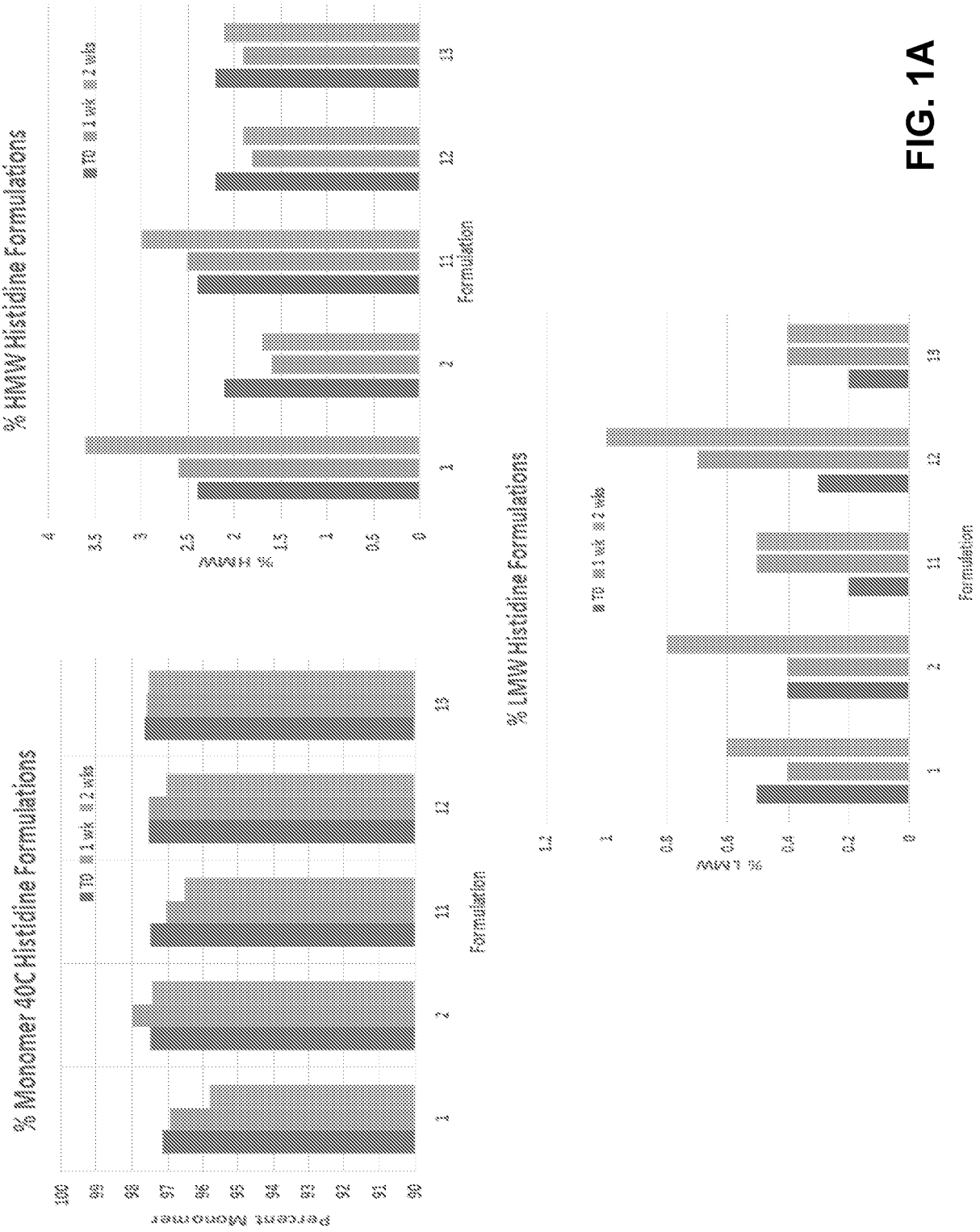

% Monomer 40C Histidine Formulations
T0 1 wk 2 wks
Percent Monomer
Formulation
% HMW Histidine Formulations
T0 1 wk 2 wks
HMW %
Formulation
% LMW Histidine Formulations
T0 1 wk 2 wks
LMW %
Formulation

FIG. 1A

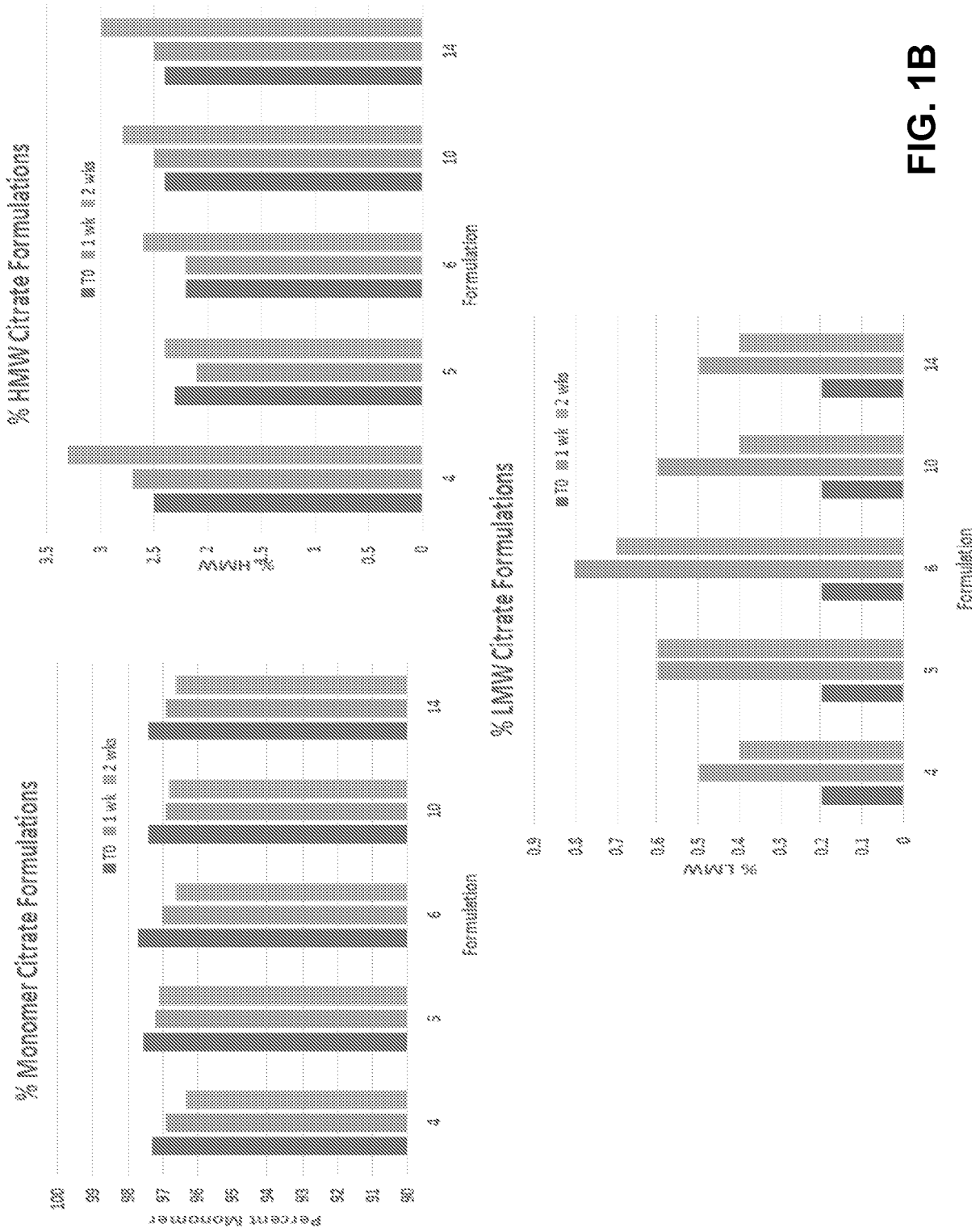

% Monomer Citrate Formulations
Percent Monomer
100
99
98
97
96
95
94
93
92
91
90
T0 1 wk 2 wks
4
5
6
10
14
Formulation
% HMW Citrate Formulations
Area %
3.5
3
2.5
2
1.5
1
0.5
0
T0 1 wk 2 wks
4
5
6
10
14
Formulation
% LMW Citrate Formulations
Area %
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
T0 1 wk 2 wks
4
5
6
10
14
Formulation

FIG. 1B

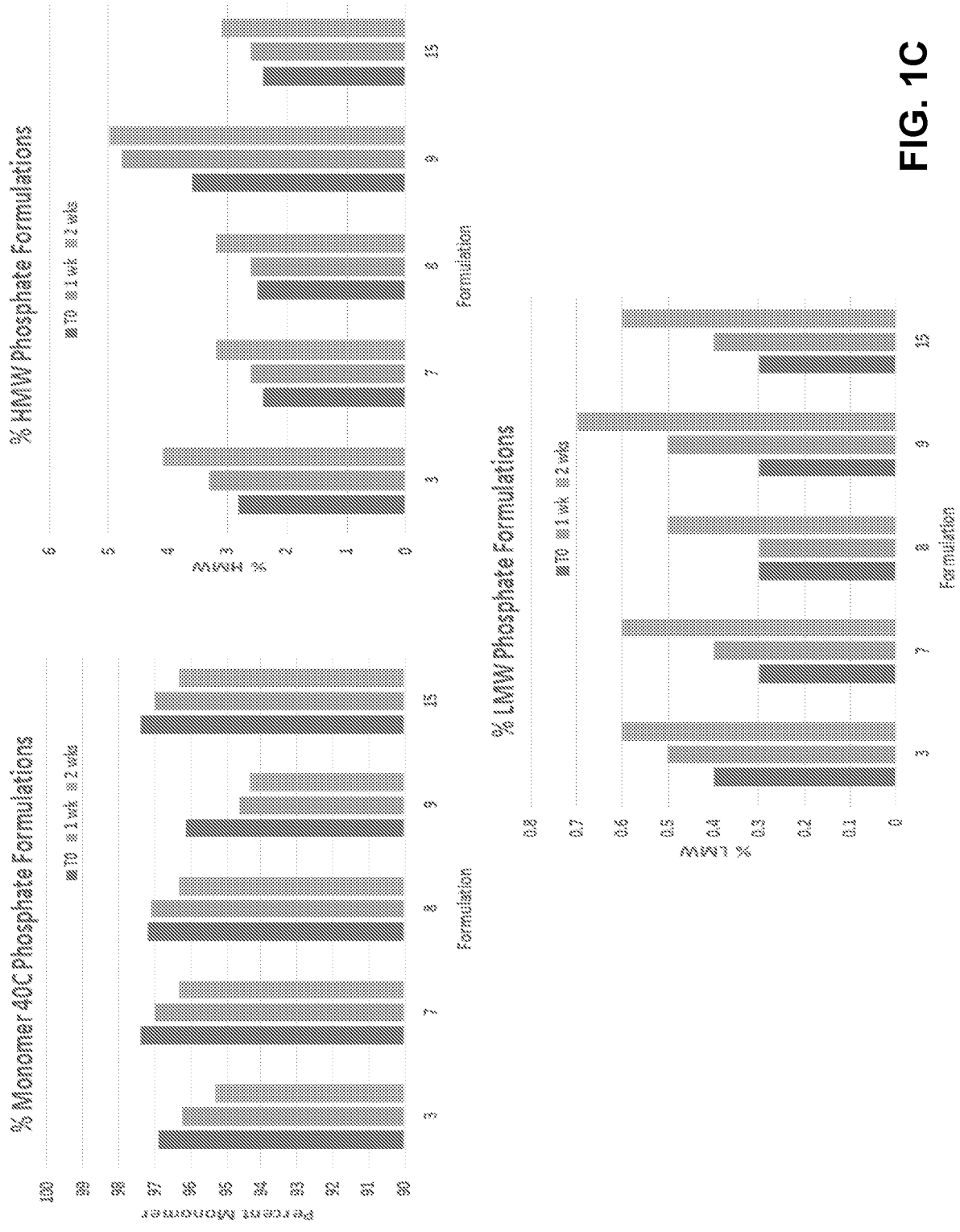

% Monomer 40C Phosphate Formulations
T0 1 wk 2 wks
Percent Monomer
100
99
98
97
96
95
94
93
92
91
90
3
7
8
9
13
15
Formulation
% HMW Phosphate Formulations
T0 1 wk 2 wks
% HMW
6
5
4
3
2
1
0
3
7
8
9
15
Formulation
% LMW Phosphate Formulations
T0 1 wk 2 wks
% LMW
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
3
7
8
9
15
Formulation

FIG. 1C

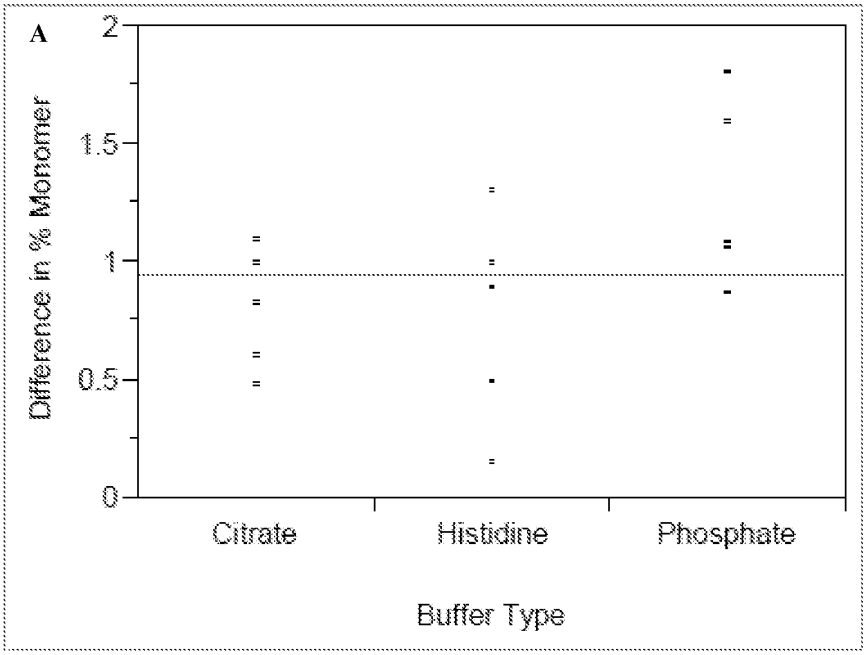

A
Difference in % Monomer
2
1.5
1
0.5
0
Citrate
Histidine
Phosphate
Buffer Type

FIG. 2A

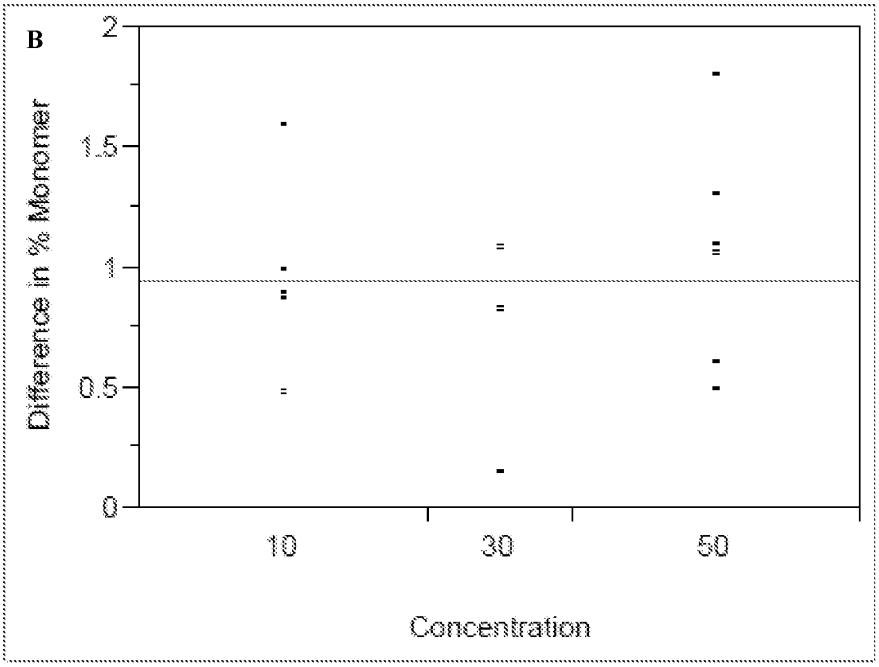

B
Difference in % Monomer
2
1.5
1
0.5
0
10
30
50
Concentration

FIG. 2B

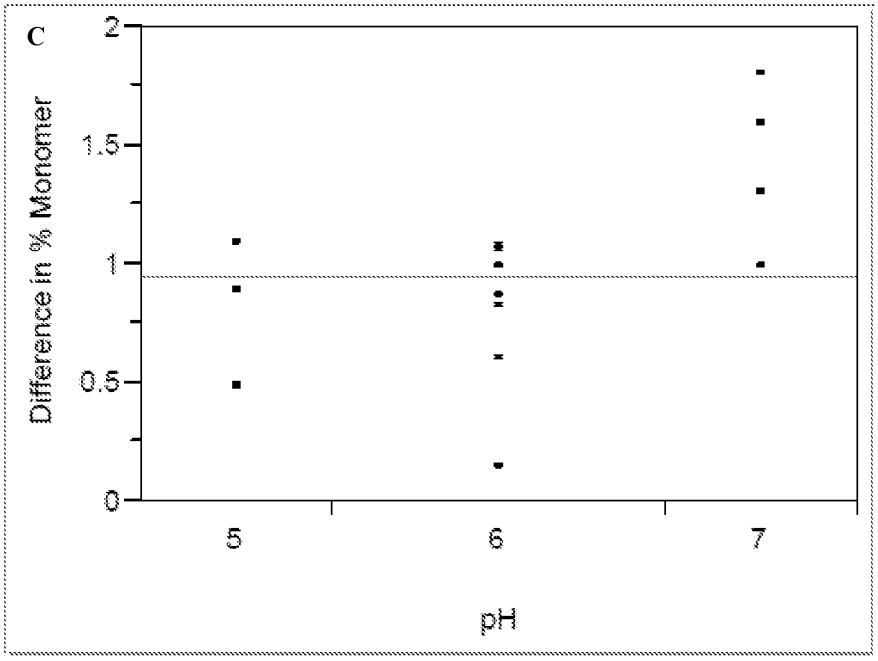

C
Difference in % Monomer
2
1.5
1
0.5
0
5
6
7
pH

FIG. 2C

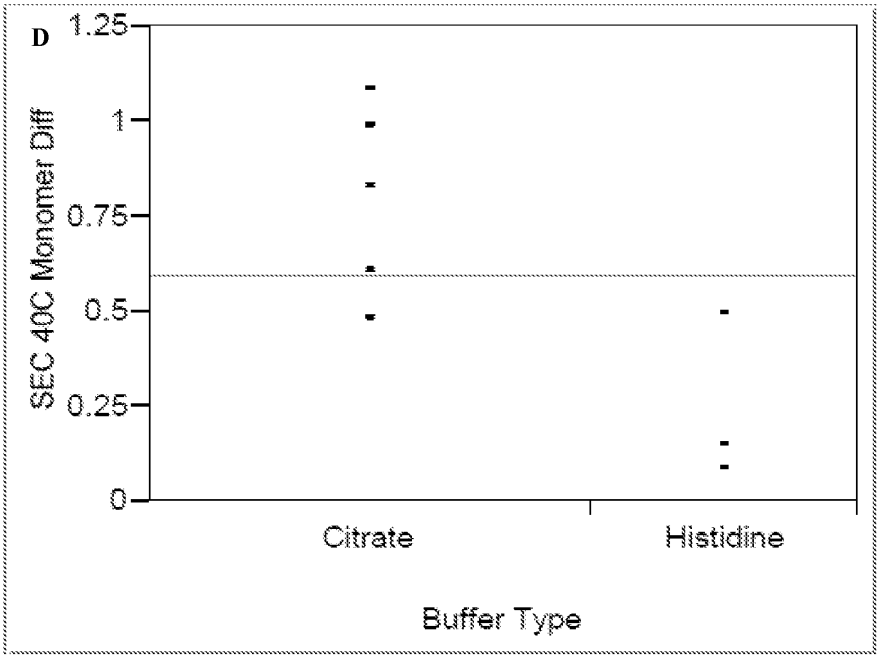
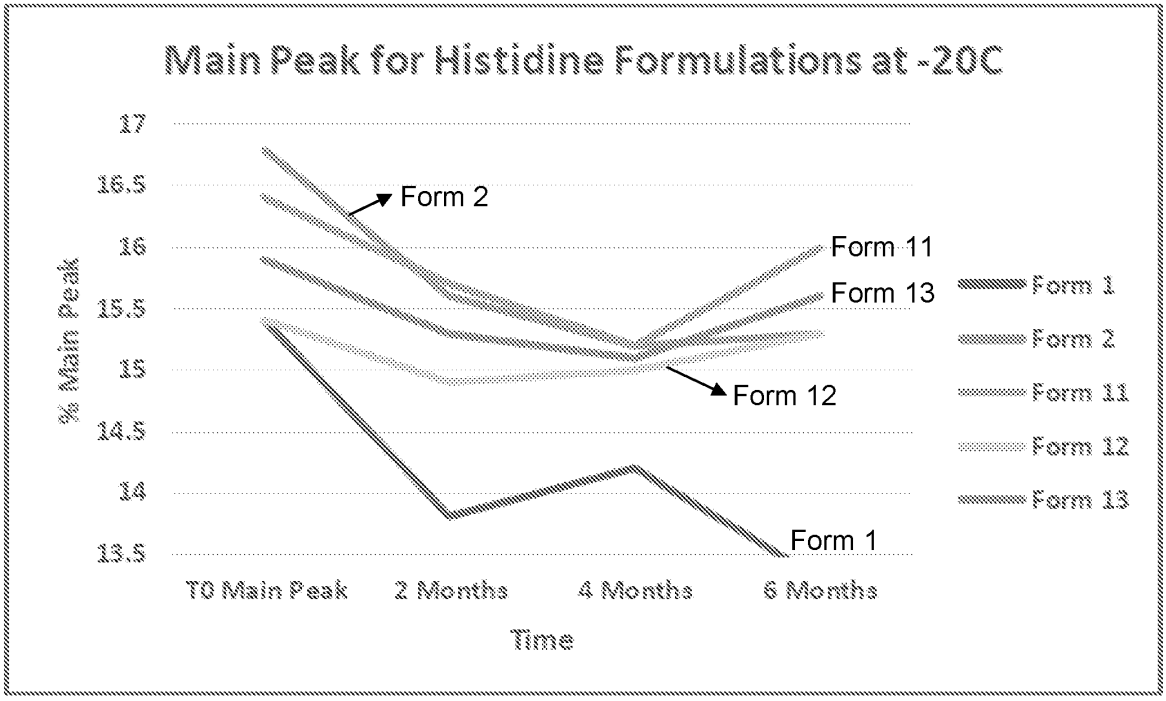

D
SEC 40C Monomer Diff
1.25
1
0.75
0.5
0.25
0
Citrate
Histidine
Buffer Type

FIG. 2D


Main Peak for Histidine Formulations at -20C
% Main Peak
17
16.5
16
15.5
15
14.5
14
13.5
Form 2
Form 11
Form 13
Form 12
Form 1
T0 Main Peak
2 Months
4 Months
6 Months
Time
Form 1
Form 2
Form 11
Form 12
Form 13

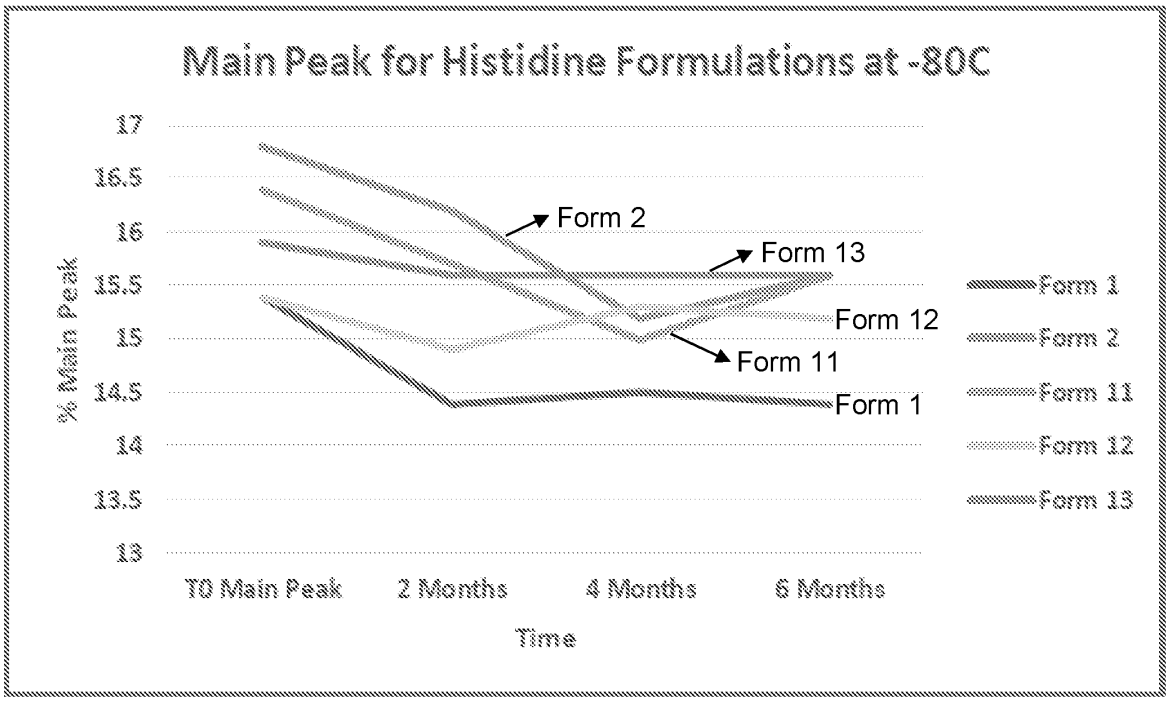

Main Peak for Histidine Formulations at -80C
% Main Peak
17
16.5
16
15.5
15
14.5
14
13.5
13
Form 2
Form 13
Form 12
Form 11
Form 1
T0 Main Peak
2 Months
4 Months
6 Months
Time
Form 1
Form 2
Form 11
Form 12
Form 13

FIG. 3

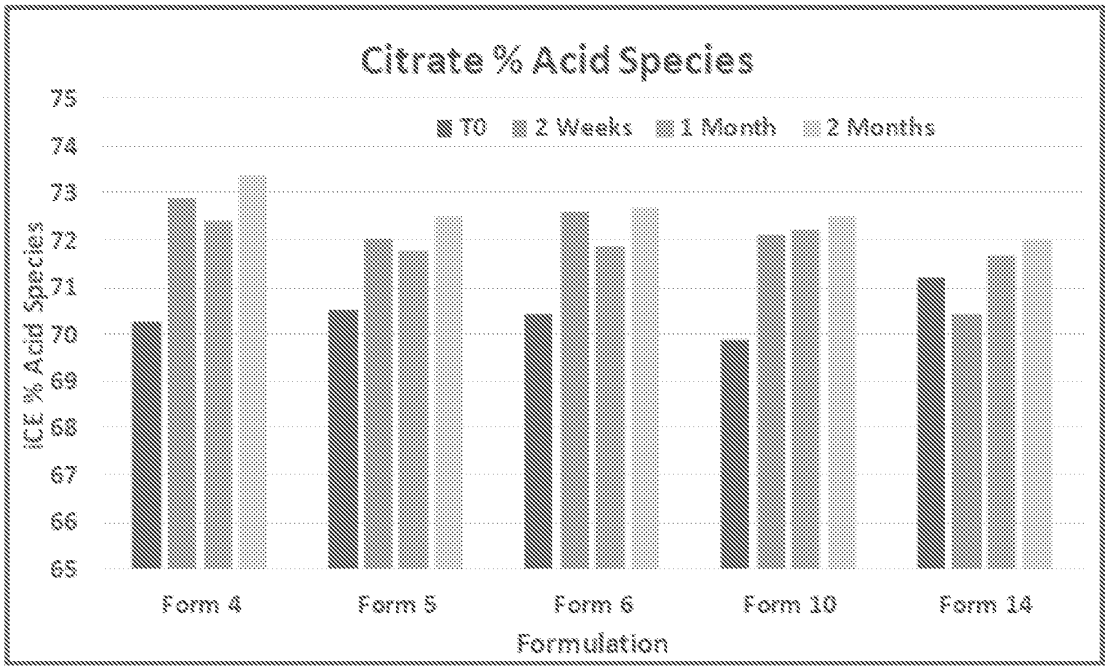

Citrate % Acid Species
T0
2 Weeks
1 Month
2 Months
iCE % Acid Species
75
74
73
72
71
70
69
68
67
66
65
Form 4
Form 5
Form 6
Form 10
Form 14
Formulation

FIG. 4

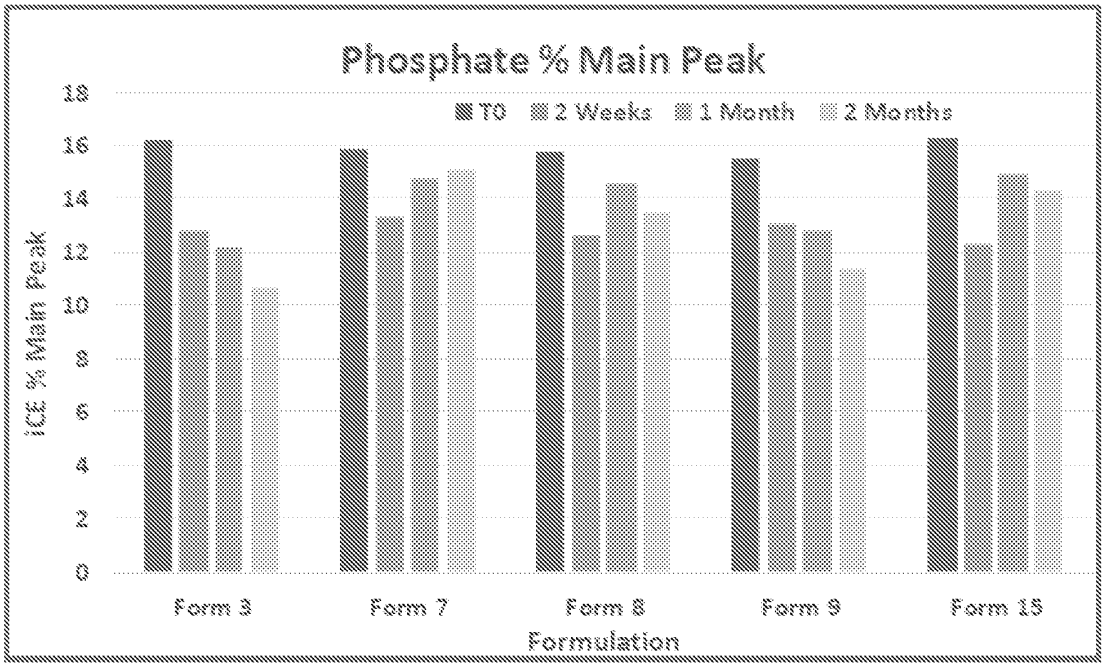

Phosphate % Main Peak
T0
2 Weeks
1 Month
2 Months
iCE % Main Peak
18
16
14
12
10
8
6
4
2
0
Form 3
Form 7
Form 8
Form 9
Form 15
Formulation

FIG. 5

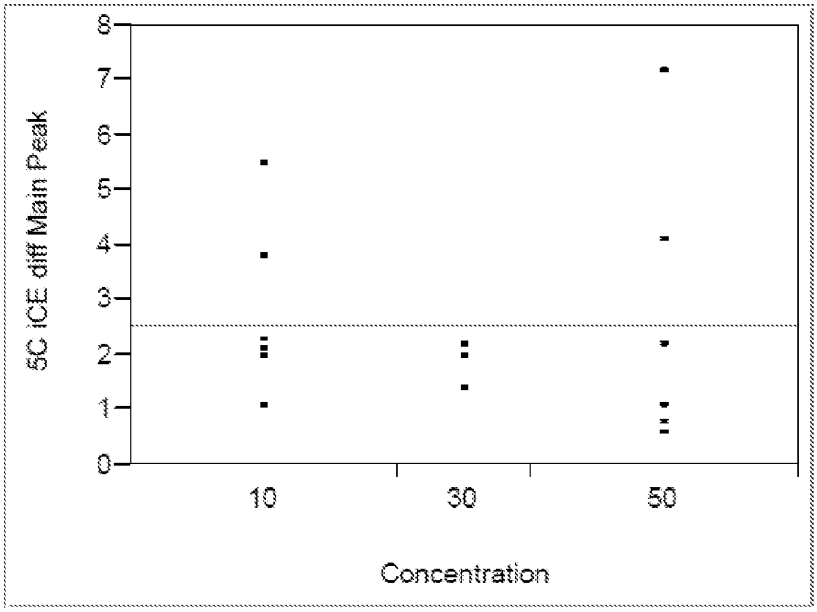

5C iCE diff Main Peak
8
7
6
5
4
3
2
1
0
10
30
50
Concentration

FIG. 6

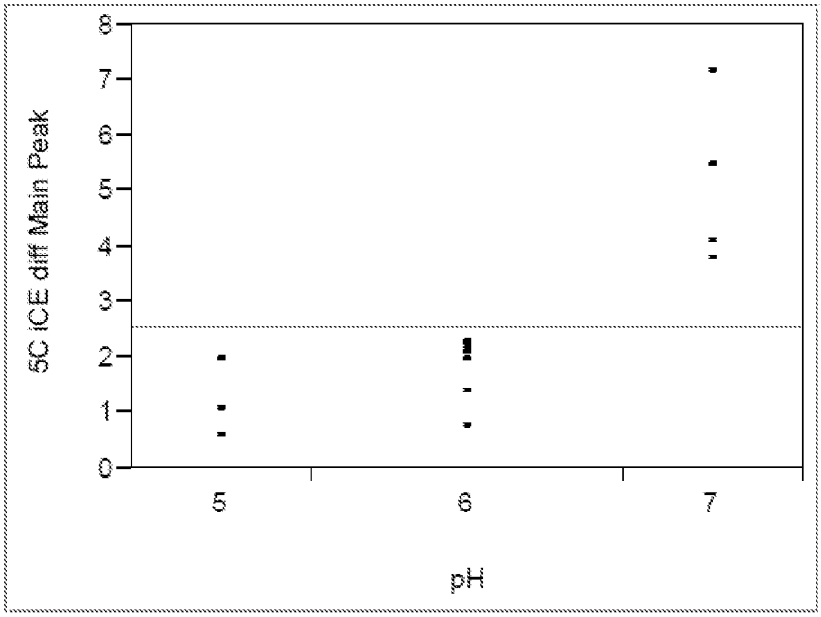

5C iCE diff Main Peak
8
7
6
5
4
3
2
1
0
5
6
7
pH

FIG. 7

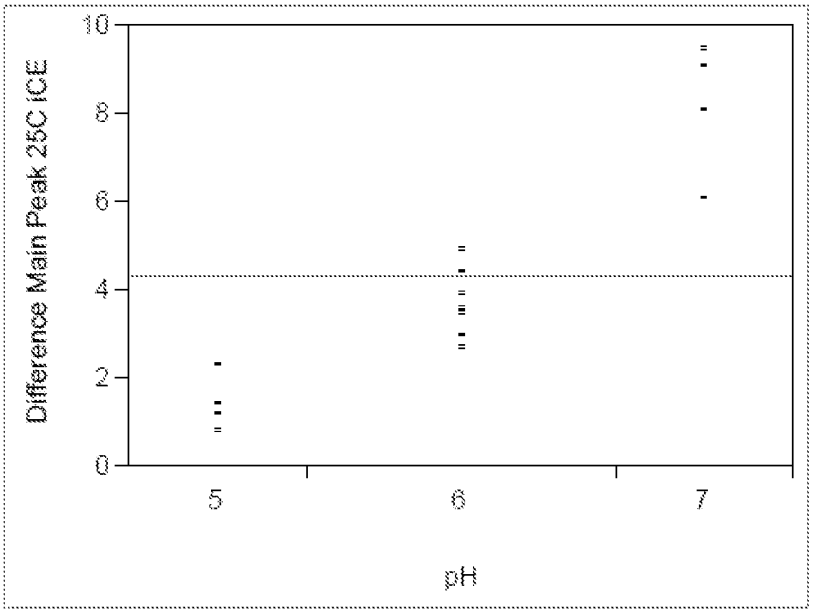
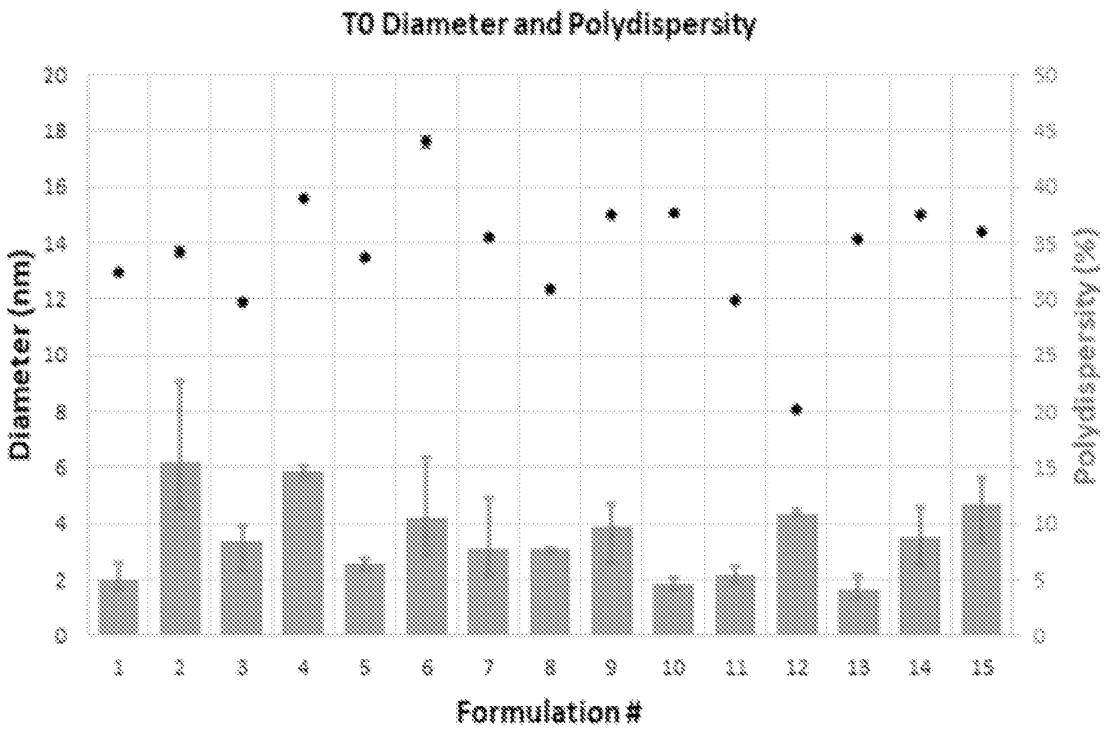


FIG. 8


T0 Diameter and Polydispersity
Diameter (nm)
Polydispersity (%)
Formulation #

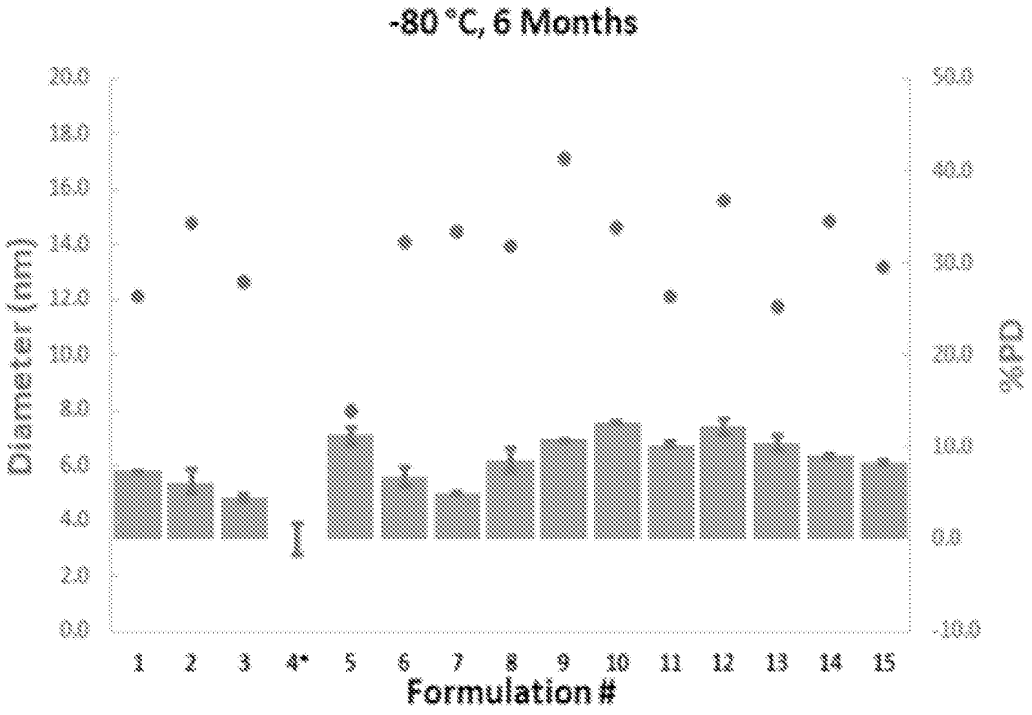

-80 °C, 6 Months
Diameter (nm)
PDI%
Formulation #

FIG. 9

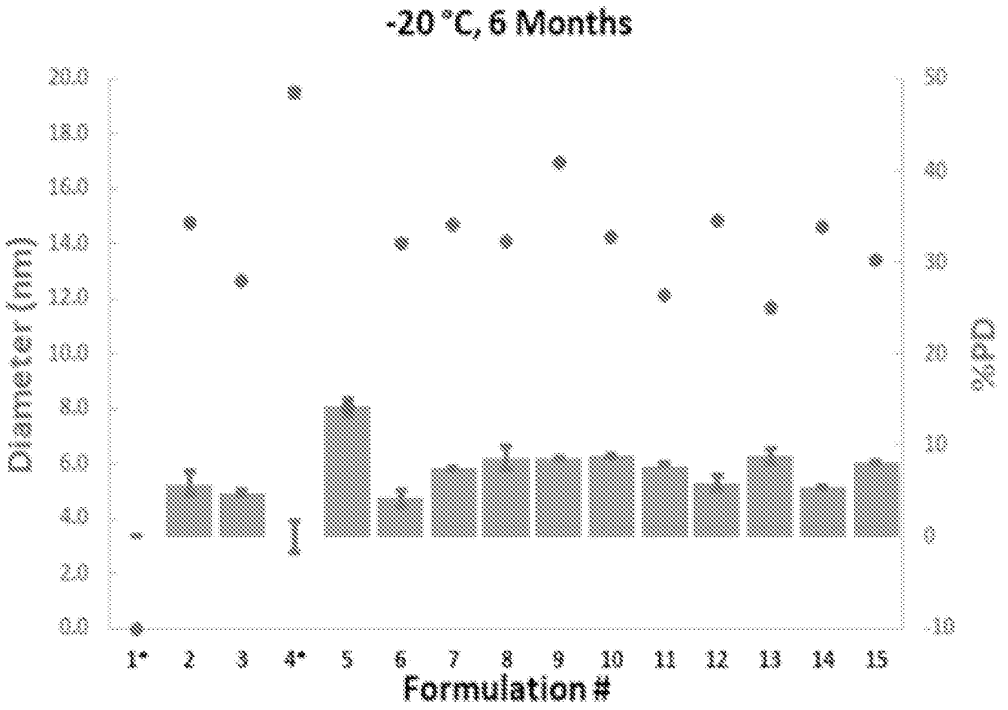

-20 °C, 6 Months
Diameter (nm)
%PD
Formulation #
1*
2
3
4*
5
6
7
8
9
10
11
12
13
14
15

FIG. 9 (cont.)