What is claimed is:

1. A method for treating cancer in a subject having a BRCA2 mutation that impairs BRCA2 activity, comprising administering to the subject SNS-595 in a dose of about 10-100 mg/m^2.

2. The method of claim 1, wherein the cancer is breast, ovarian, prostate, or pancreatic cancer.

3. The method of claim 2, wherein the cancer is breast cancer.

4. The method of claim 1, wherein the subject has a BRCA2 mutation selected from 999del5, 6174delT, 8803delC, 4486delG, 5445del5, 2024del5, 763insAT, 763insAT, 983delACAG, A3058T, 3758delACAG, 3908delTG, 4706delAAAG, 5804delTTAA, C6137A, 6174delT, 6305insA, 9132delC, del2352ins12, dup9700, and del1518.

5. The method of any of claims 1-4, wherein SNS-595 is administered in a dose of about 40-90 mg/m^2.

6. The method of any of claims 1-4, wherein SNS-595 is administered in a dose of about 30-60 mg/m^2.

7. The method of any of claims 1-4, comprising i) administering a dose of about 40-90 mg/m^2 of SNS-595 to a subject; ii) waiting a period of at least six days where the subject is not administered any SNS-595; and iii) administering another dose of about 40-90 mg/m^2 of SNS-595 to the subject.

8. The method of any of claims 1-4, wherein the dose is about 10 mg/m^2, about 15 mg/m^2, about 18 mg/m^2, about 21 mg/m^2, 24 mg/m^2, about 30 mg/m^2, about 35 mg/m^2, 40 mg/m^2, about 45 mg/m^2, about 48 mg/m^2, about 50 mg/m^2, about 60 mg/m^2, about 72 mg/m^2, about 75 mg/m^2, about 80 mg/m^2, about 85 mg/m^2, about 90 mg/m^2, or about 100 mg/m^2.

9. The method of any of claims 1-8, wherein the dose of SNS-595 is administered once in three weeks.

10. The method of any of claims 1-8, wherein the dose of SNS-595 is administered once in four weeks.

11. The method of any of claims 1-8, wherein SNS-595 is administered in a dose of about 48 mg/m^2 once every three weeks.

12. The method of any of claims 1-8, wherein SNS-595 is administered in a dose of about 60 mg/m^2 once every four weeks.

13. The method of any of claims 1-5, wherein SNS-595 is administered in a dose of about 75 mg/m^2 once every four weeks.

14. The method of any of claims 1-13, wherein SNS-595 is administered as an IV injection.

15. The method of any of claims 1-14 further comprising administering a therapeutically effective dose of at least one other therapeutic agent.

16. The method of claim 15, wherein the at least one other therapeutic agent is selected from alkylating agents, antimetabolites, aurora kinase inhibitors, purine antagonists, pyrimidine antagonists, spindle poisons, mitotic inhibitors, topoisomerase II inhibitors and poisons, topoisomerase I inhibitors, anti-neoplastic antibiotics, nitrosoureas, inorganic ion complexes, enzymes, hormones and hormone analogs, EGFR inhibitors, antibodies and antibody derivatives, IMIDs, HDAC inhibitors, Bcl-2 inhibitors, VEGF-stimulated tyrosine kinase inhibitors, VEGFR inhibitors, proteasome inhibitors, cyclin-dependent kinase inhibitors, PARP inhibitors, aromatase inhibitors, and dexamethasone.

17. The method of claim 15, wherein the therapeutic agent is a support care agent.

18. A method of identifying a cancer subject suitable for treatment with SNS-595 comprising: (a) obtaining a biological sample from a candidate having cancer; (b) screening the biological sample for a BRCA2 mutation; and (c) if the candidate has a mutation that impairs activity of BRCA2, identifying the candidate as a cancer subject suitable for treatment with SNS-595.

19. The method of claim 18 further comprising a step of treating the cancer subject with SNS-595.

20. A method of identifying one or more cancer subjects suitable for treatment with SNS-595 comprising: (a) obtaining biological samples from a plurality of candidates having cancer; (b) screening the biological samples for BRCA2 mutations; and (c) identifying each candidate having a BRCA2 mutation as a cancer subject suitable for treatment with SNS-595.

21. The method of any of claims 18-20, wherein the biological sample comprises a body fluid sample or a tissue sample.

22. A method comprising contacting a cancer cell having a mutation that impairs BRCA2 activity with an amount of SNS-595 that is effective to induce double-strand DNA breaks in the cell.

23. A method for treating cancer in a subject having reduced BRCA2 activity, comprising administering to the subject SNS-595 in a dose of about 10-100 mg/m^2.

What is claimed is:

1. Use of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid in the manufacture of a medicament for treating cancer in a subject having a BRCA2 mutation that impairs BRCA2 activity.

2. The use of claim 1, wherein the cancer is breast, ovarian, prostate, or pancreatic cancer.

3. The use of claim 2, wherein the cancer is breast cancer.

4. The use of claim 1, wherein the subject has a BRCA2 mutation selected from 999del5, 6174delT, 8803delC, 4486delG, 5445del5, 2024del5, 763insAT, 763insAT, 983delACAG, A3058T, 3758delACAG, 3908delTG, 4706delAAAG, 5804delTTAA, C6137A, 6174delT, 6305insA, 9132delC, del2352insl2, dup9700, and dell518.

5. The use of any of claims 1-4, wherein the medicament is an IV injection.

6. A method of identifying a cancer subject suitable for treatment with (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid comprising: (a) screening a biological sample obtained from a candidate having cancer for a BRCA2 mutation; and (b) if the candidate has a mutation that impairs activity of BRCA2, identifying the candidate as a cancer subject suitable for treatment with (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

7. The method of claim 6 further comprising a step of treating the cancer subject with (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

8. A method of identifying one or more cancer subjects suitable for treatment with (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid comprising: (a) screening the biological samples obtained from a plurality of candidates having cancer for BRCA2 mutations; and (b) identifying each candidate having a BRCA2 mutation as a cancer subject suitable for treatment with (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

9. The method of any of claims 6-8, wherein the biological sample comprises a body fluid sample or a tissue sample.

10. An *in vitro* method comprising contacting a cancer cell having a mutation that impairs BRCA2 activity with an amount of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid that is effective to induce double-strand DNA breaks in the cell.

11. Use of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid in the manufacture of a medicament for treating cancer in a subject having reduced BRCA2 activity.

12. Use of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid in the manufacture of a medicament for treating cancer in a subject having a BRCA2 mutation that impairs BRCA2 activity, wherein the medicament comprises about 1-1000 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

13. The use of claim 12, wherein the medicament comprises about 1-500 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

14. The use of claim 12, wherein the medicament comprises about 1-300 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

15. The use of claim 12, wherein the medicament comprises about 1-100 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

16. The use of claim 12, wherein the medicament comprises about 1-50 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

17. The use of claim 12, wherein the medicament comprises about 10, 15, 18, 21, 24, 25, 30, 40, 48, 50, 60, 70, 72, 75, 80, 90, 100, 150, 200, 300 or 500 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

18. Use of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid in the manufacture of a medicament for treating cancer in a subject having reduced BRCA2 activity, wherein the medicament comprises about 1-1000 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

19. The use of claim 18, wherein the medicament comprises about 1-500 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

20. The use of claim 18, wherein the medicament comprises about 1-300 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

21. The use of claim 18, wherein the medicament comprises about 1-100 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

22. The use of claim 18, wherein the medicament comprises about 1-50 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.

23. The use of claim 18, wherein the medicament comprises about 10, 15, 18, 21, 24, 25, 30, 40, 48, 50, 60, 70, 72, 75, 80, 90, 100, 150, 200, 300 or 500 mg of (+)-1,4-dihydro-7-[(3S,4S)-3-methoxy-4-(methylamino)-1-pyrrolidinyl]-4-oxo-1-(2-thiazolyl)-1,8-naphthyridine-3-carboxylic acid.