels
100% HUCPVC	A3	5.3E-03
	A10	6.3E-03
50% HUCPVC	B2	2.6E-03
	B13	1.2E-03
10% HUCPVC	C4	1.1E-03
	C10	1.7E-03
100% HDF	D1	8.0E-04
	D5	2.0E-03

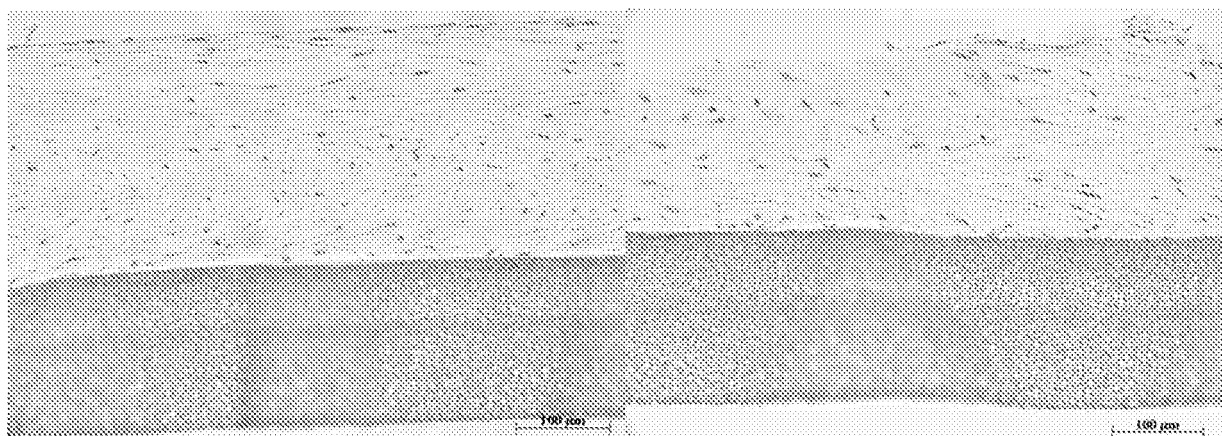
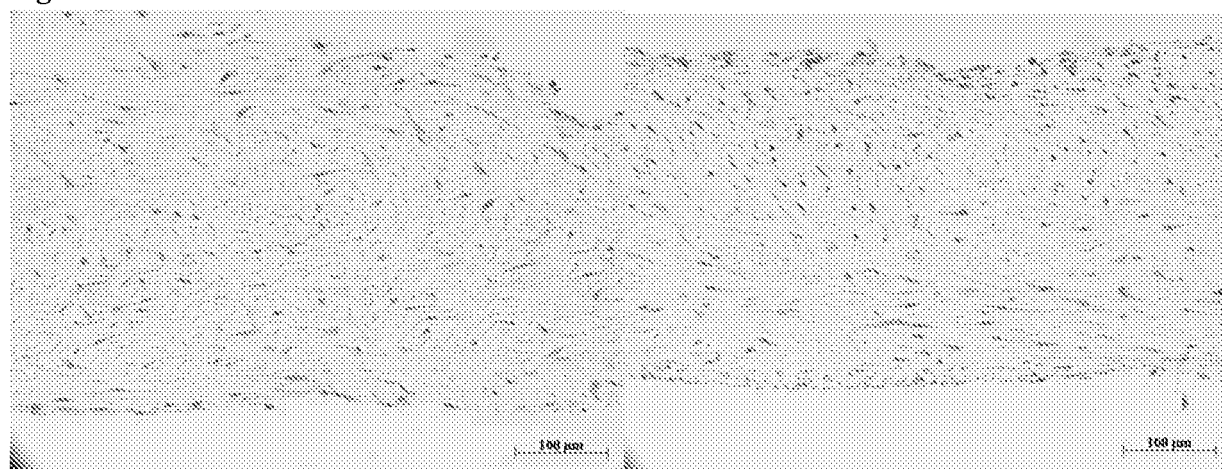
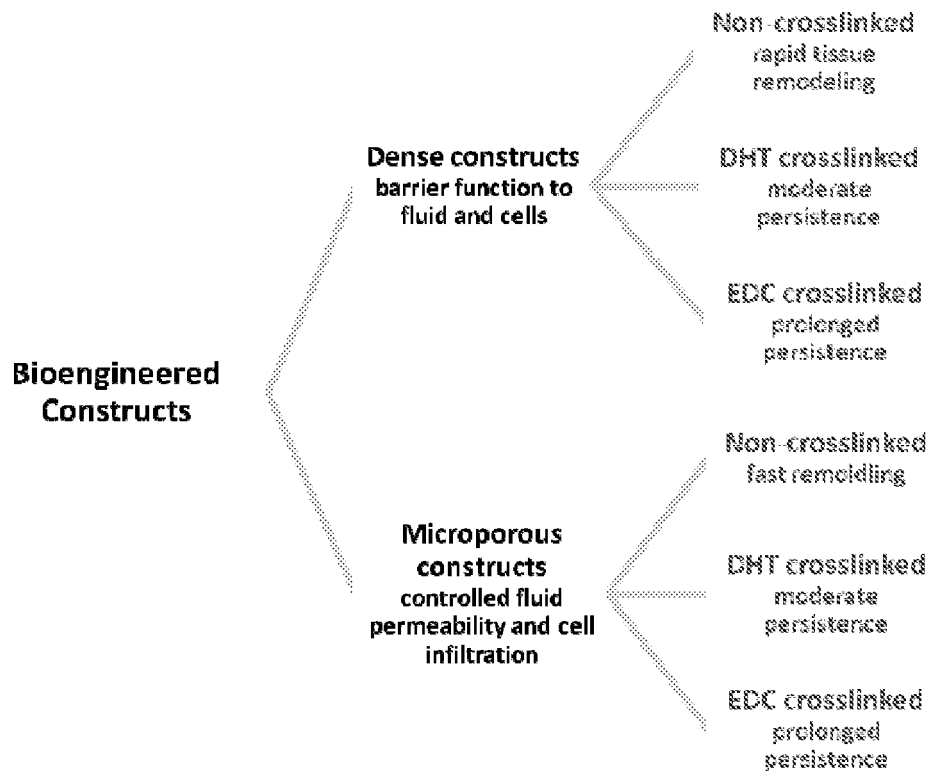
Figure 12**Figure 13**

Figure 14

A



B

	Test A (EDC Crosslinked)	Test B (DHT Crosslinked)	Test C (Non-Crosslinked)
Avg.	16.675 μm	19.706 μm	18.569 μm
St.D.	7.467 μm	10.292 μm	8.984 μm
Min	4.869 μm	1.241 μm	1.423 μm
Max	40.865 μm	59.528 μm	71.128 μm

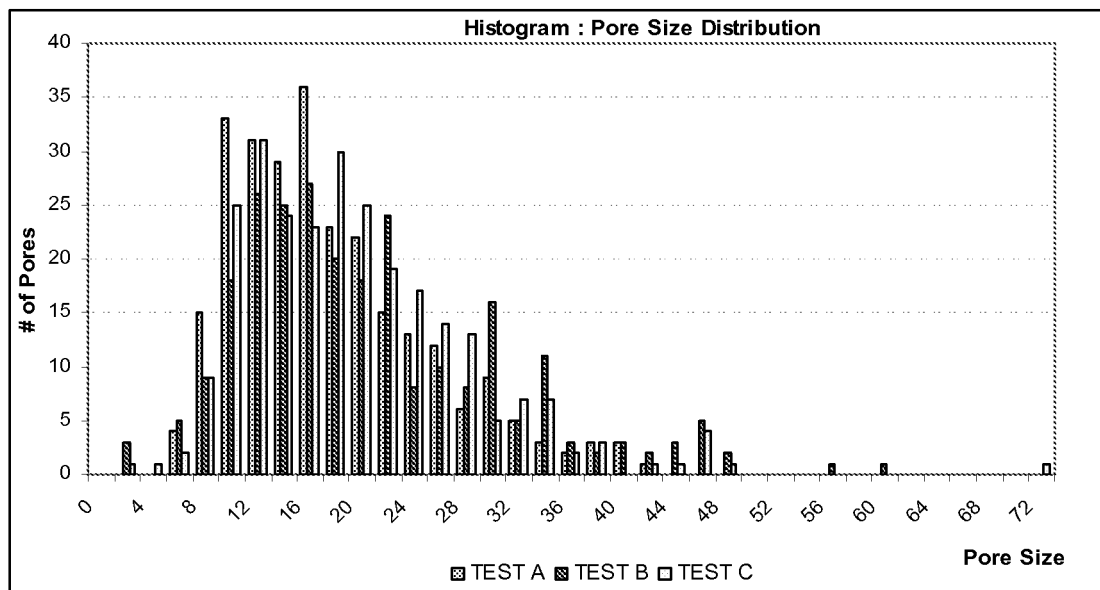


Figure 14 (cont.)

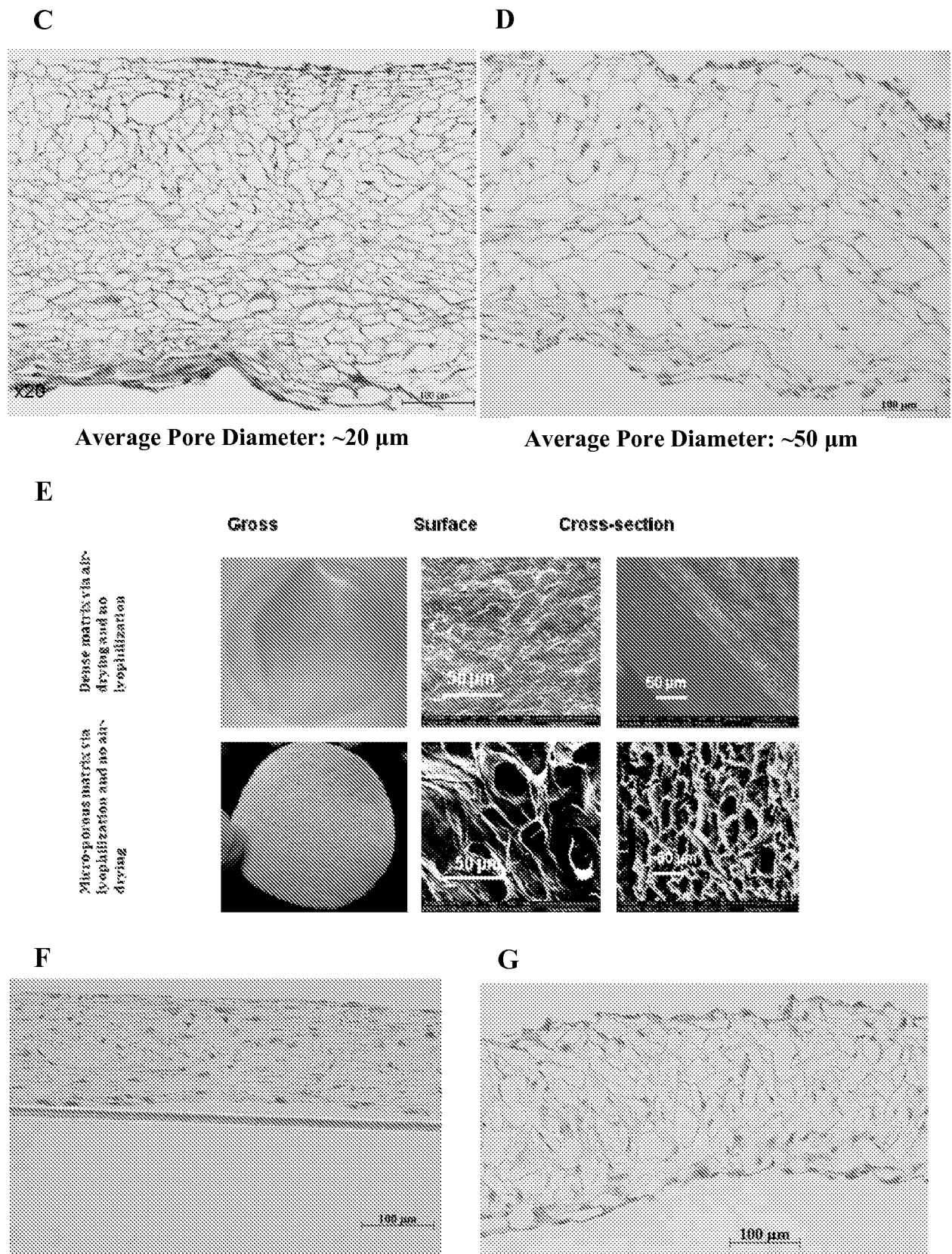
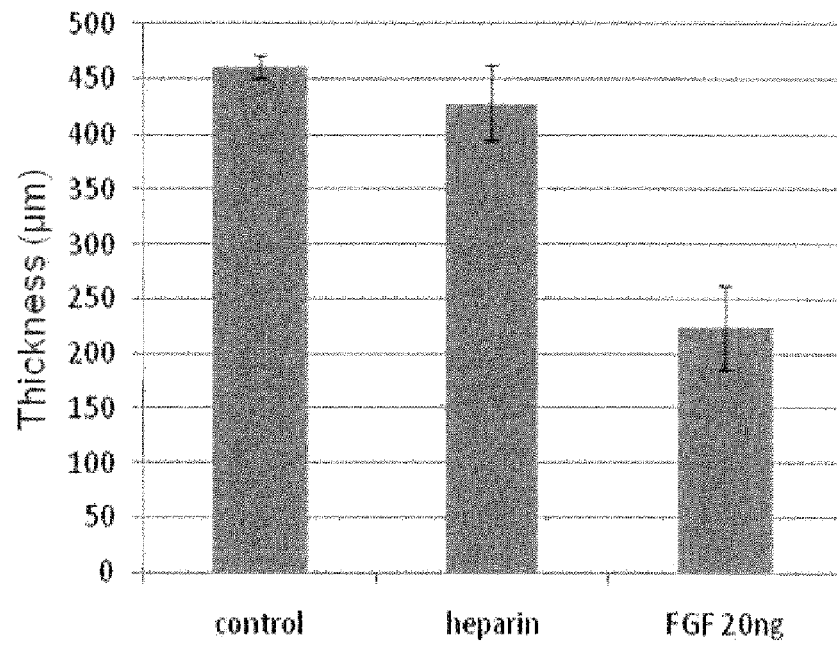


Figure 15

A



B

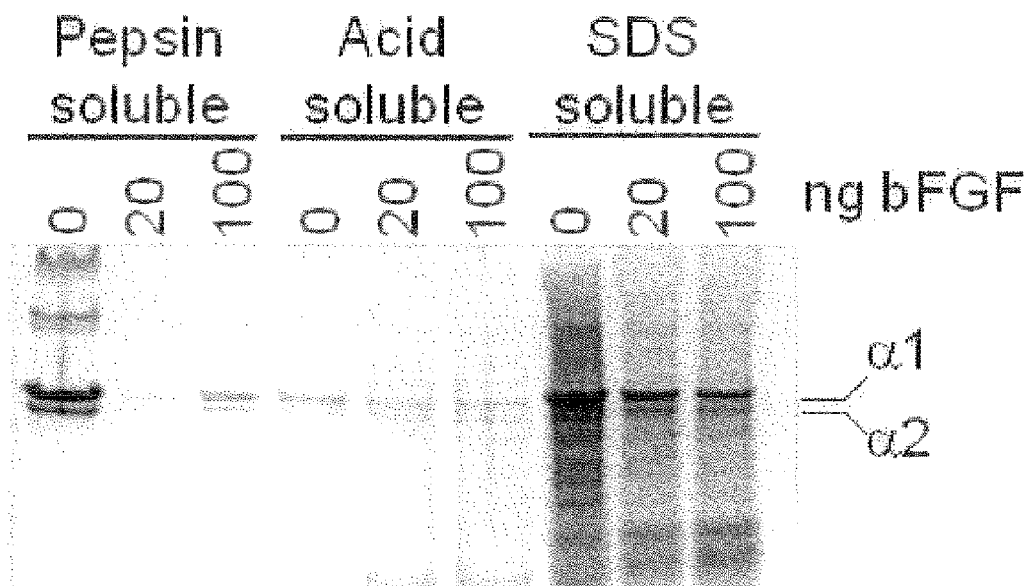
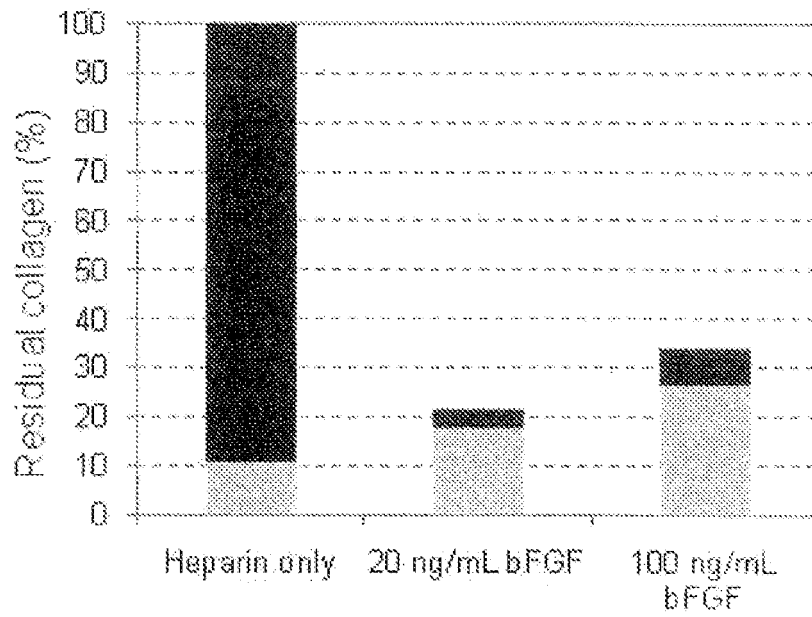
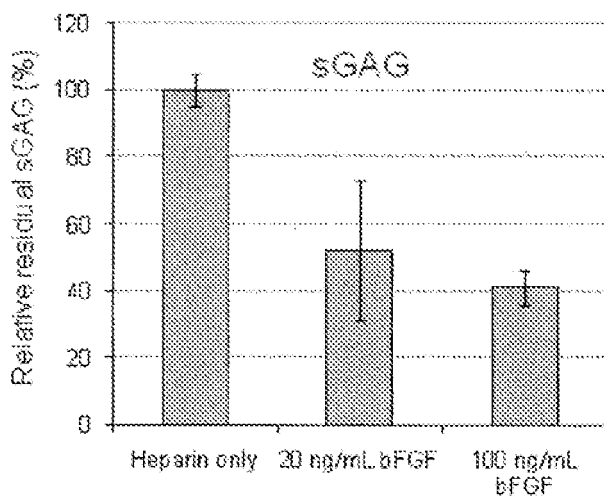


Figure 15 (cont.)

C



D



E

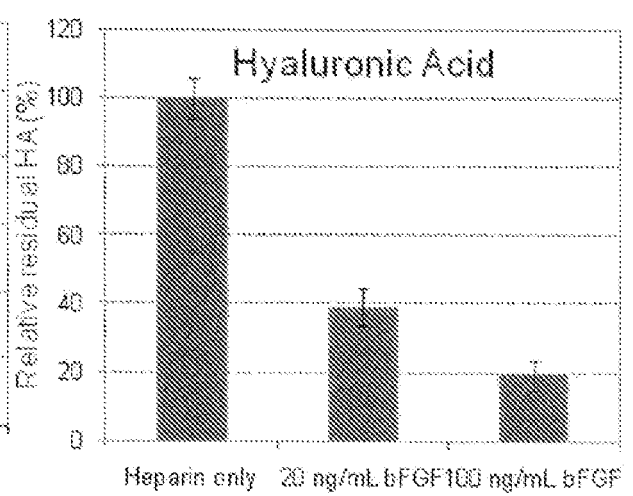


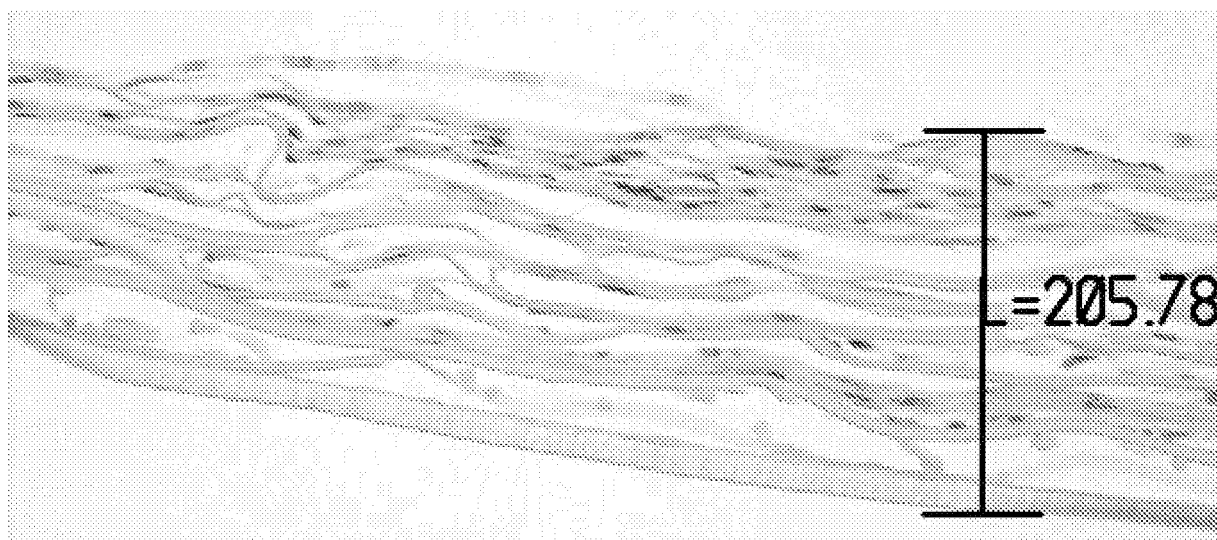
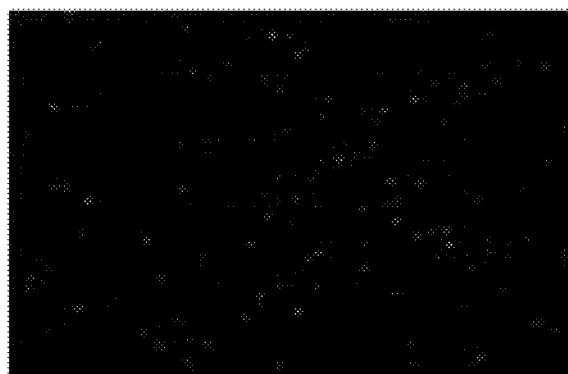
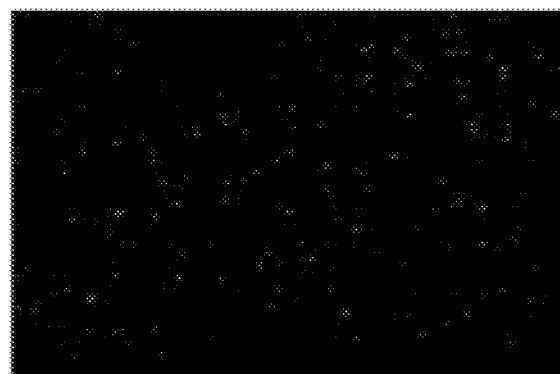
Figure 16

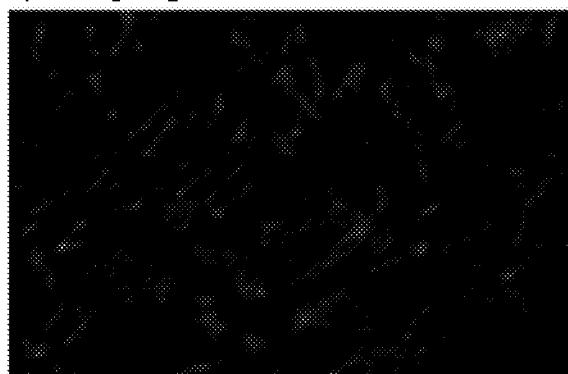
Figure 17



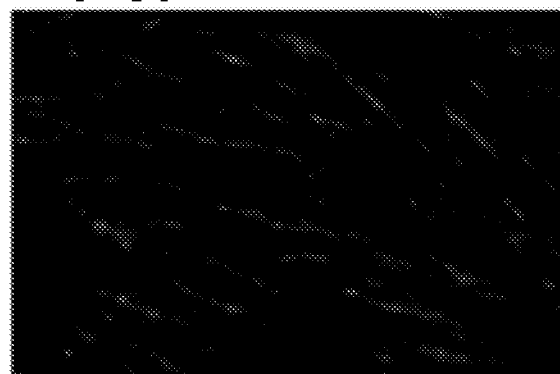
a) Silk sponge



b) Silk sponge pre-conditioned in matrix media



c) Silk sponge with living HDFs cultured for 18 days



d) Silk sponge with HDFs cultured for 18 days and devitalized prior to HUVEC culture