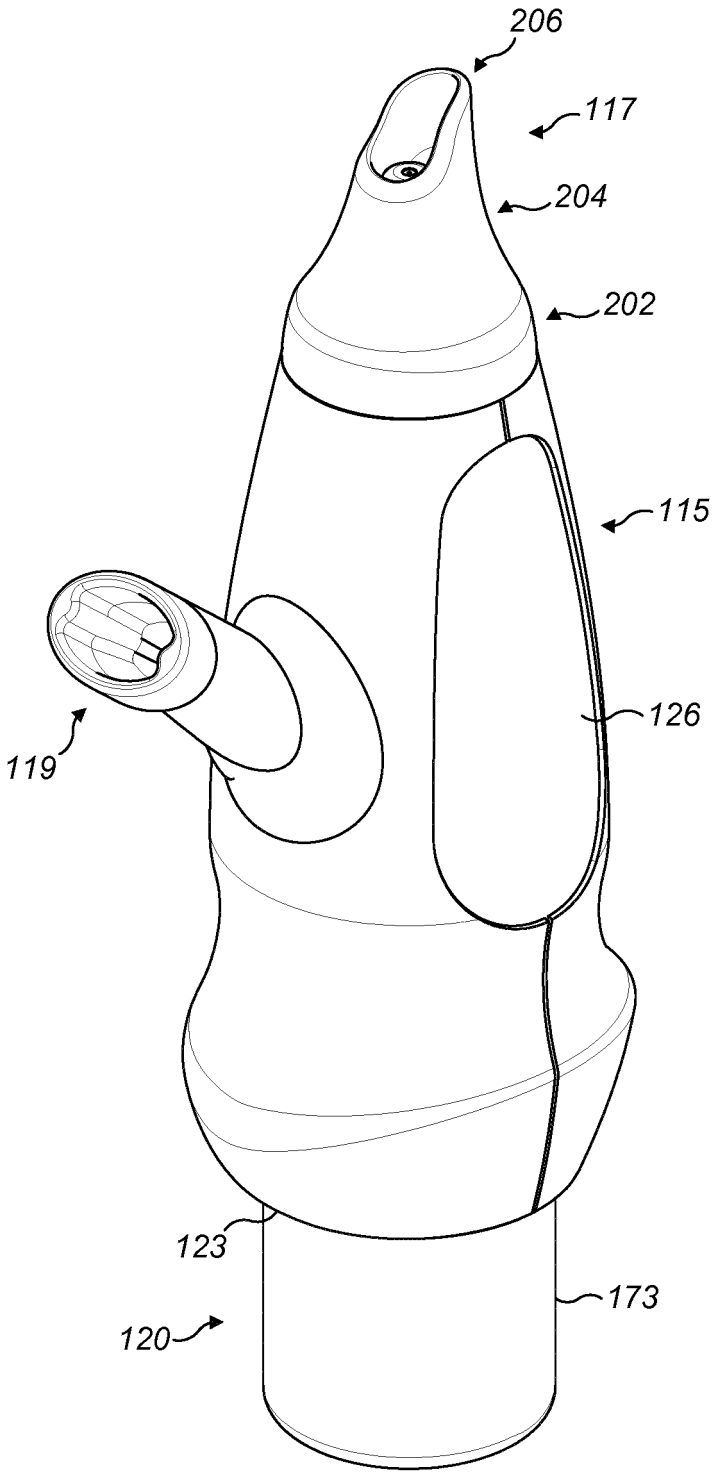

FIG. 1(a)

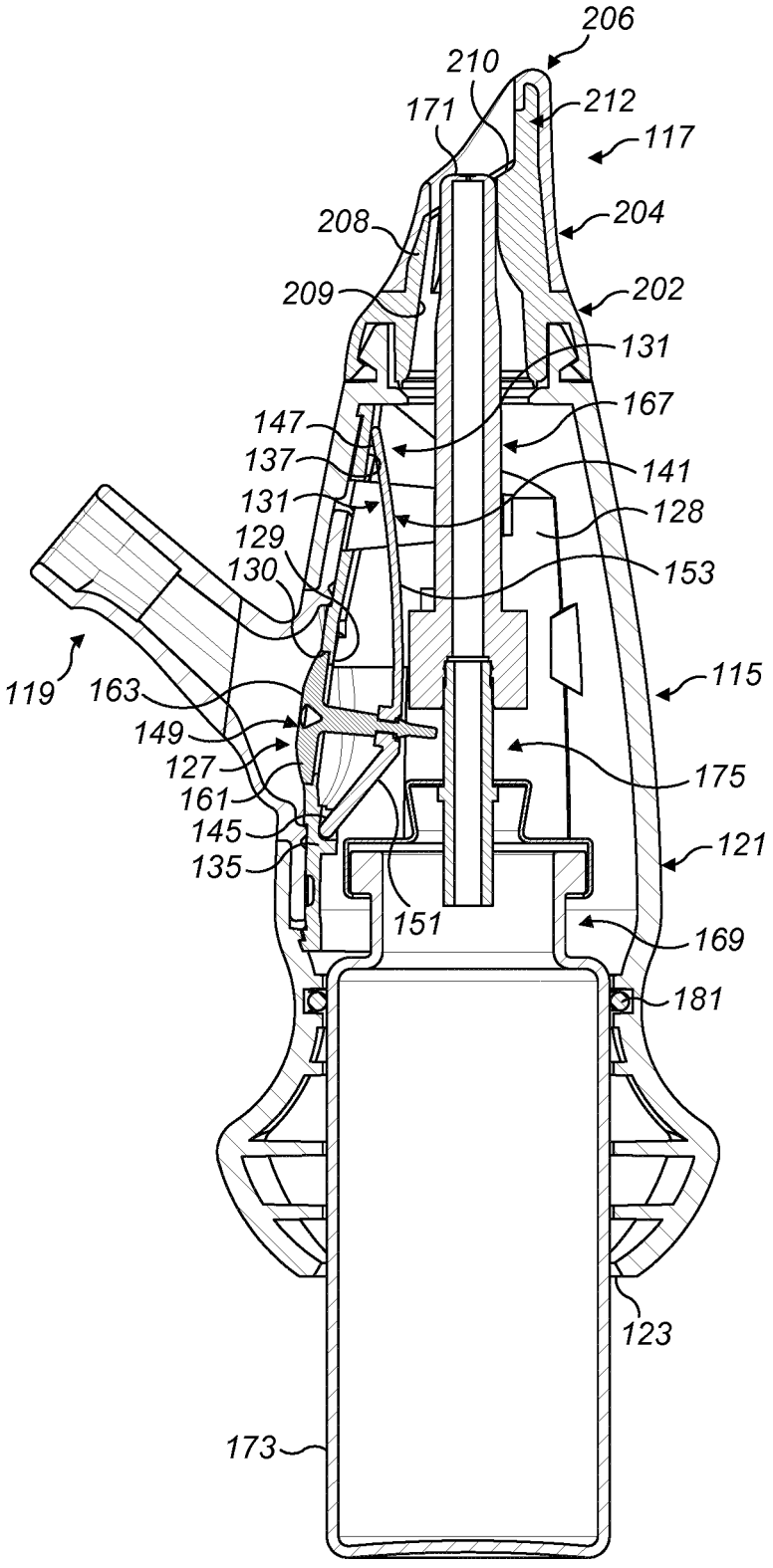
206
210
212
171
117
208
204
209
202
131
167
147
137
141
131
128
129
130
153
119
163
115
149
127
175
161
145
121
135
151
169
181
123
173

FIG. 1(b)

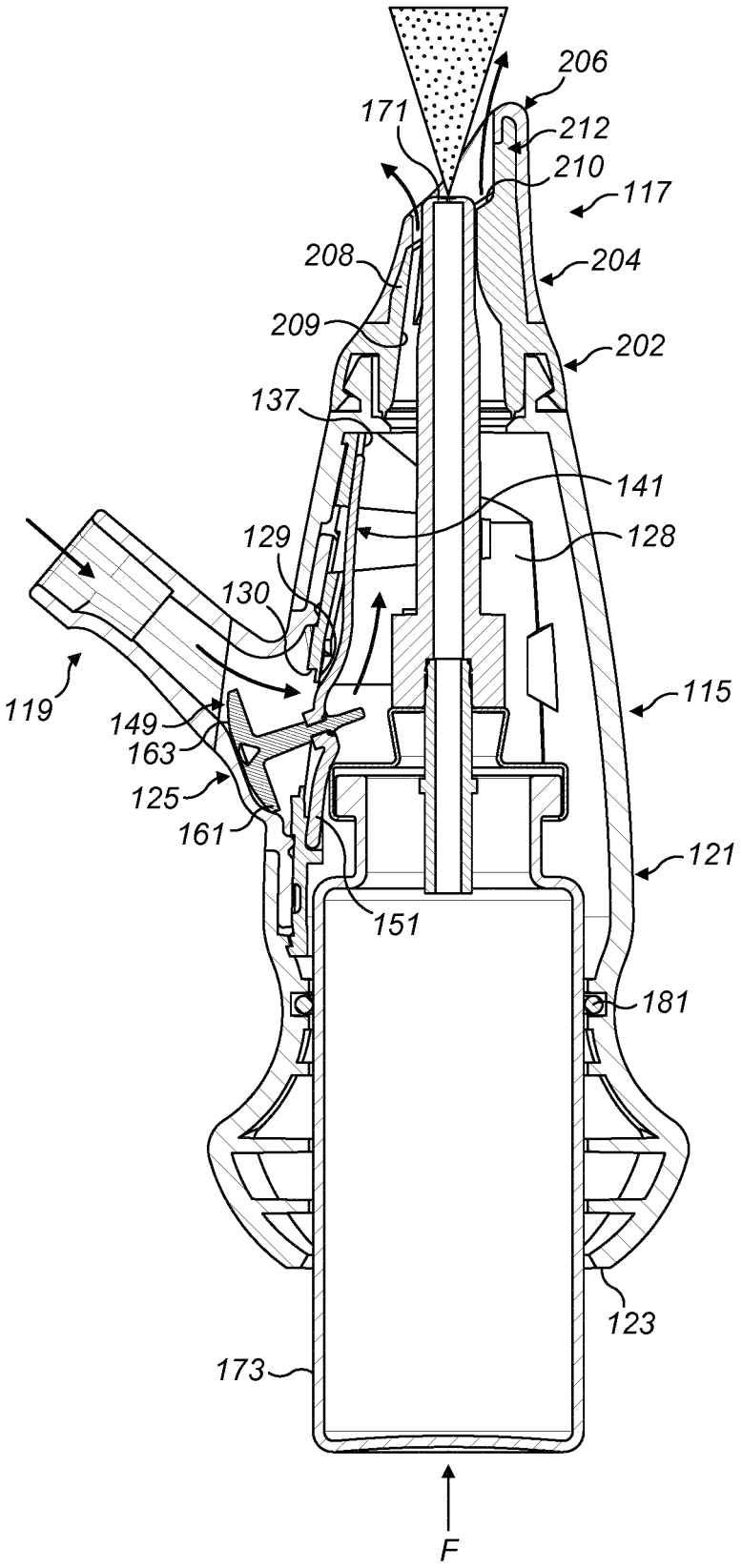
206
171
212
210
117
208
204
209
202
137
141
129
128
130
115
119
149
163
125
161
121
151
181
123
173
F

FIG. 1(c)

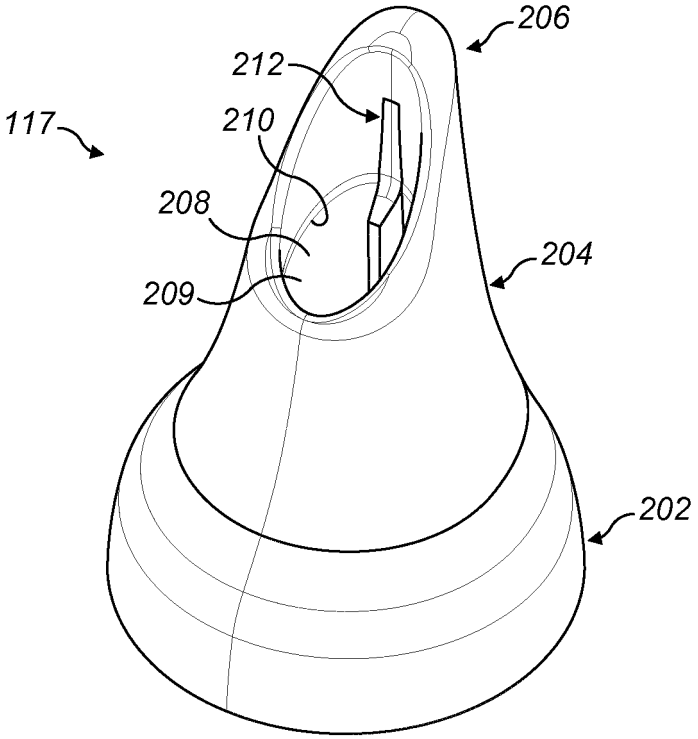

FIG. 2(a)

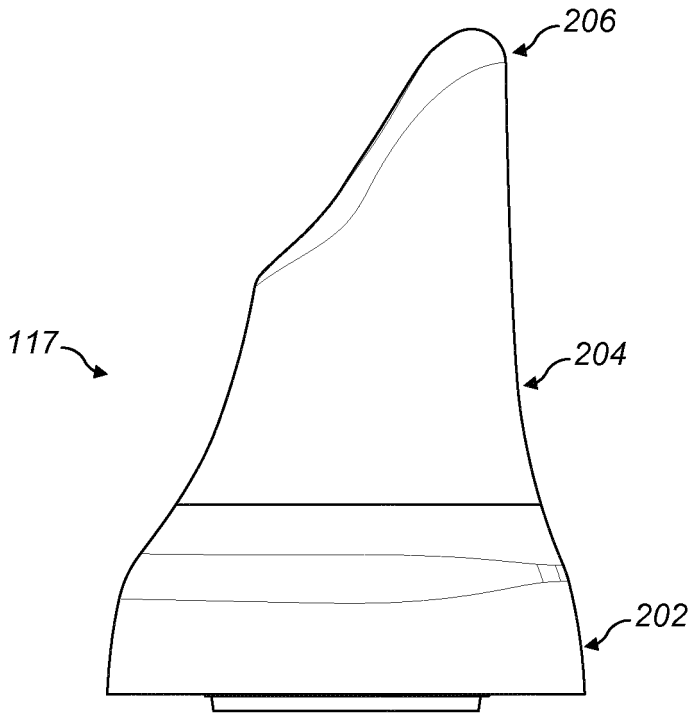

FIG. 2(b)

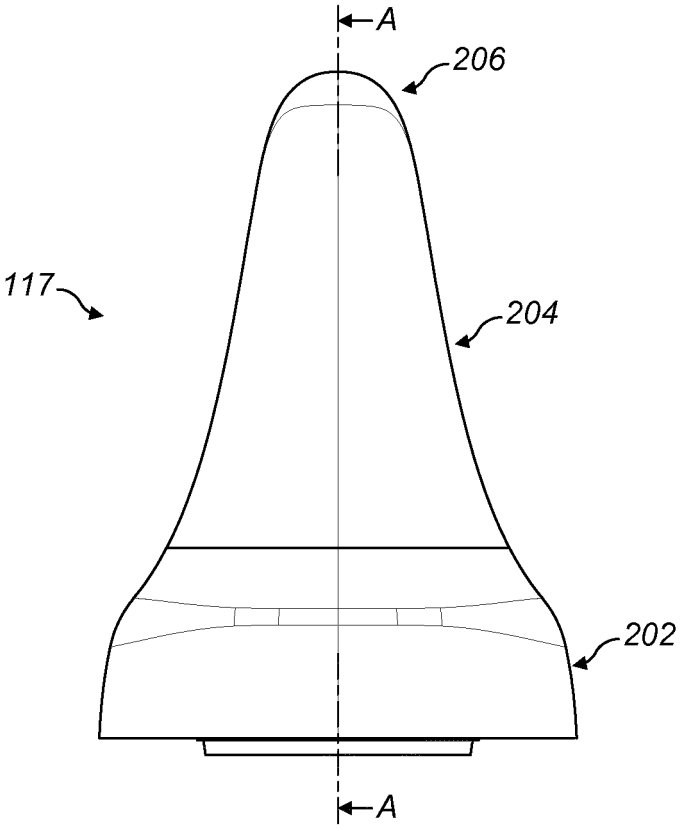

FIG. 2(c)

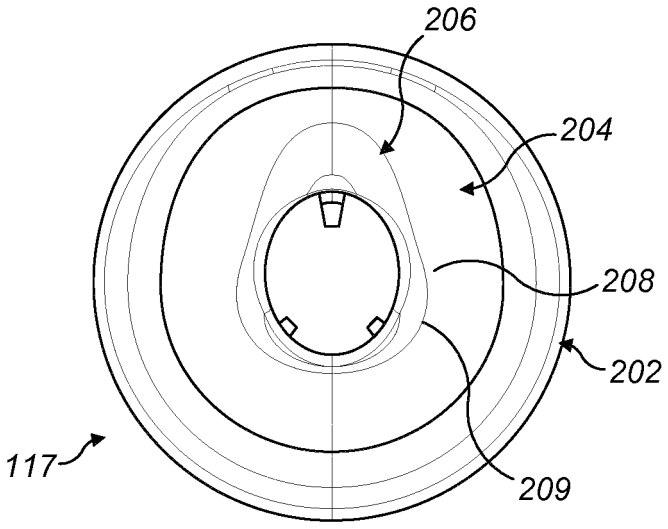

FIG. 2(d)

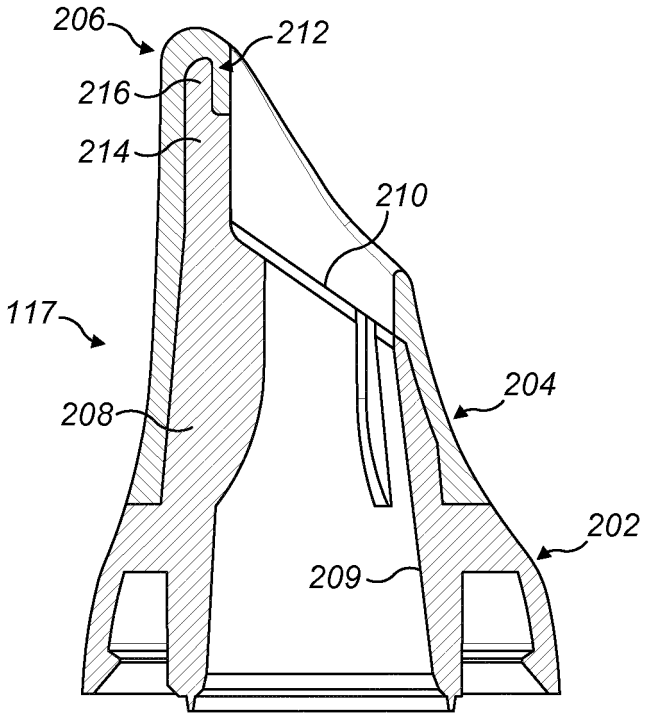
206
212
216
214
210
117
204
208
202
209

FIG. 2(e)

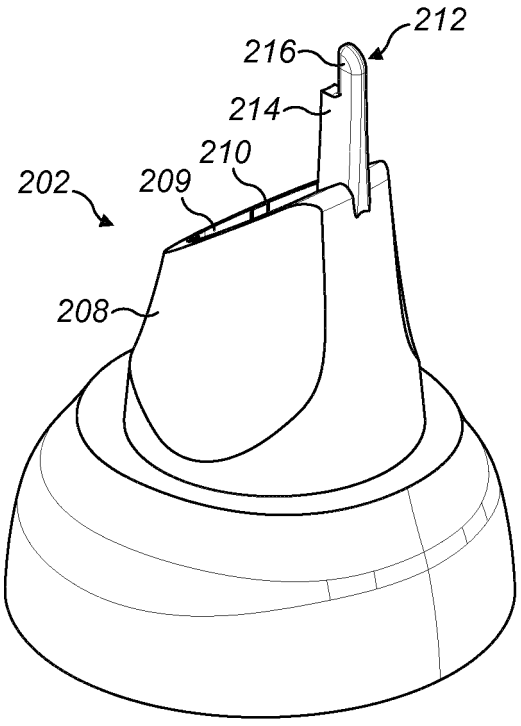
212
216
214
210
202
209
208

FIG. 3(a)

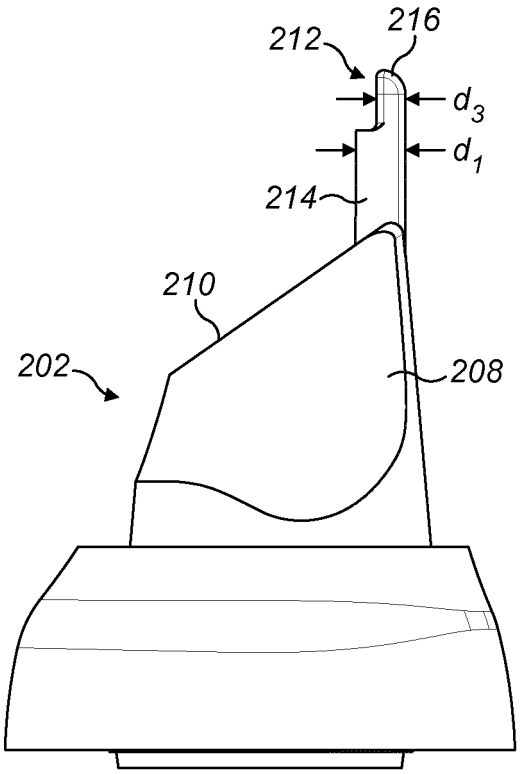

FIG. 3(b)

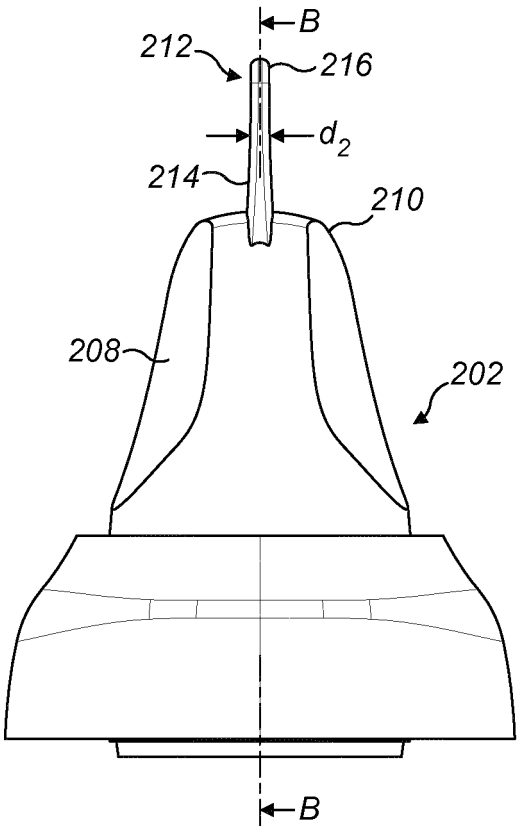

FIG. 3(c)

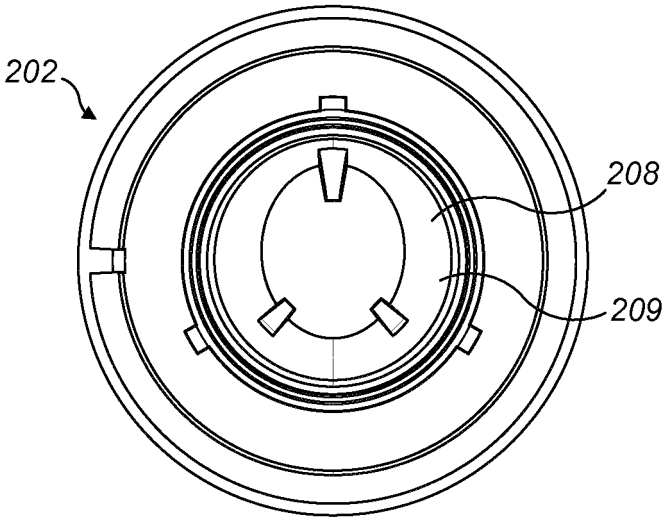

FIG. 3(d)

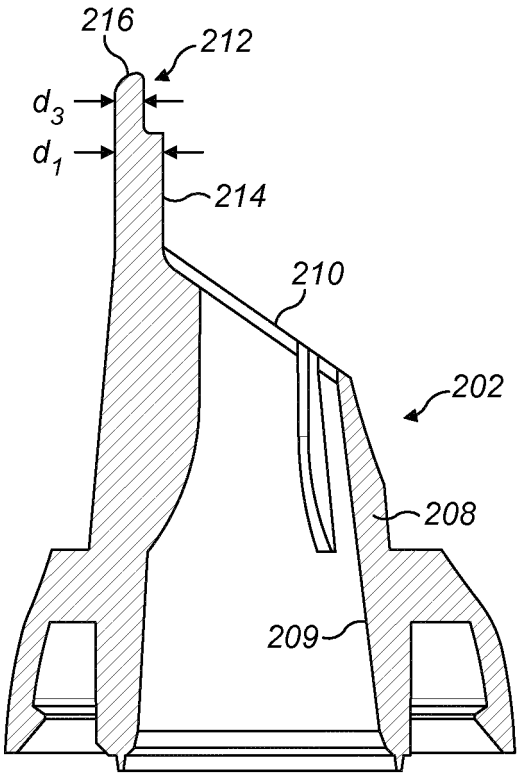

FIG. 3(e)

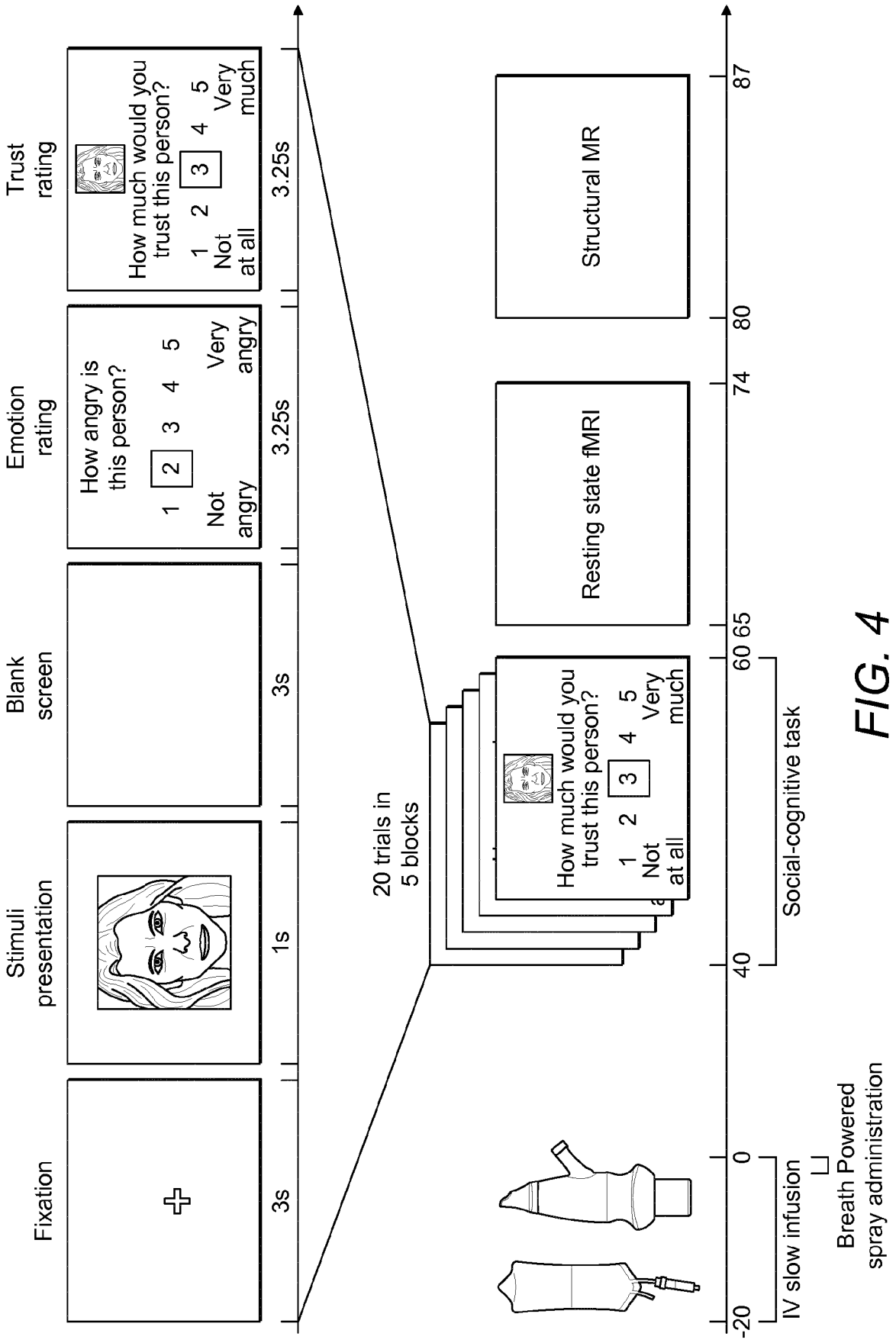
Fixation
Stimuli presentation
Blank screen
Emotion rating
Trust rating
How angry is this person?
1 2 3 4 5
Not angry
Very angry
How much would you trust this person?
1 2 3 4 5
Not at all
Very much
3s
1s
3s
3.25s
3.25s
20 trials in 5 blocks
Resting state fMRI
Structural MR
-20
0
40
60 65
74
80
87
IV slow infusion
Breath Powered spray administration
Social-cognitive task

FIG. 4

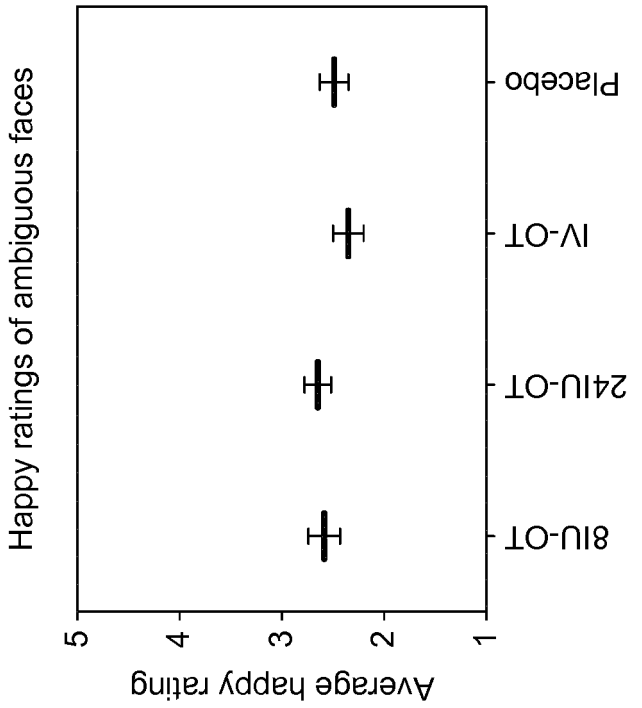
Happy ratings of ambiguous faces
Average happy rating
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(b)

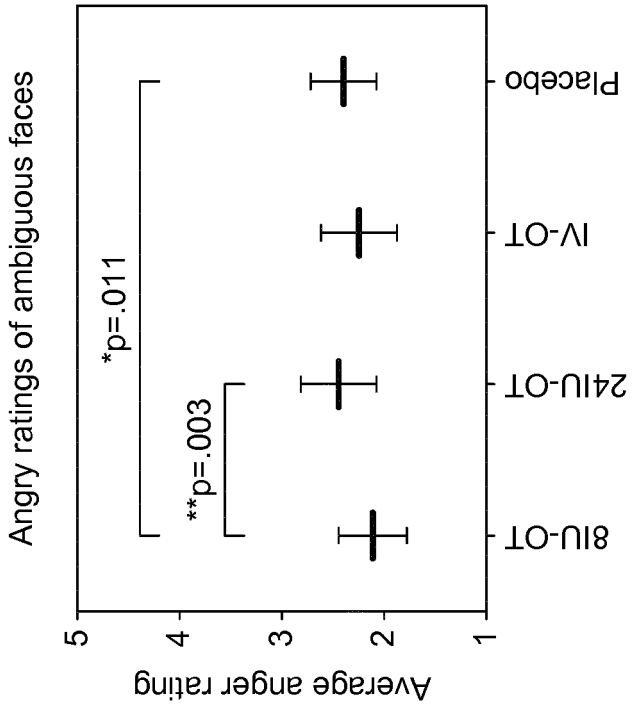
Angry ratings of ambiguous faces
Average anger rating
*p=.011
**p=.003
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(a)

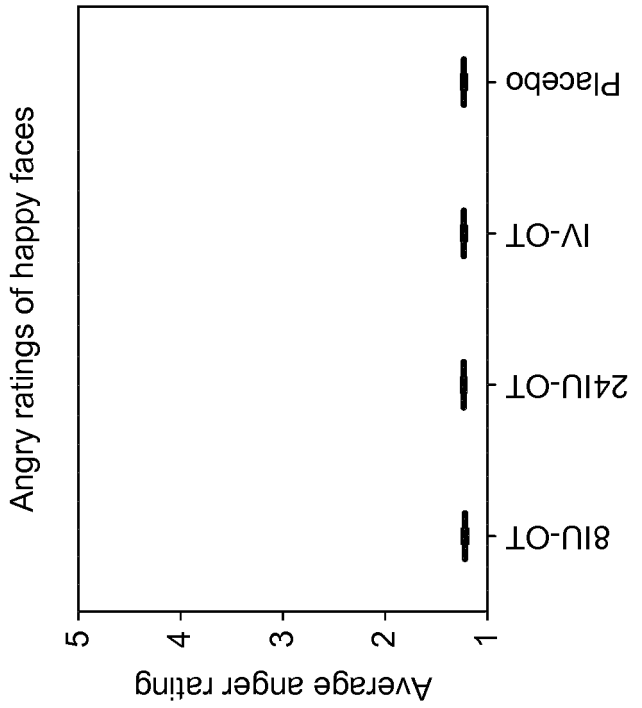
Angry ratings of happy faces
Average anger rating
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(d)

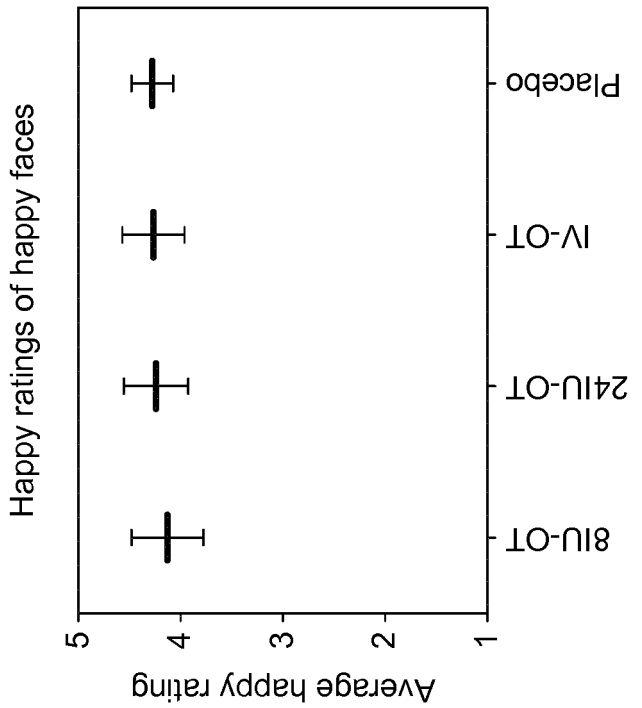
Happy ratings of happy faces
Average happy rating
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(c)

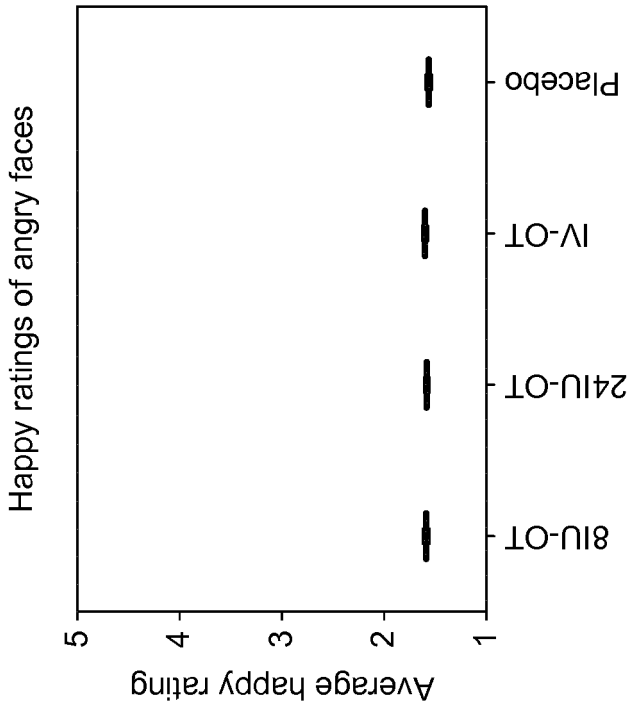
Happy ratings of angry faces
Average happy rating
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(f)

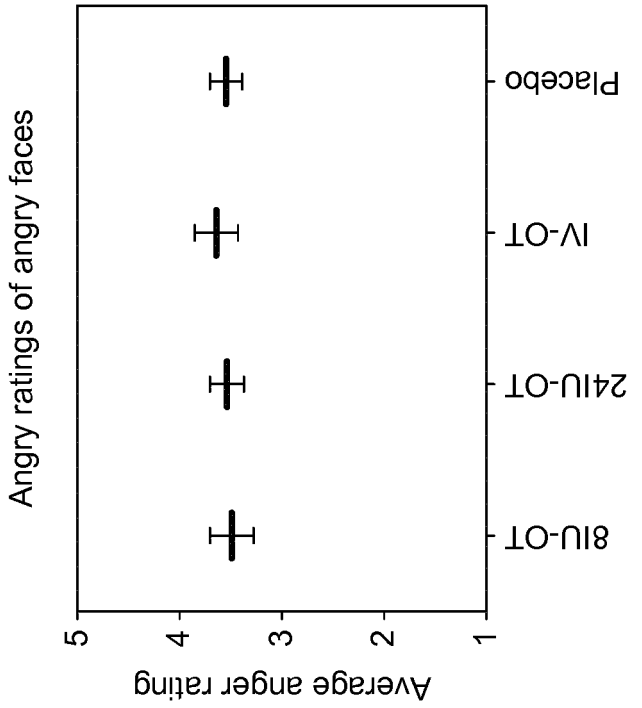
Angry ratings of angry faces
Average anger rating
5
4
3
2
1
8IU-OT
24IU-OT
IV-OT
Placebo
Treatment

FIG. 5(e)

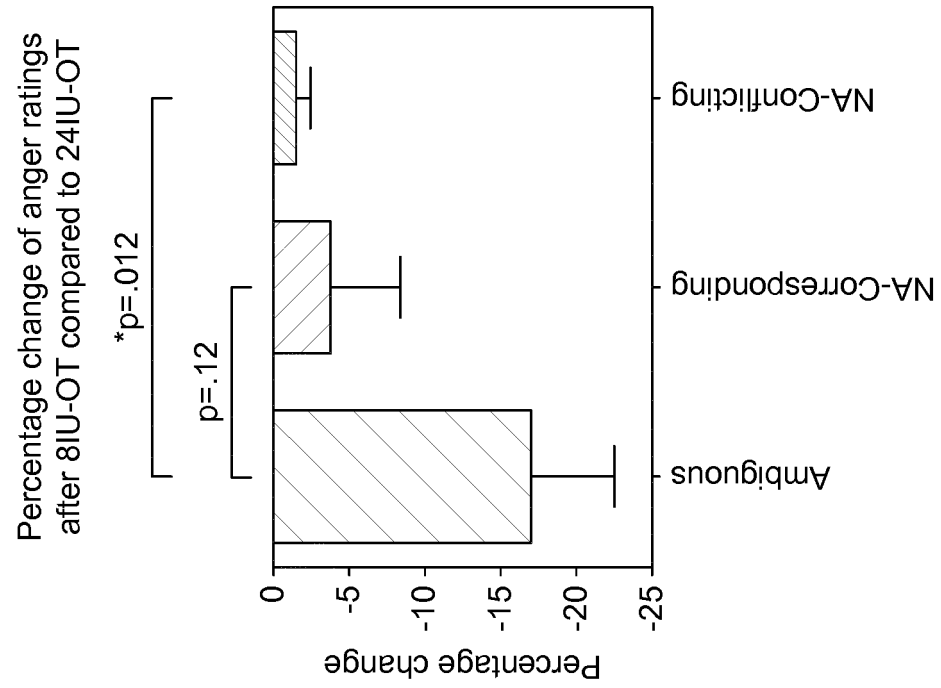
Percentage change of anger ratings after 8IU-OT compared to 24IU-OT
*p=.012
p=.12
Percentage change
0
-5
-10
-15
-20
-25
Ambiguous
NA-Corresponding
NA-Conflicting
Stimuli Category

FIG. 6(b)

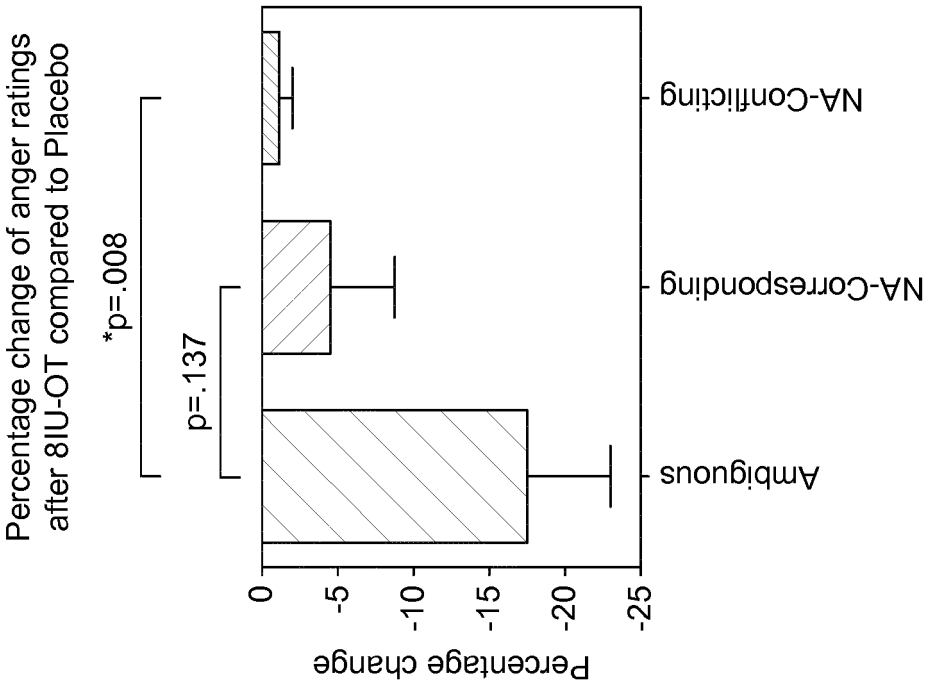
Percentage change of anger ratings after 8IU-OT compared to Placebo
*p=.008
p=.137
Percentage change
0
-5
-10
-15
-20
-25
Ambiguous
NA-Corresponding
NA-Conflicting
Stimuli Category

FIG. 6(a)

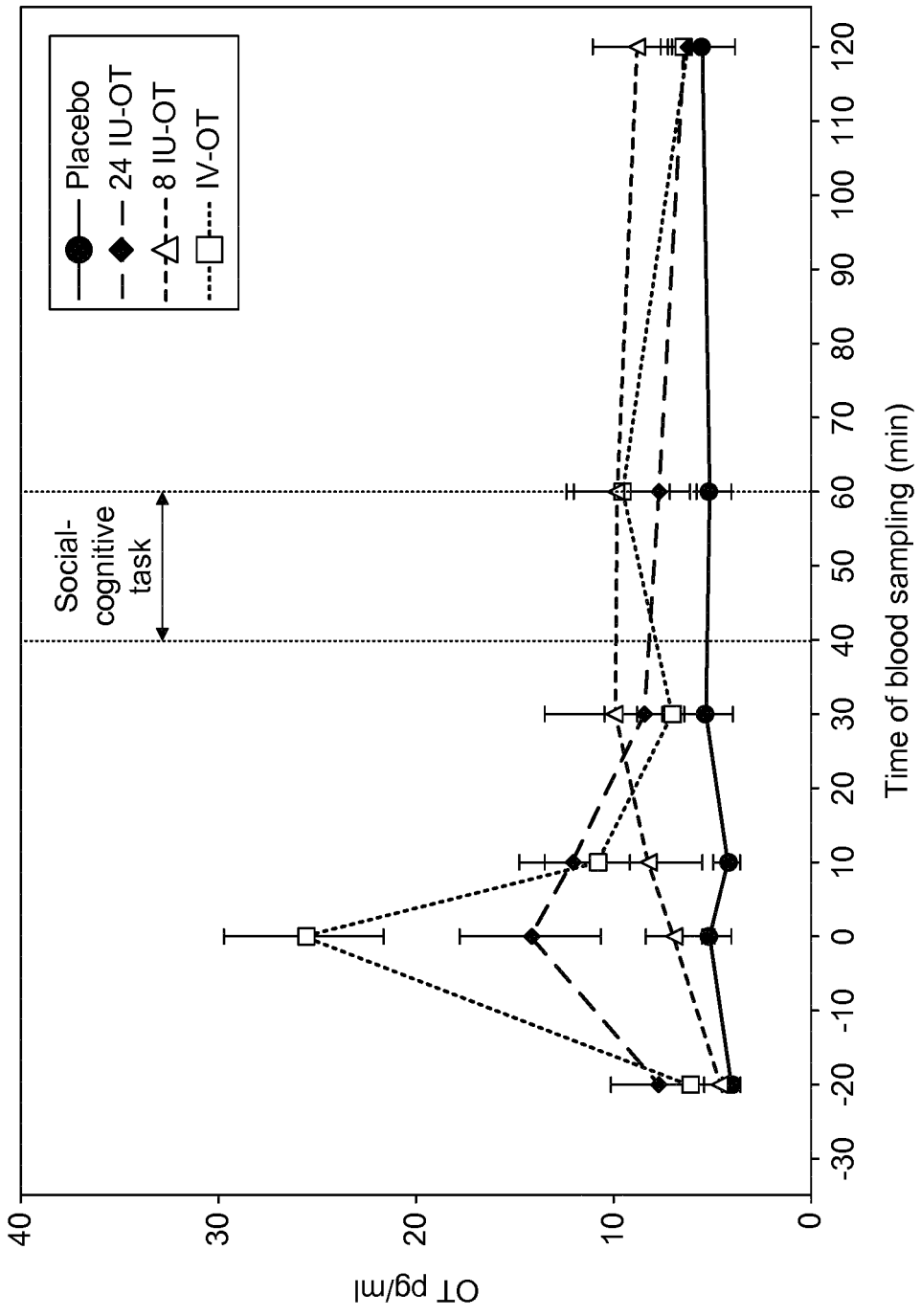
Placebo
24 IU-OT
8 IU-OT
IV-OT
Social-cognitive task
OT pg/ml
Time of blood sampling (min)
0
10
20
30
40
-30
-20
-10
0
10
20
30
40
50
60
70
80
90
100
110
120

FIG. 7(a)

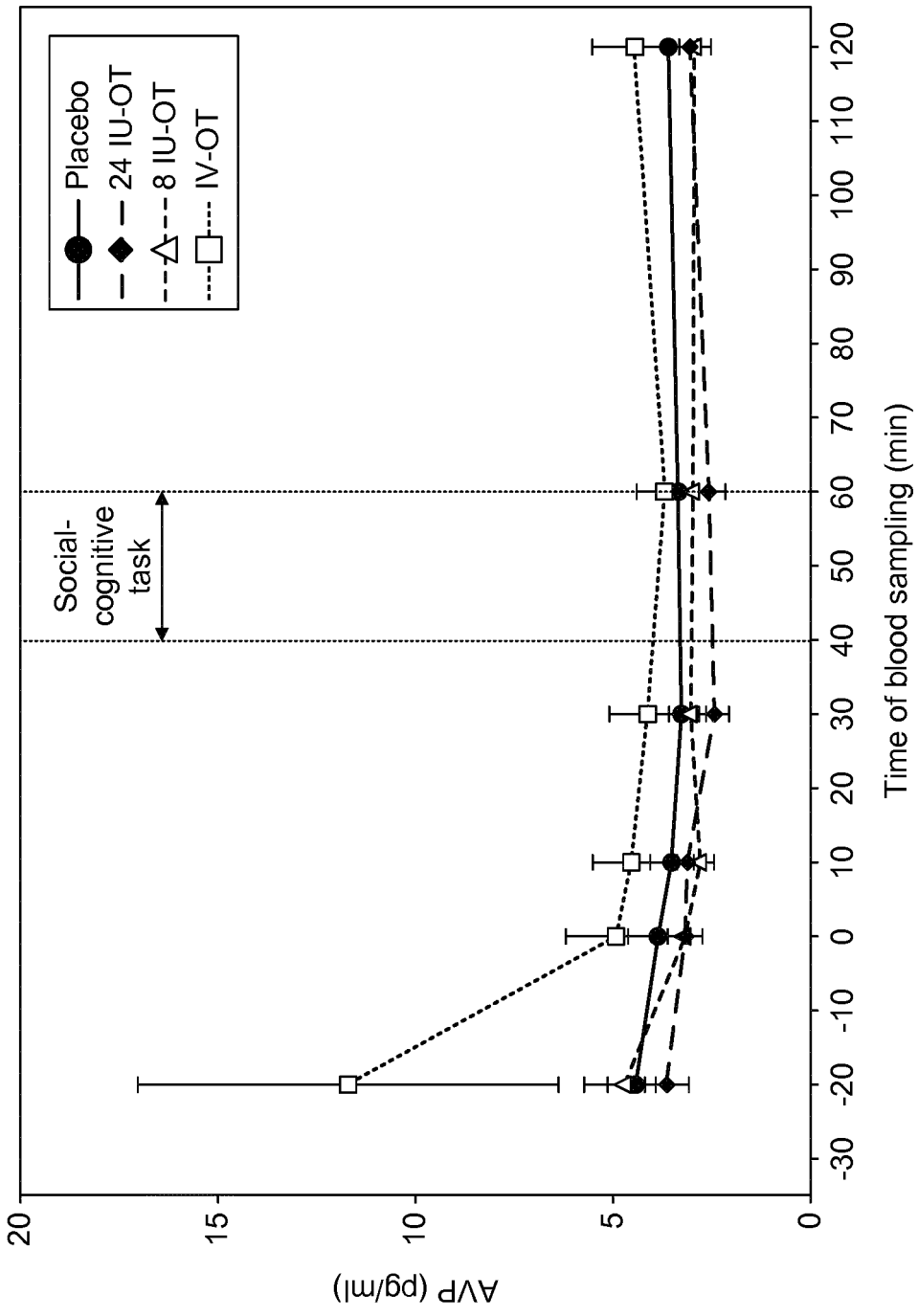
Placebo
24 IU-OT
8 IU-OT
IV-OT
Social-cognitive task
AVP (pg/ml)
Time of blood sampling (min)
20
15
10
5
0
-30
-20
-10
0
10
20
30
40
50
60
70
80
90
100
110
120

FIG. 7(b)

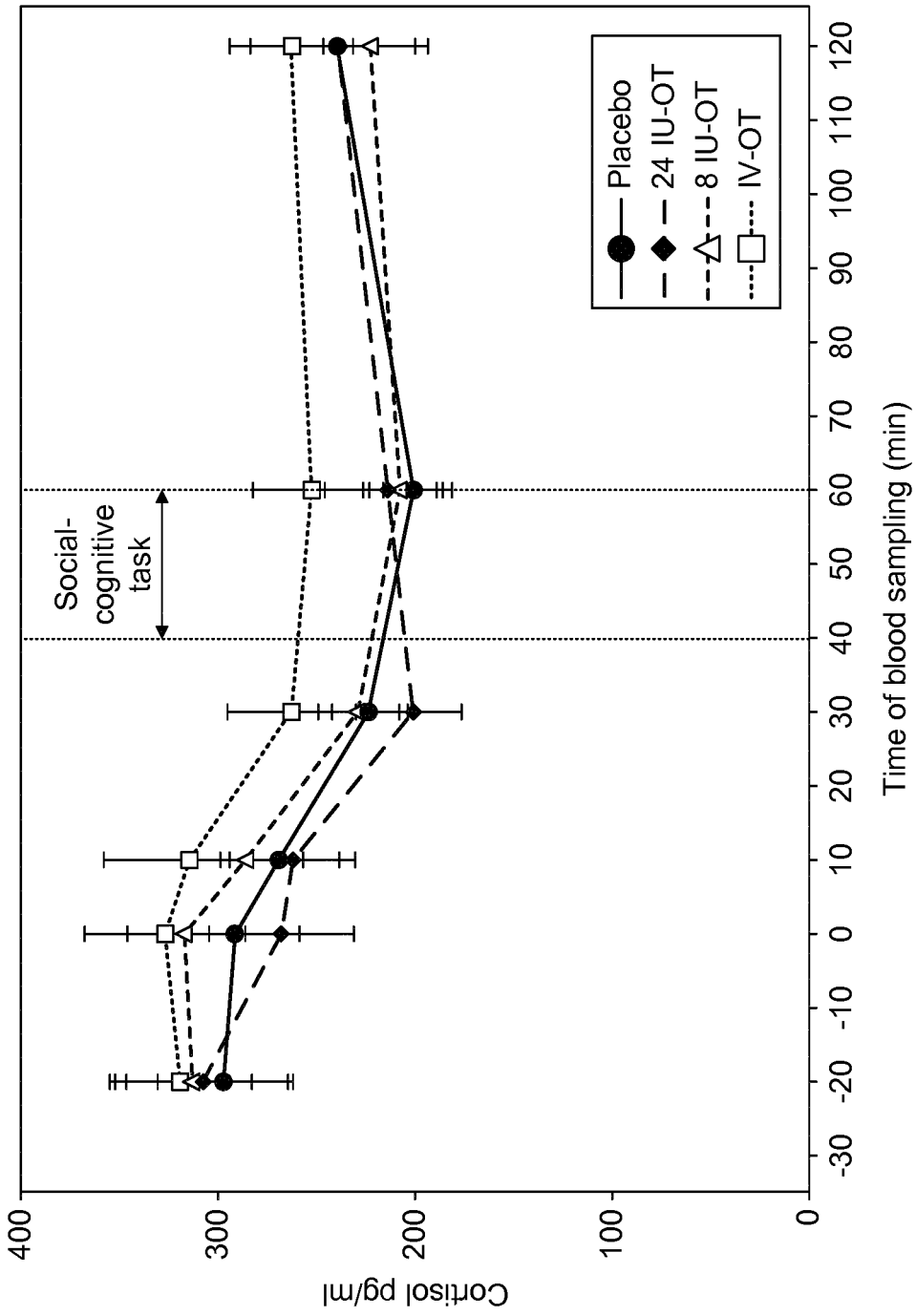
Cortisol pg/ml
400
300
200
100
0
-30
-20
-10
0
10
20
30
40
50
60
70
80
90
100
110
120
Time of blood sampling (min)
Social-cognitive task
Placebo
24 IU-OT
8 IU-OT
IV-OT

FIG. 7(c)

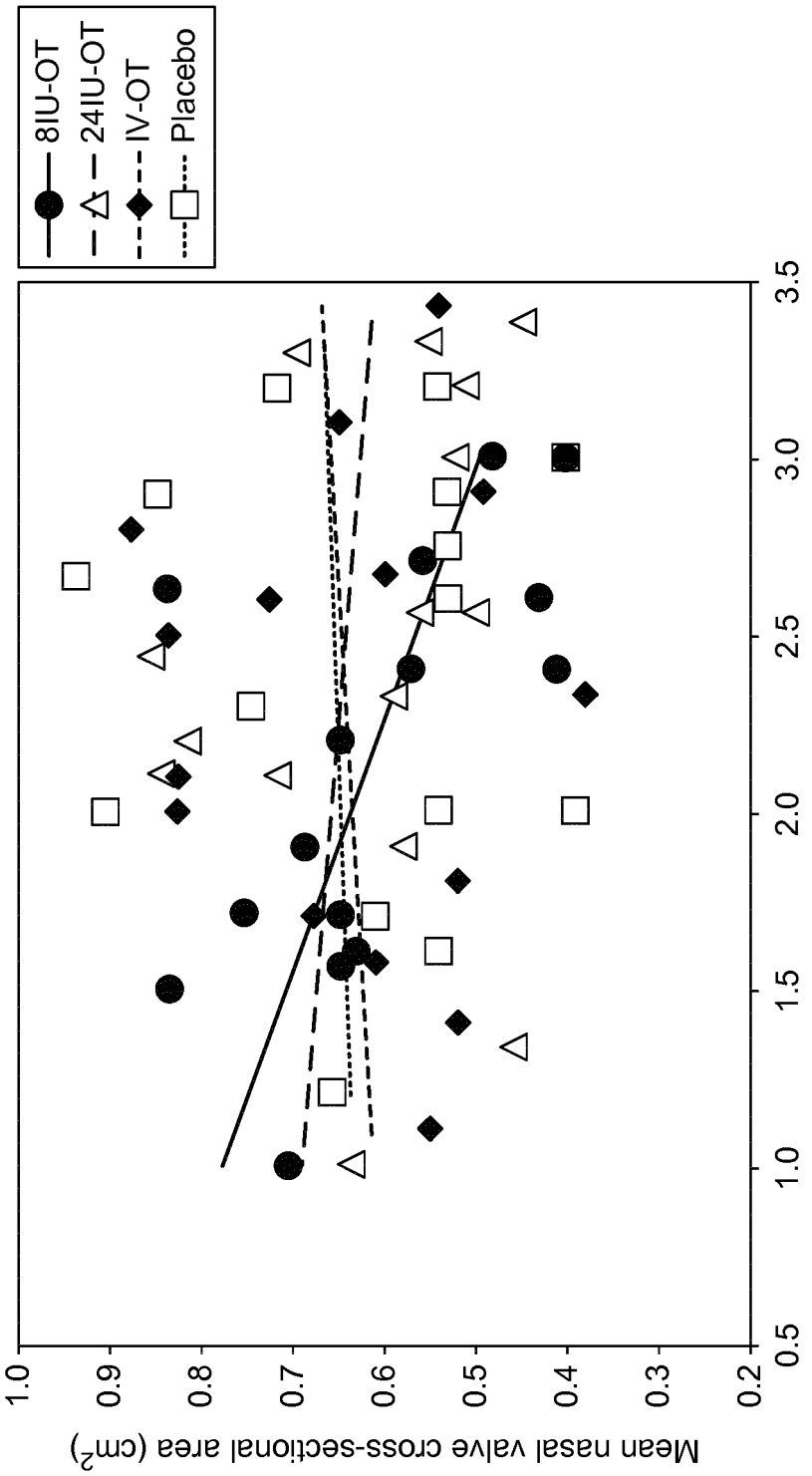
8IU-OT
24IU-OT
IV-OT
Placebo
Mean nasal valve cross-sectional area (cm²)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.5
1.0
1.5
2.0
2.5
3.0
3.5
Angry ratings of ambiguous faces

FIG. 8

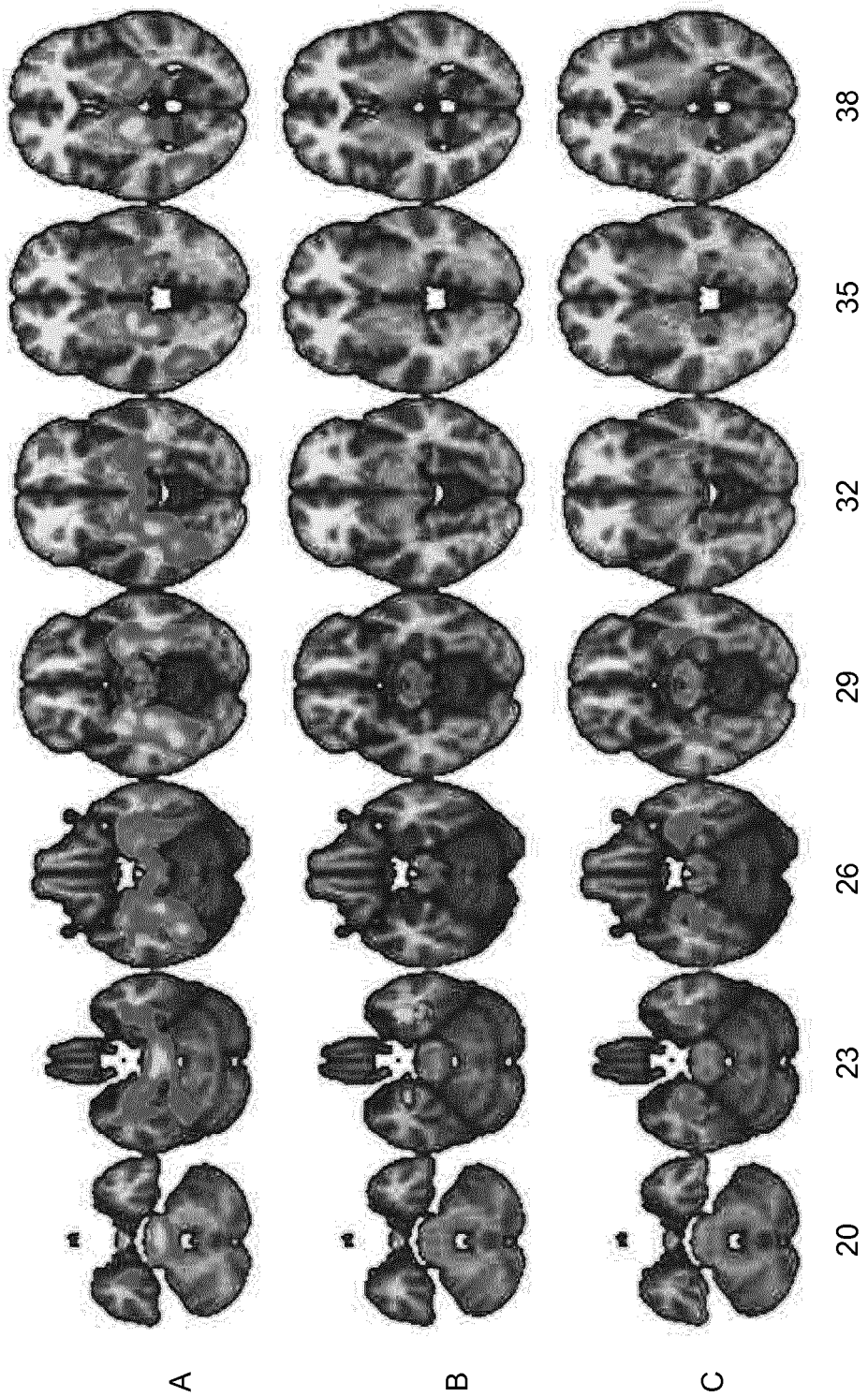

FIG. 9

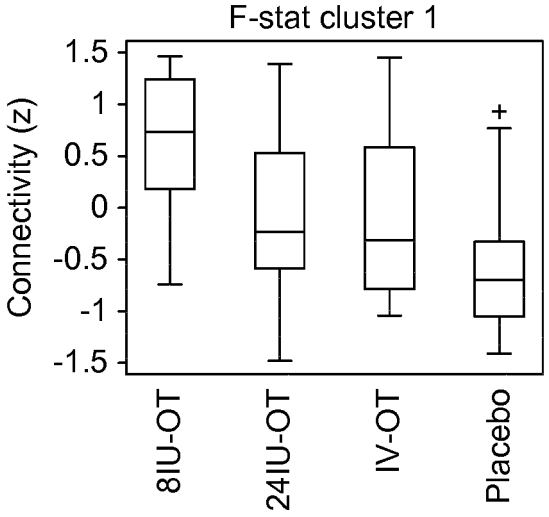

FIG. 10(a)

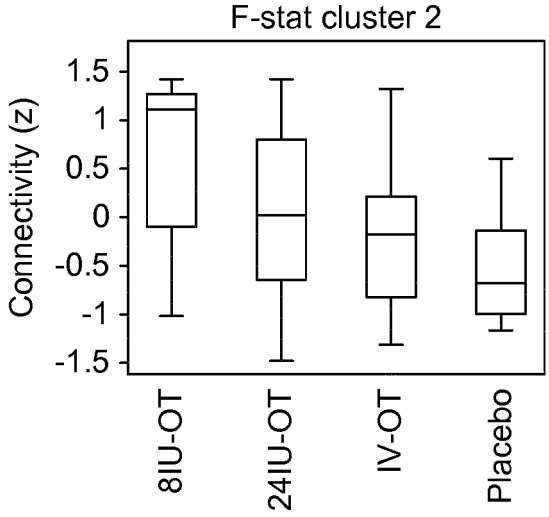

FIG. 10(b)

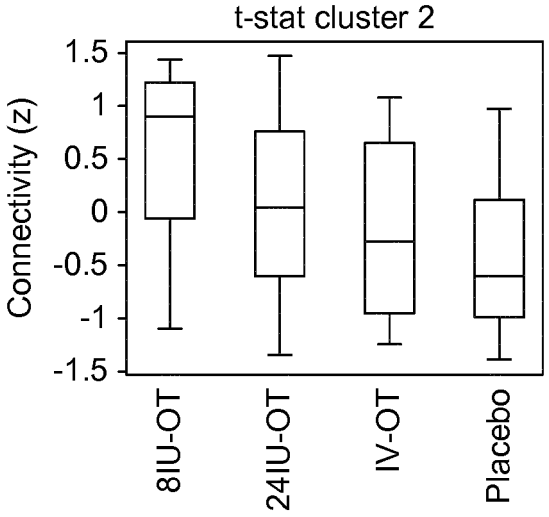

FIG. 11(a)

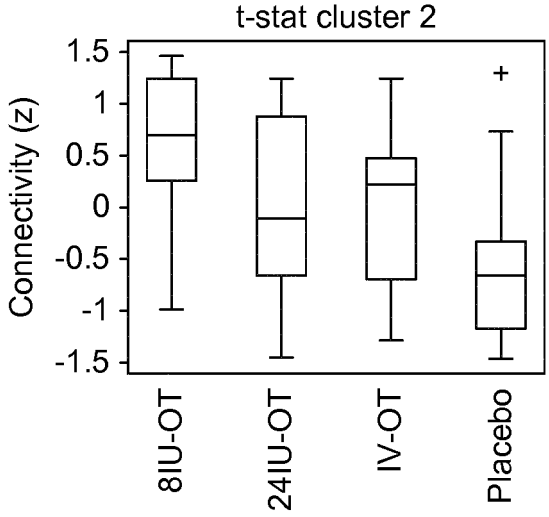

FIG. 11(b)

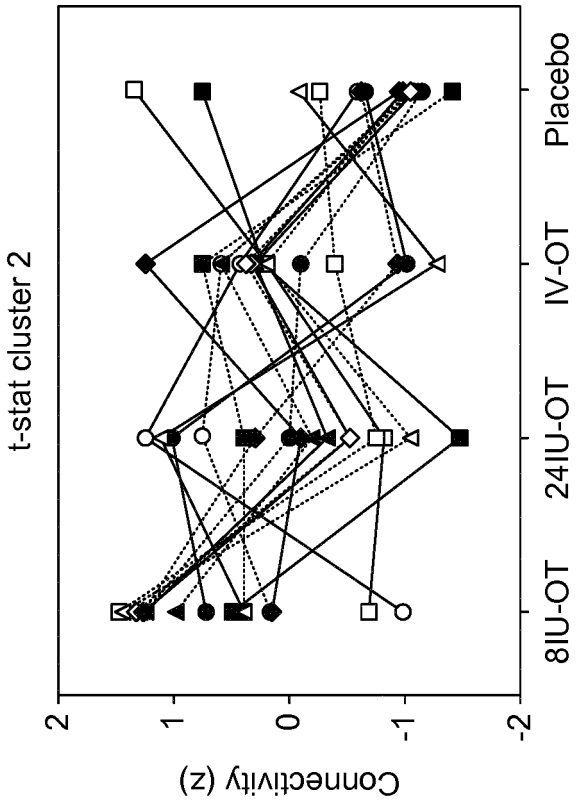

FIG. 12(b)

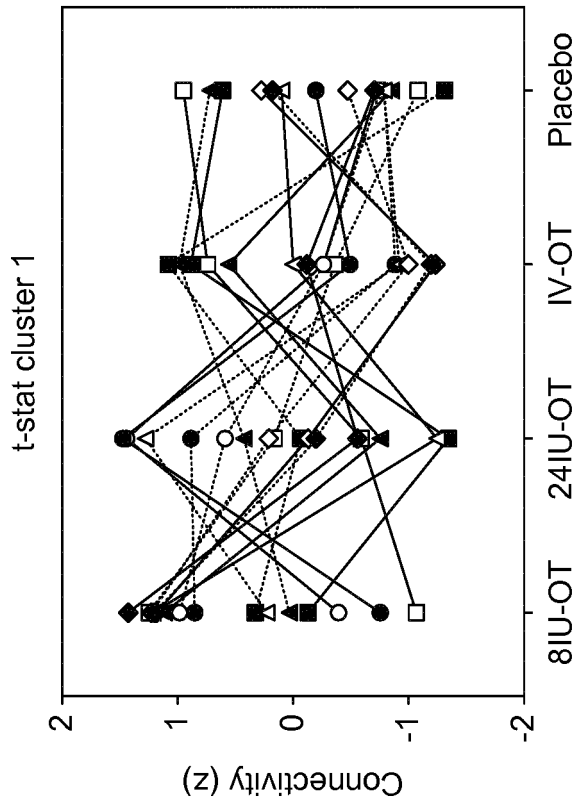

FIG. 12(a)

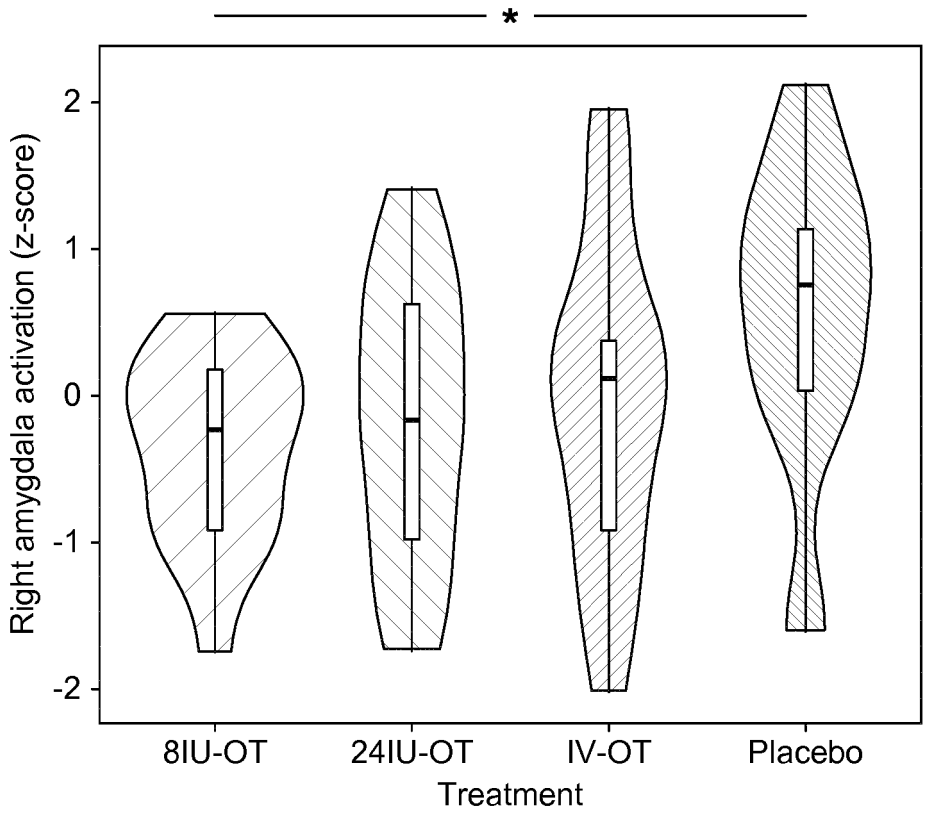

FIG. 13(a)

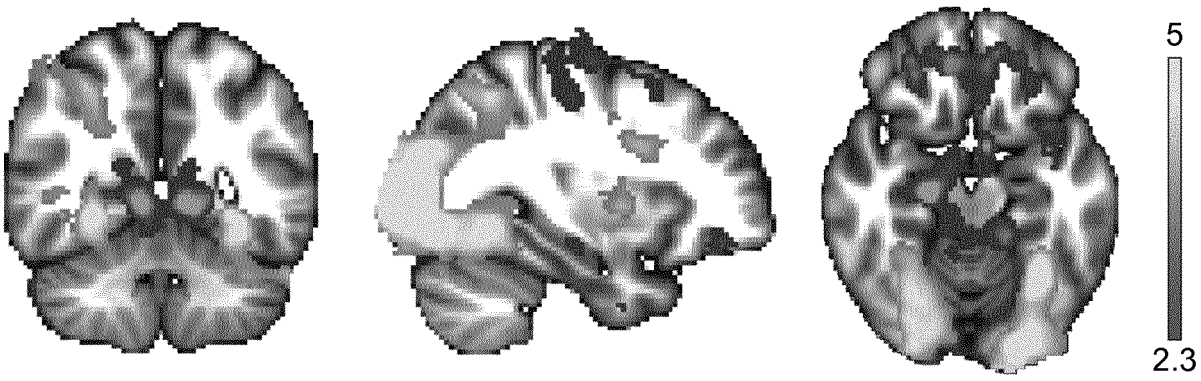

FIG. 13(b)

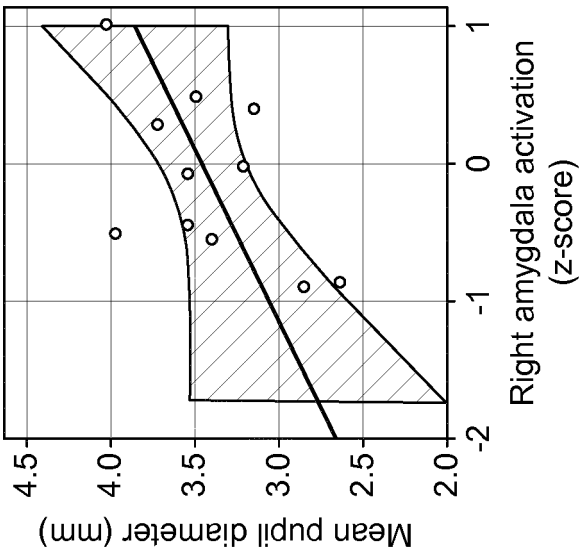

FIG. 14(c)

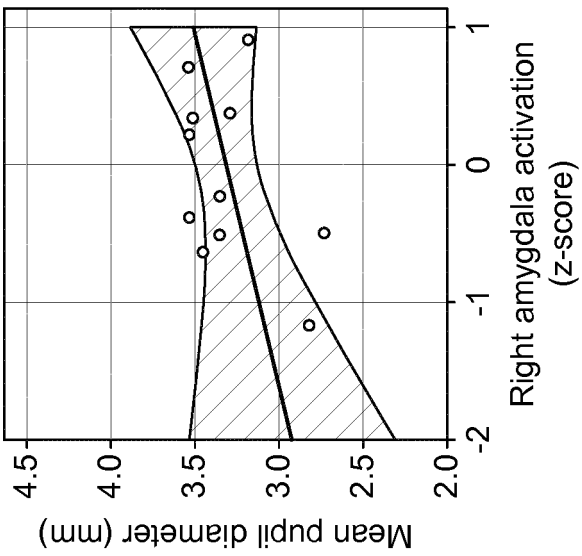

FIG. 14(b)

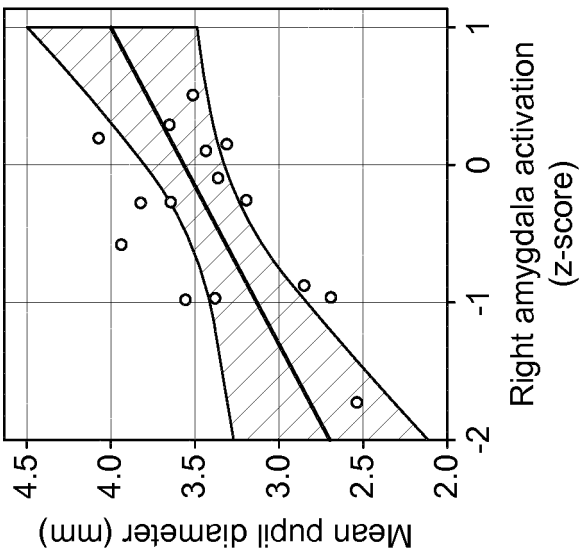

FIG. 14(a)