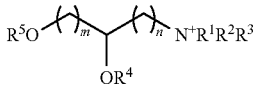
**26**. A surface-modified particle comprising a particle core and a coating adsorbed to a surface of the particle core, wherein the particle core consists of a protein active agent, the coating comprises a surfactant having formula I, and the surface-modified particle has a size from about 10 nm to about 1 μm, does not comprise polysaccharides, does not comprise colloidal silicon dioxide, and does not comprise monoacylated monoglycerides:

I



wherein n and m are 1;

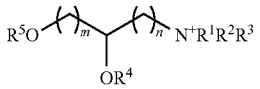
$R^1$, $R^2$, and $R^3$ are methyl; and

$R^4$ and $R^5$ are independently selected from the group consisting of cis-9-octadecenoyl and cis-9-octadecenyl.

**27**. A method of enhancing cellular uptake of an active agent, said method comprising:

contacting cells with surface-modified particles under conditions sufficient to enhance cellular uptake of the surface-modified particles, said particles comprising a particle core and a coating adsorbed to a surface of the particle core, wherein the particle core comprises a small molecule active agents, a peptide active agent or a protein active agent, the coating comprises a surfactant having formula I, and the surface-modified particle has a size from about 10 nm to about 1 μm, does not comprise polysaccharides, does not comprise colloidal silicon dioxide, and does not comprise monoacylated monoglycerides:

I



wherein n and m are 1;

$R^1$, $R^2$, and $R^3$ are methyl; and

$R^4$ and $R^5$ are independently selected from the group consisting of cis-9-octadecenoyl and cis-9-octadecenyl.

**28**. The method of claim **27**, wherein the cells are phagocytic cells.

**29**. The method of claim **27**, wherein said contacting is carried out ex vivo.

**30**. The method of claim **27**, wherein said contacting is carried out in vivo.

**31**. The method of claim **27**, wherein the cells are phagocytic cells selected from the group consisting of macrophages, monocytes, granulocytes, agranulocytes, neutrophils, and combinations thereof.

**32**. The method of claim **27**, wherein said contacting is effected by administering to a subject an amount of said surface modified particles effective to treat infectious diseases or disorders, inflammatory diseases or disorders, neurodegenerative diseases or disorders, or proliferative diseases or disorders.

**33**. The method of claim **32**, wherein said administering is performed intravenously, intraarterially, intramuscularly, subcutaneously, intradermally, intraarticularly, intrathecally, epidurally, intracerebrally, buccally, rectally, topically, transdermally, orally, intranasally, via the pulmonary route, intraperitoneally, intraophthalmically, or by a combination thereof.

**34**. The method of claim **32**, wherein the subject has a neurodegenerative disease or disorder selected from the group consisting of Parkinson's disease, Alzheimer's disease, multiple sclerosis, encephalomyelitis, encephalitis, Huntington's disease, amyotrophic lateral sclerosis, frontotemporal dementia, prion diseases, Creutzfeldt-Jakob disease, and adrenoleukodystrophy.

**35**. The method of claim **32**, wherein the subject has an inflammatory disease or disorder selected from the group consisting of rheumatoid arthritis, Graves' disease, myasthenia gravis, thyroiditis, diabetes, inflammatory bowel disease, autoimmune oophoritis, systemic lupus erythematosus, and Sjogren's syndrome.

**36**. The method of claim **32**, wherein the subject has a proliferative disease or disorder selected from the group consisting of colon cancer, kidney cancer, non small cell lung cancer, small cell lung cancer, head and neck cancer, cancers of the peritoneal cavity, cervical cancer, breast cancer, prostate cancer, brain cancer, sarcoma, melanoma, leukemia, acute lymphocytic leukemia, acute myelogenous leukemia, chronic lymphocytic leukemia, chronic myelogenous leukemia, Hodgkin lymphoma, non-Hodgkin lymphoma, myeloma, and glioblastoma.

**37**. The method of claim **32**, wherein the subject has a proliferative disease or disorder; and $R^4$ and $R^5$ are cis-9-octadecenoyl.

**38**. The method of claim **32**, wherein the subject has a proliferative disease or disorder; and $R^4$ and $R^5$ are cis-9-octadecenyl.

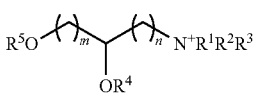
**39**. The method of claim **27**, wherein the particle core consists of a peptide active agent.

**40**. The method of claim **27**, wherein the particle core consists of a protein active agent.

**41**. The method of claim **27**, wherein the surface-modified particle includes at least 75% (w/w) active agent.

**42**. A method for treating a subject having an infectious disease or disorder, an inflammatory disease or disorder, a neurodegenerative disease or disorder, or a proliferative disease or disorder comprising administering to said subject a plurality of surface-modified particles into a body cavity having a site of disease or inflammation, said surface-modified particles comprising a particle core and a coating adsorbed to a surface of the particle core, wherein the particle core comprises a small molecule active agents, a peptide active agent or a protein active agent, the coating comprises a surfactant of formula I, the surface-modified particle has a size from about 10 nm to about 1 μm, does not comprise polysaccharides, does not comprise colloidal silicon dioxide, and does not comprise monoacylated monoglycerides, and said administration is effective in alleviating, treating, and/or preventing symptoms or pathologies associated with said disease or disorder:

I



wherein n and m are 1;

$R^1$, $R^2$, and $R^3$ are methyl; and

$R^4$ and $R^5$ are independently selected from the group consisting of cis-9-octadecenoyl and cis-9-octadecenyl.