CLAIMS

1. A stable intratumor injectable formulation of a water insoluble chemotherapeutic agent, consisting of a therapeutically effective amount of a chemotherapeutic agent selected from a taxane, a podophyllotoxin derivative, a camptothecin derivative, and mixtures thereof in a pharmaceutically acceptable biocompatible carrier for injection comprising a medium chain triglyceride or a pharmaceutically acceptable vegetable oil, and an optional solvent which when included consists of a non-aqueous solvent, wherein the injectable formulation is stable and suitable for intratumor administration as a solution and is a colorless and transparent non-aqueous solution that does not include cholesterol, a phospholipid, a protein, or surfactant.

2. The intratumor injection formulation of claim 1, wherein the taxane is paclitaxel.

3. The intratumor injection formulation of claim 1, wherein the chemotherapeutic agent is paclitaxel and the pharmaceutically acceptable biocompatible carrier for injection is a medium chain triglyceride is an esterification product of an acid selected from the group consisting of caproic acid, caprylic acid, capric acid, lauric acid, and mixtures thereof, further comprising a hydroalcoholic solvent.

4. The intratumor injectable formulation of claim 1, wherein the chemotherapeutic agent is hydroxycamptothecin and the pharmaceutically acceptable biocompatible carrier for injection comprises a medium chain triglyceride.

5. The intratumor injection formulation of claim 1, wherein the taxane is doxetaxel.

6. The intratumor injectable formulation of claim 1, wherein the podophyllotoxin derivative is selected from the group consisting of etoposide, teniposide, and mixtures thereof.

7. The intratumor injectable formulation of claim 1, wherein the camptothecin derivative is hydroxycamptothecin.

8. An intratumor injectable formulation kit, comprising a first vial containing a powdered water insoluble chemotherapeutic agent selected from a taxane, a podophyllotoxin derivative, a camptothecin derivative, and mixtures thereof, and a second vial containing the pharmaceutically acceptable excipients needed to deliver the chemotherapeutic agent to a tumor, the pharmaceutically acceptable excipients consisting of a pharmaceutically acceptable biocompatible carrier comprising a medium chain triglyceride or a pharmaceutically acceptable vegetable oil, and an optional solvent which when included consists of a non-aqueous solvent, wherein the injectable formulation is suitable for intratumor administration as a solution that is stable, colorless,

transparent and non-aqueous and does not include cholesterol, a phospholipid, a protein, or surfactant.

9. The intratumor injectable formulation of claim 1, which further comprises a buffer to provide a pH from about 3.5 to about 4.5.

10. The intratumor injectable formulation of claim 9, wherein the buffer comprises citric acid.

11. The formulation of claim 1, wherein the injectable solution is capable of being passed through a 0.22-micron filter.

12. The formulation of claim 9, wherein the chemotherapeutic agent is paclitaxel, the pharmaceutically acceptable biocompatible carrier for injection is a medium chain triglyceride, and the solvent is dehydrated ethanol.

13. The intratumor injectable formulation of claim 8, which further comprises a buffer to provide a pH from about 3.5 to about 4.5.