FIG. 1A

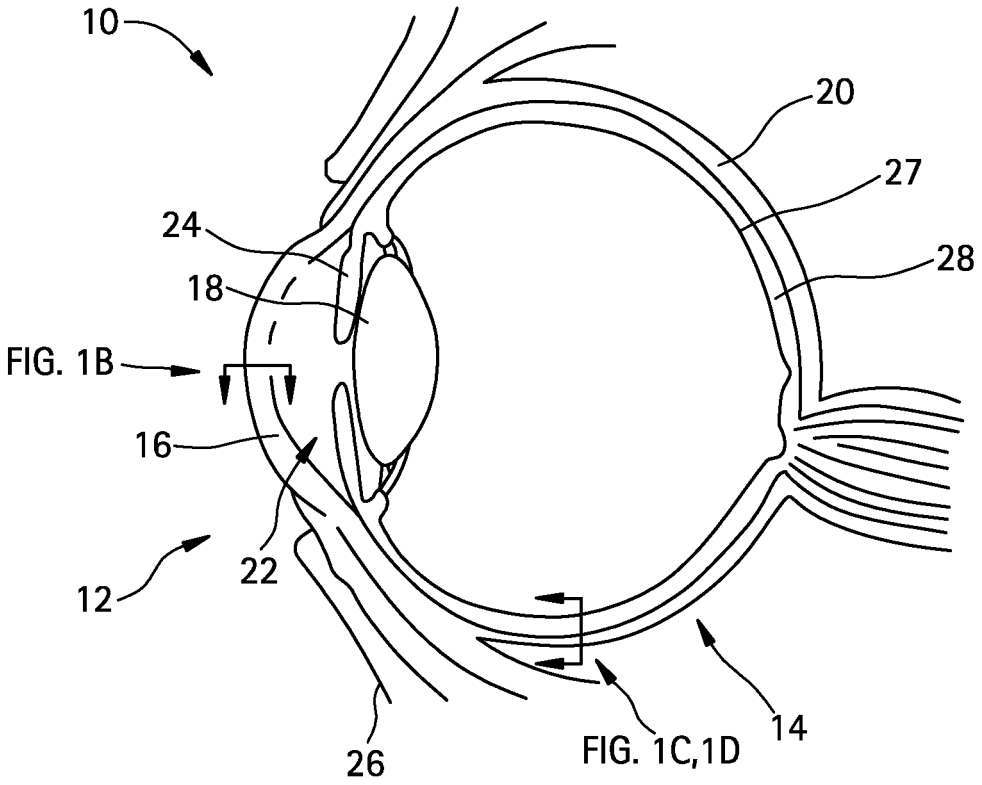


FIG. 1B

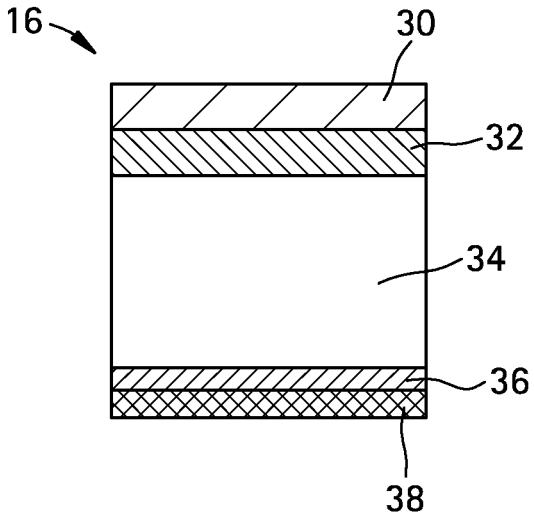


FIG. 1C

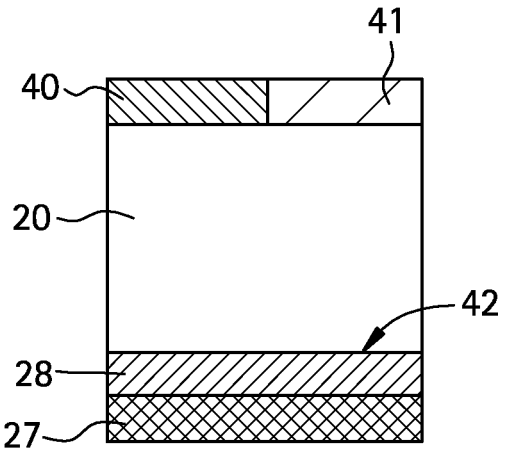


FIG. 1D

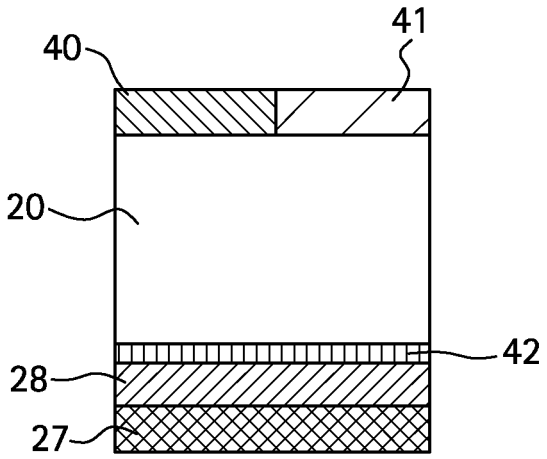


FIG. 2

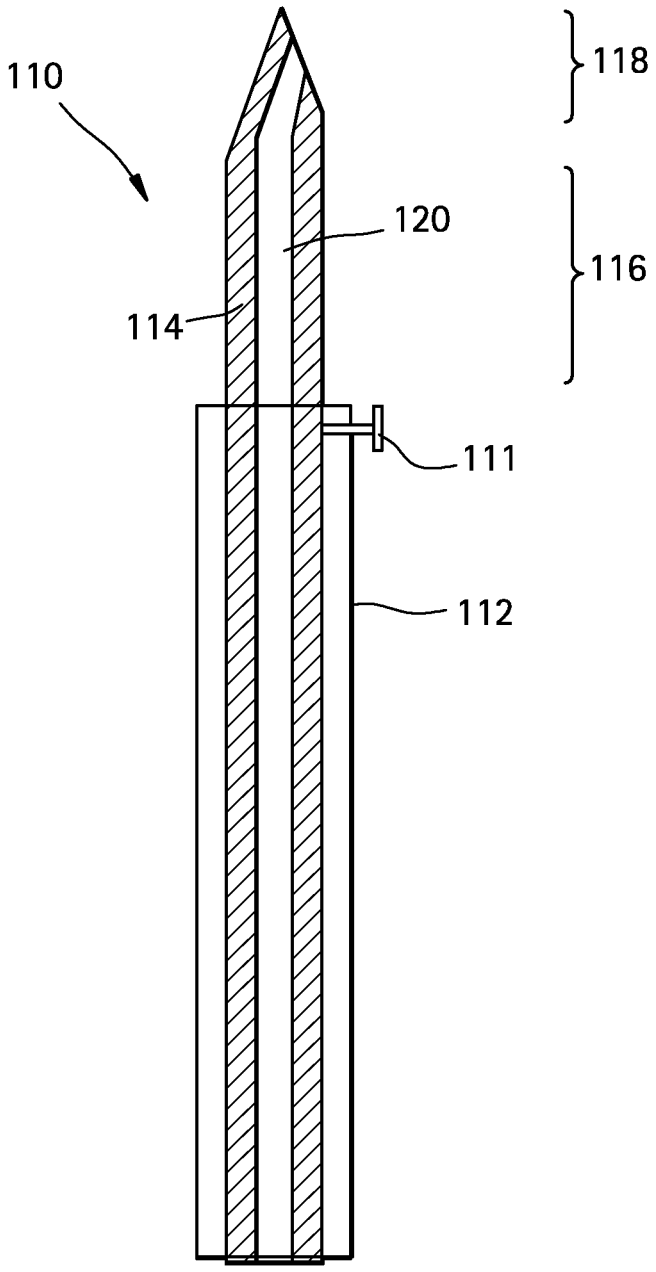


FIG. 3

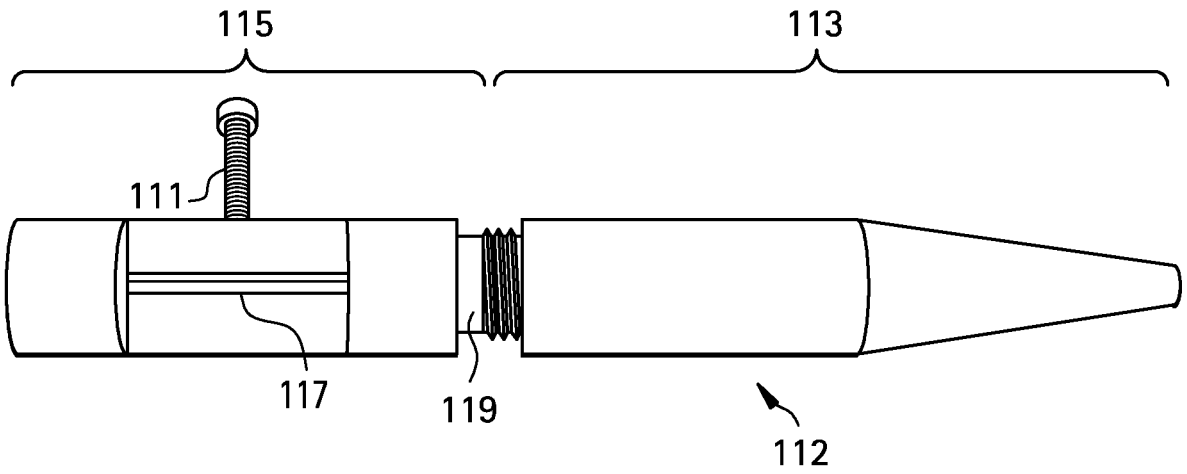


FIG. 4

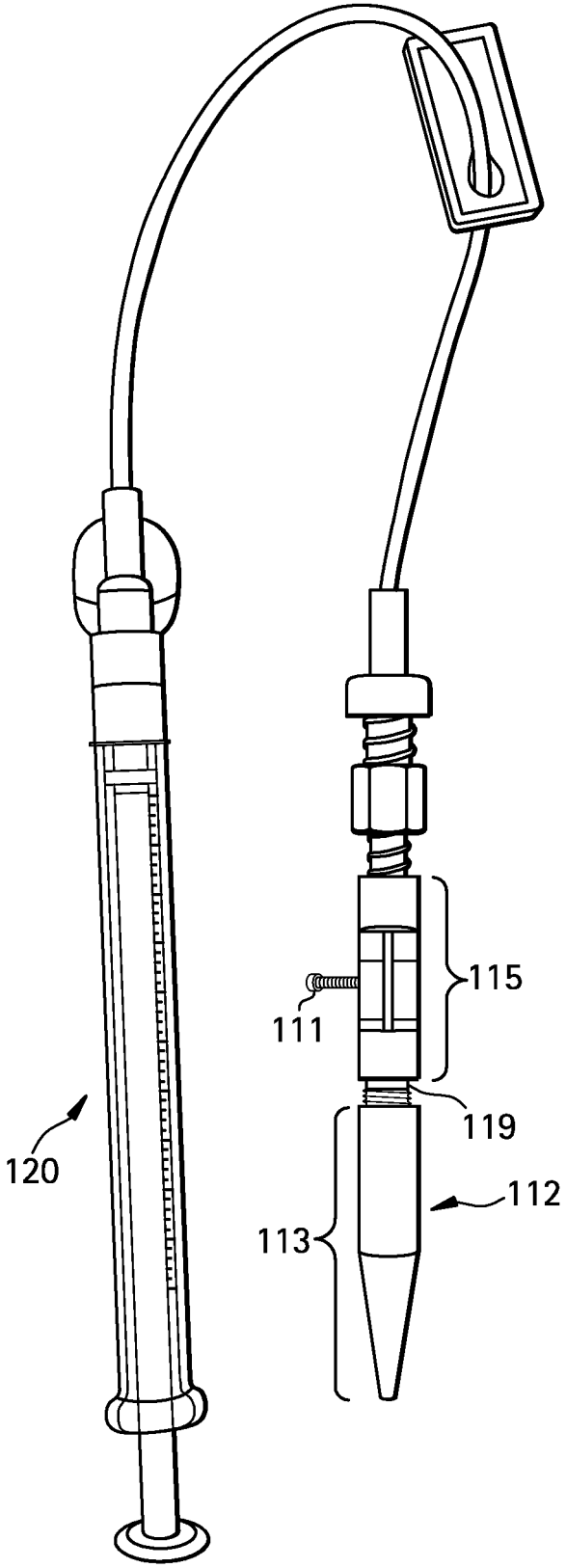


FIG. 5

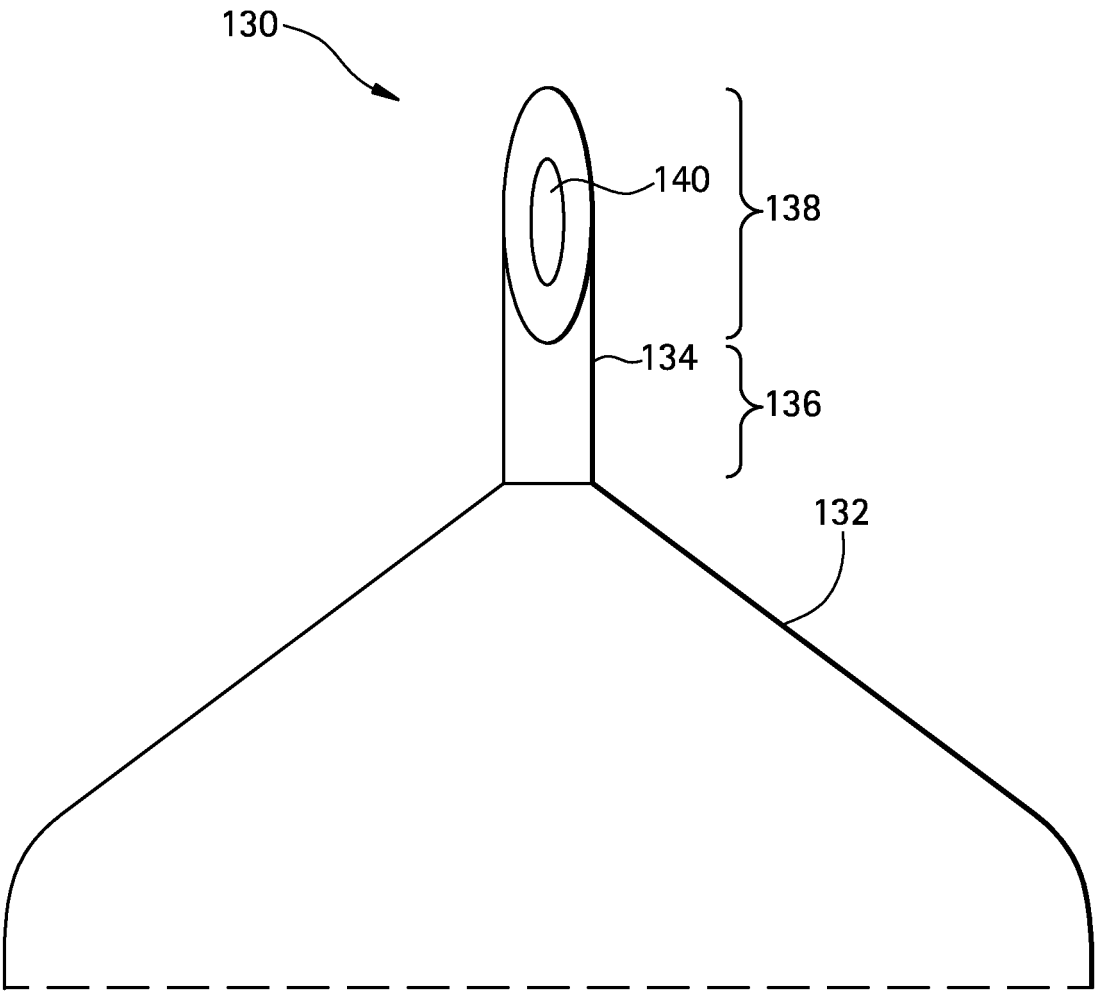


FIG. 6A

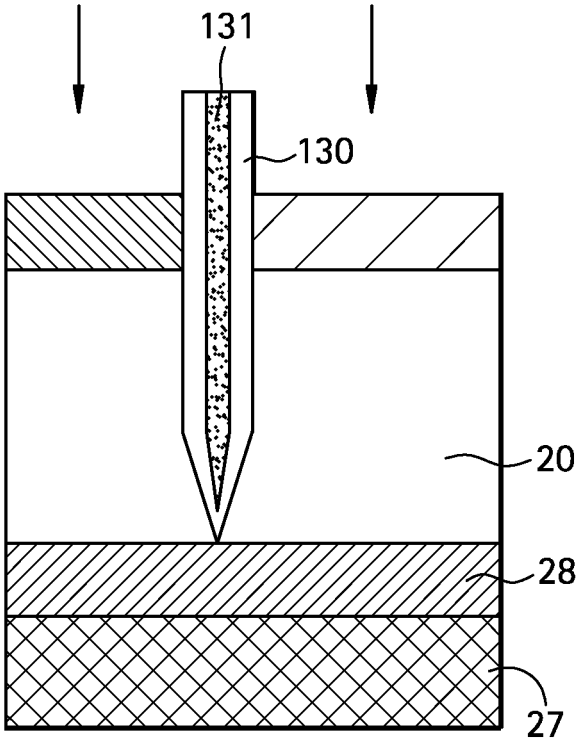


FIG. 6B

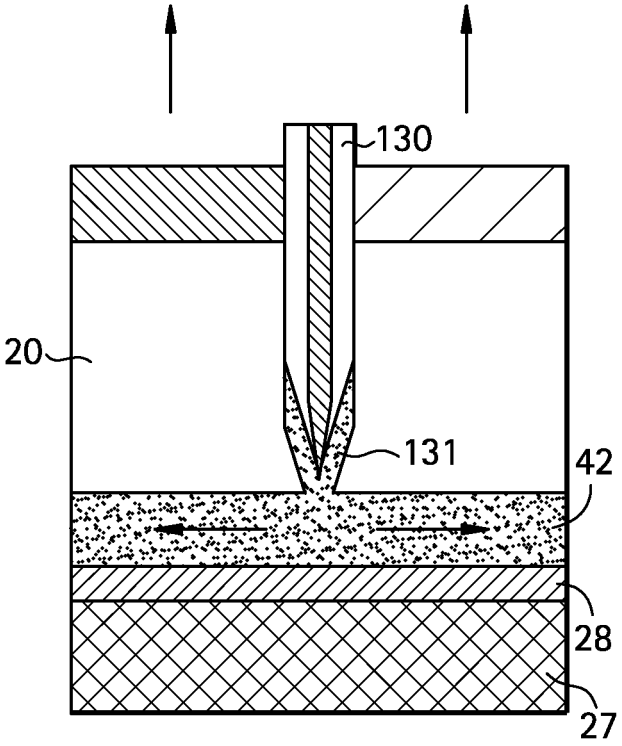


FIG. 7A

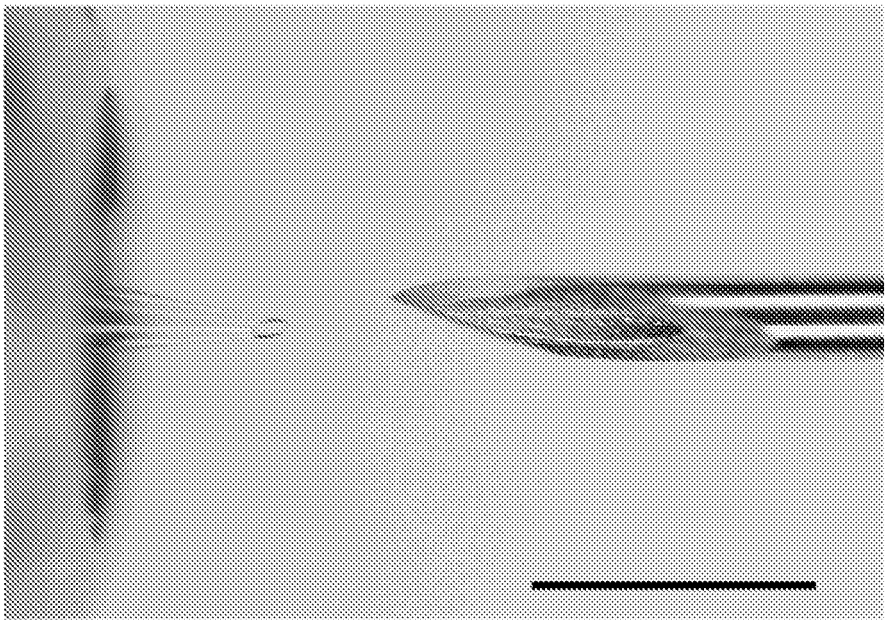


FIG. 7B

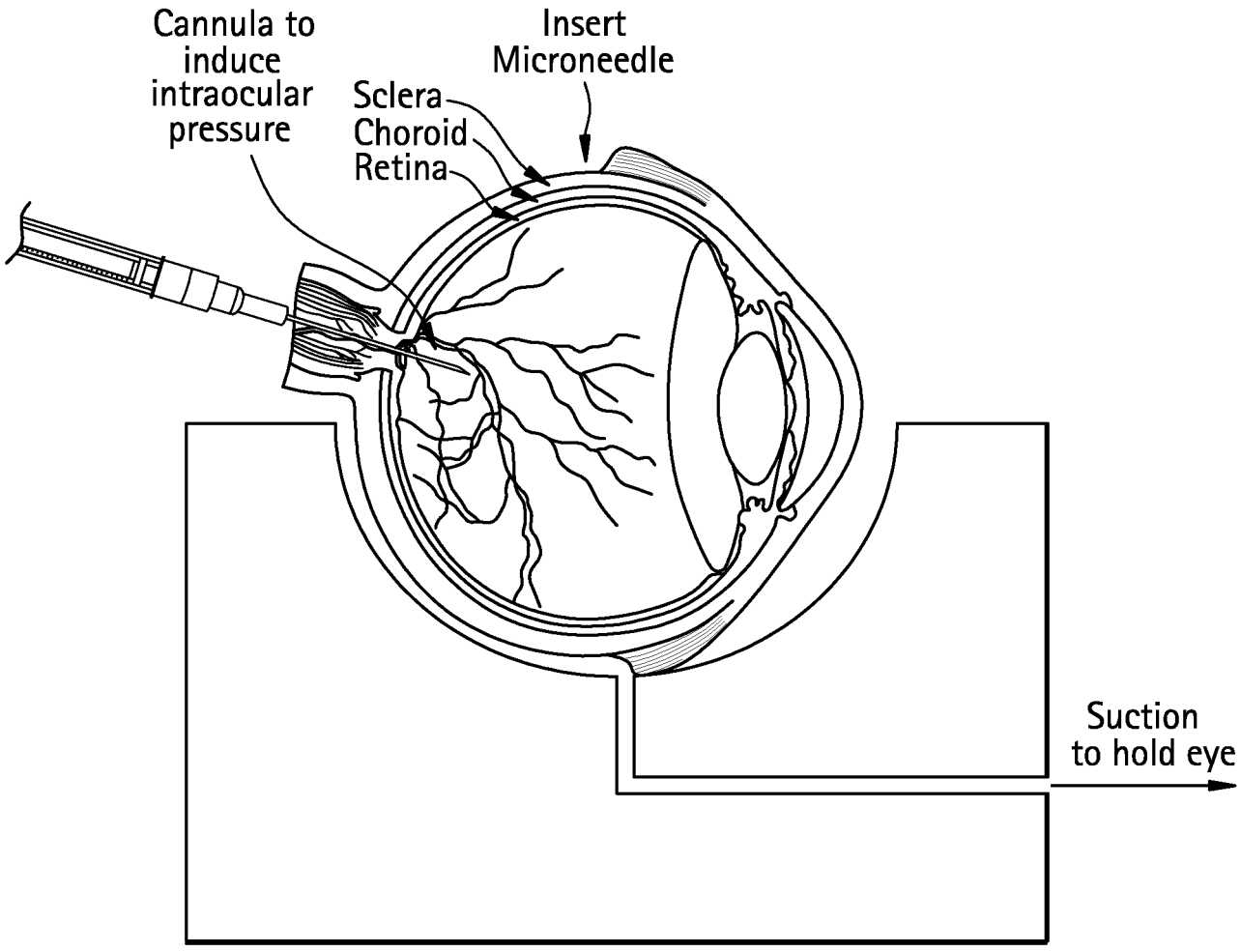

Cannula to induce intraocular pressure
Insert Microneedle
Sclera
Choroid
Retina
Suction to hold eye

FIG. 8A

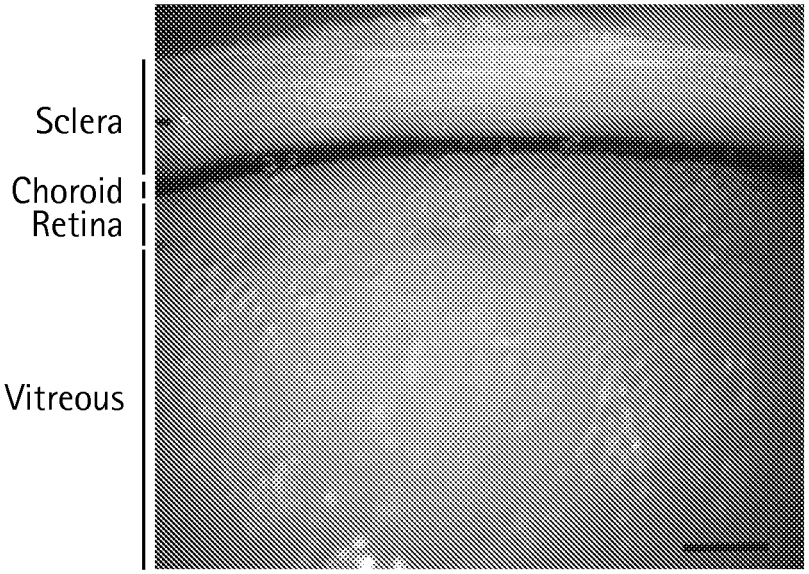

Sclera
Choroid
Retina
Vitreous

FIG. 8B

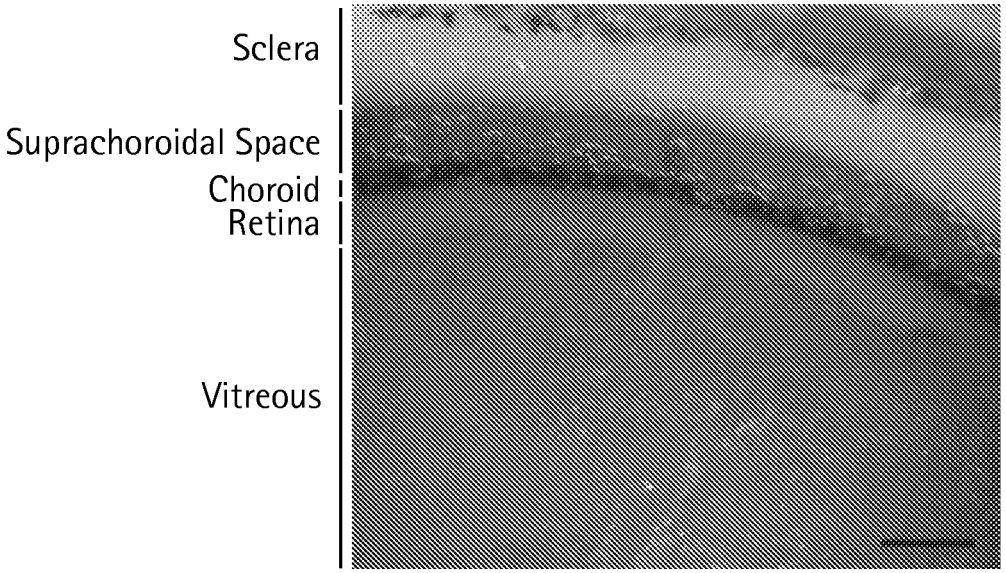

Sclera
Suprachoroidal Space
Choroid
Retina
Vitreous

FIG. 9A

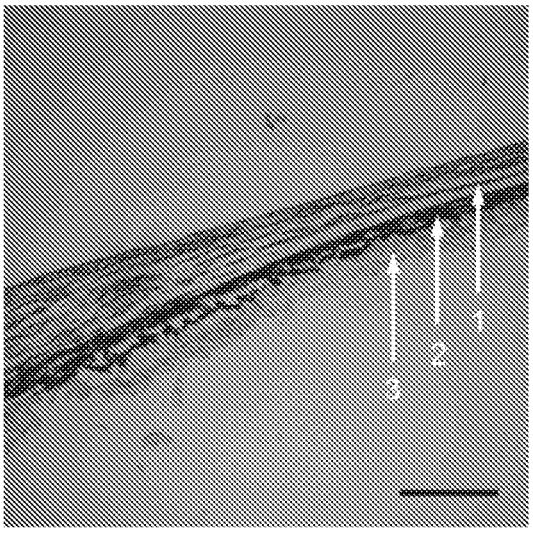


FIG. 9B

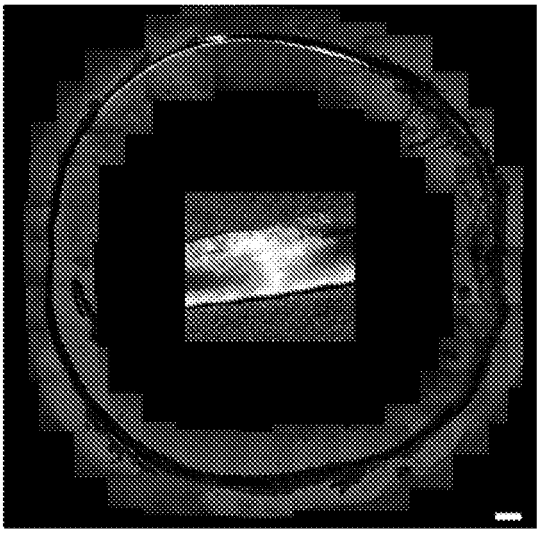


FIG. 9C

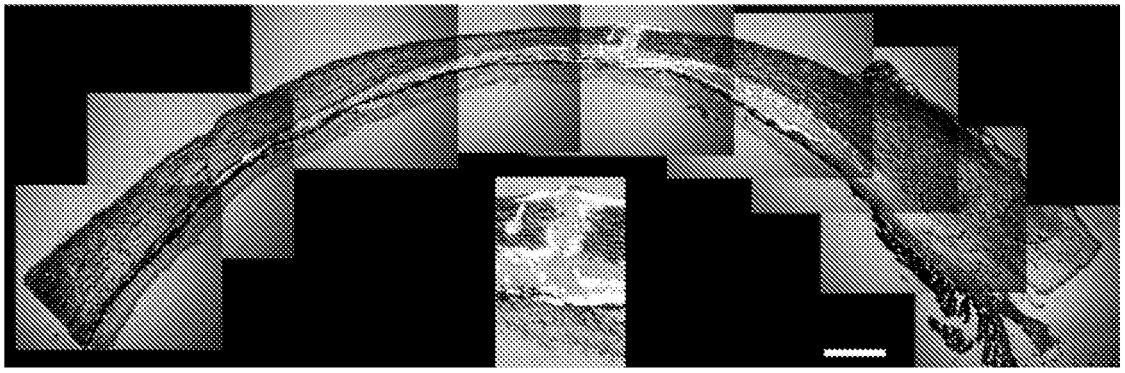


FIG. 9D

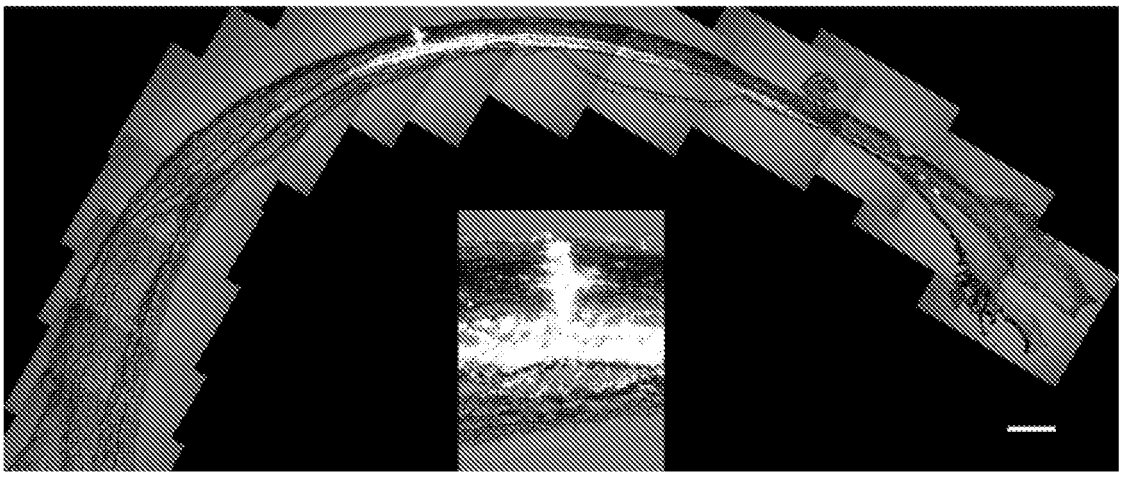


FIG. 10A

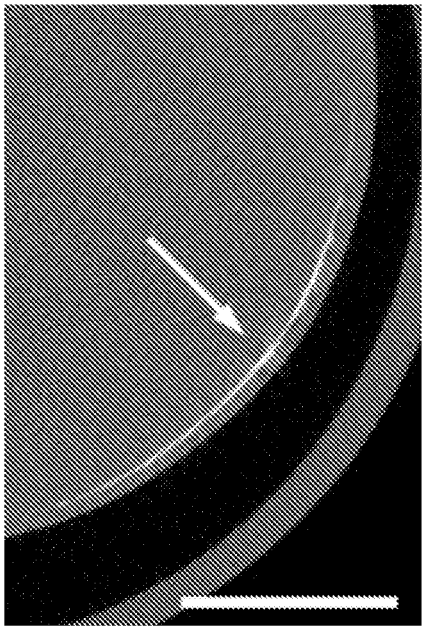


FIG. 10B

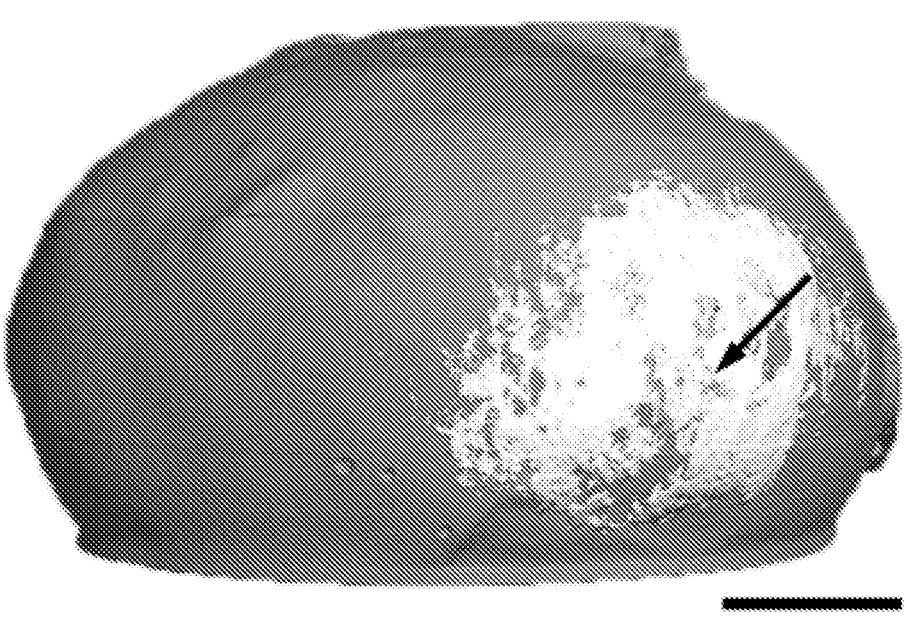


FIG. 11A

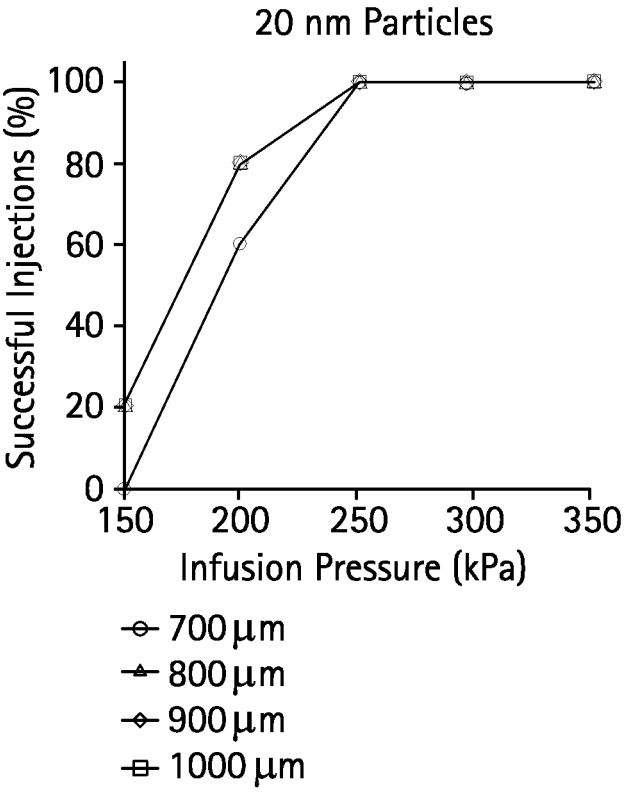


FIG. 11B

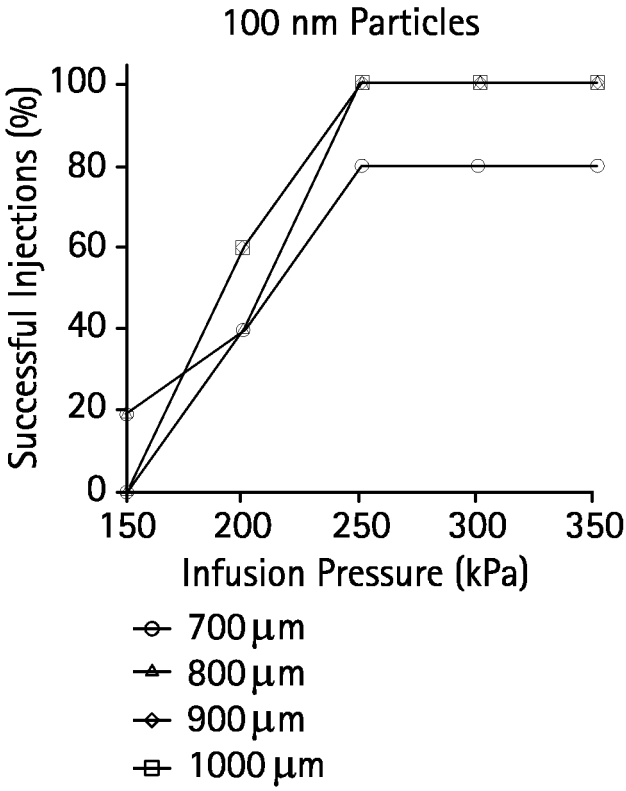


FIG. 11C

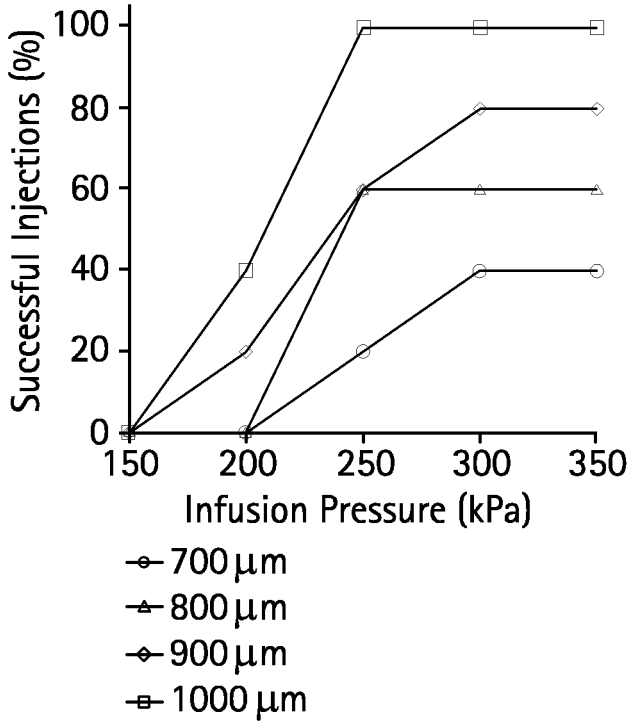


FIG. 11D

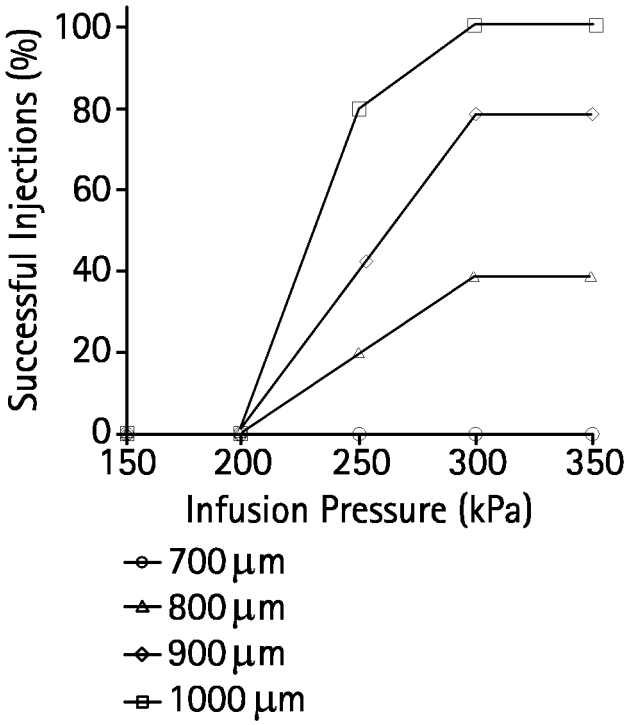


FIG. 12A

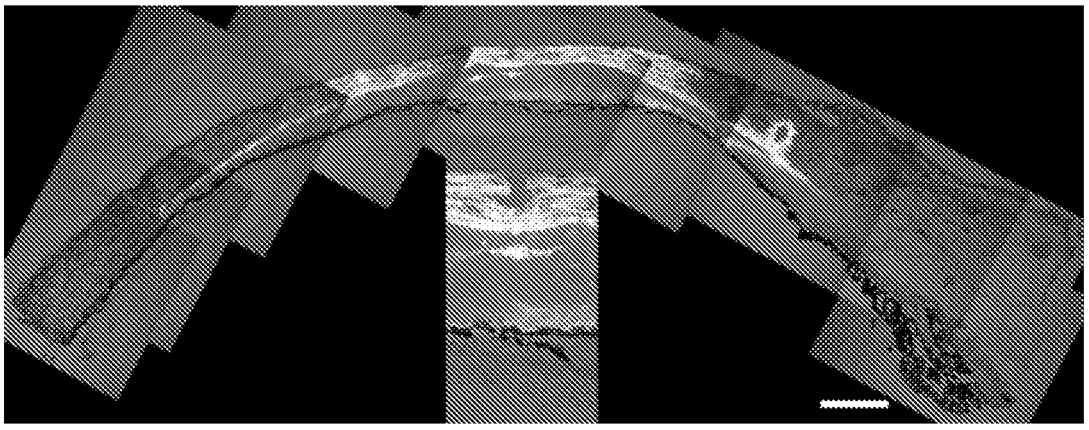


FIG. 12B

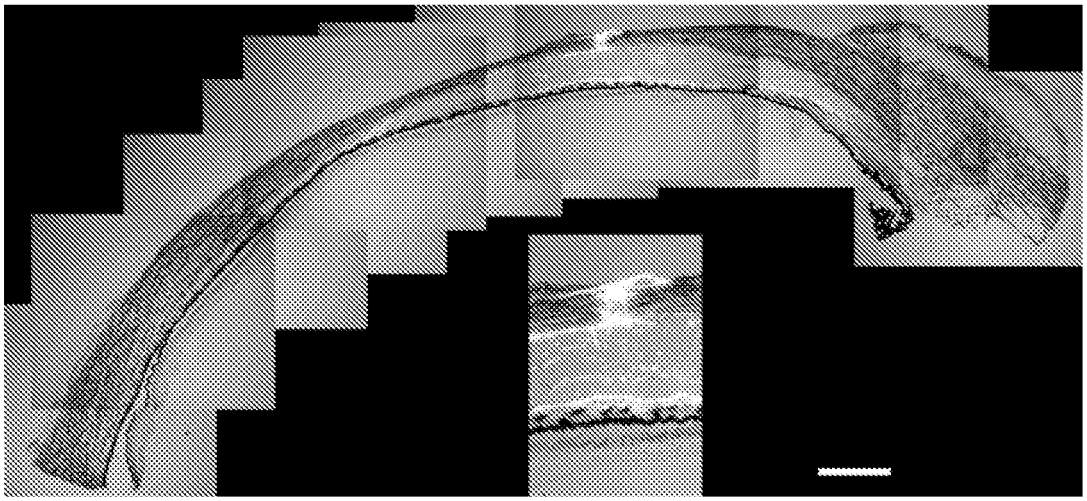


FIG. 13A

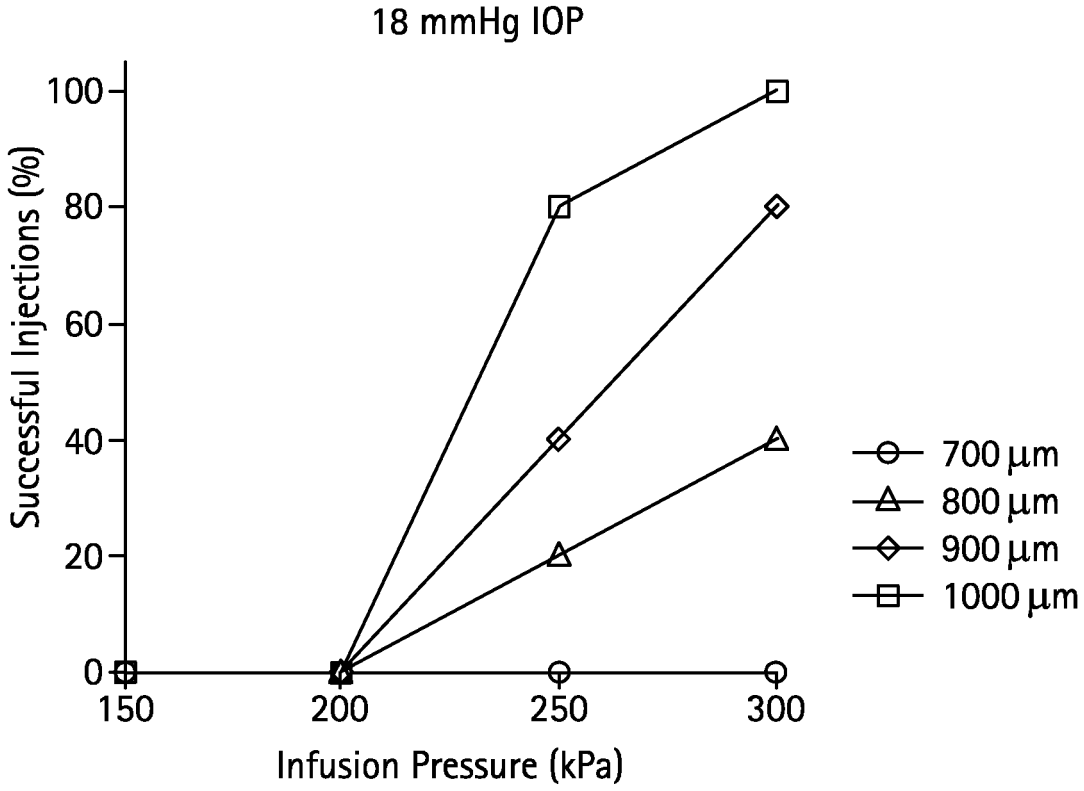


FIG. 13B

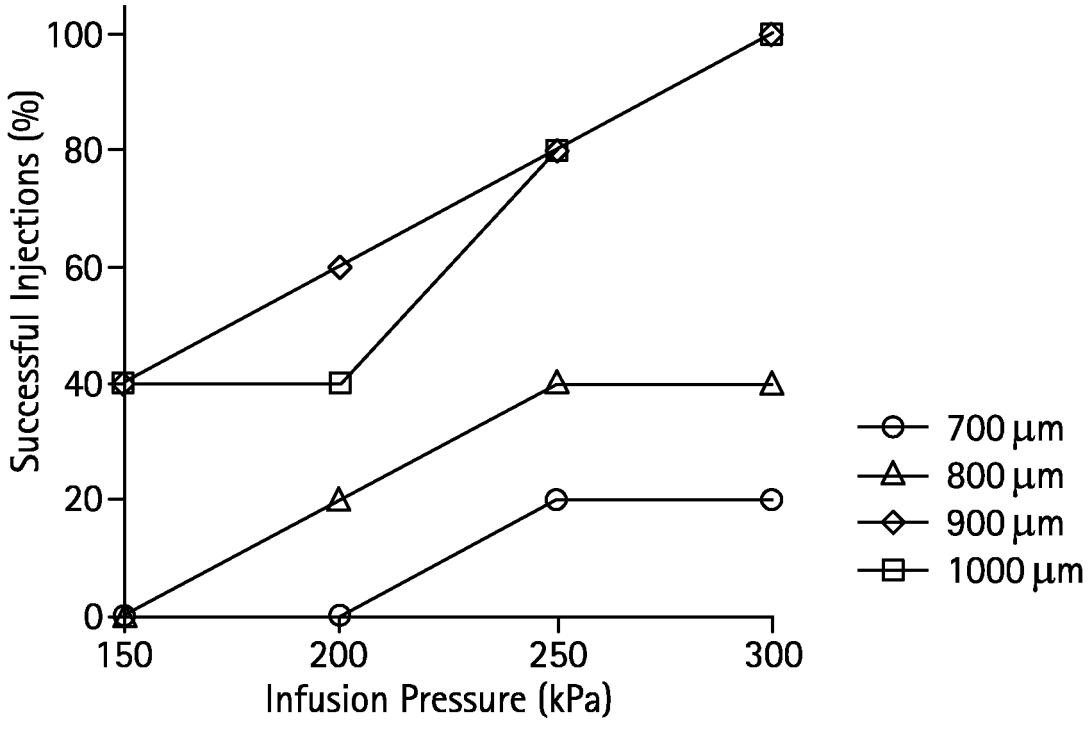


FIG. 14

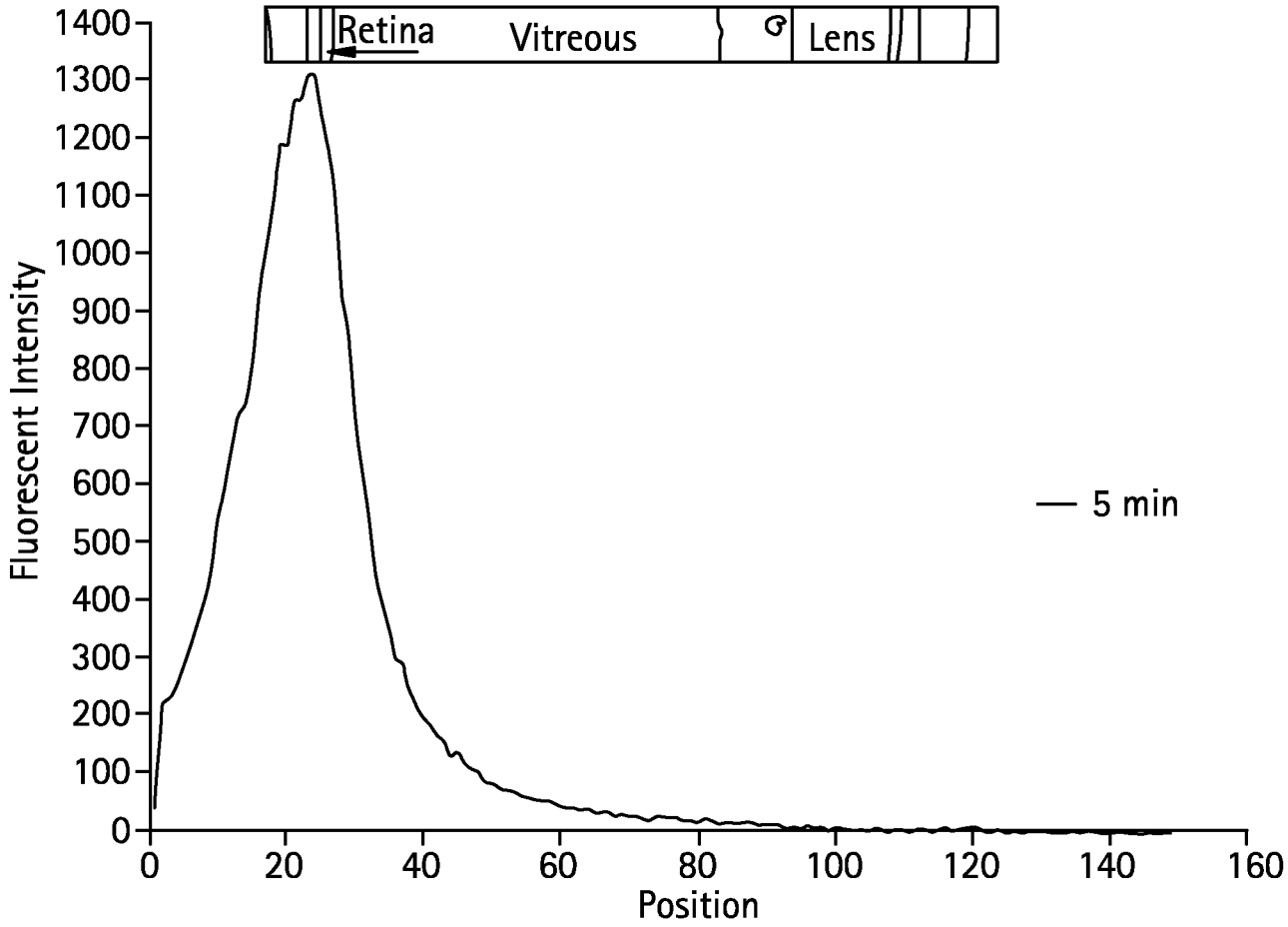

Retina
Vitreous
Lens
Fluorescent Intensity
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
160
Position
5 min

FIG. 15

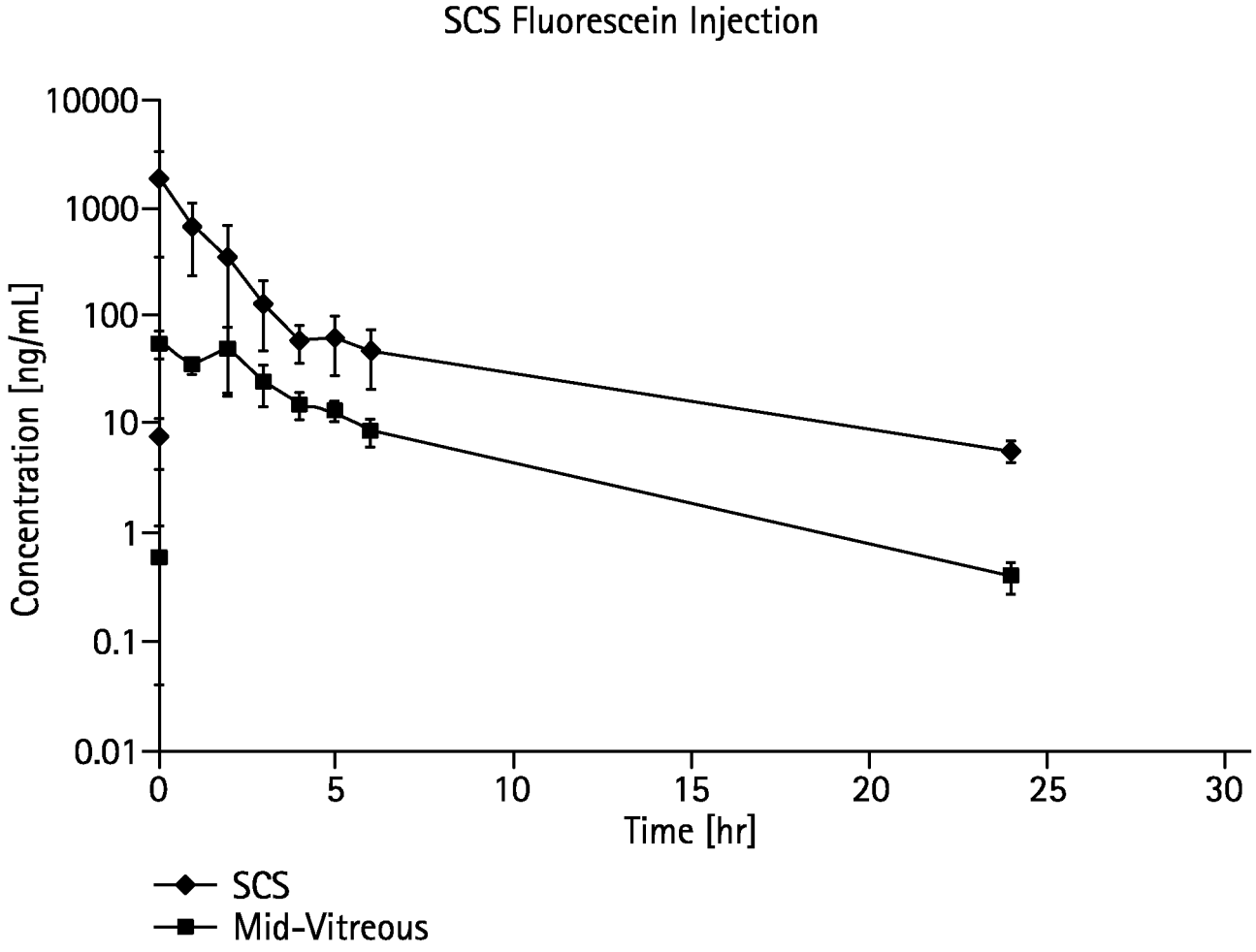

SCS Fluorescein Injection
10000
1000
100
10
1
0.1
0.01
Concentration [ng/mL]
0
5
10
15
20
25
30
Time [hr]
SCS
Mid-Vitreous

FIG. 16

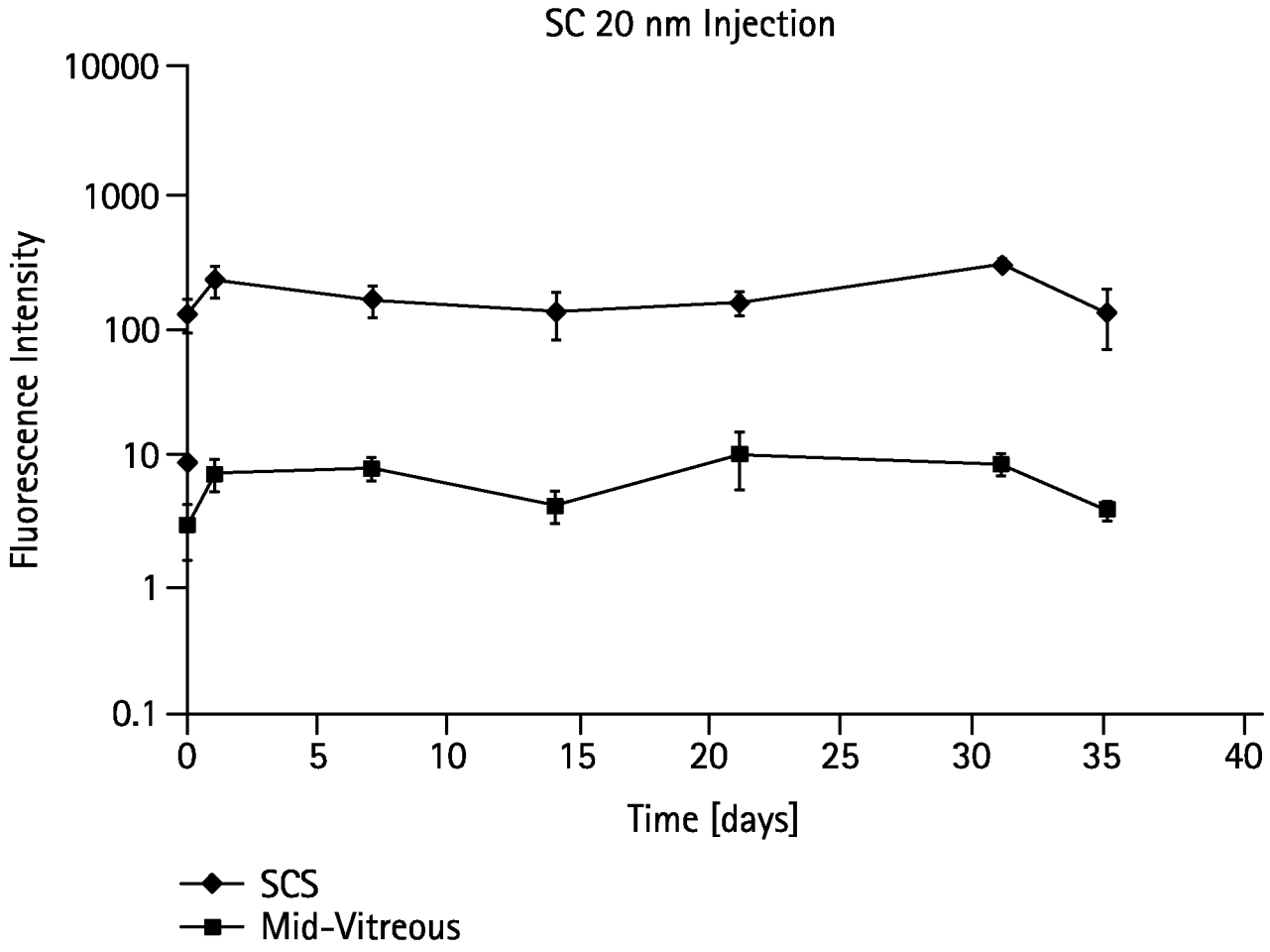

SC 20 nm Injection
10000
1000
100
10
1
0.1
Fluorescence Intensity
0
5
10
15
20
25
30
35
40
Time [days]
SCS
Mid-Vitreous

FIG. 17

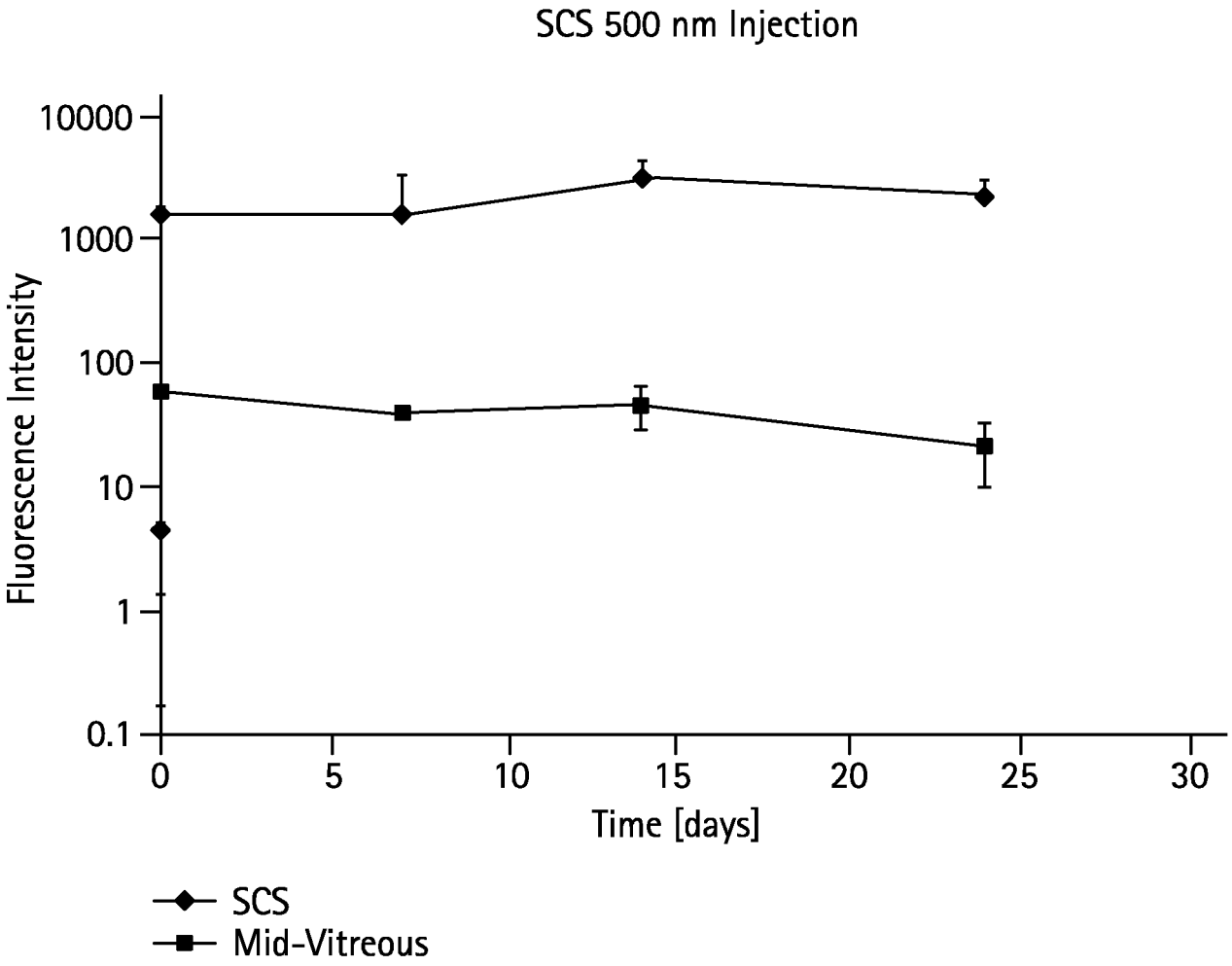
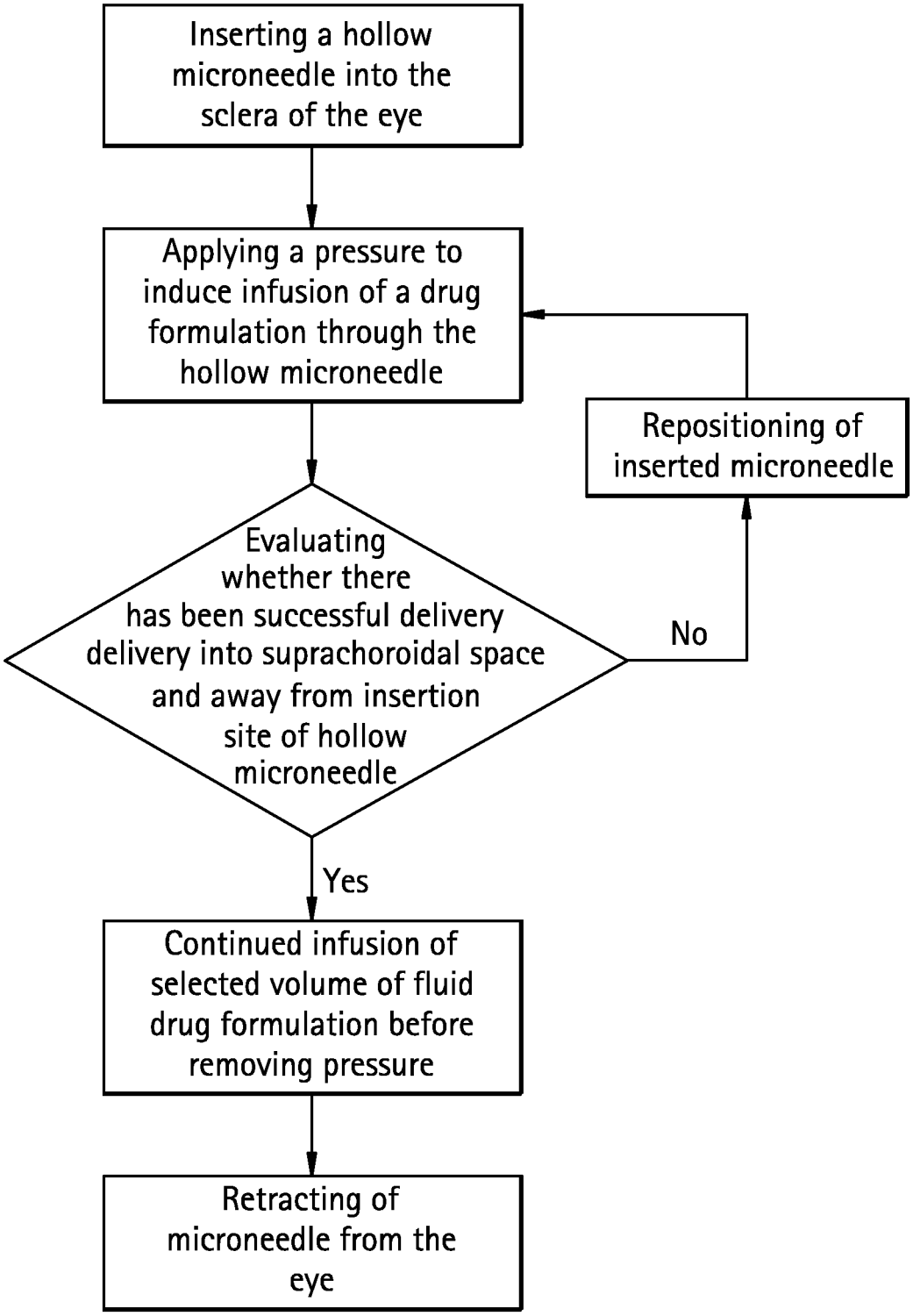

SCS 500 nm Injection
Fluorescence Intensity
10000
1000
100
10
1
0.1
0
5
10
15
20
25
30
Time [days]
SCS
Mid-Vitreous

FIG. 18


Inserting a hollow microneedle into the sclera of the eye
Applying a pressure to induce infusion of a drug formulation through the hollow microneedle
Repositioning of inserted microneedle
Evaluating whether there has been successful delivery delivery into suprachoroidal space and away from insertion site of hollow microneedle
No
Yes
Continued infusion of selected volume of fluid drug formulation before removing pressure
Retracting of microneedle from the eye