

5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-imidazol-4-yl]-3-(2,2-dimethyl-propyl)-3H-imidazo[4,5-b]pyridin-2-ylamine

Furthermore, since the combination of carboplatin and gemcitabine are also currently used for the treatment of ovarian cancer, and it is also reported in the literature that comparable efficacy is seen in the treatment of ovarian cancer between carboplatin compared to cisplatin (however with less toxicity observed with carboplatin), the current inventors conclude that the triple combination of gemcitabine, carboplatin, and 5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-imidazol-4-yl]-3-(2,2-dimethyl-propyl)-3H-imidazo[4,5-b]pyridin-2-ylamine may be more efficacious than a combination of gemcitabine and carboplatin along with the potential benefit of reduced toxicity by administering carboplatin instead of cisplatin.

**Summary**

In an aspect, there is provided 5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-imidazol-4-yl]-3-(2,2-dimethyl-propyl)-3H-imidazo[4,5-b]pyridin-2-ylamine, or a pharmaceutically acceptable salt thereof, for use in combination therapy with gemcitabine and a platinum agent selected from cisplatin and carboplatin in the treatment of ovarian cancer.

**Detailed Description**

The present invention relates to a method of treating ovarian cancer in a mammal comprising administering a combination of gemcitabine, a platinum agent selected from the group consisting of cisplatin and carboplatin, and 5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-imidazol-4-yl]-3-(2,2-dimethyl-propyl)-3H-imidazo[4,5-b]pyridin-2-ylamine or a pharmaceutically acceptable salt. In a further embodiment, administration is on the same day. In another further embodiment, the administration is during a 21-day treatment cycle. In another further embodiment, gemcitabine and the platinum agent are administered up to 2 days after 5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-imidazol-4-yl]-3-(2,2-dimethyl-propyl)-3H-imidazo[4,5-b]pyridin-2-ylamine or a pharmaceutically acceptable salt is administered and gemcitabine is administered again up to 7 days later. In another further embodiment, the pharmaceutically acceptable salt is the dimethanesulfonate salt.

The present invention also relates to a method of treating ovarian cancer in a mammal undergoing concurrent therapy with 5-[2-tert-butyl-5-(4-fluoro-phenyl)-1H-