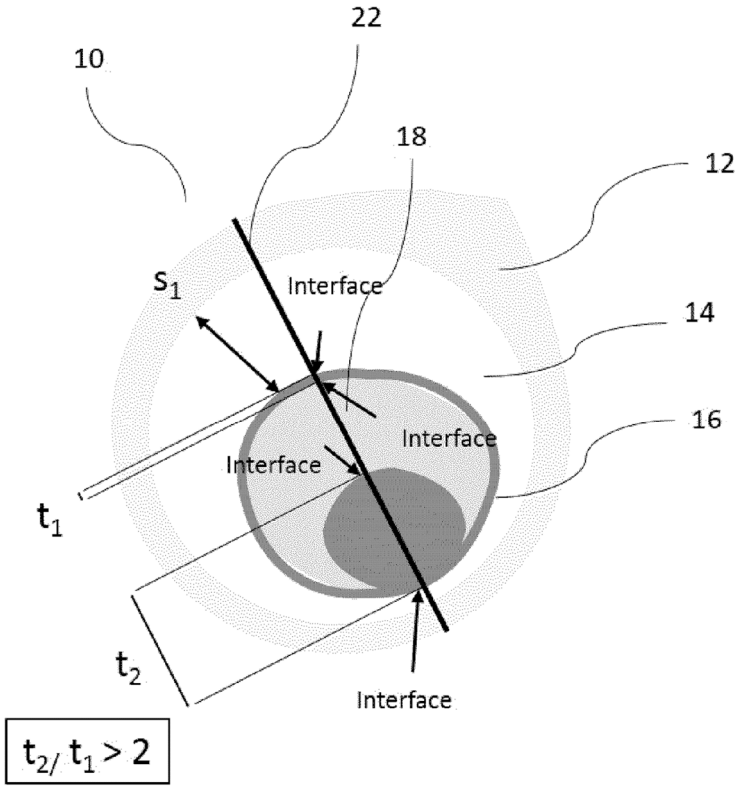


Figure 1a

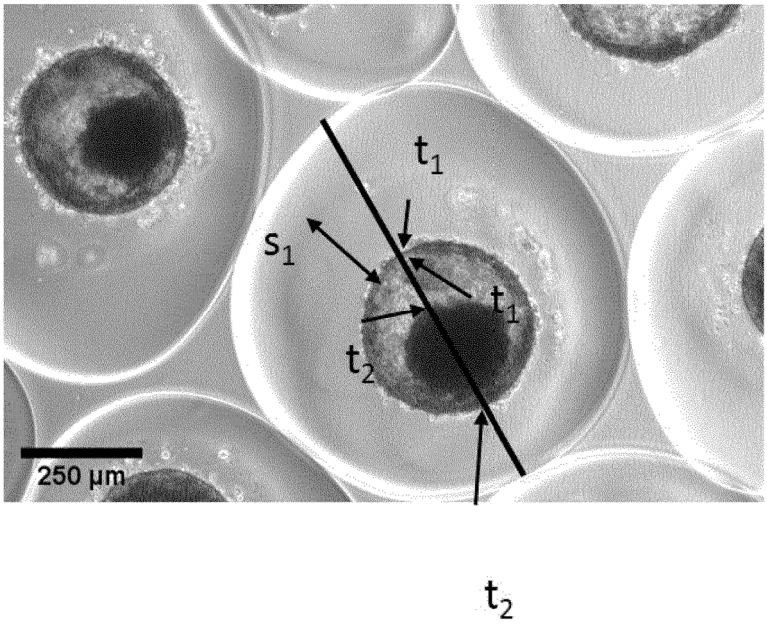


Figure 1b

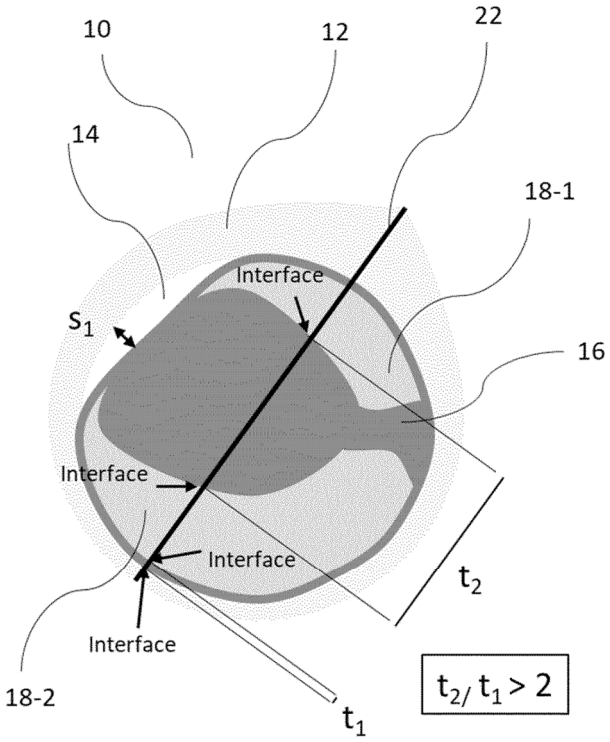


Figure 2a

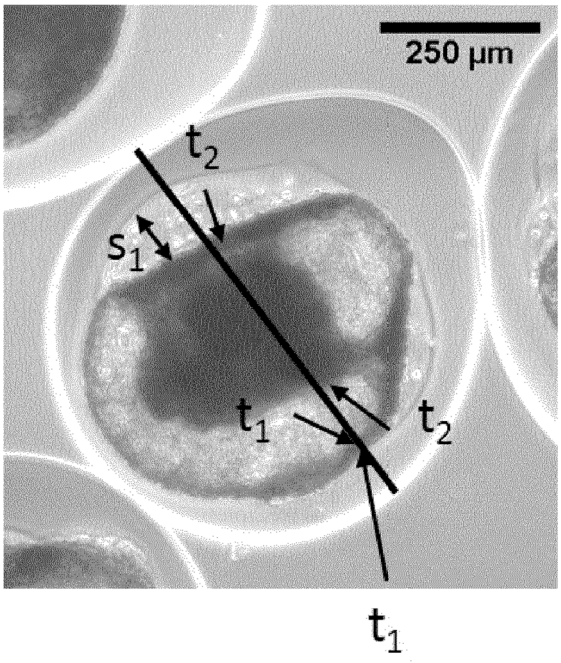


Figure 2b

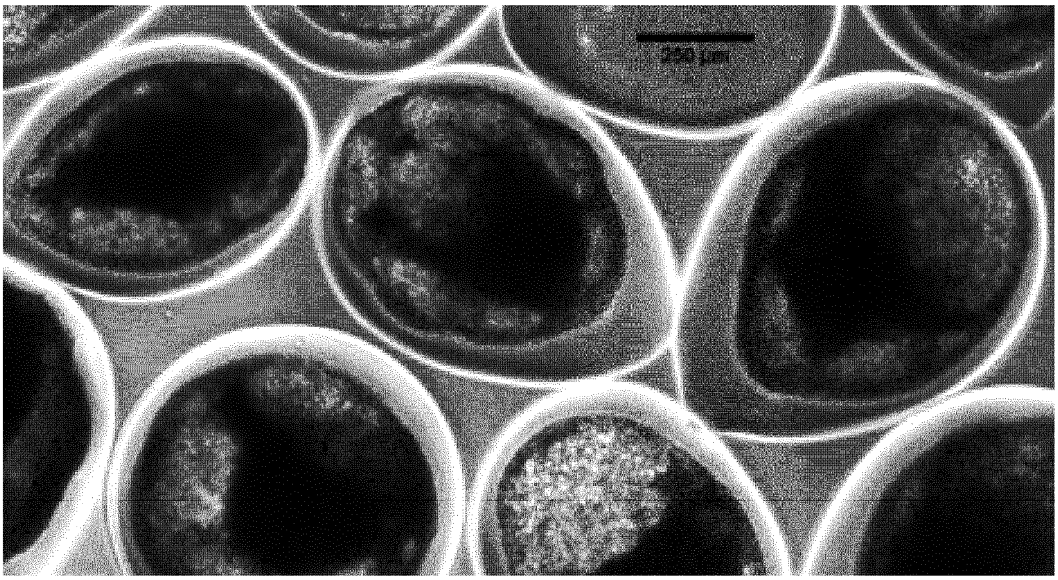


Figure 2c

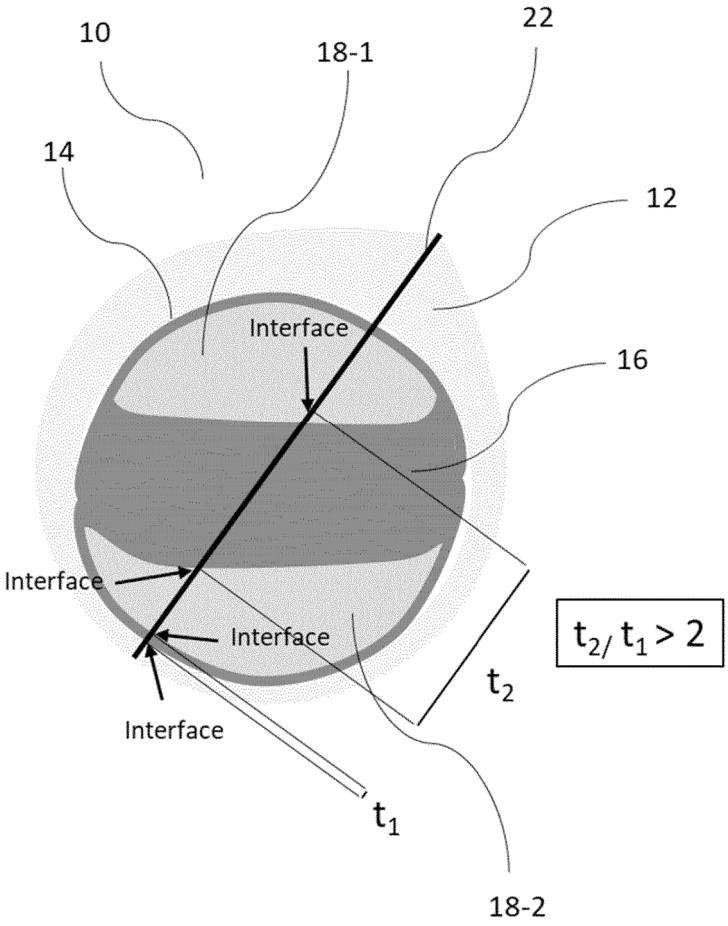


Figure 3a

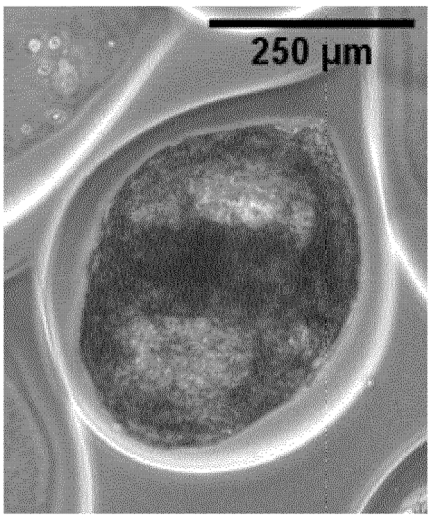


Figure 3b

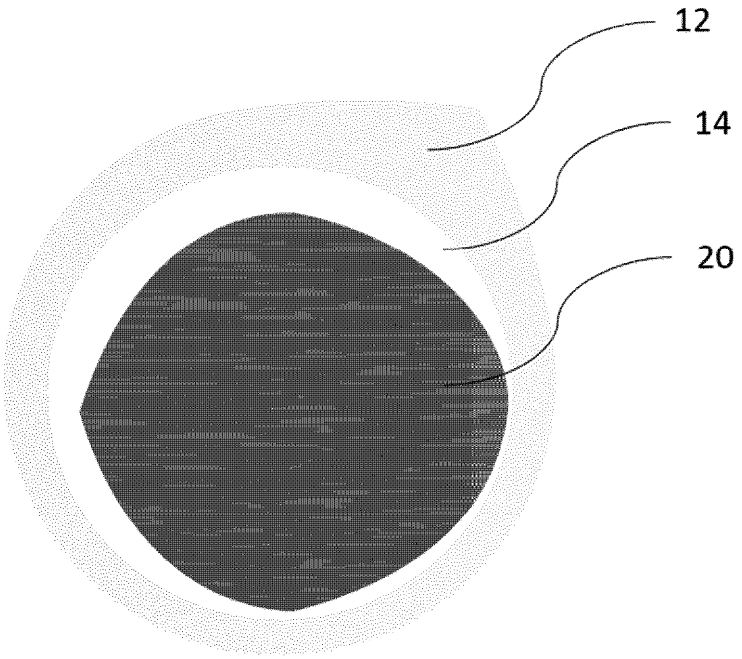


Figure 4a

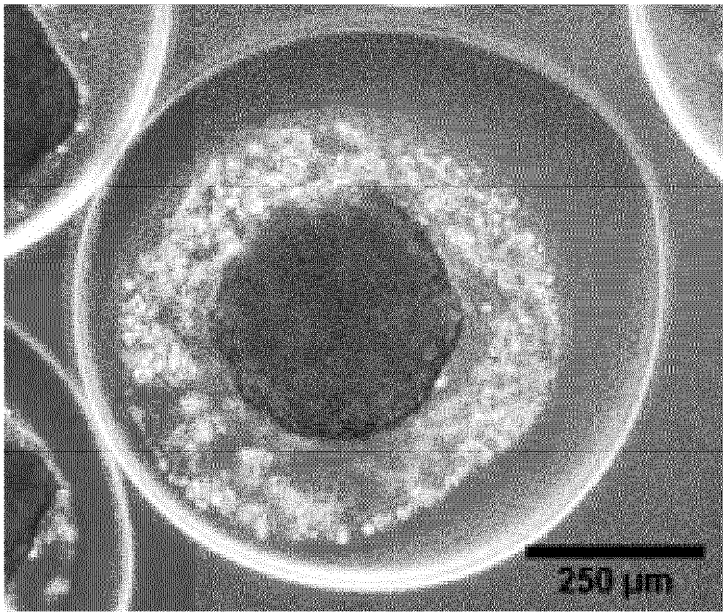
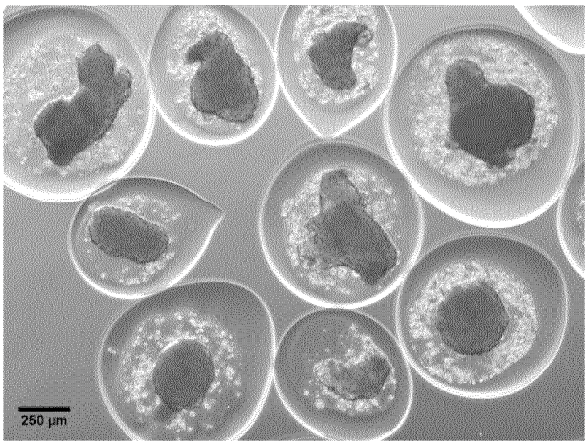
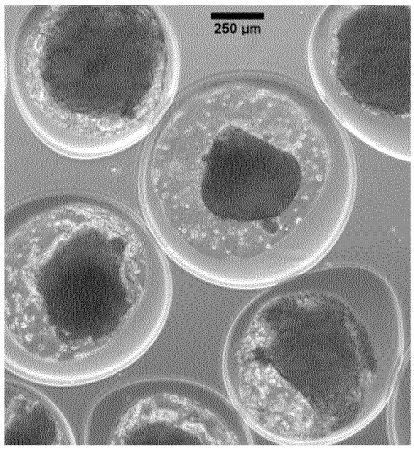


Figure 4b

With no matrix added at time of encapsulation

With matrix added at time of encapsulation





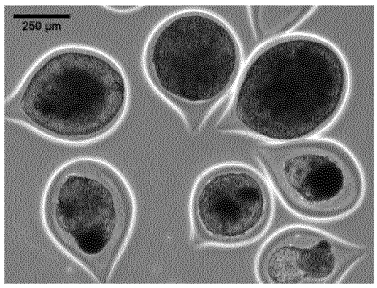


Figure 4c

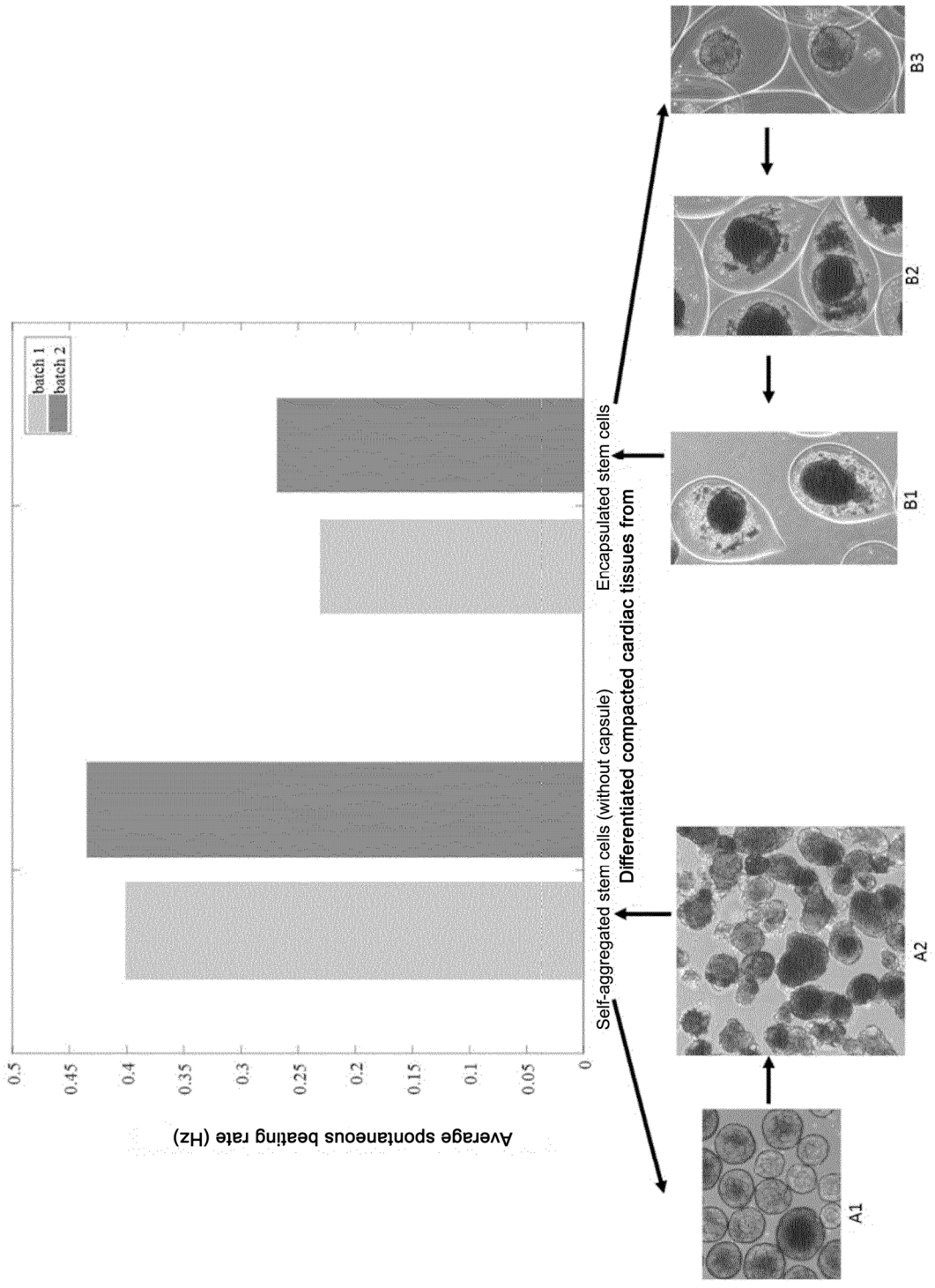

Average spontaneous beating rate (Hz)
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
batch 1
batch 2
Self-aggregated stem cells (without capsule)
Encapsulated stem cells
Differentiated compacted cardiac tissues from
A1
A2
B1
B2
B3

Figure 5

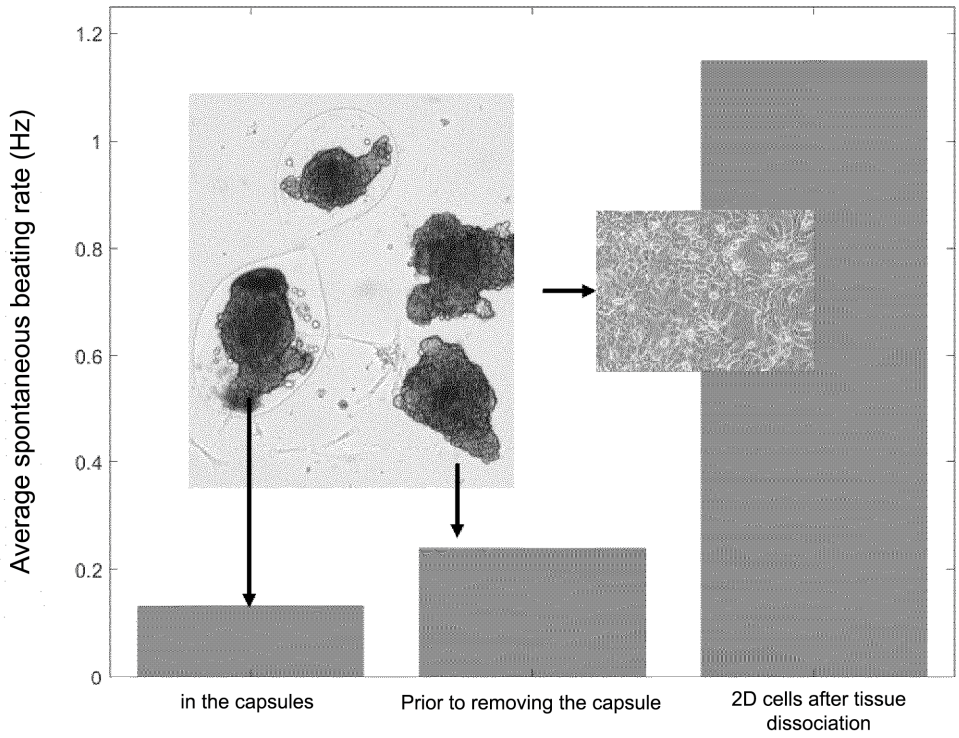
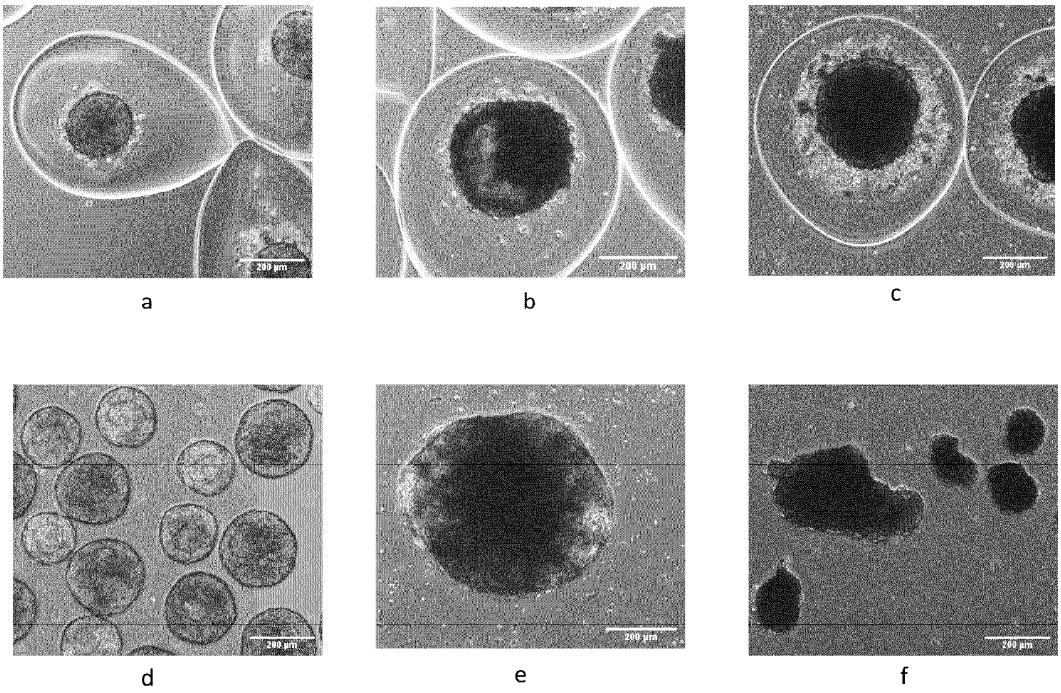

Average spontaneous beating rate (Hz)
1.2
1
0.8
0.6
0.4
0.2
0
in the capsules
Prior to removing the capsule
2D cells after tissue dissociation

Figure 6



a b c

d e f

Figure 7

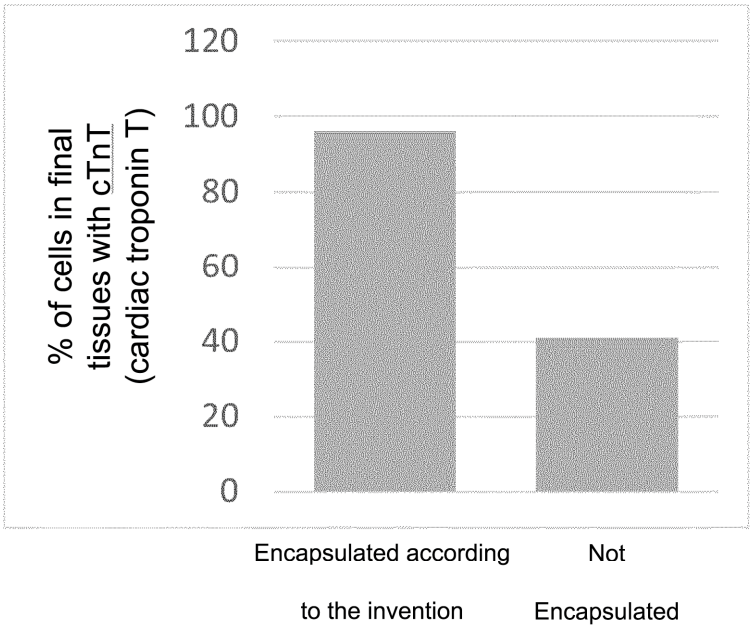


Figure 8

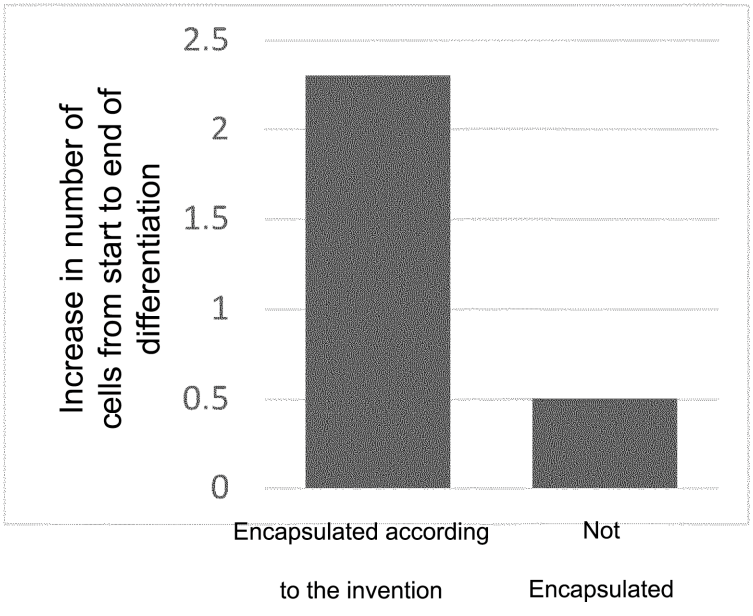


Figure 9