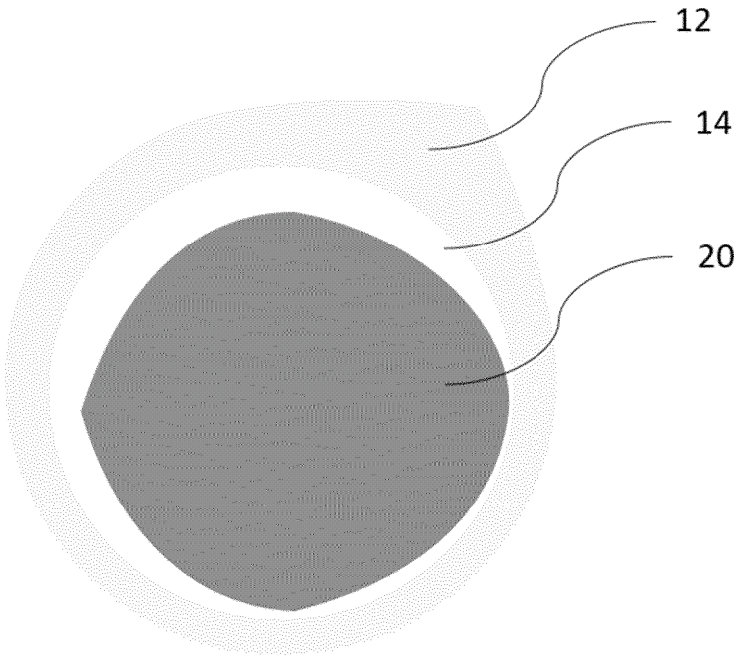


Figure 1a

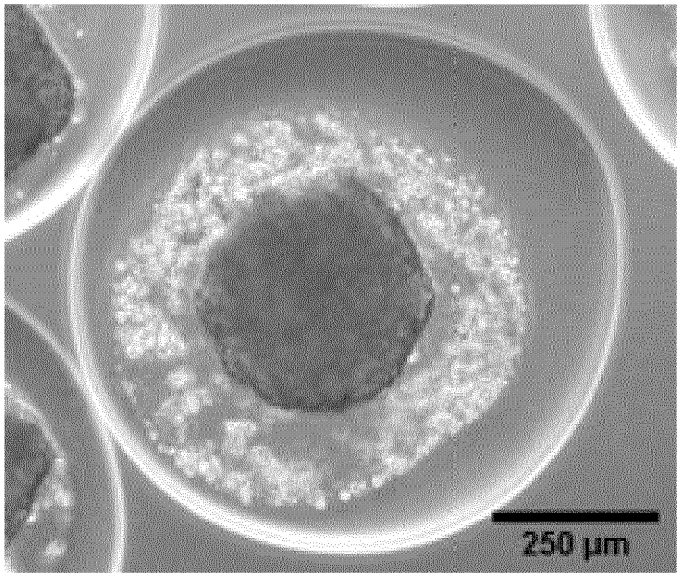
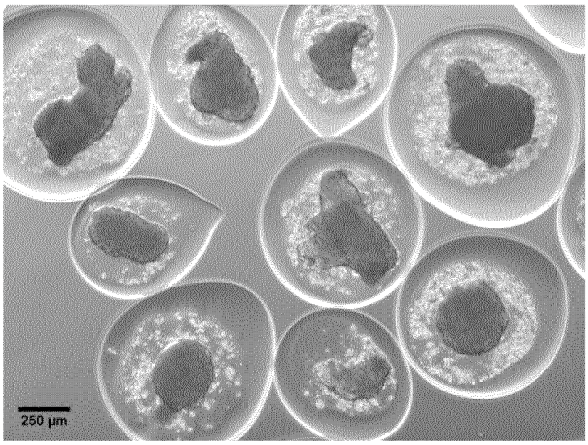
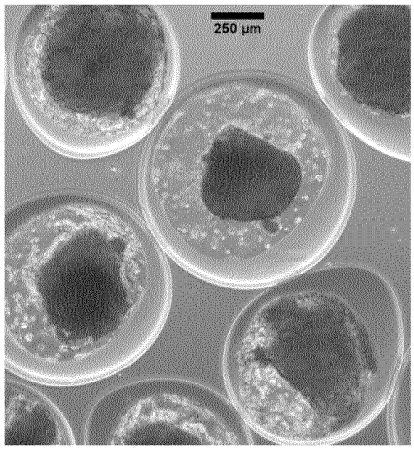


Figure 1b

Without addition of matrix at the time of encapsulation

With addition of matrix at the time of encapsulation





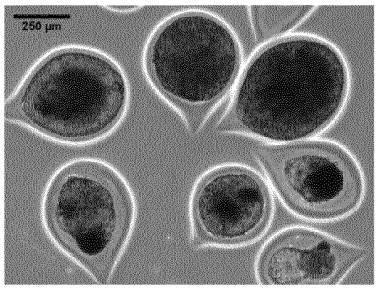


Figure 1c

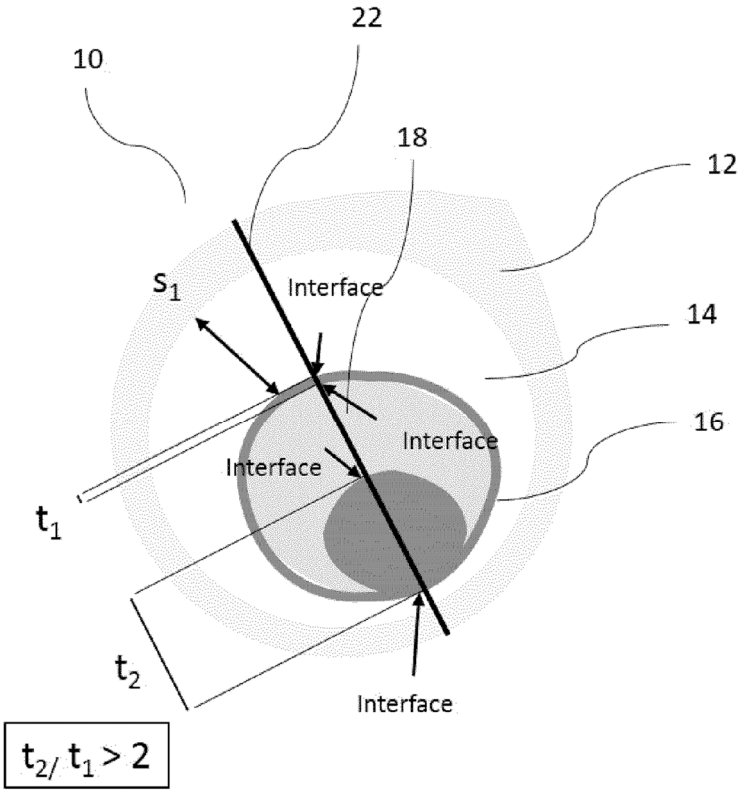
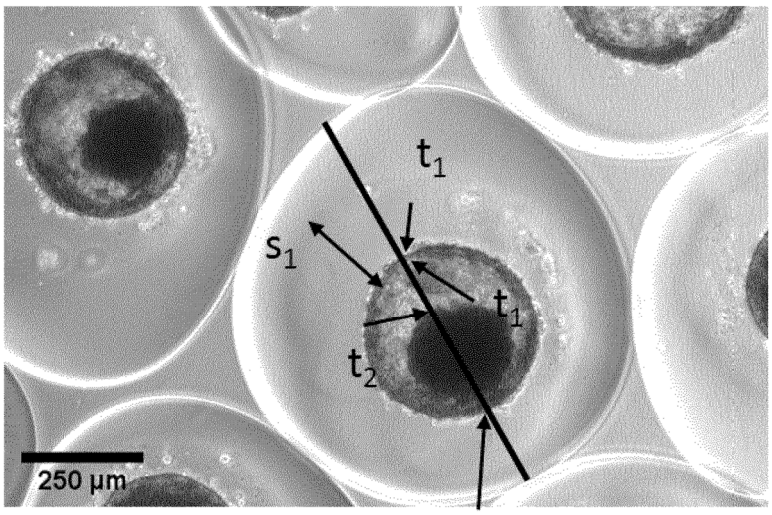


Figure 2a



t_2

Figure 2b

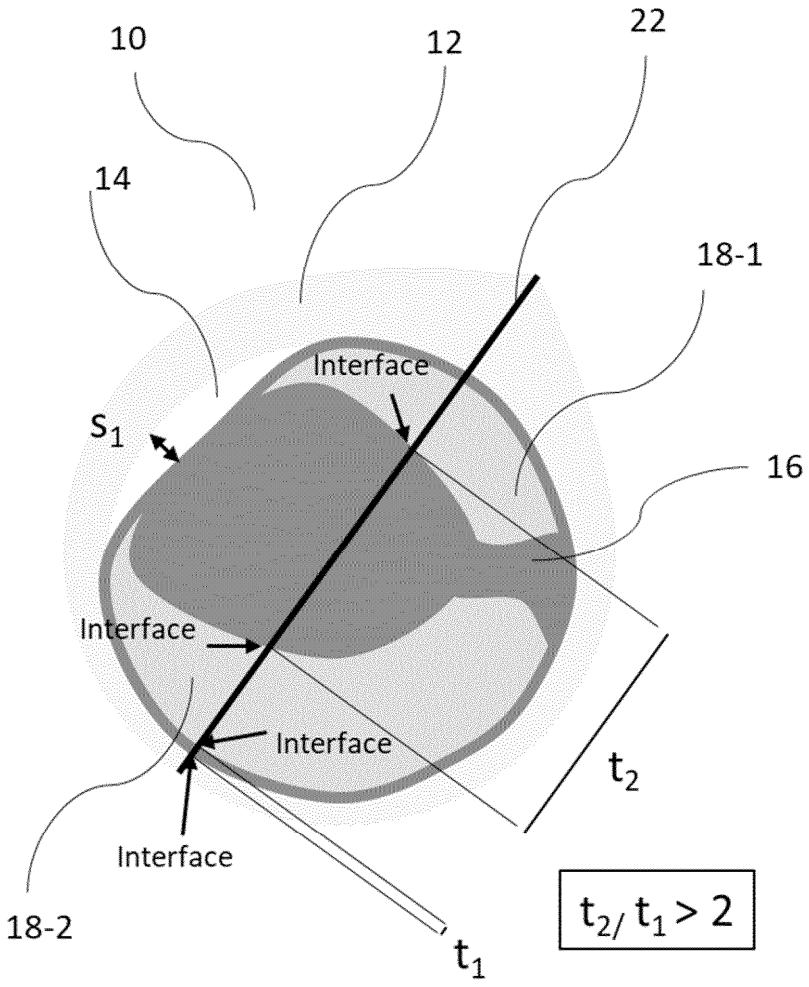

10
12
22
14
18-1
Interface
s_1
16
Interface
Interface
t_2
Interface
18-2
t_1
$t_2 / t_1 > 2$

Figure 3a

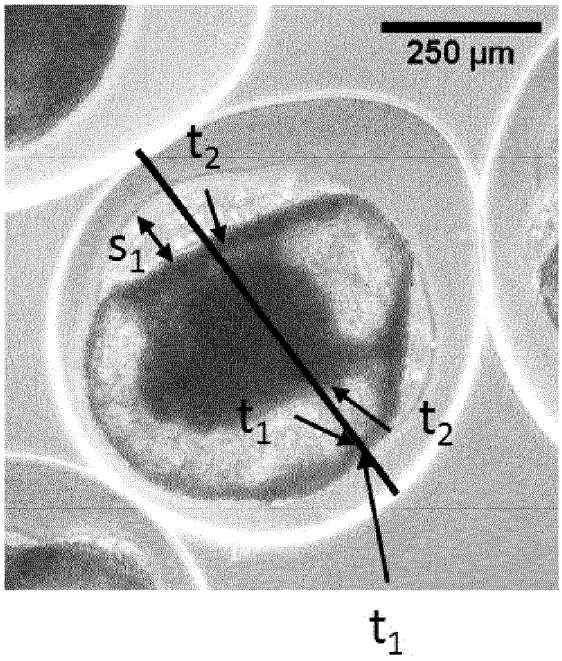


Figure 3b

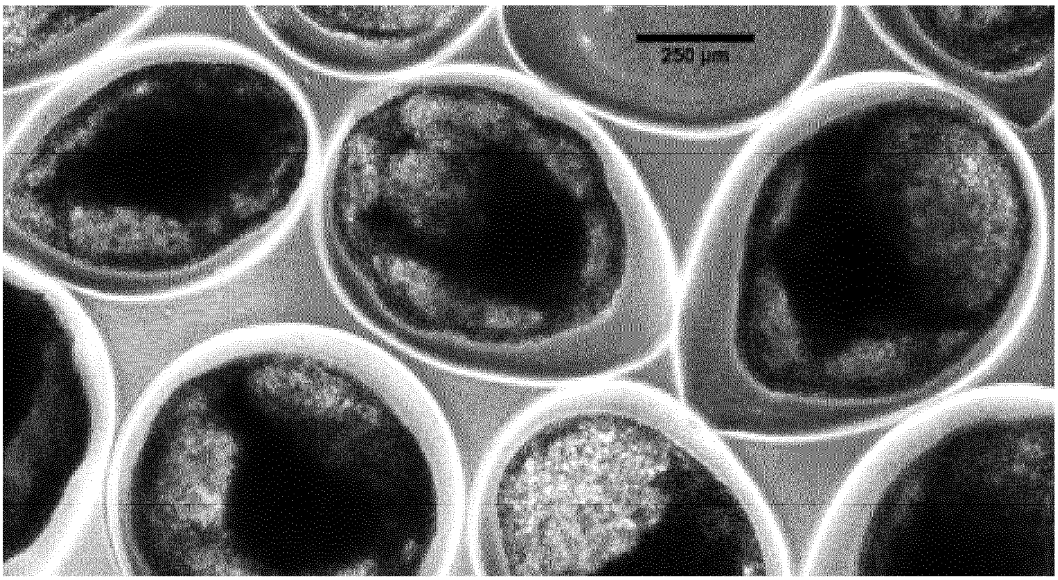


Figure 3c

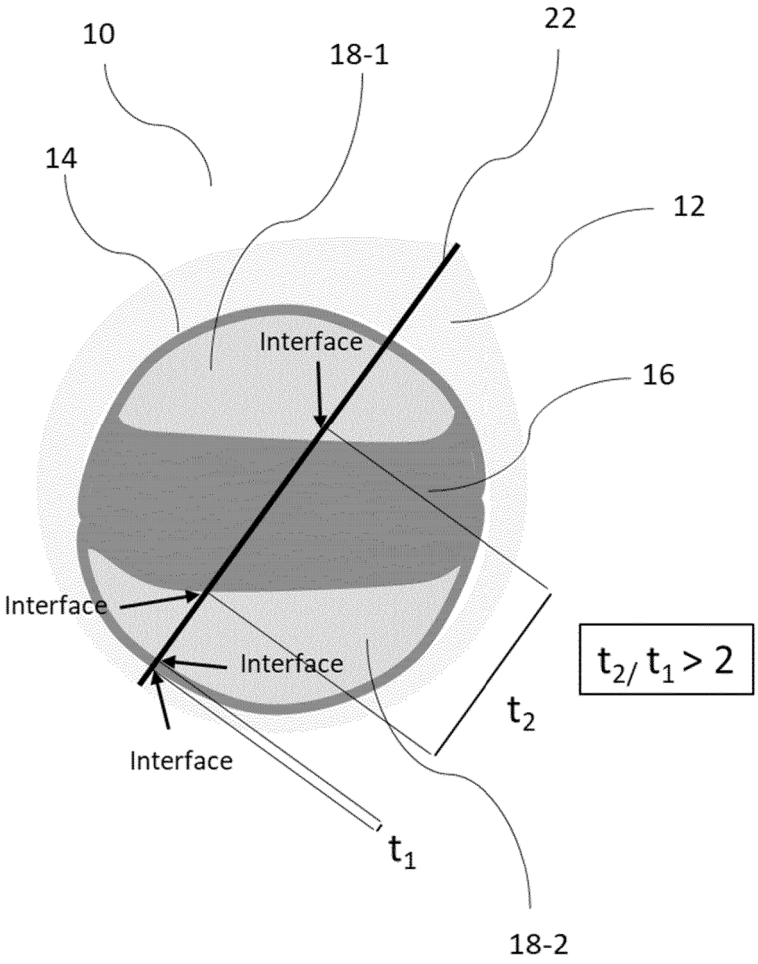


Figure 4a

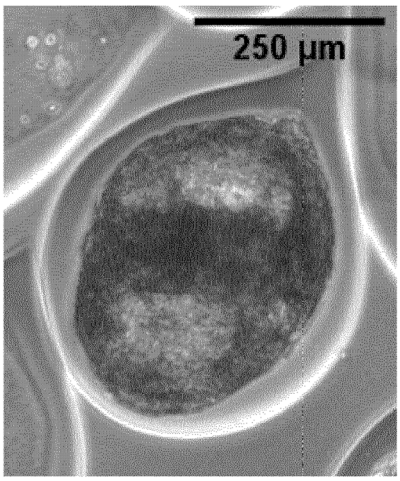


Figure 4b

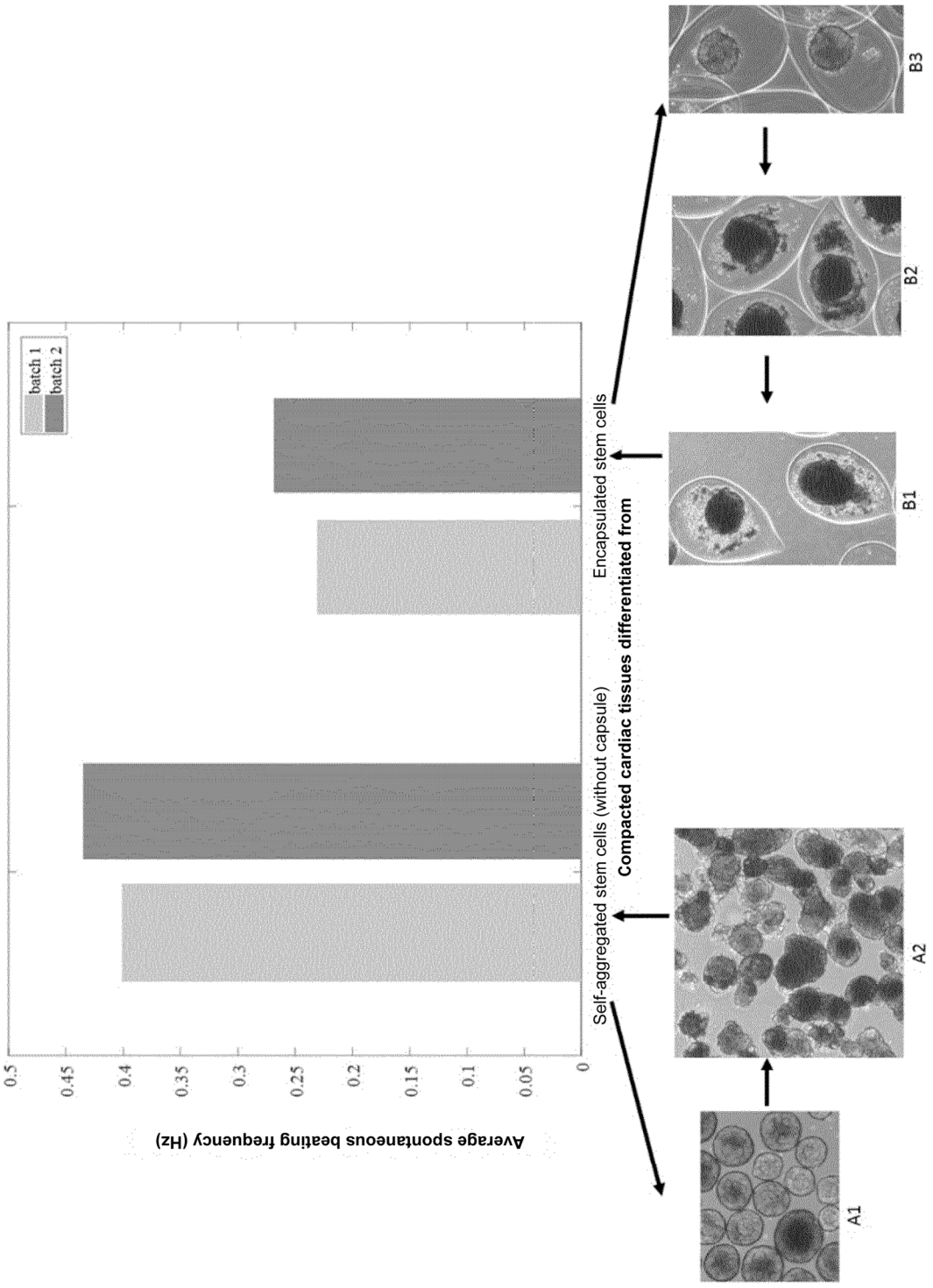

batch 1
batch 2
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Average spontaneous beating frequency (Hz)
Self-aggregated stem cells (without capsule)
Compacted cardiac tissues differentiated from
Encapsulated stem cells
A1
A2
B1
B2
B3

Figure 5

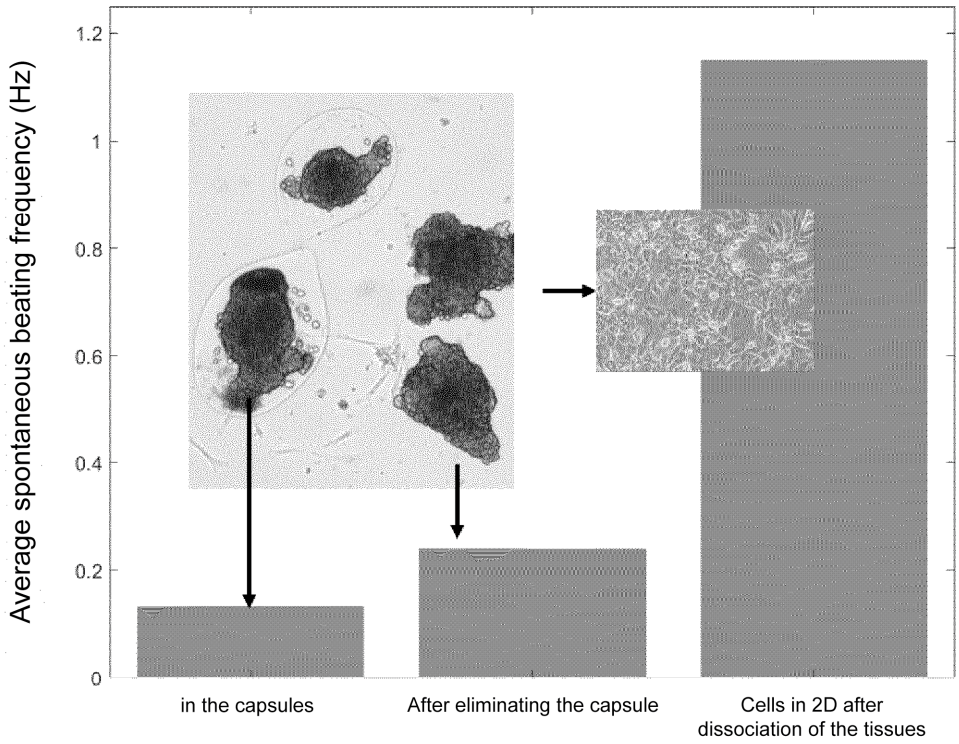

Average spontaneous beating frequency (Hz)
1.2
1
0.8
0.6
0.4
0.2
0
in the capsules
After eliminating the capsule
Cells in 2D after dissociation of the tissues

Figure 6

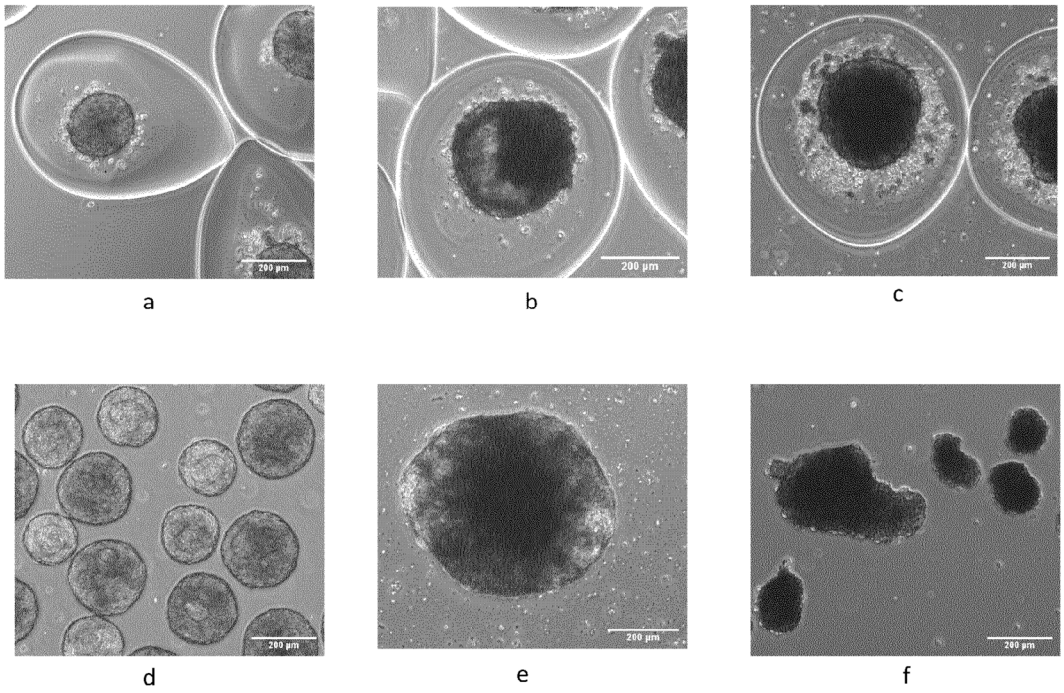


Figure 7

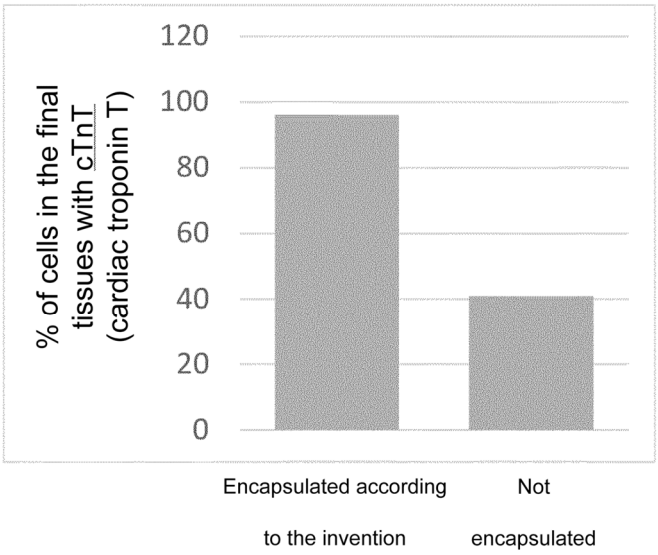


Figure 8

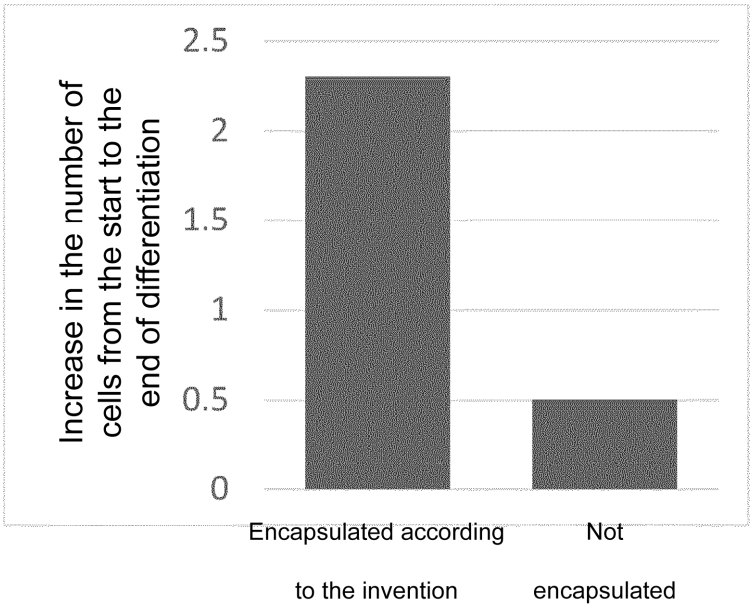

Increase in the number of cells from the start to the end of differentiation
2.5
2
1.5
1
0.5
0
Encapsulated according to the invention
Not encapsulated

Figure 9