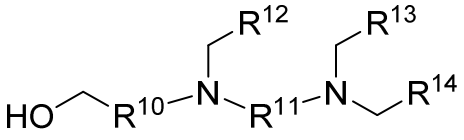
CLAIMS

What is claimed is:

1. A composition comprising a compound defined by Formula I, or a pharmaceutically acceptable salt thereof:



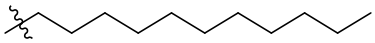
I

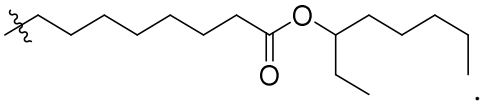
wherein

R^{10} is substituted or unsubstituted C_1-C_5 alkyl;

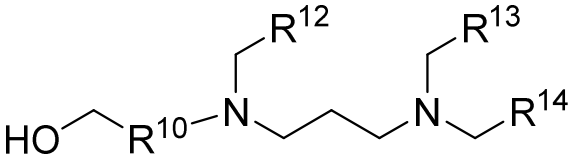
R^{11} is substituted or unsubstituted C_1-C_5 alkyl;

R^{12}, R^{13}, and R^{14} are each independently substituted or unsubstituted C_6-C_{20} alkyl;

with the proviso that when R^{10} is —C_5H_{10}— and R^{11} is —C_3H_6—, then R^{12}, R^{13}, and R^{14} are not all ; and

with the proviso that when R^{10} is —C_5H_{10}— and R^{11} is —C_3H_6—, then R^{12}, R^{13}, and R^{14} are not all .

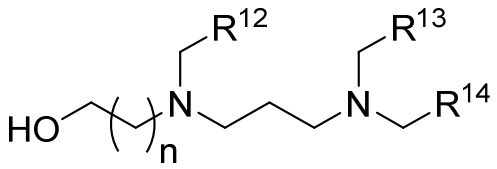
2. The composition of claim 1, wherein the compound is defined by Formula I-A:



I-A

or a pharmaceutically acceptable salt thereof.

3. The composition of claim 1, wherein the compound is defined by Formula I-B, or a pharmaceutically acceptable salt thereof:

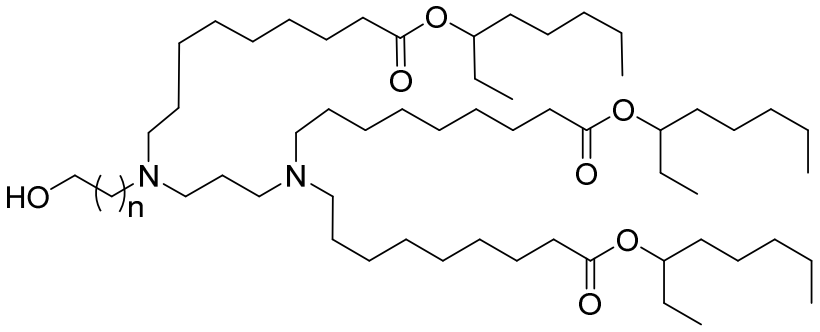


I-B

wherein n is an integer from 1 to 5.

4. The composition of claim 1, wherein R^{12}, R^{13}, and R^{14} are each independently a substituted or unsubstituted C_{10}-C_{18} alkyl.

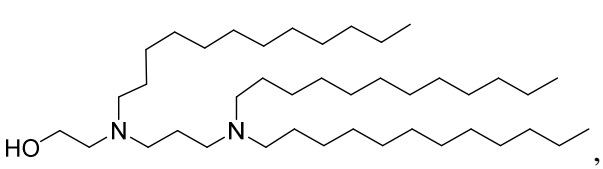
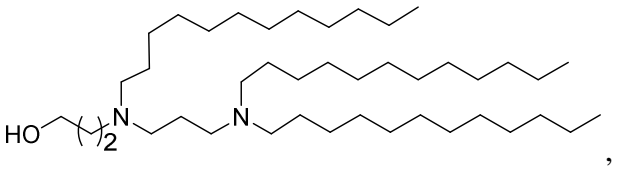
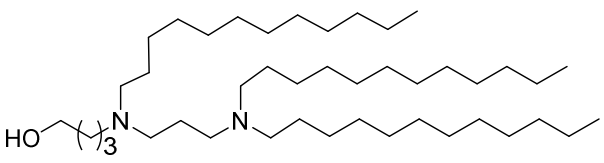
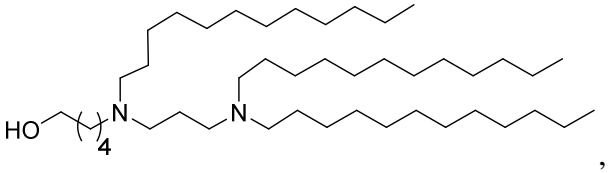
5. The composition of claim 1, wherein the compound is defined by Formula I-C, or a pharmaceutically acceptable salt thereof:

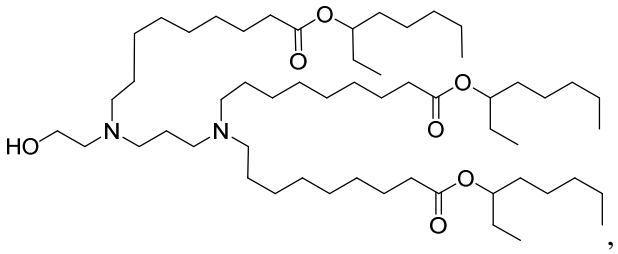
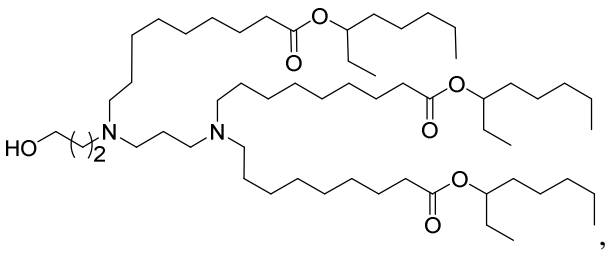
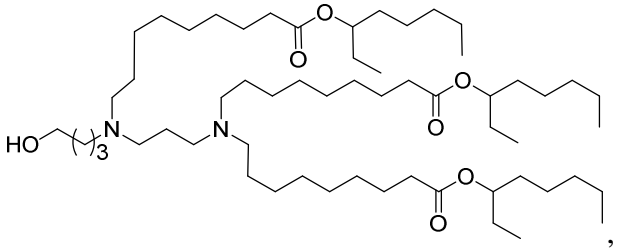
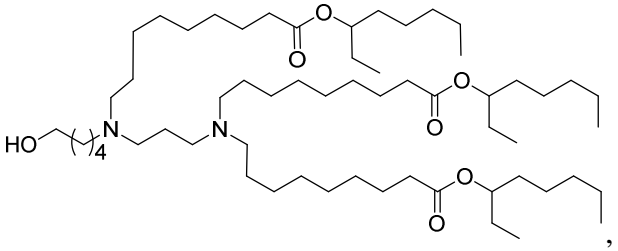
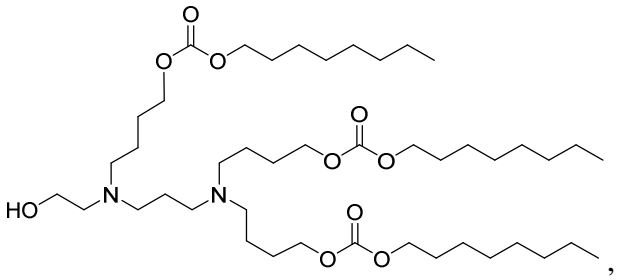
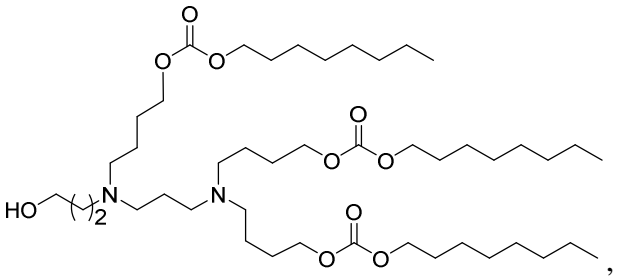
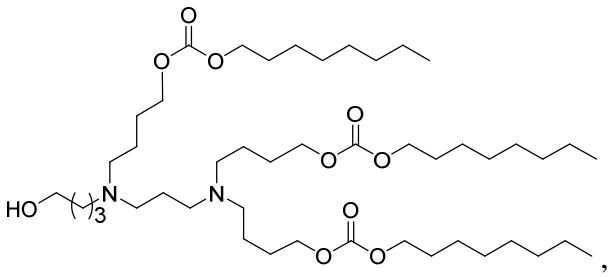
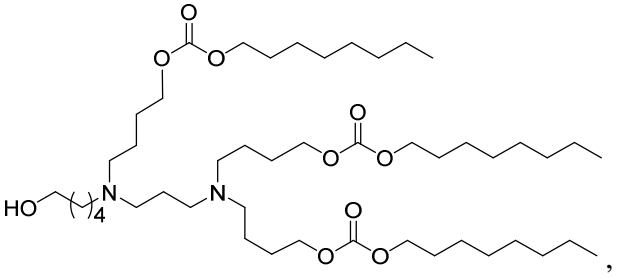
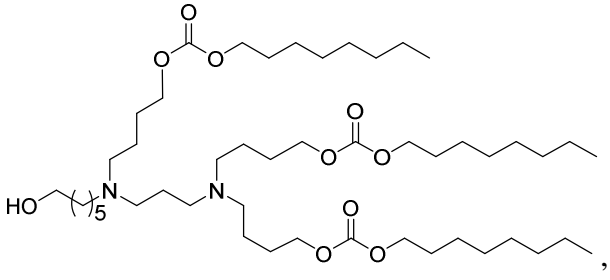
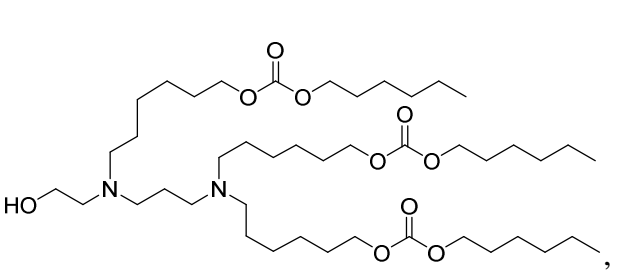
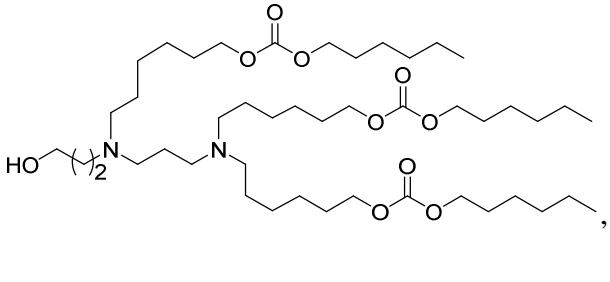
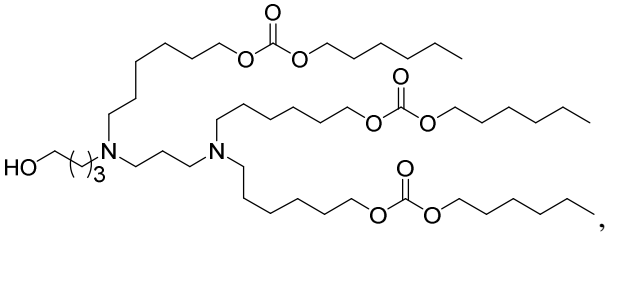


I-C

wherein n is an integer from 1 to 4.

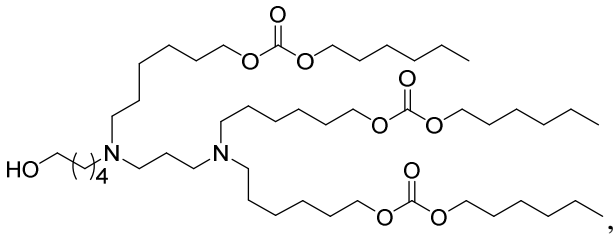
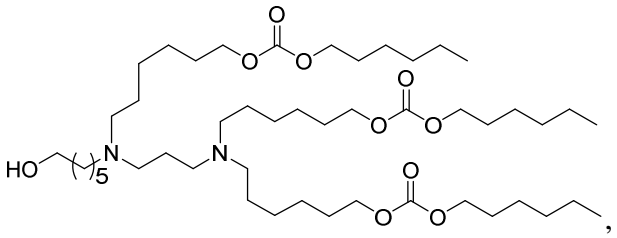
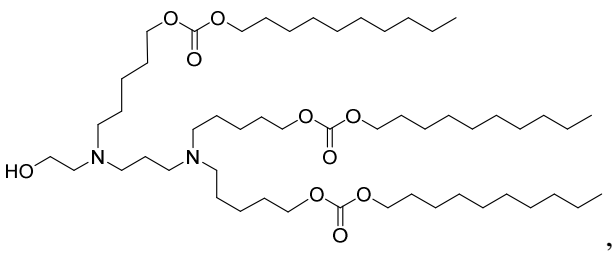
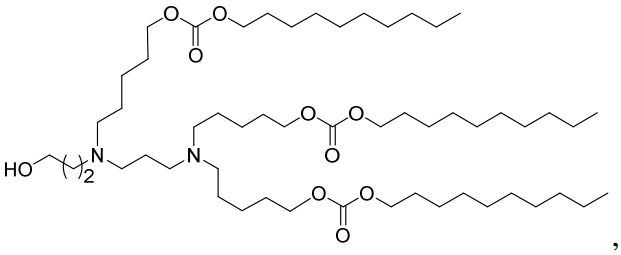
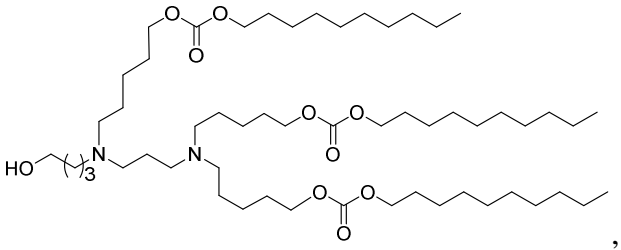
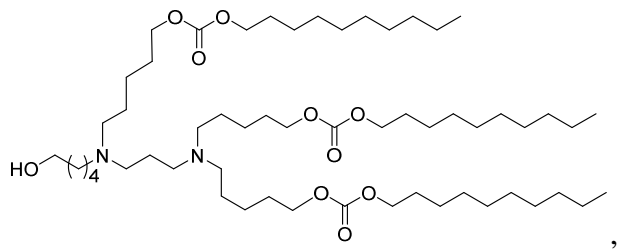
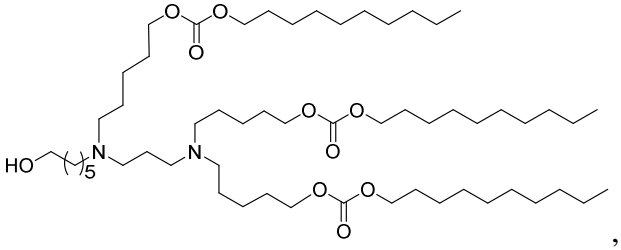
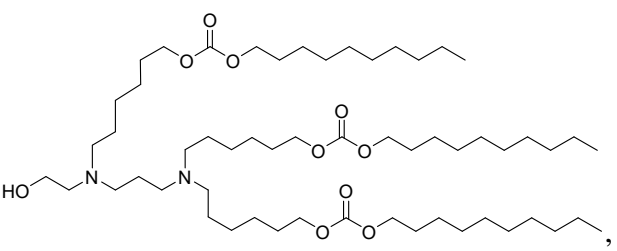
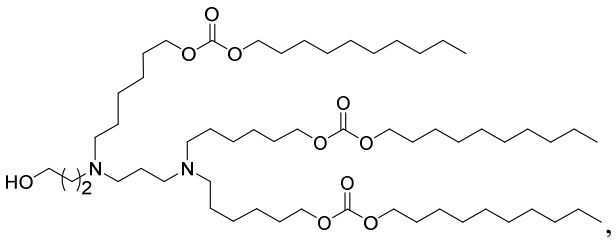
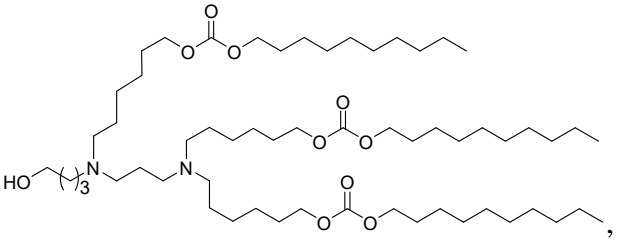
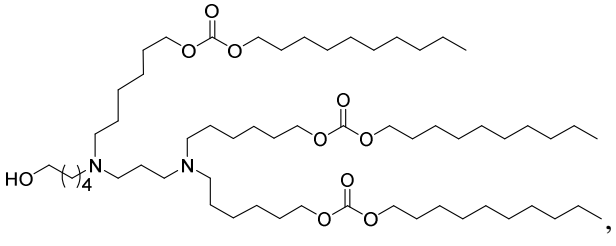
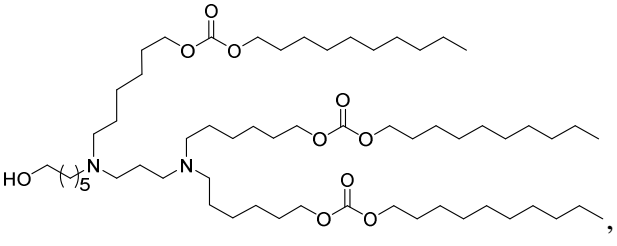
6. The composition of claim 1, wherein the compound is selected from the group consisting of:


,

,

,

,


,

,

,

,

,

,

,

,

,

,

,

,

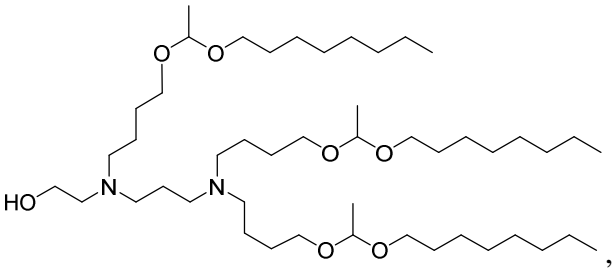
,

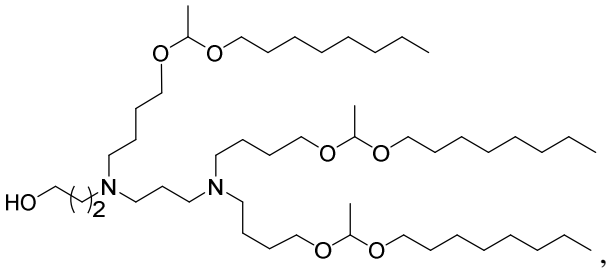
,

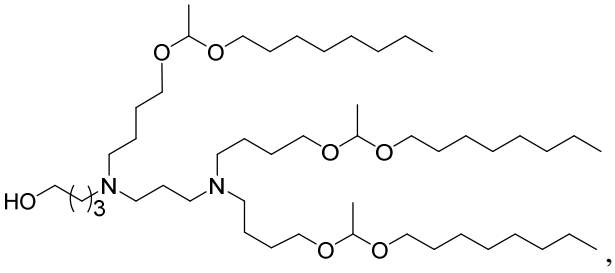

,

,

,

,

,

,

,

,

,

,

,

,

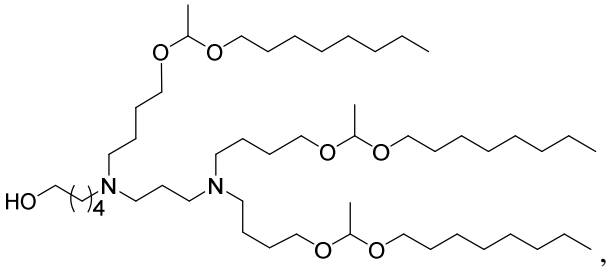
,

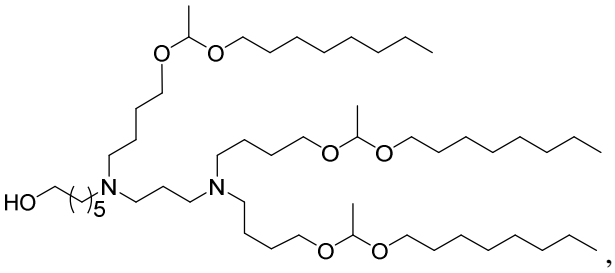
,

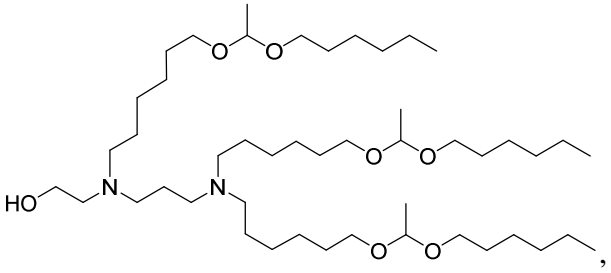


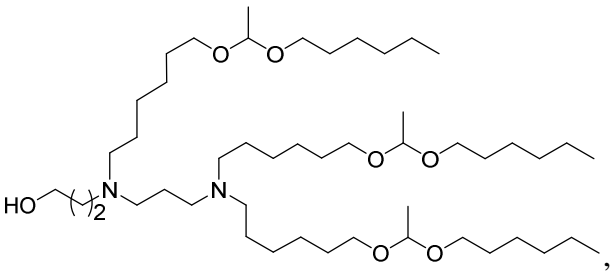


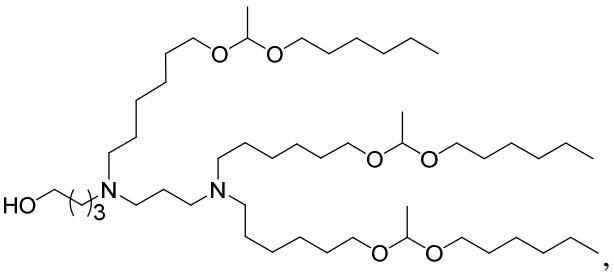


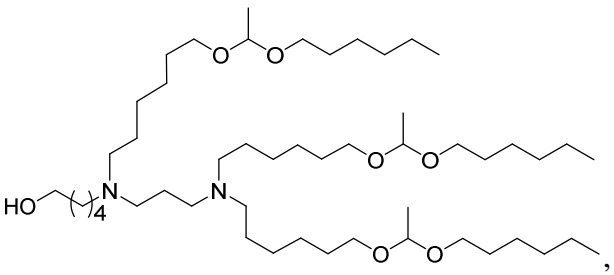


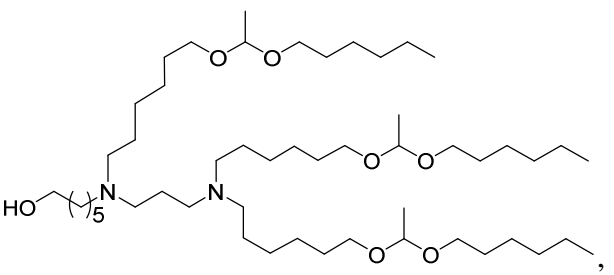


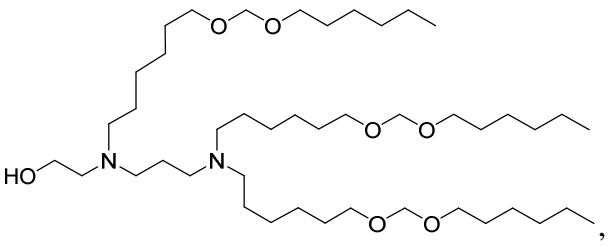


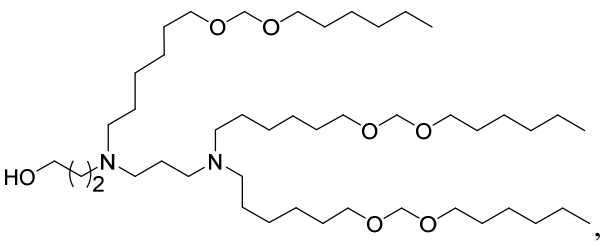


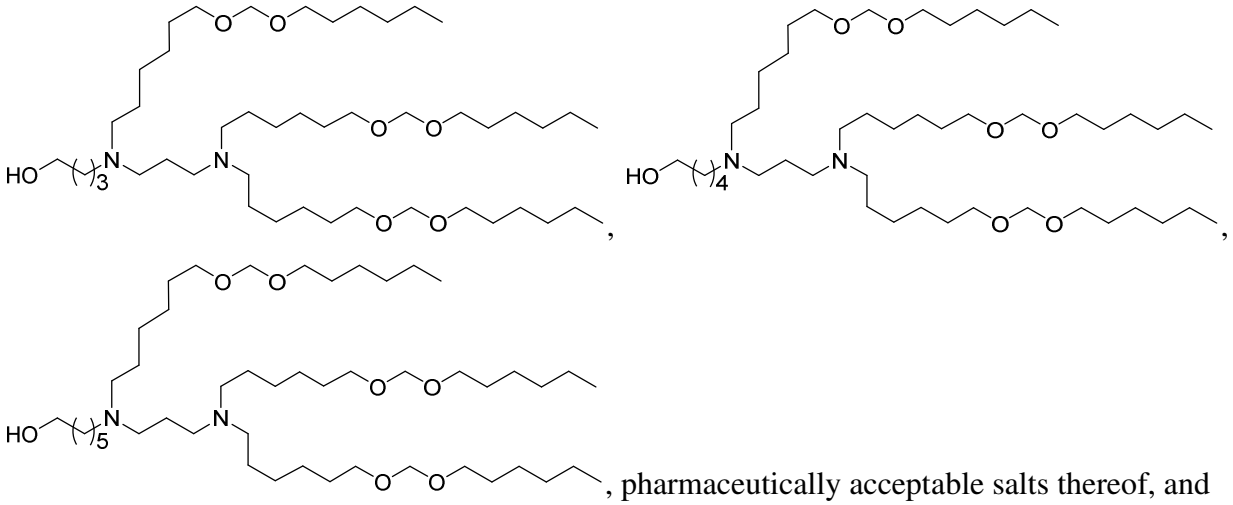






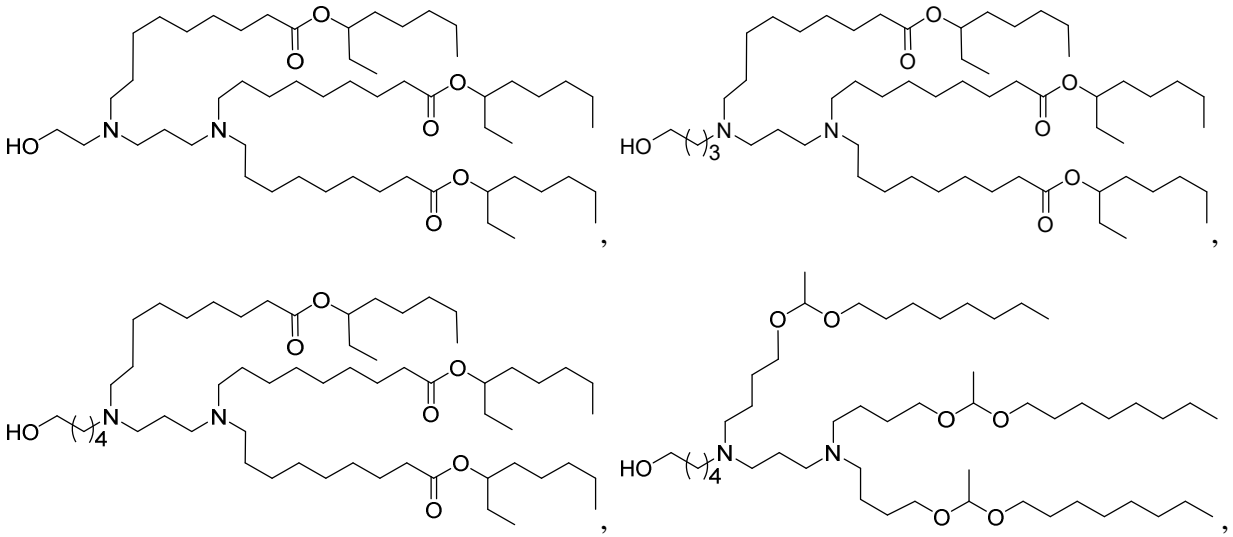






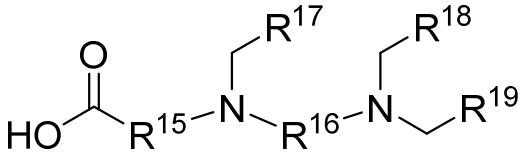
, pharmaceutically acceptable salts thereof, and combinations thereof.

7. The composition of claim 1, wherein the compound is selected from the group consisting of:



pharmaceutically acceptable salts thereof, and combinations thereof.

8. A composition comprising a compound defined by Formula II, or a pharmaceutically acceptable salt thereof:



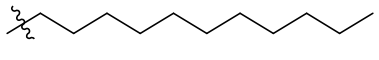
II

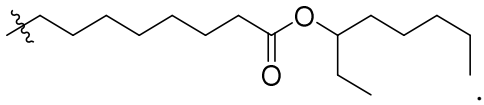
wherein

R^{15} is substituted or unsubstituted C_1-C_5 alkyl;

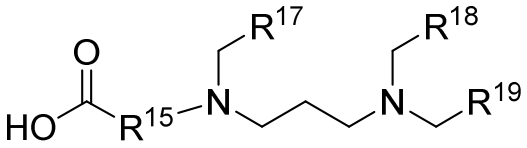
R^{16} is substituted or unsubstituted C_1-C_5 alkyl;

R^{17}, R^{18}, and R^{19} are each independently substituted or unsubstituted C_6-C_{20} alkyl;

with the proviso that when R^{15} is —C_5H_{10}— and R^{16} is —C_3H_6—, then R^{17}, R^{18}, and R^{19} are not all  ; and

with the proviso that when R^{15} is —C_5H_{10}— and R^{16} is —C_3H_6—, then R^{17}, R^{18}, and R^{19} are not all  .

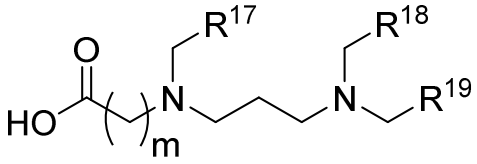
9. The composition of claim 8, wherein the compound is defined by Formula II-A:



II-A

or a pharmaceutically acceptable salt thereof.

10. The composition of claim 8, wherein the compound is defined by Formula II-B, or a pharmaceutically acceptable salt thereof:

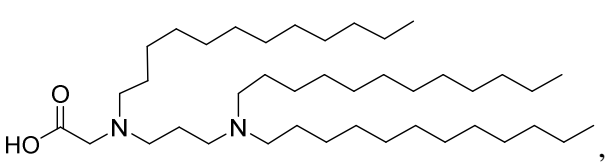
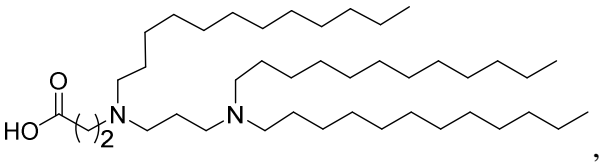
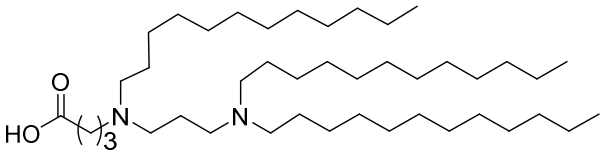
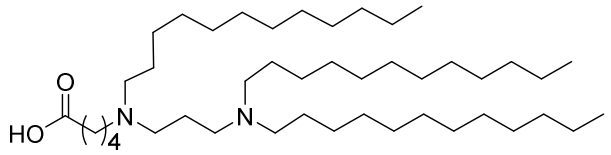
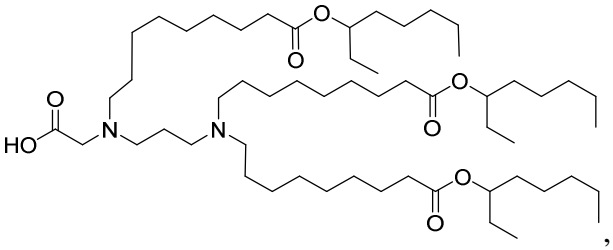
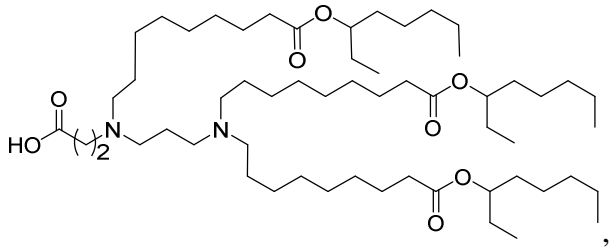
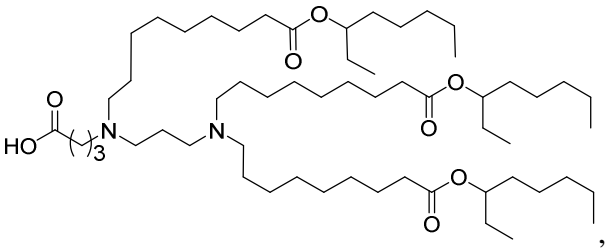
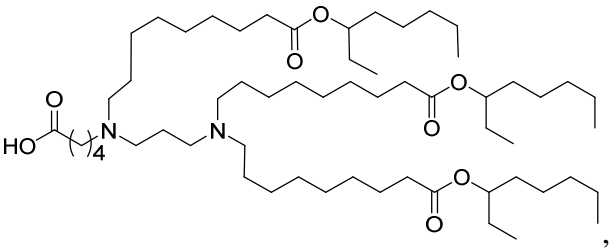
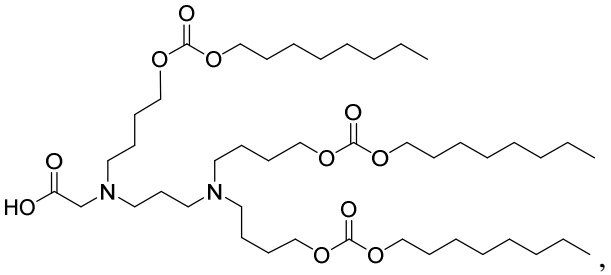
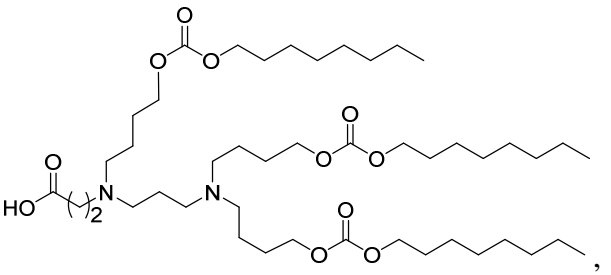
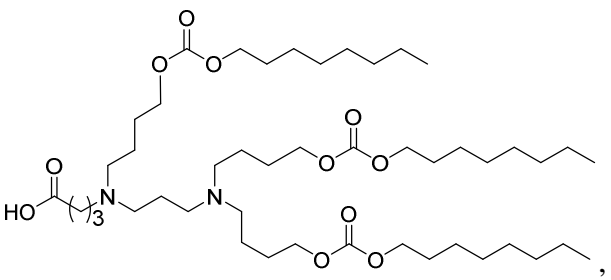
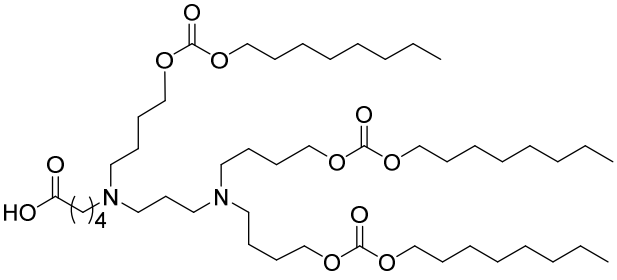


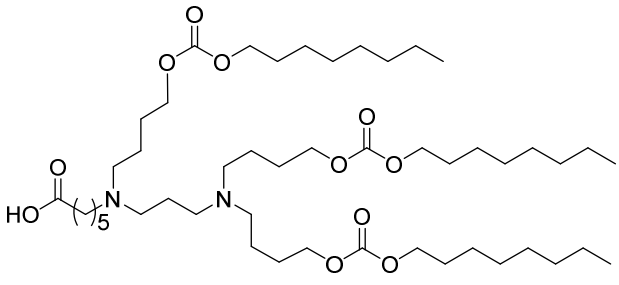
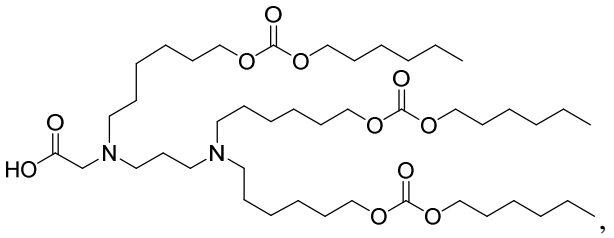
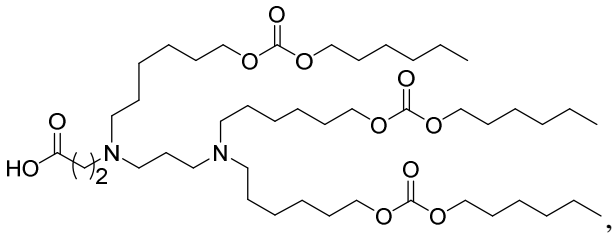
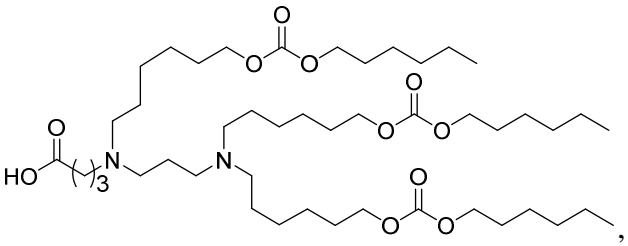
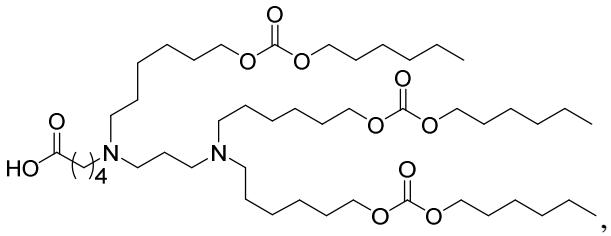
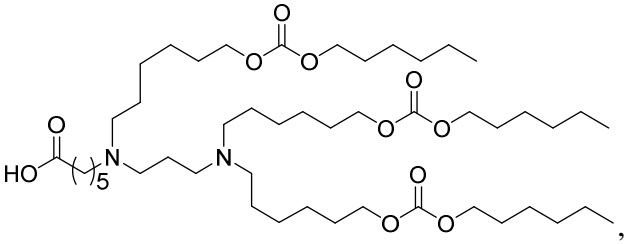
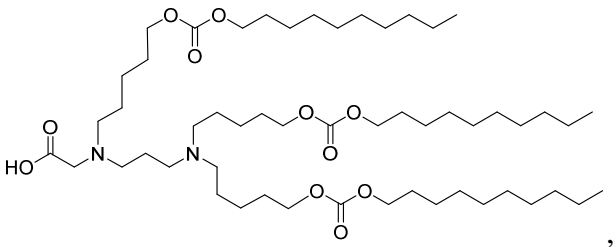
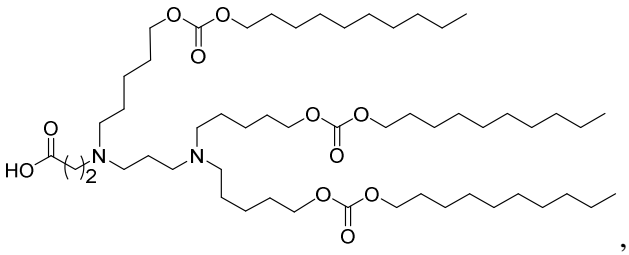
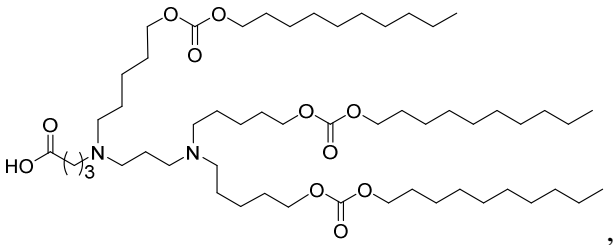
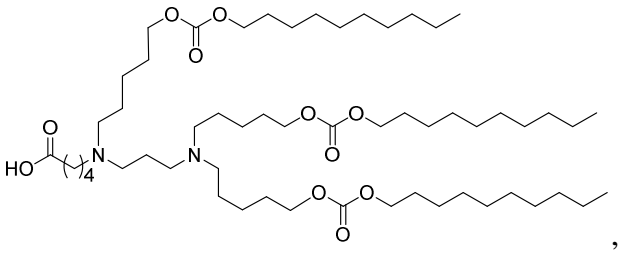
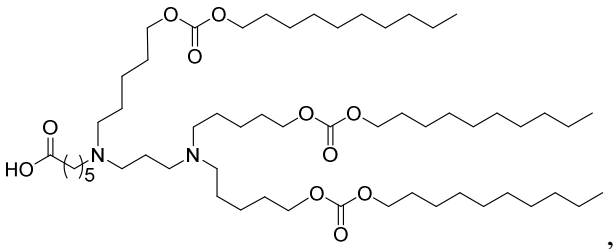
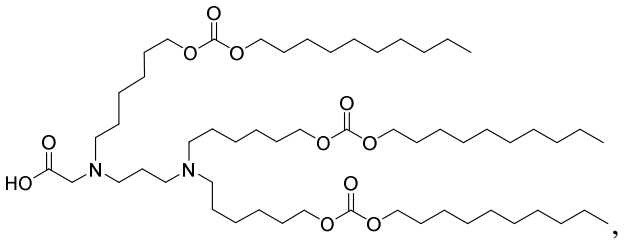
II-B

wherein m is an integer from 1 to 5.

11. The composition of claim 8, wherein R^{17}, R^{18}, and R^{19} are each independently a substituted or unsubstituted C_{10}-C_{18} alkyl.

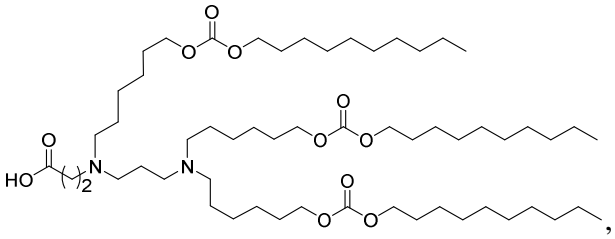
12. The composition of claim 8, wherein the compound is selected from the group consisting of:

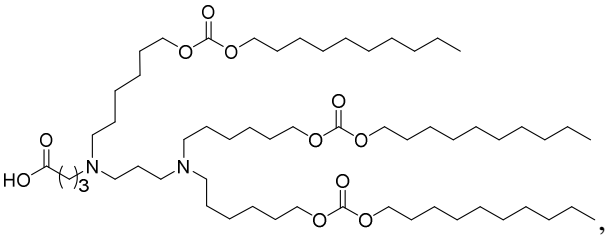

,

,

,

,

,

,

,

,

,

,

,

,

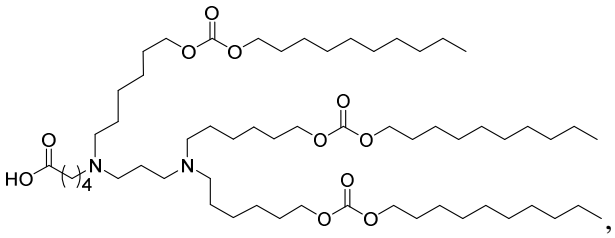

,

,

,

,

,

,

,

,

,

,

,

,

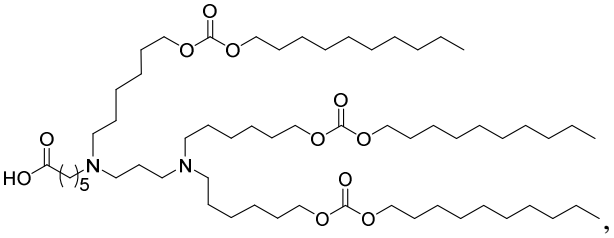
,

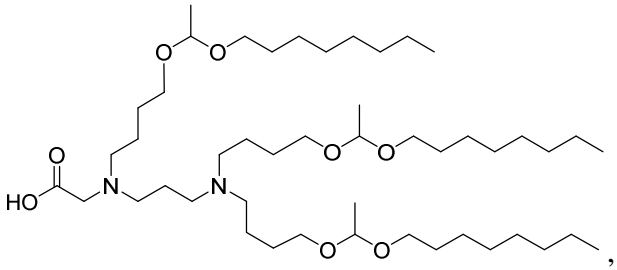
,

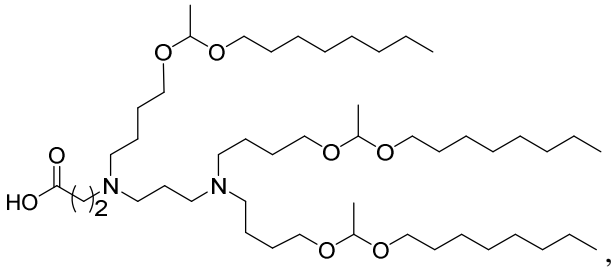


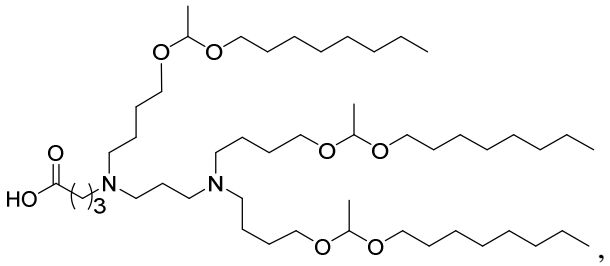


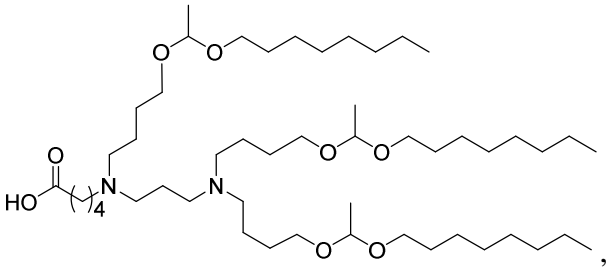


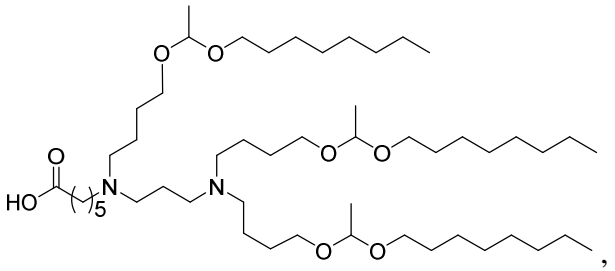


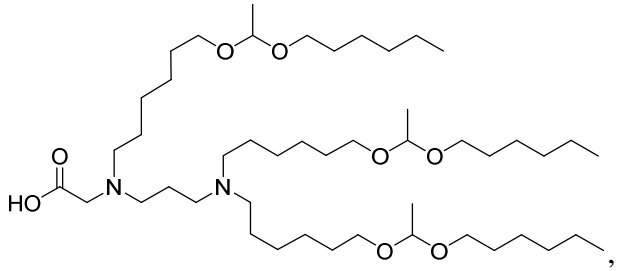


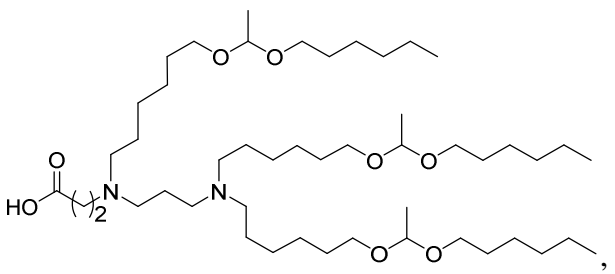


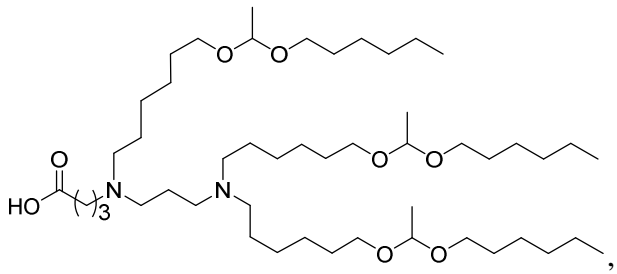


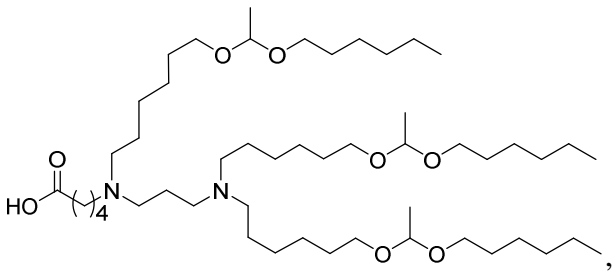
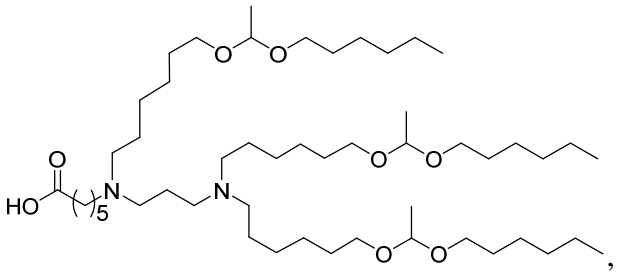
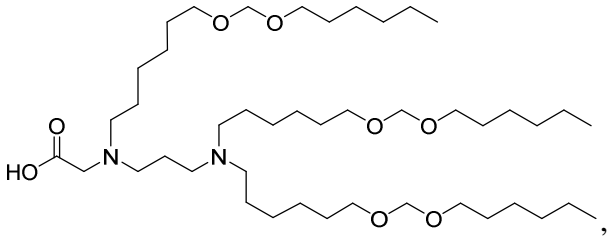
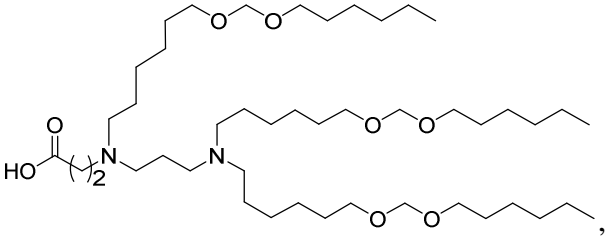
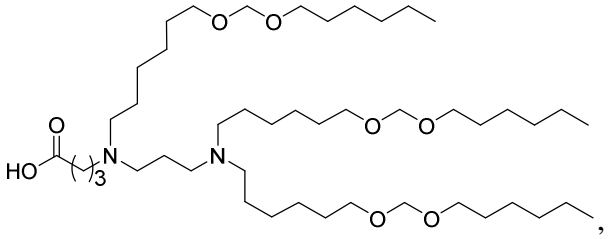
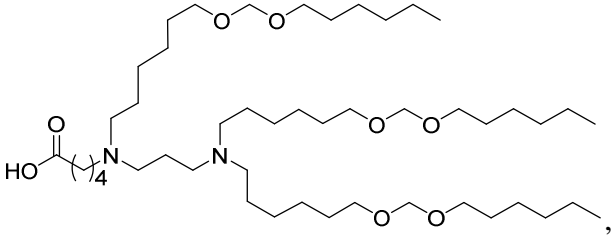
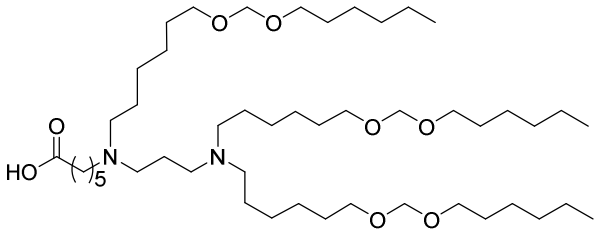




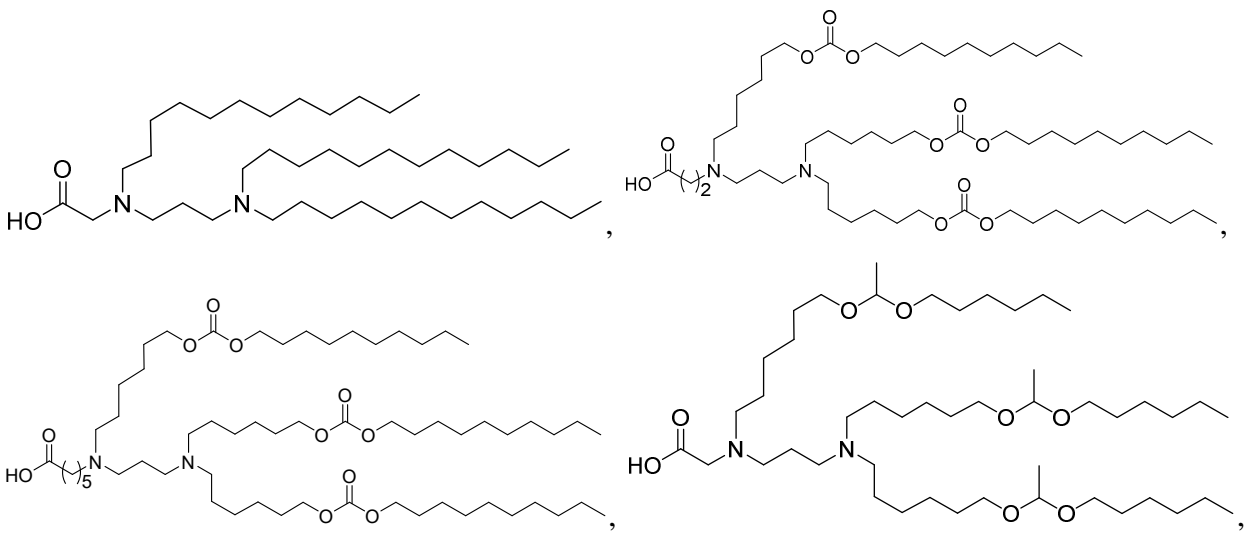






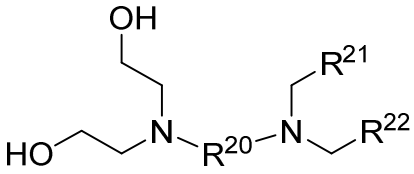

,

,

,

,

,

,

, pharmaceutically acceptable salts thereof, and combinations thereof.

13. The composition of claim 8, wherein the compound is selected from the group consisting of:



pharmaceutically acceptable salts thereof, and combinations thereof.

14. A composition comprising a compound defined by Formula III, or a pharmaceutically acceptable salt thereof:



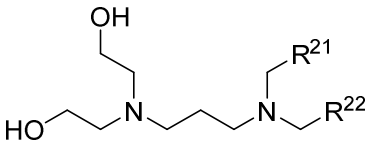
III

wherein

R^{20} is substituted or unsubstituted C_1-C_5 alkyl; and

R^{21} and R^{22} are each independently substituted or unsubstituted C_6-C_{20} alkyl.

15. The composition of claim 14, wherein the compound is defined by Formula III-A:

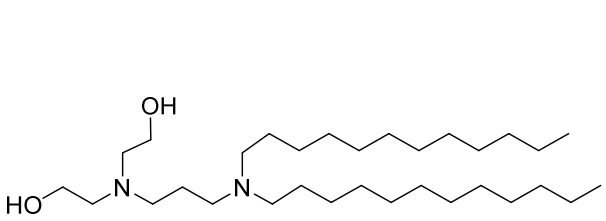
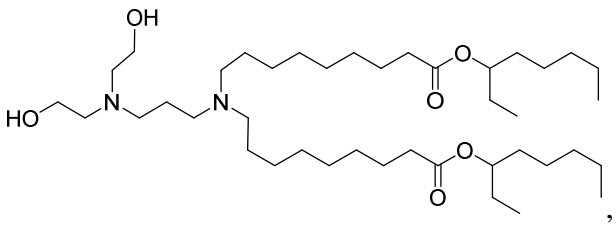
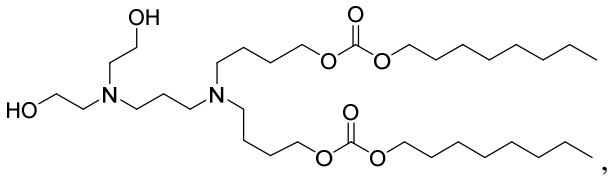
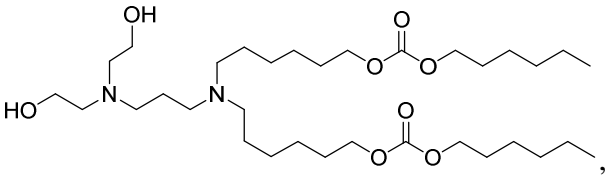
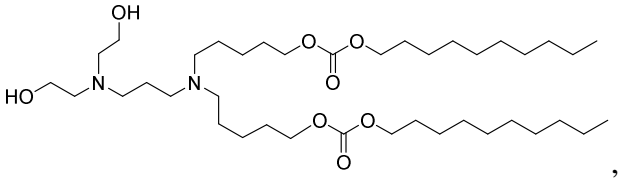
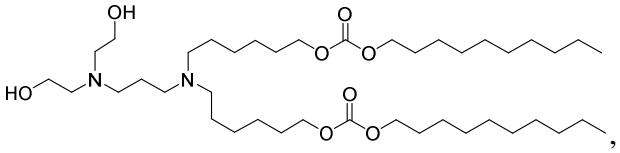
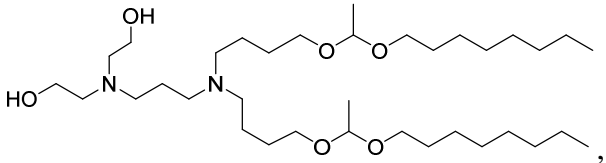
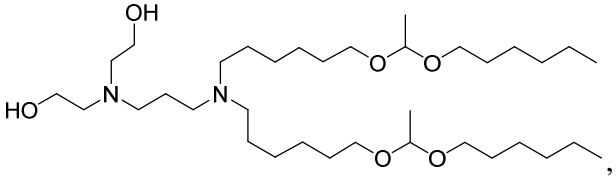
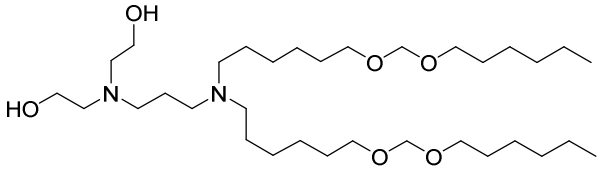


III-A

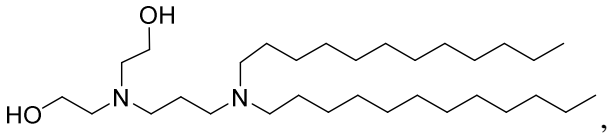
or a pharmaceutically acceptable salt thereof.

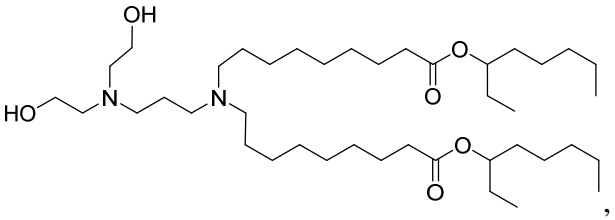
16. The composition of claim 14, wherein R^{21} and R^{22} are each independently a substituted or unsubstituted C_{10}-C_{18} alkyl.

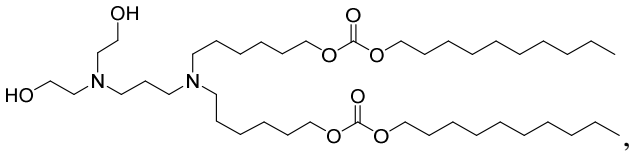
17. The composition of claim 14, wherein the compound is selected from the group consisting of:

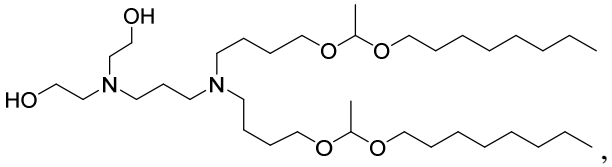

,

,

,

,

,

,

,

,

, pharmaceutically acceptable salts thereof, and combinations thereof.

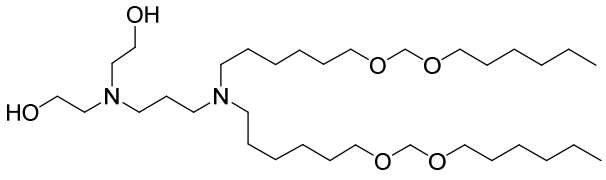
18. The composition of claim 14, wherein the compound is selected from the group consisting of:



,


,


,


,


, pharmaceutically acceptable salts thereof, and combinations thereof.

19. A lipid particle comprising the composition of claim 1.