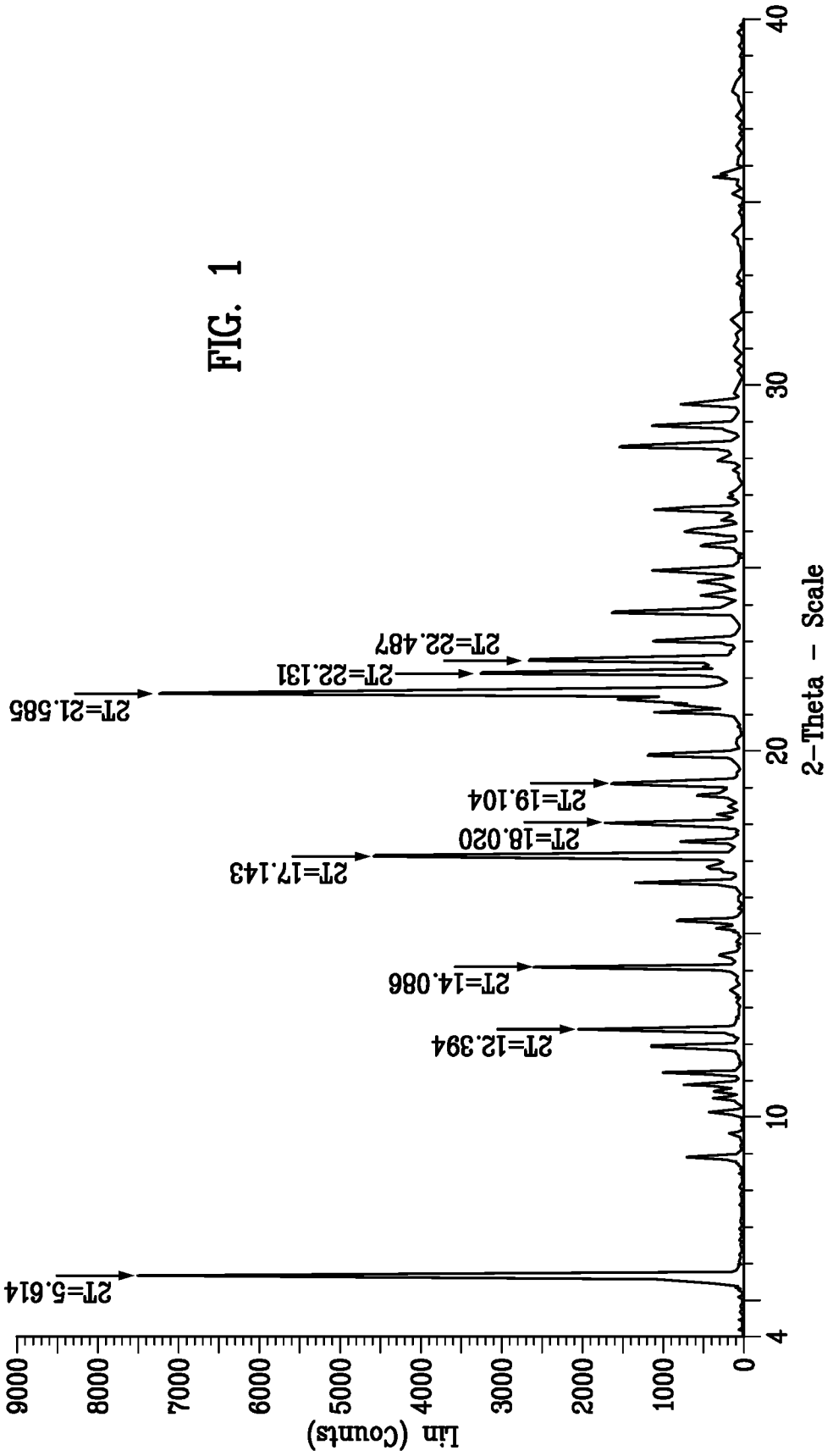
FIG. 1


Lin (Counts)
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
4
10
20
30
40
2-Theta - Scale
2T=5.614
2T=12.394
2T=14.086
2T=17.143
2T=18.020
2T=19.104
2T=21.585
2T=22.131
2T=22.487

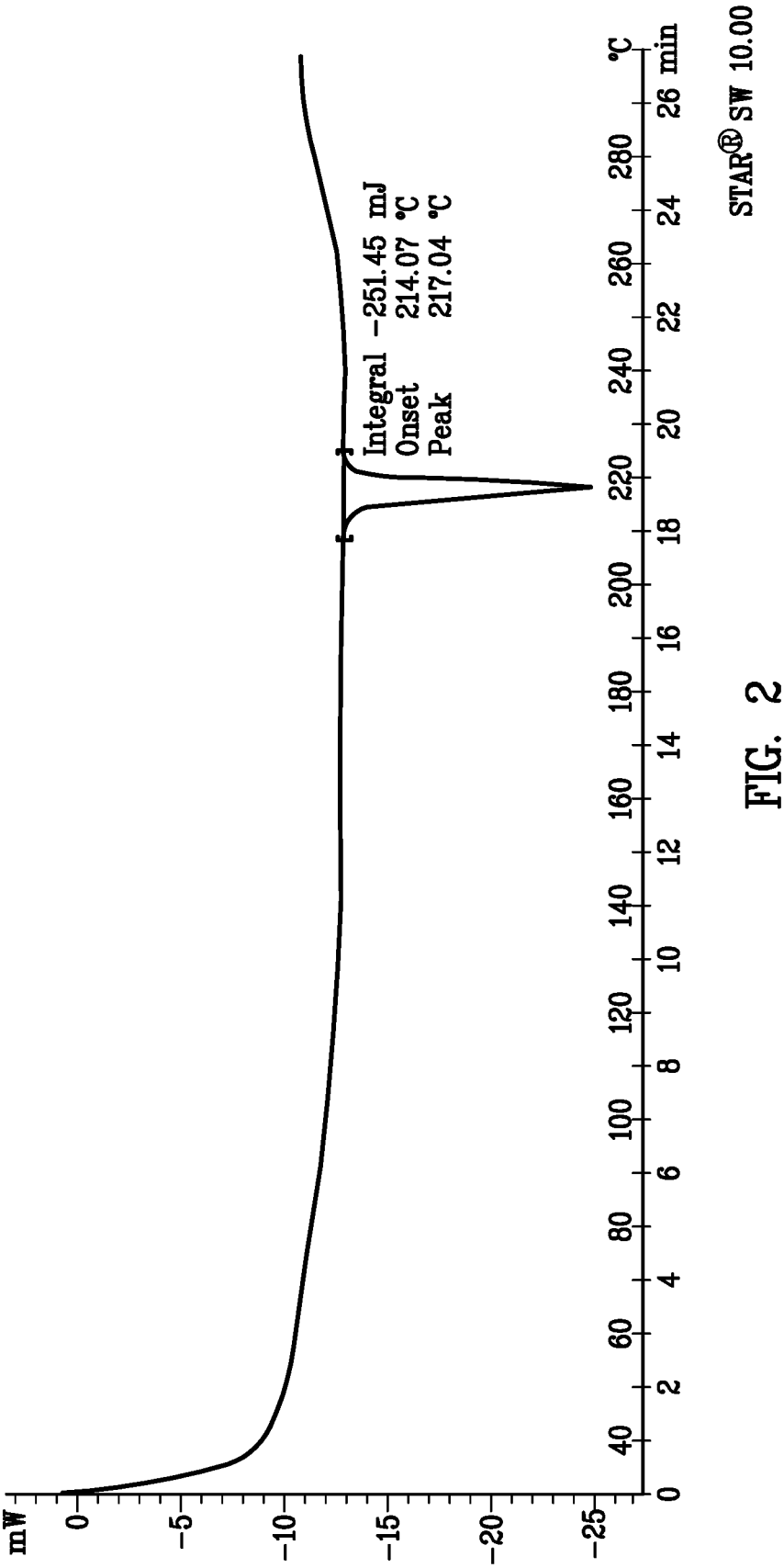

mW
0
-5
-10
-15
-20
-25
0
2
4
6
8
10
12
14
16
18
20
22
24
26 min
40
60
80
100
120
140
160
180
200
220
240
260
280
°C
Integral -251.45 mJ
Onset 214.07 °C
Peak 217.04 °C
STAR® SW 10.00

FIG. 2

FIG. 3

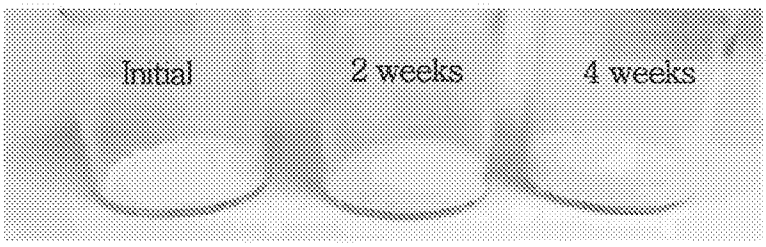


FIG. 4

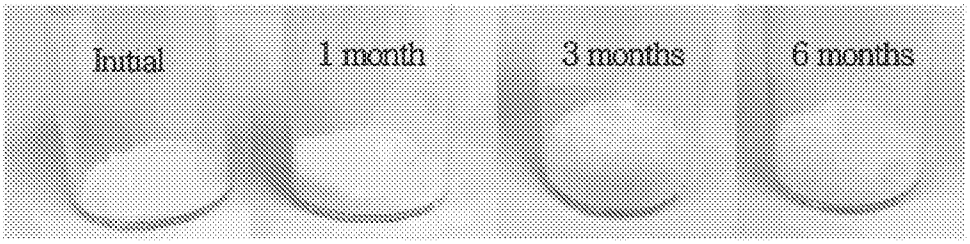


FIG. 5

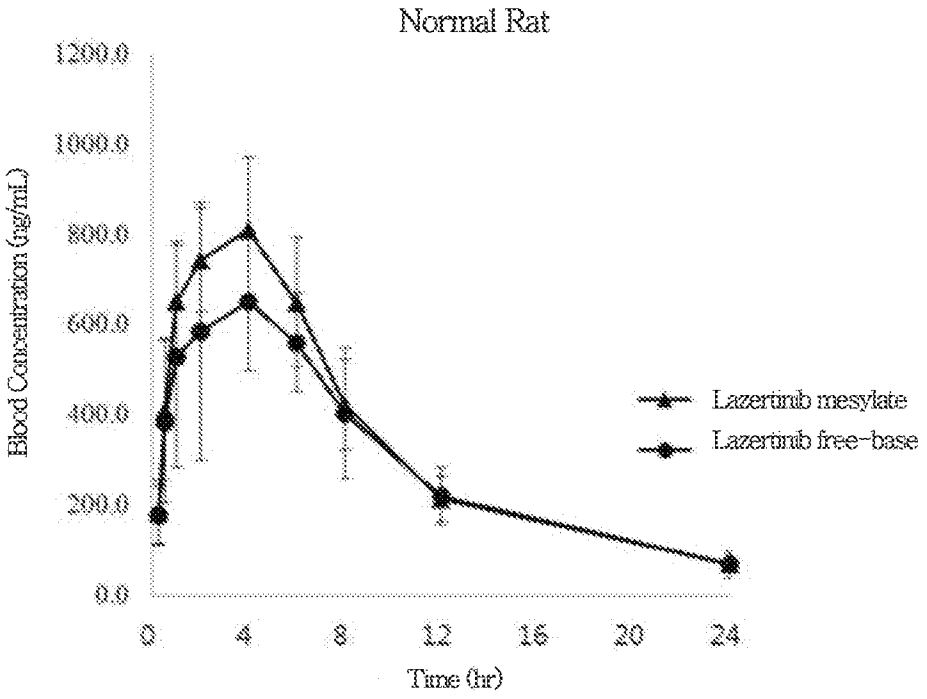

Normal Rat
Blood Concentration (ng/mL)
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
0
4
8
12
16
20
24
Time (hr)
Lazertinib mesylate
Lazertinib free-base

FIG. 6

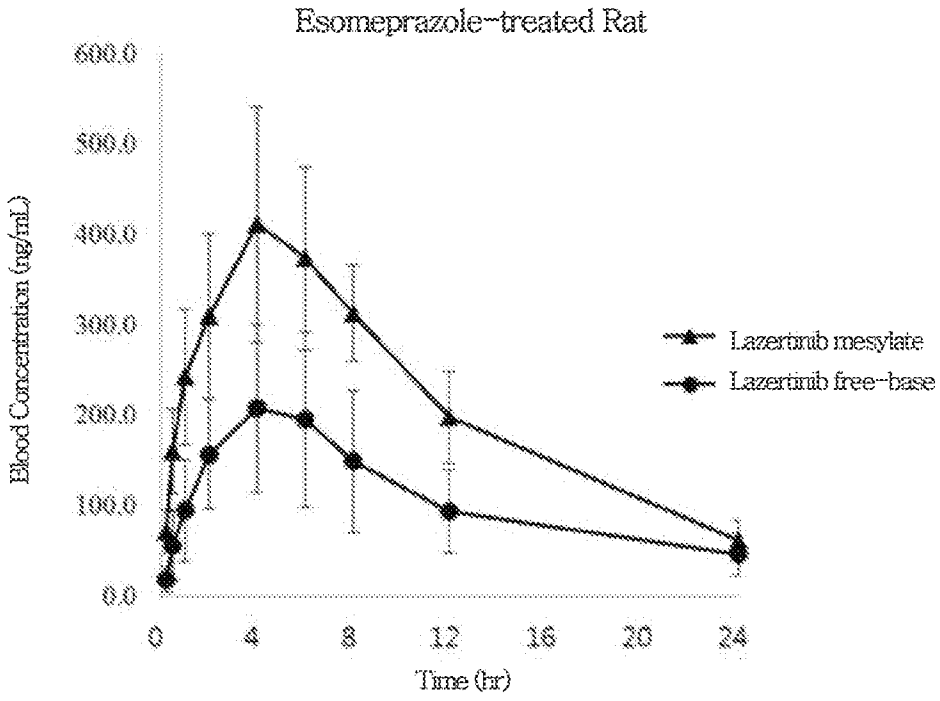

Esomeprazole-treated Rat
Blood Concentration (ng/mL)
600.0
500.0
400.0
300.0
200.0
100.0
0.0
0
4
8
12
16
20
24
Time (hr)
Lazertinib mesylate
Lazertinib free-base

FIG. 7

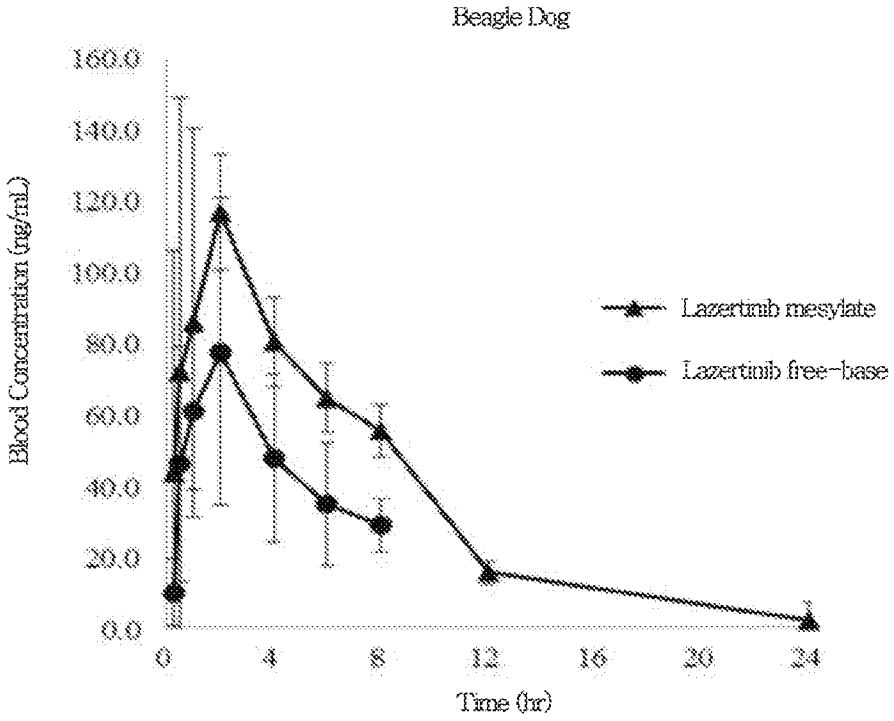

Beagle Dog
Blood Concentration (ng/mL)
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0
4
8
12
16
20
24
Time (hr)
Lazertinib mesylate
Lazertinib free-base

FIG. 8

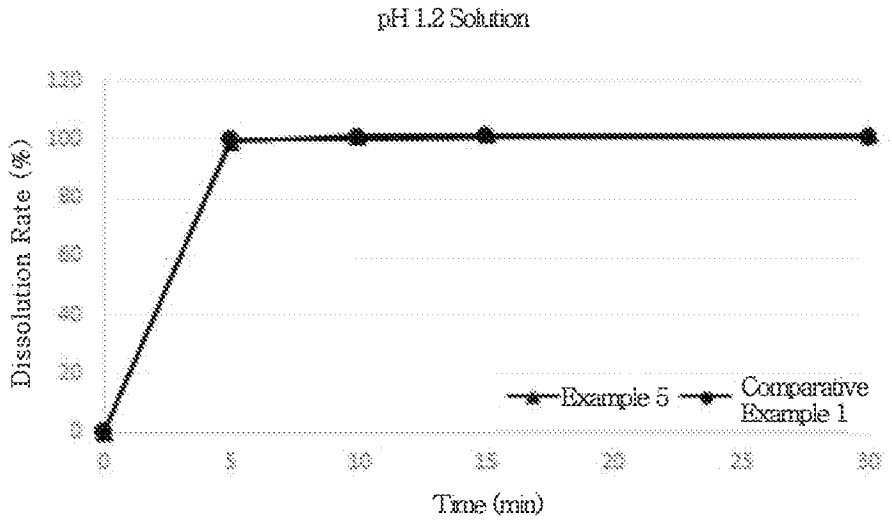

pH 1.2 Solution
Dissolution Rate (%)
0
20
40
60
80
100
120
0
5
10
15
20
25
30
Time (min)
Example 5
Comparative Example 1

FIG. 9

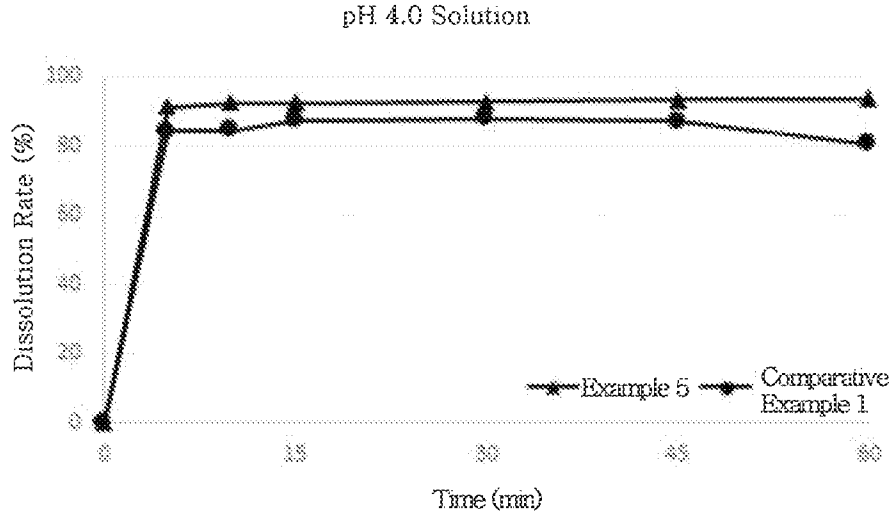

pH 4.0 Solution
Dissolution Rate (%)
0
20
40
60
80
100
120
0
15
30
45
60
Time (min)
Example 5
Comparative Example 1

FIG. 10

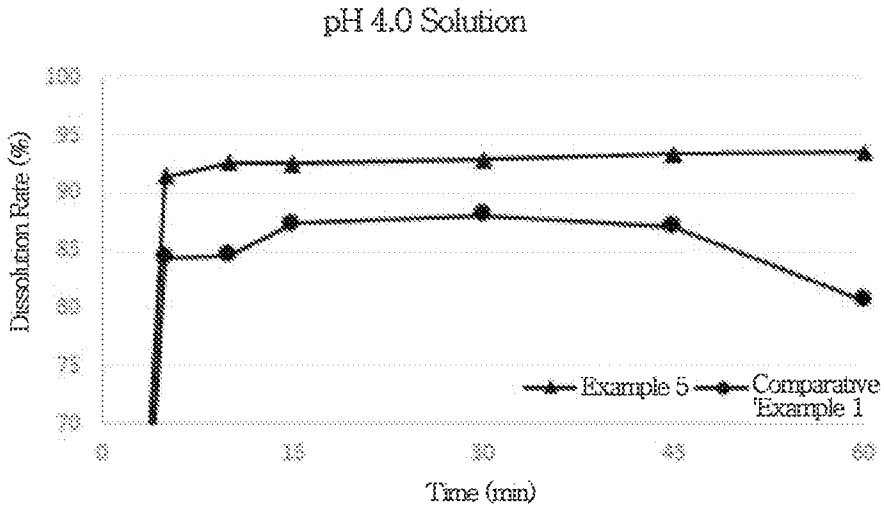

pH 4.0 Solution
Dissolution Rate (%)
100
95
90
85
80
75
70
0
15
30
45
60
Time (min)
Example 5
Comparative Example 1

FIG. 11

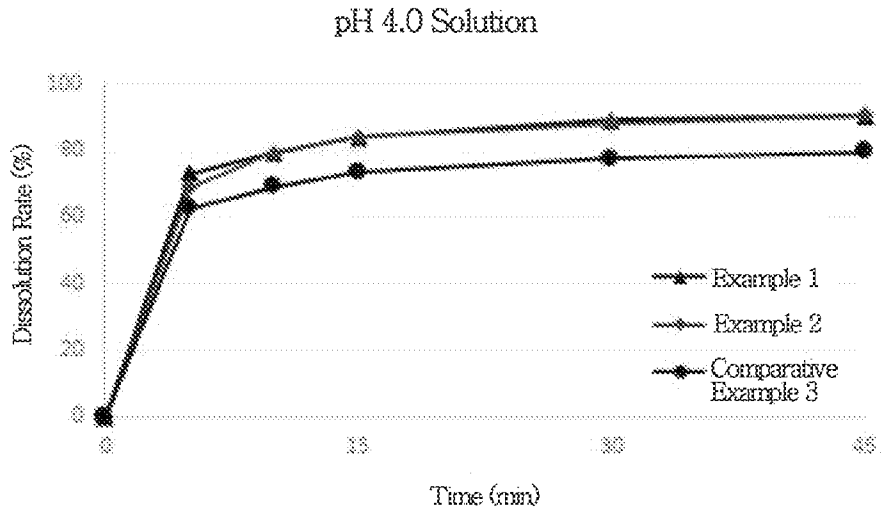

pH 4.0 Solution
Dissolution Rate (%)
100
80
60
40
20
0
0
15
30
45
Time (min)
Example 1
Example 2
Comparative Example 3

FIG. 12

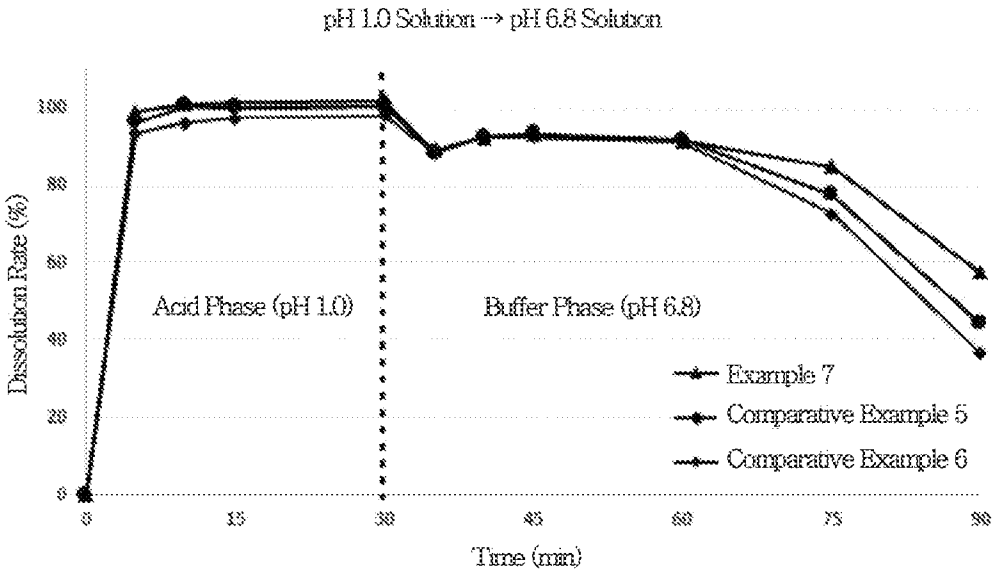
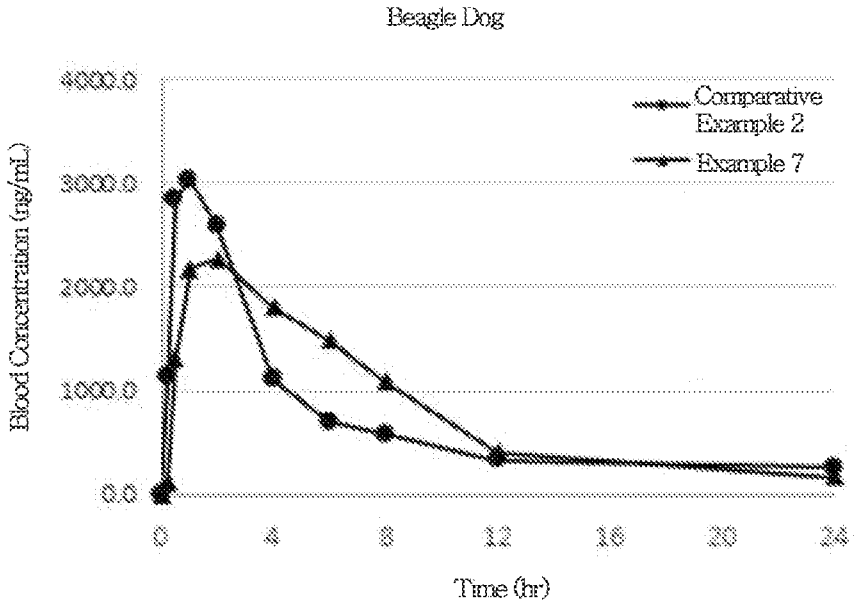

pH 1.0 Solution → pH 6.8 Solution
Dissolution Rate (%)
Acid Phase (pH 1.0)
Buffer Phase (pH 6.8)
Example 7
Comparative Example 5
Comparative Example 6
Time (min)

FIG. 13


Beagle Dog
Blood Concentration (ng/mL)
4000.0
3000.0
2000.0
1000.0
0.0
0
4
8
12
16
20
24
Time (hr)
Comparative Example 2
Example 7