



Gemcitabine: An Anti-Tumor Drug used in Chemotherapy

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DESCRIPTION

Gemcitabine is a chemotherapeutic drug with a brand name called "Gemzar". It treats cancers such as testicular cancer, breast cancer, ovarian cancer, non-small cell lung cancer, pancreatic cancer, and bladder cancer. Intravenous infusion is active against neoplastic growth and up regulates interferon signaling, thus inhibiting the replication of hepevirus A, the causative agent of hepatitis E. The following side effects are common (happening in extra than 30%) for patients who are taking Gemcitabine: Flu-like symptoms (muscle pain, fever, headache, chills, fatigue), Fever (inside 6-12 hours of first dose), Fatigue, Nausea (mild), Vomiting, Poor appetite.

These are less common side effects of receiving gemcitabine (occurring in 10.29% of patients), such as diarrhoea, Weaknesses, Hair loss, Mouth sore, Difficulty in sleeping, Shortness of breath. Gemzar in combination with carboplatin is indicated for the treatment of patients with advanced ovarian cancer who have relapsed at least 6 months after completion of platinum-based treatment. Gemzar in combination with paclitaxel is indicated for first-line treatment of patients with metastatic breast cancer who have previously failed adjuvant chemotherapy with anthracyclines, unless anthracyclines are clinically contraindicated. The combination of Gemzar and cisplatin is indicated for first-line treatment of patients with unrespectable, locally advanced (stage IIIA or IIIB) or metastatic (stage IV) Non-Small Cell Lung Cancer (NSCLC). Gemzar can be locally advanced (unrespectable stage II or stage III) or Metastatic (stage IV) adenocarcinoma of the pancreas.

Gemcitabine is used with various chemotherapy drugs in the treatment of some solid tumors. Cisplatin is one of the drugs most commonly used in combination with gemcitabine, and studies have shown synergistic interactions between the two drugs. This synergistic effect is believed to be primarily due to increased formation of platinum-DNA adducts. The synergistic effect of gemcitabine and etoposide has also been demonstrated in human ovarian and lung cancer cell lines. Recent data indicate

that the interaction between gemcitabine and trastuzumab is concentration dependent. At low gemcitabine concentrations, the combination was synergistic, whereas at high concentrations, the combination was antagonistic.

Gemcitabine injection is used in combination with other medicines (such as carboplatin) to treat patients with advanced ovarian cancer that has recurred at least 6 months after treatment with other cancer drugs. Gemcitabine injections are used with other drugs (such as paclitaxel) to treat metastatic (diffusion) breast cancer in patients receiving other treatments (such as anthracyclines). It is also used in combination with other medicines (such as cisplatin) to treat advanced or non-small cell lung cancer that cannot be treated with surgery. But it is possible to use two different drugs together. For Measles Virus Vaccine, Mumps Virus Vaccine, Rotavirus Vaccine, Rubella Virus Vaccine, Varicella Virus Vaccine, Shingles Virus Vaccine. Using this medicine with any of the following medicines is usually not recommended, but may be required in some cases. If both medicines are prescribed together, doctor may change the dose or how often a person can use one or both of the medicines.

Do not use certain medicines before or after meals or before or after eating certain types of foods as interactions can occur. Taking certain drugs with alcohol or tobacco can also cause interactions. The presence of other medical problems may affect the use of this medicine. Be sure to consult doctor if a person has any other medical conditions, especially chickenpox (including recent exposure) or shingles. It may increase the risk of the disease spreading to other parts of the body. Gemcitabine may reduce the body's ability to fight infections. By slowly removing the drug from a person's body, can increase its effectiveness. Taking this medicine during pregnancy may harm to unborn baby. It can also lead to birth defects if a man has a birth defect when his sexual partner becomes pregnant. A person should use effective contraception while taking this medicine and for at least 6 months after last dose. Male patients with a female partner should use effective contraception while taking this medicine and for at least 3 months after the last dose.

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