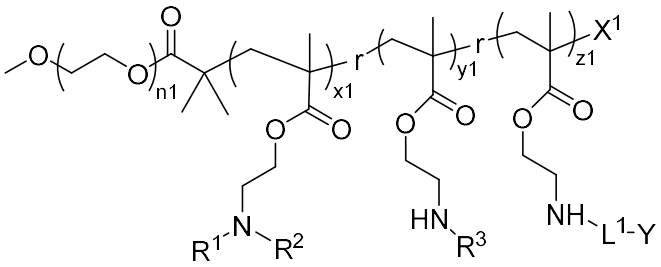
CLAIMS

1. A block copolymer having the structure of Formula (I), or a pharmaceutically acceptable salt, solvate, or hydrate thereof:



Formula (I),

wherein:

n_1 is an integer from 10-200;

x_1 is an integer from 40-300;

y_1 is an integer from 0-6;

z_1 is an integer from 1-10;

X^1 is a halogen, -OH, or -C(O)OH;

R^1 and R^2 are each independently an optionally substituted C_1-C_6 alkyl, C_3-C_{10} cycloalkyl or aryl;

or R^1 and R^2 are taken together with the corresponding nitrogen to which they are attached to form an optionally substituted 5 to 7-membered ring;

each R^3 is independently hydrogen, acyl, or ICG;

L^1 is a bond or -C(O)-, or optionally substituted C_1-C_{10} alkylene linker or PEG linker; and

Y is a therapeutic agent for the treatment of cancer, wherein the therapeutic agent is a cytokine or a fragment thereof, an engineered antibody fragment, or a small molecule having a molecular weight less than 900 Daltons.

2. The block copolymer of claim 1, wherein R^1 and R^2 are each independently an optionally substituted C_1-C_6 alkyl.

3. The block copolymer of claim 1 or 2, wherein R^1 and R^2 are each independently -CH_2CH_3, -$CH_2CH_2CH_3$, or -$CH_2CH_2CH_2CH_3$.

4. The block copolymer of any one of claims 1-3, wherein R^1 and R^2 are each -$CH_2CH_2CH_2CH_3$.

5. The block copolymer of claim 1, wherein R^1 and R^2 are taken together with the corresponding nitrogen to which they are attached to form an optionally substituted 5 to 7-membered ring.

6. The block copolymer of claim 1 or 5, wherein R^1 and R^2 taken together are -$CH_2(CH_2)_2CH_2$-, -$CH_2(CH_2)_3CH_2$-, or -$CH_2(CH_2)_4CH_2$-.
7. The block copolymer of any one of claims 1-6, wherein x_1 is an integer from 50-200, 60-160, or 90-140.
8. The block copolymer of claim 7, wherein x_1 is 90-140.
9. The block copolymer of any one of claims 1-8, wherein y_1 is an integer from 1-6, 1-5, 1-4, or 1-3.
10. The block copolymer of any one of claims 1-8, wherein y_1 is 0.
11. The block copolymer of any one of claims 1-10, wherein z_1 is an integer from 1-9, 1-8, 1-7, 1-6, 1-5, 1-4, or 1-3.
12. The block copolymer of any one of claims 1-10, wherein z_1 is an integer from 1-3.
13. The block copolymer of any one of claims 1-12, wherein n_1 is an integer from 60-150 or 100-140.
14. The block copolymer of any one of claims 1-12, wherein n_1 is 100-140.
15. The block copolymer of any one of claims 1-14, wherein X^1 is a halogen.
16. The block copolymer of claim 15, wherein X^1 is -Br.
17. The block copolymer of any one of claims 1-16, wherein each R^3 is independently acyl or ICG.
18. The block copolymer of any one of claims 1-16, wherein each R^3 is independently hydrogen.
19. The block copolymer of any one of claims 1-18, wherein L^1 is an optionally substituted C_1-C_{10} alkylene linker, optionally substituted with a maleimide residual.
20. The block copolymer of any one of claims 1-18, wherein L^1 is an optionally substituted PEG linker, optionally substituted with a maleimide residual.