

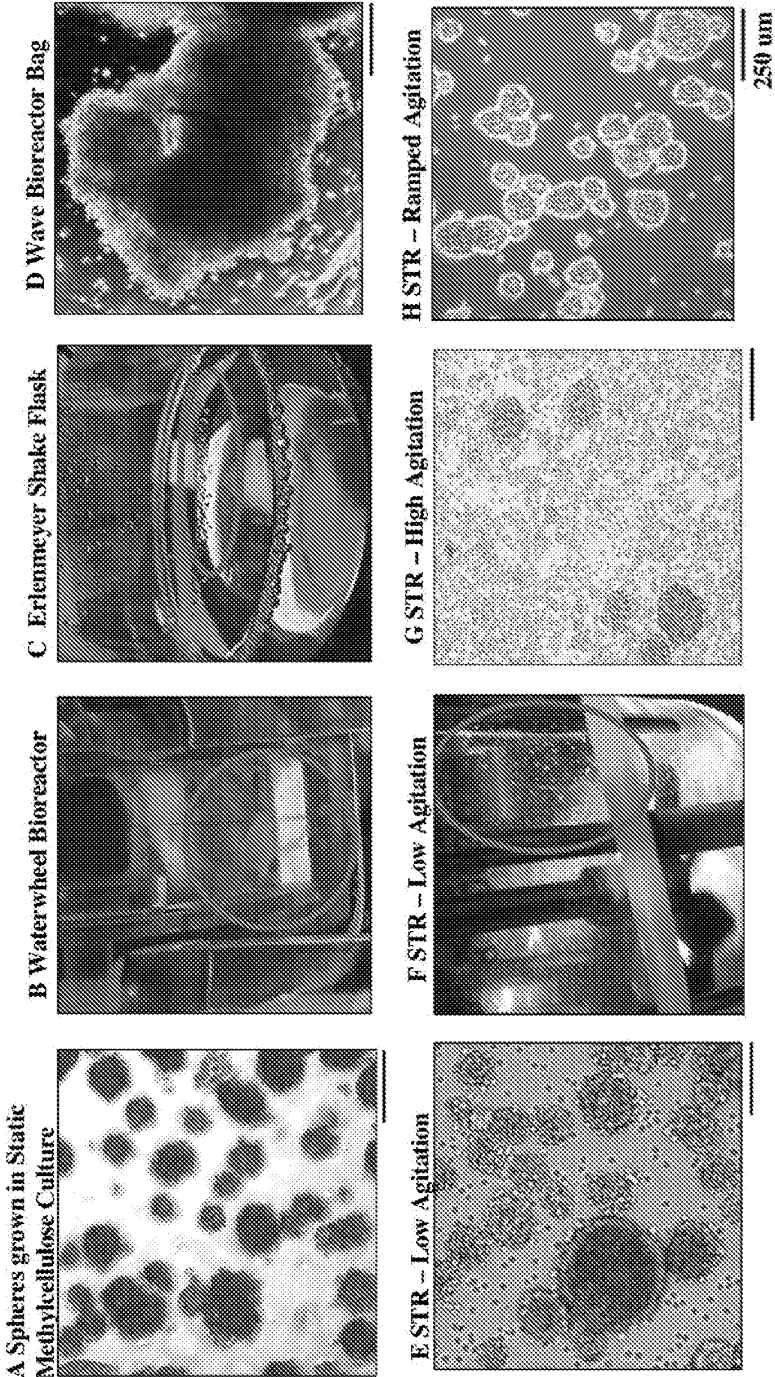


FIG. 1

A Computational Fluid Dynamic derived models of Hydrodynamic conditions with RPM increase

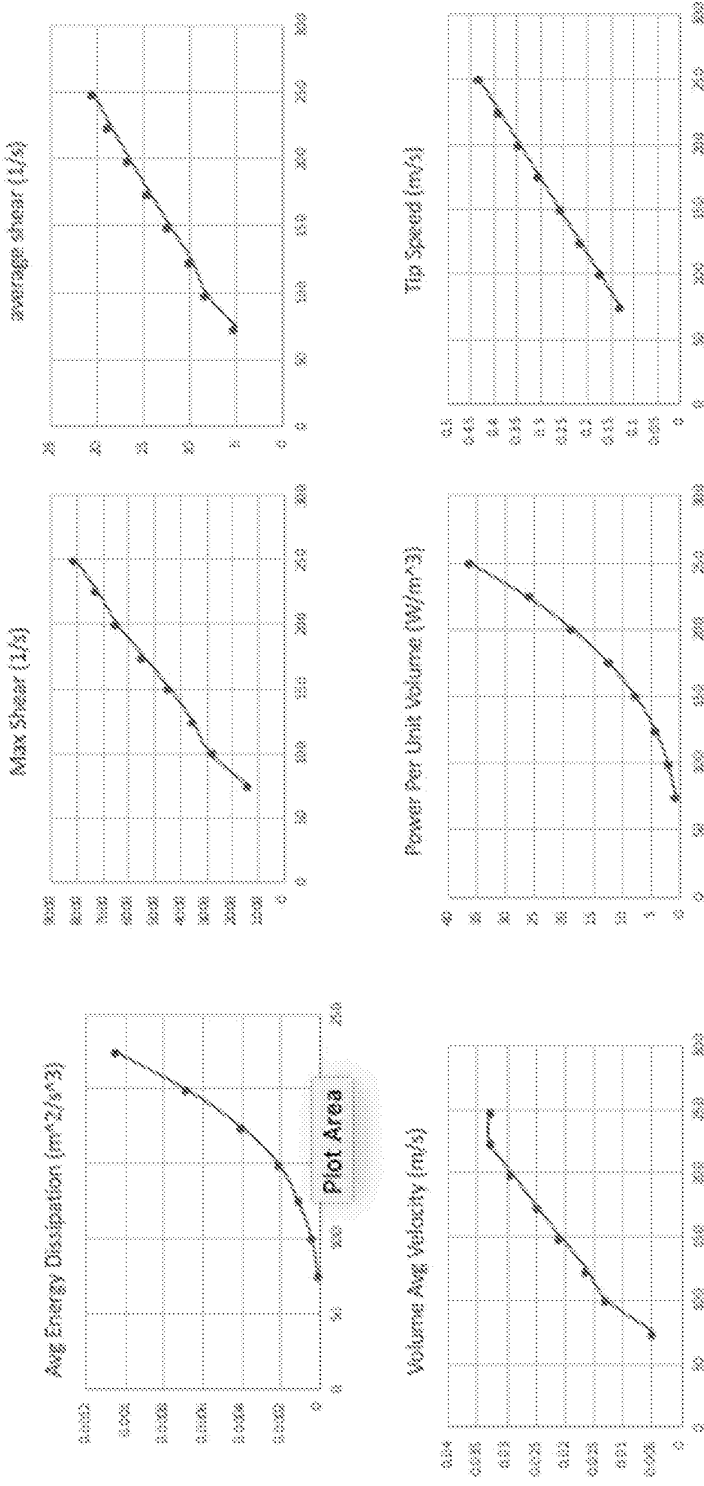
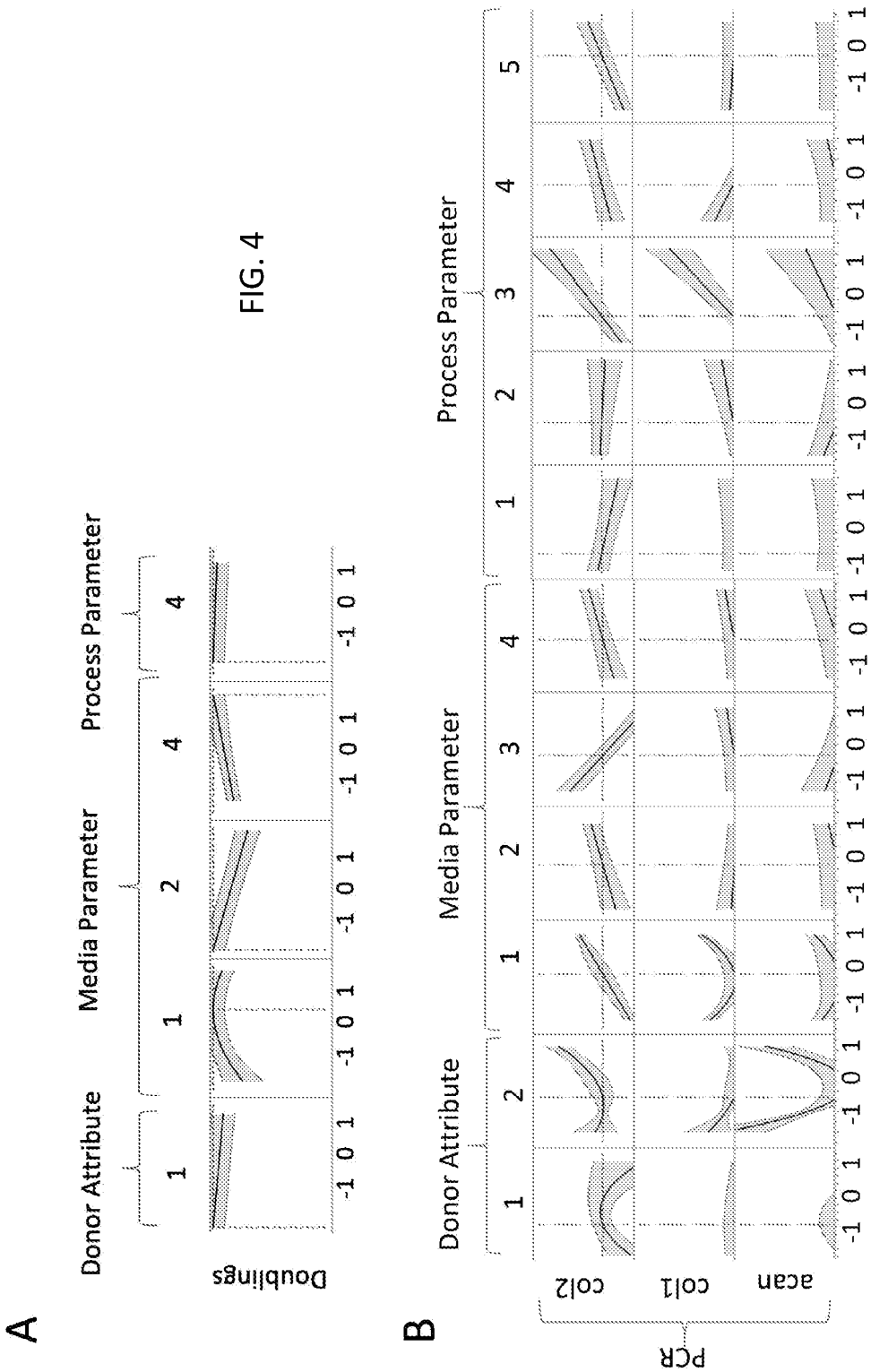


FIG. 2

B AggreCan Correlation to Hydrodynamic Conditions

AggreCan Correlation to Hydrodynamic Conditions	
Hydrodynamic Condition	P Value (ANOVA)
Max Shear Rate (1/s)	0.012
Average Shear Rate (1/s)	0.014
Tip Speed (m/s)	0.016
Volume Avg Velocity (m/s)	0.021
Power Per Unit Volume (W/m ³)	0.023
Avg Energy Dissipation (m ² /s ³)	0.030

FIG. 2 continued



A

Image	Donor Attribute 1	Donor Attribute 2	Process Parameter 1	Process Parameter 2
A	-1	-1	≤ -0.33	≤ -0.57
B	-1	1	≤ -0.11	≤ -0.72
C	1	-1	≤ -0.56	≥ -0.59
D	1	1	≤ -0.11	≤ -0.72
Ranges	-1 to 1	-1 to 1	-1 to ≤ -0.56	-0.72 to -0.49

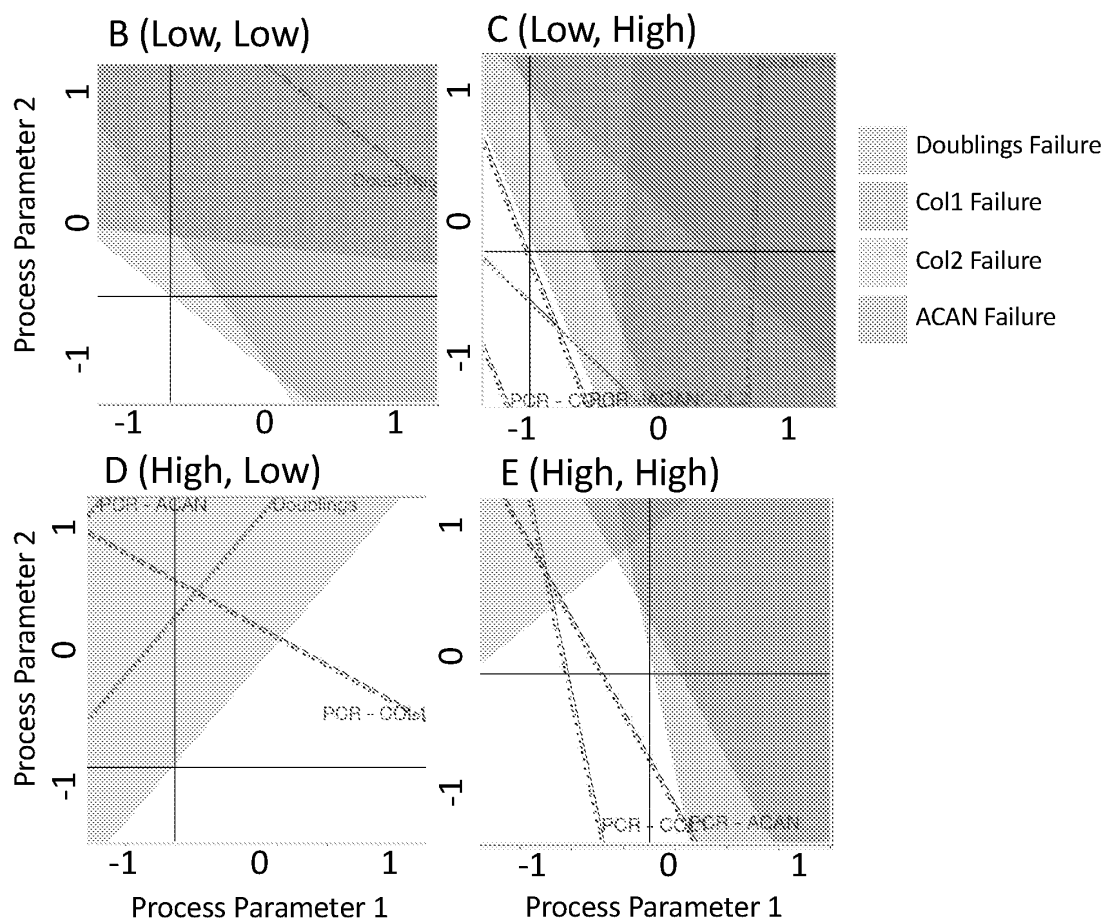


FIG. 5

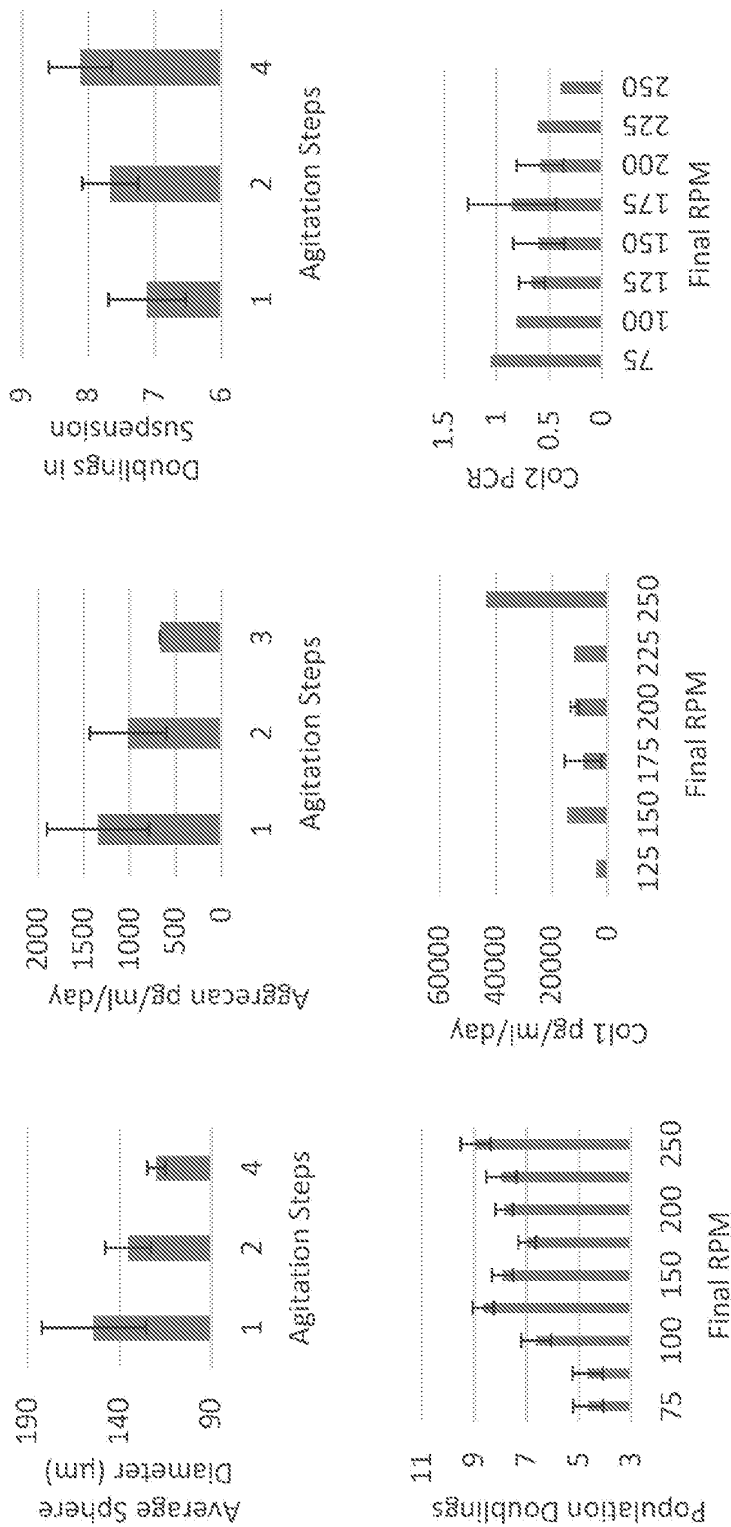


FIG. 6

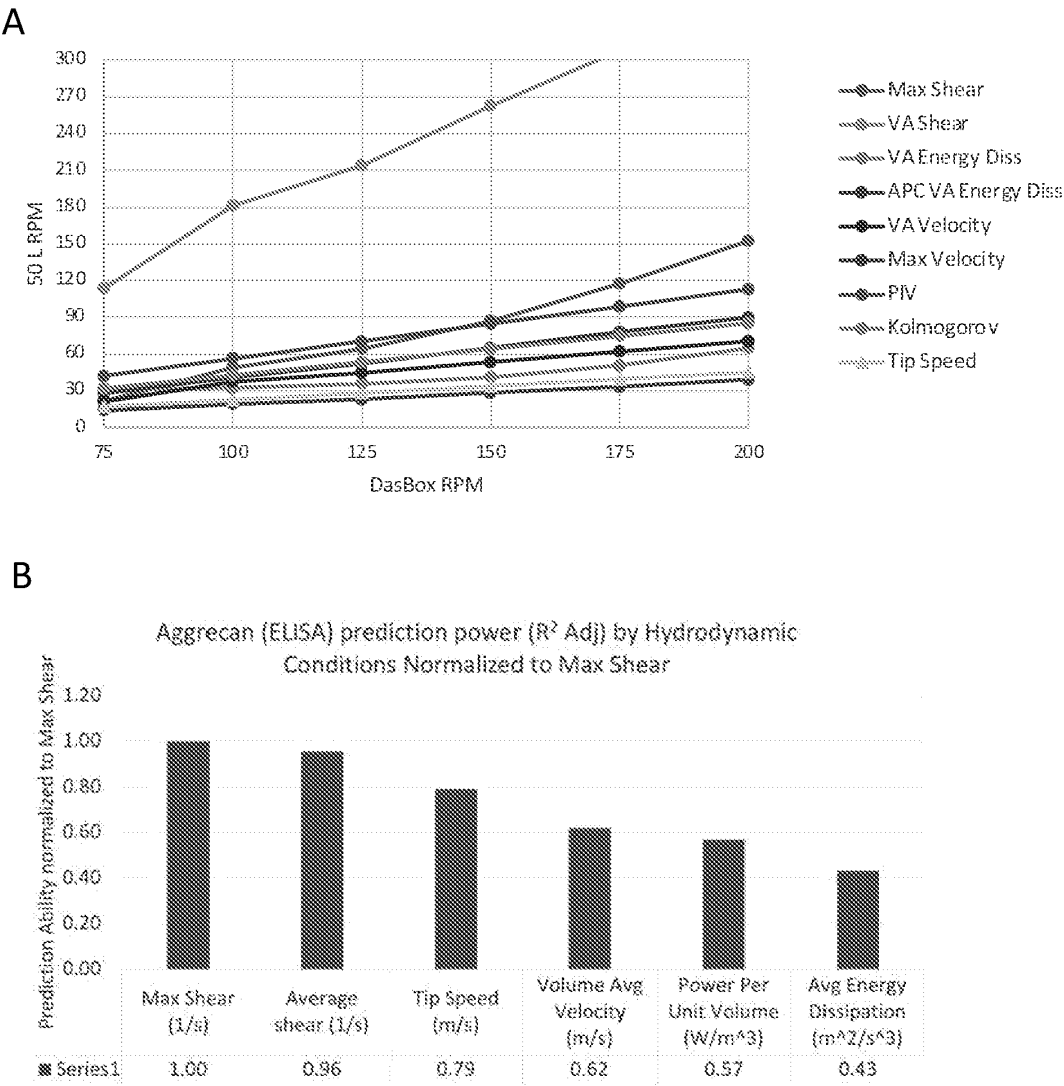


FIG. 7

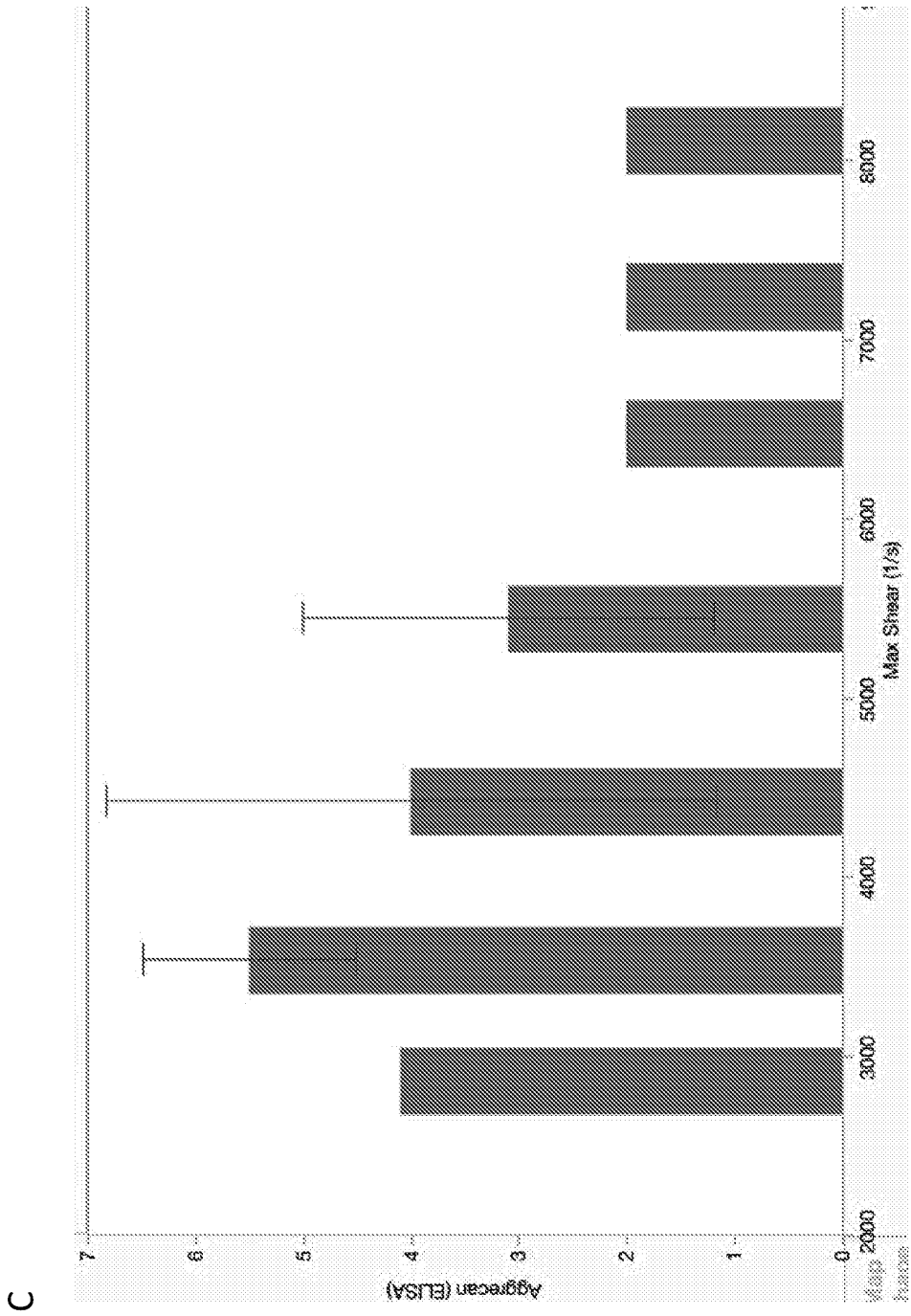


FIG. 7 continued

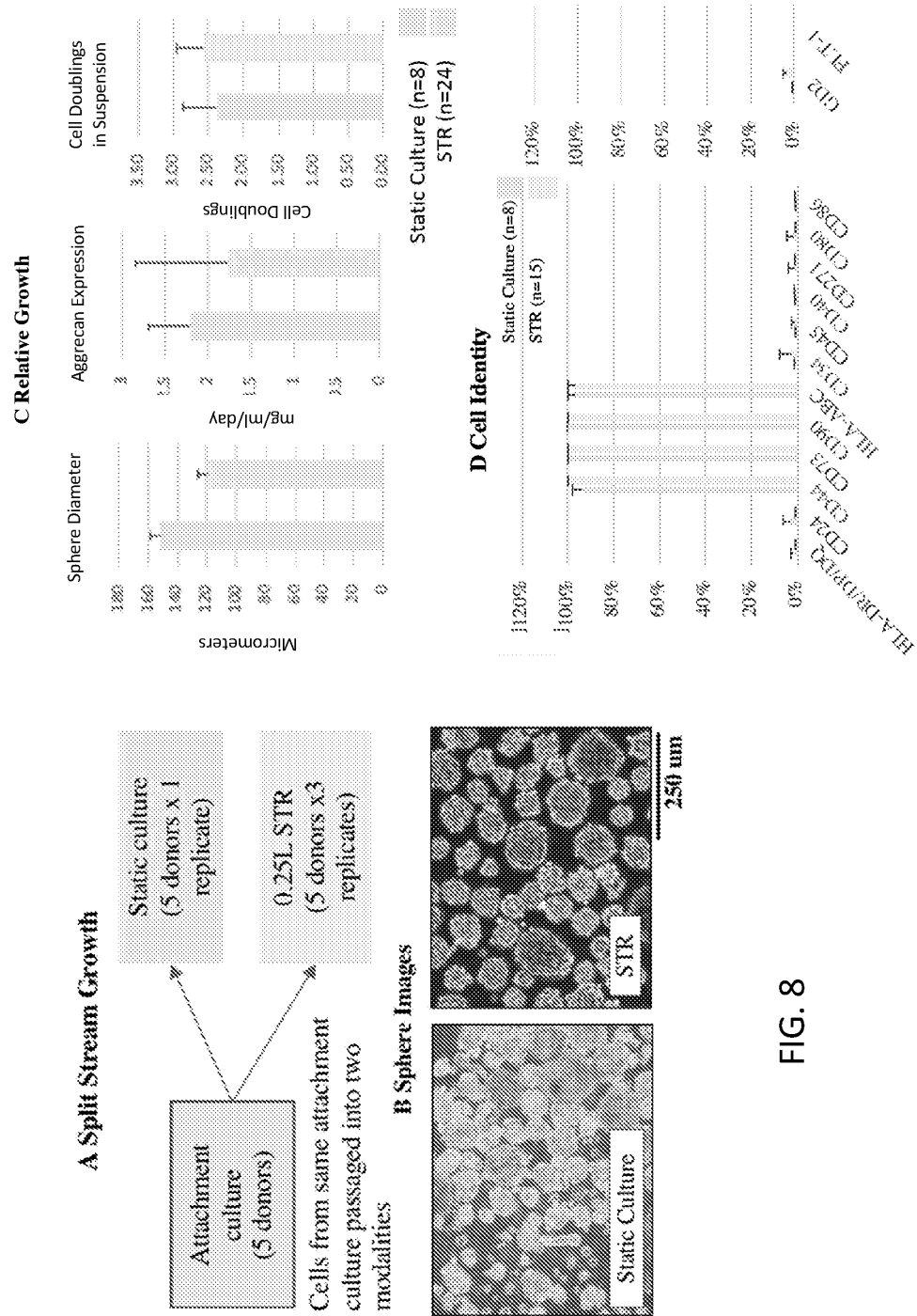


FIG. 8

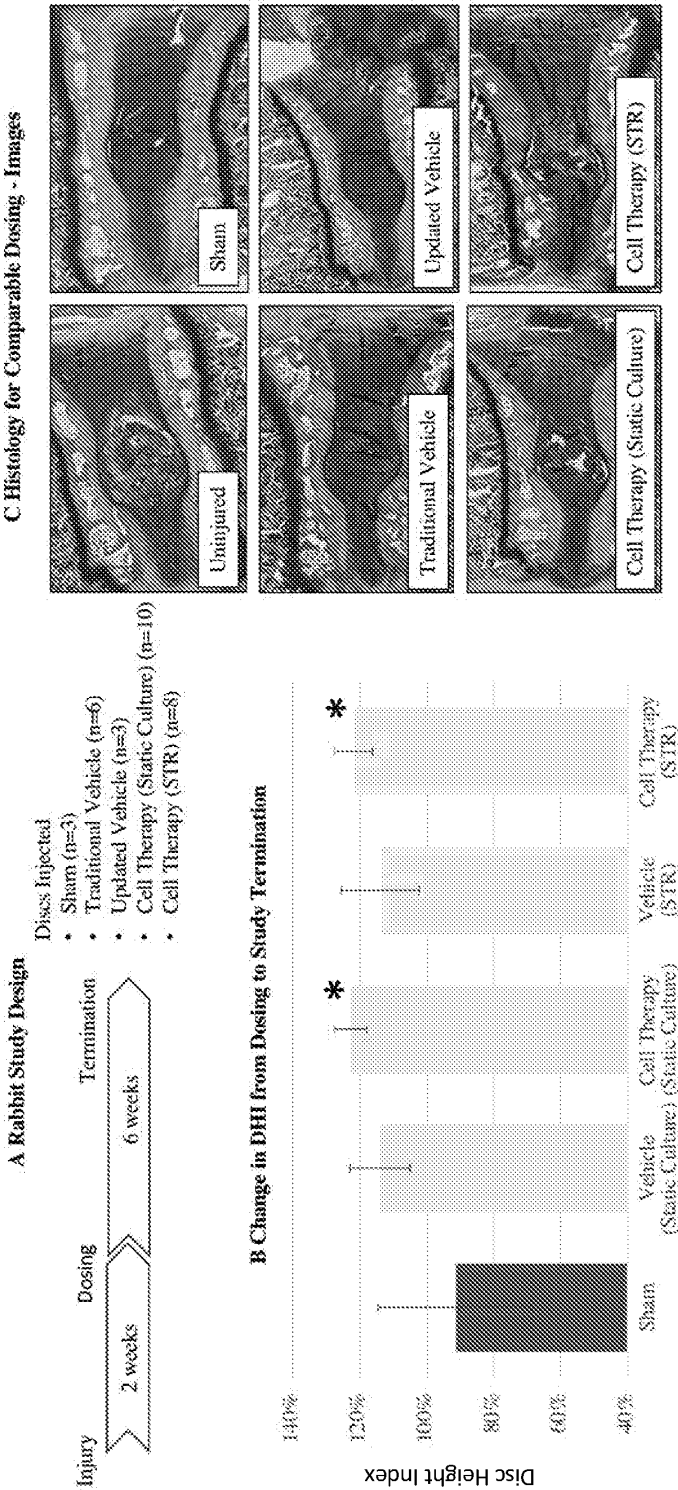


FIG. 9

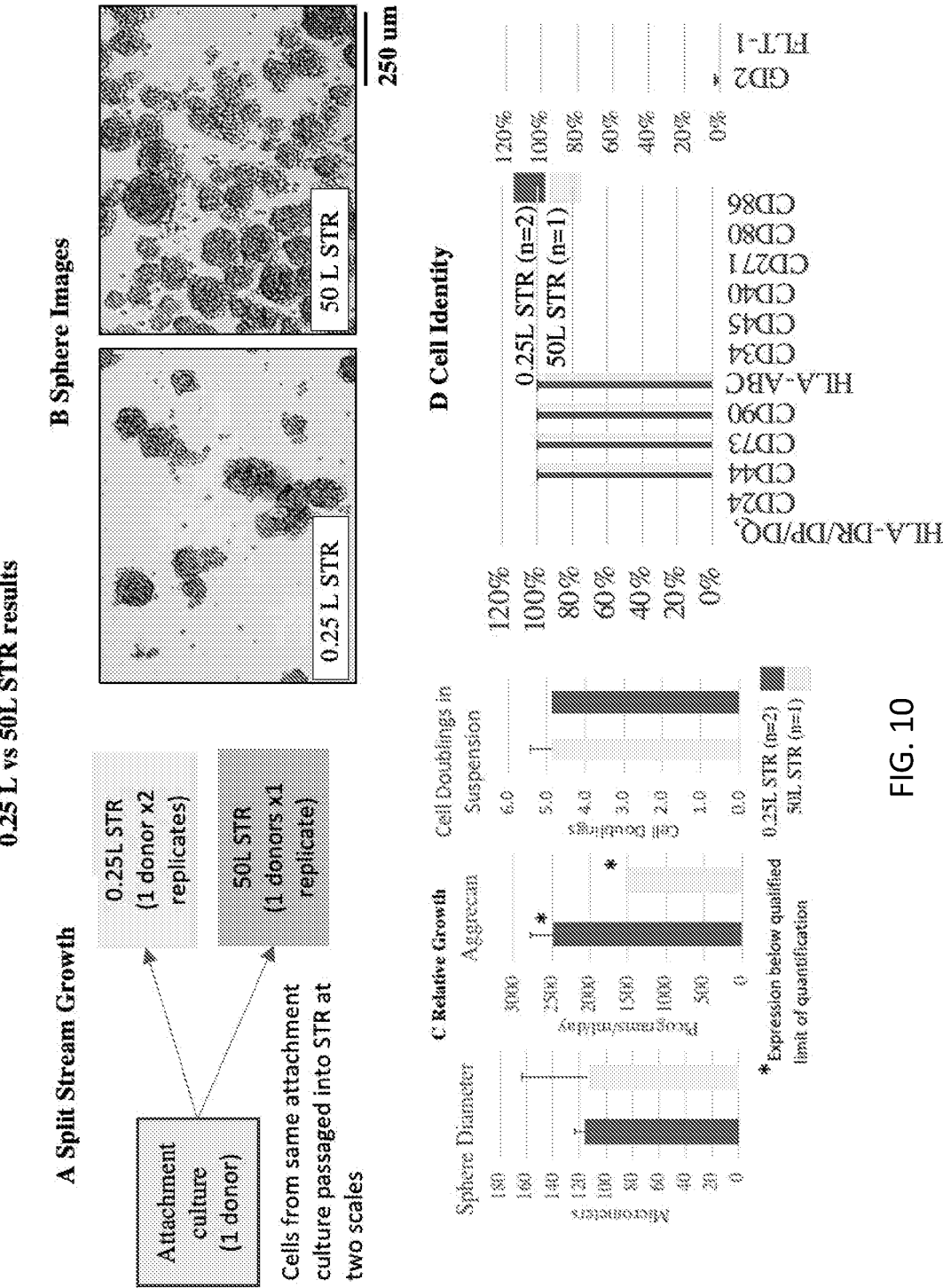


FIG. 10

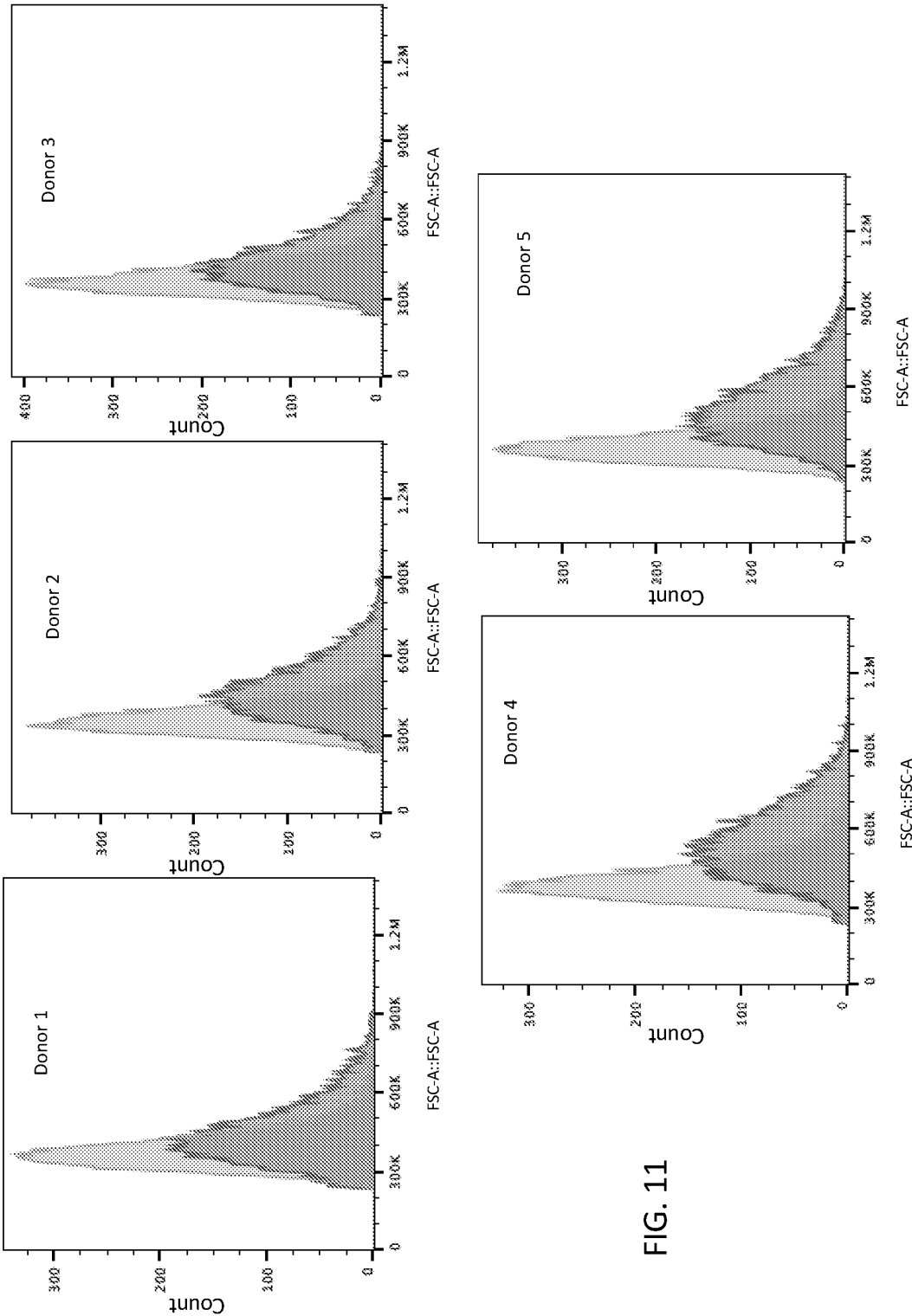


FIG. 11

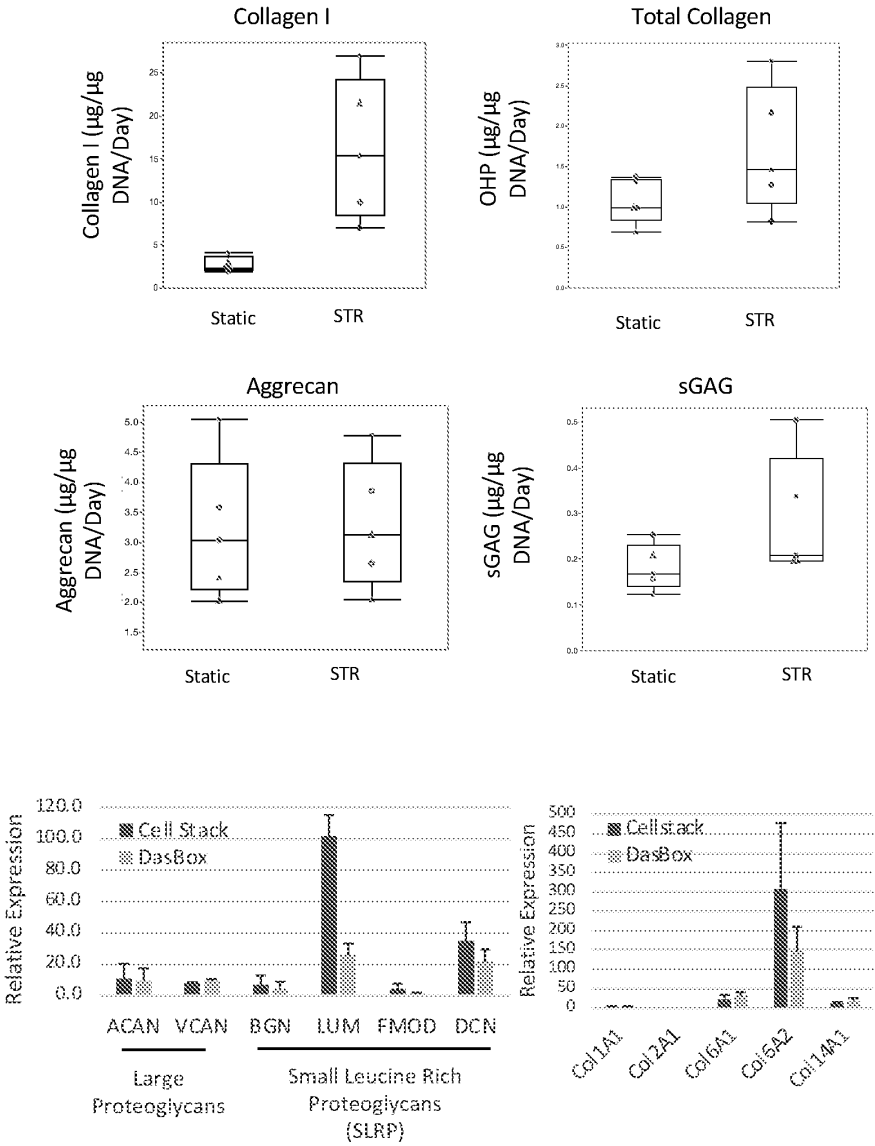


FIG. 12

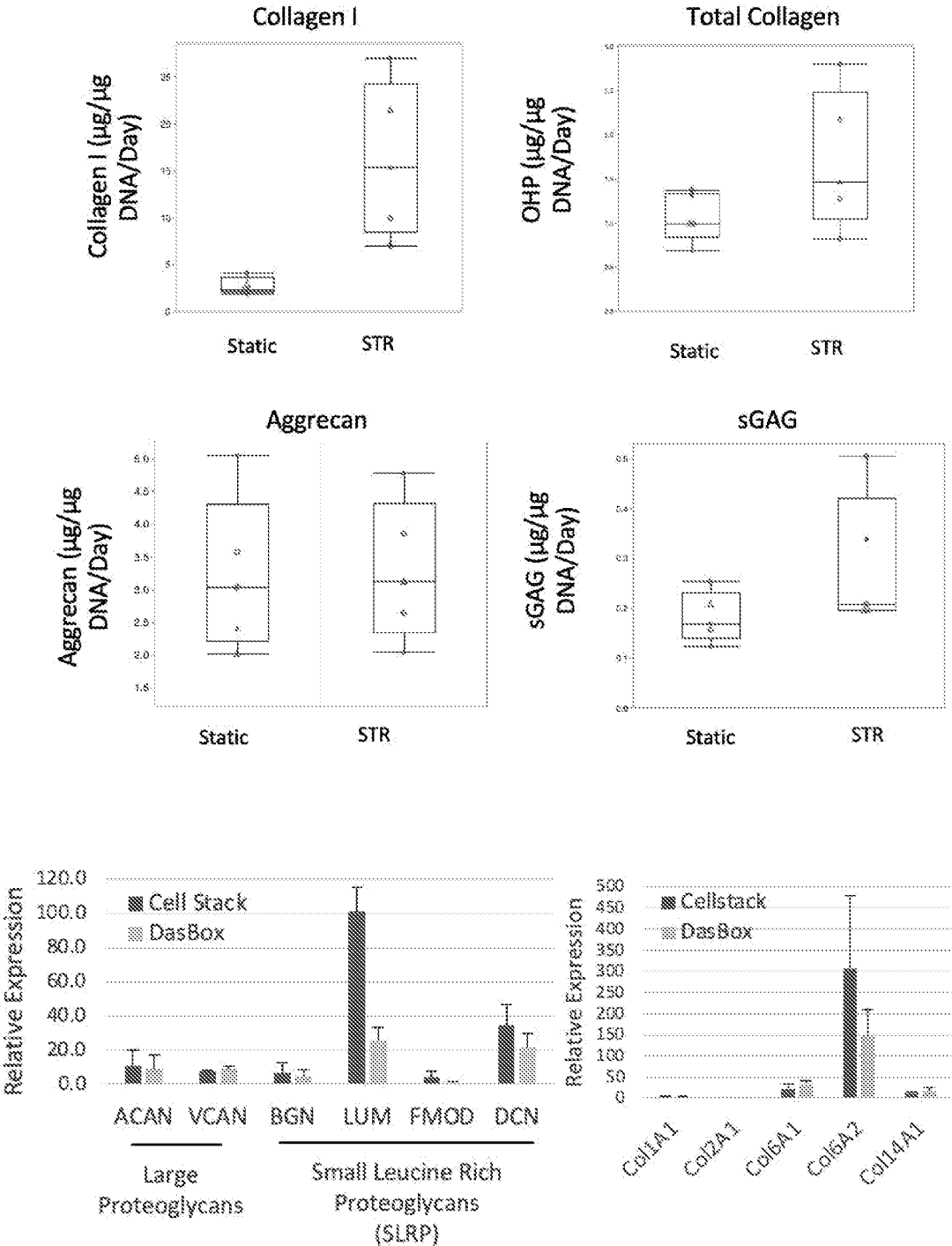


FIG. 12

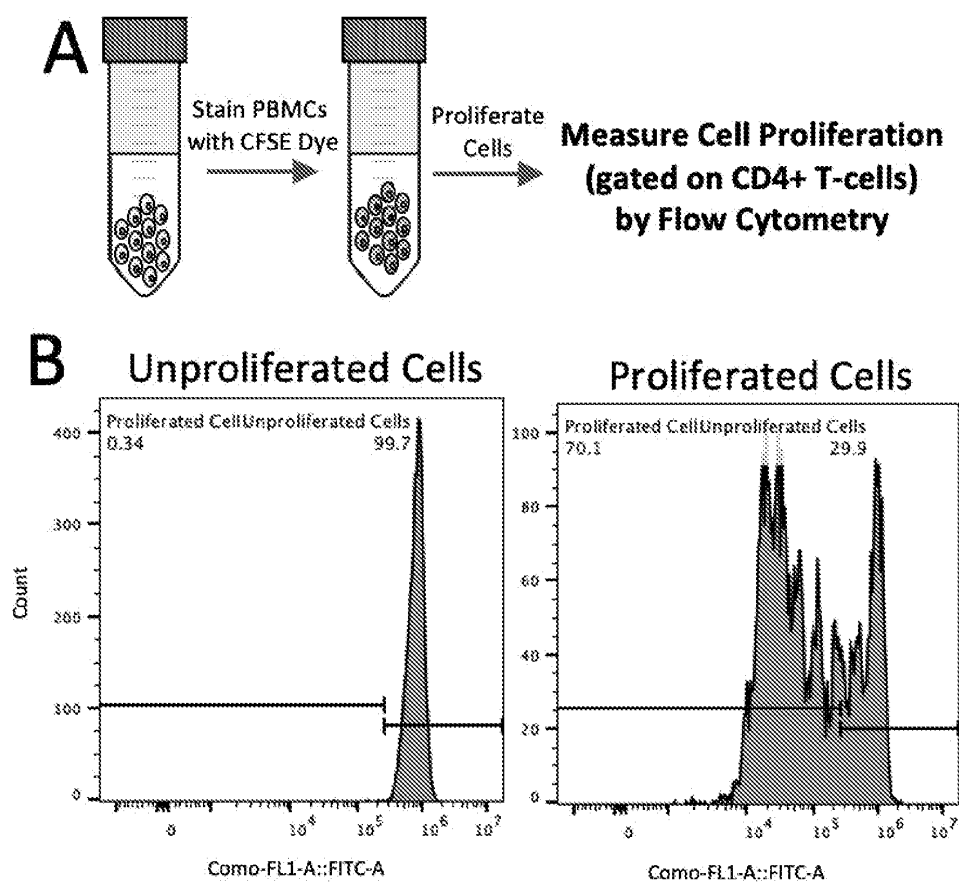


FIG. 13

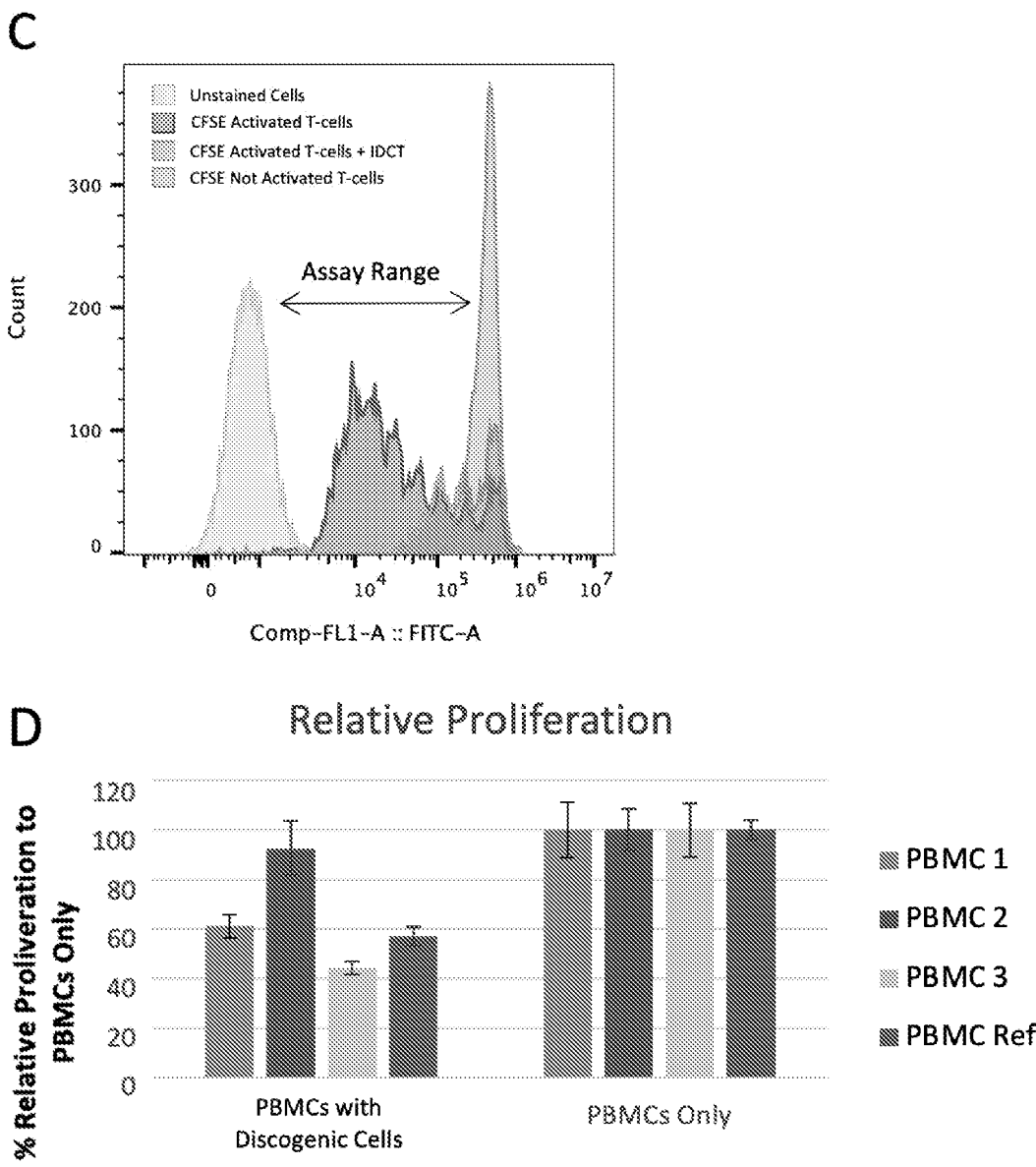


FIG. 13 continued