For the use of a Registered Medical Practitioner or a Hospital or a Laboratory only

GEMITRATE

(Gemcitabine for Injection I.P.) (Lyophilised)

COMPOSITION

GEMITRATE 200

Each vial contains:
Gemcitabine Hydrochloride I.P. equivalent to Gemcitabine 200 mg

GEMITRATE 1000

Each vial contains:
Gemcitabine Hydrochloride I.P. equivalent to Gemcitabine 1gm

GEMITRATE 1400

Each vial contains:
Gemcitabine Hydrochloride I.P. equivalent to Gemcitabine 1.4g

DESCRIPTION

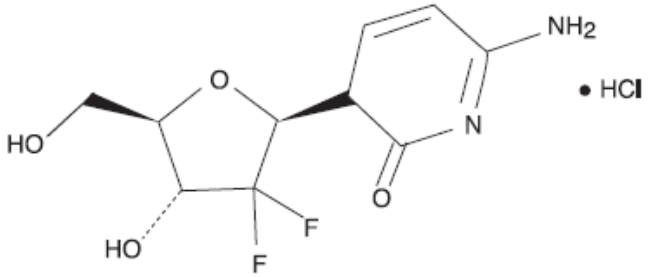
Gemcitabine is a nucleoside metabolic inhibitor that exhibits antitumor activity. Gemcitabine HCl is a white to off-white solid. It is soluble in water, slightly soluble in methanol, and practically insoluble in alcohal and polar organic solvents.

Empirical formula : $C_9H_{11}F_2N_3O_4 \bullet HCl$.

Chemical Name: 2´-deoxy-2´,2´-difluorocytidine monohydrochloride (β-isomer).

Molecular Weight: 299.66.

Structural Formula:



CLINICAL PHARMACOLOGY

Pharmacodynamic

Cytotoxic Activity in Cell Culture Models: Gemcitabine exhibits significant cytotoxicity activity against a variety of cultured murine and human tumour cells. It exhibits cell phase specificity, primarily killing cells undergoing DNA synthesis (S-phase) and under certain conditions blocking the progression of cells through the G1/S-phase boundary. In vitro the cytotoxic action of gemcitabine is both concentration and time dependent.

Antitumour Activity in Preclinical Models: In animal tumour models, the antitumour activity of gemcitabine is schedule dependent. When gemcitabine is administered daily, high animal mortality but minimal antitumoural activity is seen. If, however, gemcitabine is given every third or fourth day, it can be administered in non-lethal doses with substantial antitumoural activity against a broad spectrum of mouse tumours.

Cellular Metabolism and Mechanisms of Action: Gemcitabine (dFdC), which is a pyrimidine antimetabolite, is metabolised intracellularly by nucleoside kinase to the active diphosphate (dFdCDP) and triphosphate (dFdCTP) nucleosides. The cytotoxic action of gemcitabine is due to inhibition of DNA synthesis by two actions of dFdCDP and dFdCTP. First, dFdCDP inhibits ribonucleotide reductase, which is uniquely responsible for catalysing the reactions that generate the deoxynucleoside triphosphates (dCTP) for DNA synthesis. Inhibition of this enzyme by dFdCDP causes a reduction in the concentrations of deoxynucleosides in general, and especially in that of dCTP. Second, dFdCTP competes with dCTP for incorporation into DNA (self-potentiation). Likewise, a small amount of gemcitabine may also be incorporated into RNA. Thus, the reduction in the intracellular concentration of dCTP potentiates the incorporation of dFdCTP into DNA. DNA polymerase epsilon is essentially unable to remove gemcitabine and repair the growing DNA strands. After gemcitabine is incorporated into DNA, one additional nucleotide is added to the growing DNA strands. After this addition there is essentially a complete inhibition in further DNA synthesis (masked chain termination). After incorporation into DNA, gemcitabine then appears to induce the programmed cellular death process known as apoptosis.

Pharmacokinetics

After intravenous doses gemcitabine is rapidly cleared from the blood and metabolised by cytidine deaminase in the liver, kidney, blood, and other tissues. Clearance is about 25% lower in women than in men. Almost the entire dose is excreted in urine as 2′-deoxy-2′, 2′ difluorouridine (dFdU), only about 1% being found in the faeces. Intracellular metabolism produces mono-, di-, and triphosphate metabolites, the latter two active. The half-life of gemcitabine ranges from 42 to 94 minutes depending on age and gender. The intracellular halflife of the triphosphate is stated to range from 0.7 to 12 hours. Clearance of gemcitabine was affected by age and gender. The lower clearance in women and the elderly results in higher concentrations of gemcitabine for any given dose. Differences in either clearance or volume of distribution based on patient characteristics or the duration of infusion result in changes in half-life and plasma concentrations. Table 1 shows plasma clearance and half-life of gemcitabine following short infusions for typical patients by age and gender. Gemcitabine half-life for short infusions ranged from 42 to 94 minutes, and the value for long infusions varied from 245 to 638 minutes, depending on age and gender, reflecting a greatly increased volume of distribution with longer infusions.

Table 1: Gemcitabine Clearance and Half-Life for the "Typical" Patient

Age	Clearance Men(L/hr/m2)	Clearance Women(L/hr/m2)	Half–Life a Men (min)	Half-Life a Women (min)
29	92.2	69.4	42	49
45	75.7	57.0	48	57
65	55.1	41.5	61	73
79	40.7	30.7	79	94

a Half-life for patients receiving a short infusion (< 70 min).

INDICATIONS
In management of non-small cell lung cancer.

Bladder Cancer: Locally advanced or metastatic bladder cancer, in combination with cisplatin. Pancreatic Cancer: Locally advanced or metastatic adenocarcinoma of the pancreas. Non-Small Cell Lung Cancer: First-line treatment of patients with locally advanced or metastatic non-small cell lung cancer, in combination with cisplatin. Gemcitabine monotherapy can be considered in elderly patients or those with performance status 2.

Ovarian Cancer: Locally advanced or metastatic epithelial ovarian carcinoma, in combination with carboplatin, in patients with relapsed disease following a recurrence-free interval of at least 6 months after platinum-based, first line therapy.

Breast Cancer: Unresectable, locally recurrent or metastatic breast cancer, in combination withpaclitaxel, in patients experiencing a relapse after adjuvant/neoadjuvant chemotherapy. The preceding chemotherapy should have included an anthracycline, unless clinically contraindicated.

DOSE AND METHOD OF ADMINISTRATION
For intravenous infusion, following reconstitution. Upon reconstitution a colourless or slightly yellow solution is produced. The recommended diluent for reconstitution method of Gemitrate 200 should be Reconstitute with 5 ml of sodium chloride injection (0.9% w/v) and shake gently to make a clear solution containing 38 mg/ml to 40 mg/ml of Gemcitabine. Reconstitution at concentrations greater than 40 mg/ml may result in incomplete dissolution and should be avoided. The recommended diluent for reconstitution method of Gemitrate 1000 should be reconstitute with 25 ml of sodium chloride injection (0.9% w/v) and shake gently to make a clear solution containing 38 mg/ml to 40 mg/ml of Gemcitabine. Reconstitution at concentrations greater than 40 mg/ml may result in incomplete dissolution and should be avoided.

Bladder cancer (combination therapy):
Adults: The recommended dose for gemcitabine is 1000 mg/m^2, given as a 30 minute infusion. The dose should be given on days 1, 8, and 15 of each 28 day cycle in combination with cisplatin. Cisplatin is given at a recommended dose of 70 mg/m^2 on day 1 following gemcitabine, or day 2 of each 28 day cycle. This four week cycle is then repeated. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient.

Pancreatic Cancer:
Adults: The recommended dose of gemcitabine is 1000 mg/m^2, given by 30 minute intravenous infusion. This should be repeated once weekly for up to 7 weeks, followed by a one week rest period. Subsequent cycles should consist of gemcitabine infusions once weekly for 3 consecutive weeks out of every four weeks. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient.

Non-small cell lung cancer (monotherapy):
Adults: The recommended dose of gemcitabine is 1000 mg/m^2, given by 30 minute intravenous infusion. This should be repeated once weekly for three weeks, followed by a one week rest period. This four-week cycle is then repeated. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient.

Non-small cell lung cancer (combination therapy):
Adults: The recommended dose of gemcitabine is 1250 mg/m^2 given by 30 minute intravenous infusion, on days 1 and 8 of each 21 day cycle. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient. Cisplatin has been used at doses between 75-100 mg/m^2 once every 3 weeks.

Ovarian cancer (combination therapy:
The recommended dose of gemcitabine, when used in combination with carboplatin, is 1000 mg/m^2, given by 30 minute intravenous infusion on days 1 and 8 of each 21 day cycle. After gemcitabine, carboplatin will be given on day 1, consistent with a target Area Under Curve (AUC) of 4.0mg/ml/min. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient.

Breast cancer (combination therapy):
Adults: It is recommended that gemcitabine is used together with paclitaxel according to the following procedure: Paclitaxel (175 mg/m^2) is intravenously infused over 3 hours on day 1, followed by gemcitabine (1250 mg/m^2) intravenously infused for 30 minutes on days 1 and 8 of each 21 day treatment cycle. Dosage reduction with each cycle or within a cycle may be applied based upon the amount of toxicity experienced by the patient. The absolute granulocyte count should be at least 1.5 x 109/l before treatment with the gemcitabine + paclitaxel combination.

Monitoring for toxicity and dose modification due to toxicity Dosage adjustment due to non haematological toxicity: Periodic physical examination and checks of renal and hepatic function should be made to detect non-haematological toxicity. Dosage reduction with each cycle or within a cycle may be applied, based upon the amount of toxicity experienced by the patient. In general, for severe (Grade 3 or 4) non-haematological toxicity, except nausea/vomiting, therapy with gemcitabine should be withheld or decreased depending on the judgement of the treating physician. Doses should be withheld until toxicity has been resolved. For cisplatin, carboplatin, and paclitaxel dosage adjustment in combination therapy, please refer to the corresponding Summary of Product Characteristics or Product Leaflet.

Dosage adjustment in the presence of haematological toxicity:
Initiation of a cycle: For all indications, patients must be monitored before each dose for platelet and granulocyte counts. Patients should have an absolute granulocyte count of at least 1,500 (x10^6/l) and a platelet count of 100,000 (x10^6/l) prior to the administration of a cycle.

Within a cycle: Dose modifications of gemcitabine within a cycle should be performed according to the following tables:

Dose modification of gemcitabine within a cycle for bladder cancer, pancreatic cancer, and NSCLC, given in monotherapy or in combination with cisplatin			
Absolute Granulocyte Count (x 10^9/l)		**Platelet Count (x 10^9/l)**	**% of Total Dose**
> 1	and	>100	100
1-1.5	or	50-100	75
<0.5	or	<50	Withhold

*Withheld treatment will not be reinstated within a cycle before the absolute granulocyte count reaches at least 0.5(x 10^9/l) and the platelet count reaches 50 (x 10^9/l).

Dose modification of gemcitabine within a cycle for bladder cancer, pancreatic cancer, and NSCLC, given in monotherapy or in combination with cisplatin			
Absolute Granulocyte Count (x 10^9/l)		**Platelet Count (x 10^9/l)**	**% of Total Dose**
> 1	and	>100	100
1-1.5	or	75-100	50
<1	or	<75	Withhold

*Withheld treatment will not be reinstated within a cycle. Treatment will start on day 1 of the next cycle once the absolute granulocyte count reaches at least 1.5(x 10^9/l) and the platelet count reaches 100 (x 10^9/l)

Dose modification of gemcitabine within a cycle for bladder cancer, pancreatic cancer, and NSCLC, given in monotherapy or in combination with cisplatin			
Absolute Granulocyte Count (x 10^9/l)		**Platelet Count (x 10^9/l)**	**% of Total Dose**
≥ 1.2	and	>75	100
1-<1.2	or	50-100	75
0.7-<1	or	≥50	50
50 < 0.7	or	<50	Withhold

*Withheld treatment will not be reinstated within a cycle. Treatment will start on day 1 of the next cycle once the absolute granulocyte count reaches at least 1.5(x10^9/l) and the platelet count reaches 100 (x 10^9/l)

Dose adjustment due to haematological toxicity in subsequent cycles, for all indications
The gemcitabine dose should be reduced to 75% of the original cycle initiation dose, in the case of the following haematological toxicities:
• Absolute granulocyte count < 0.5 x 10^9/l for more than 5 days
• Absolute granulocyte count < 0.1 x 10^9/l for more than 3 days
• Febrile neutropaenia
• Platelets < 25 x 10^9/l
• Cycle delay of more than one week due to toxicity

Gemcitabine is tolerated well during infusion and may be administered ambulant. If extravasation occurs, generally the infusion must be stopped immediately and started again in another blood vessel. The patient should be monitored carefully after the administration.

Special Populations:

Patients with hepatic or renal impairment:

Gemcitabine should be used with caution in patients with hepatic or renal insufficiency as there is insufficient information from clinical studies to allow for clear dose recommendations for these patient populations.

Elderly population (> 65 years):

Gemcitabine has been well tolerated in patients over the age of 65. There is no evidence to suggest that dose adjustments, other than those already recommended for all patients, are necessary in the elderly.

Paediatric population (<18 years):

Gemcitabine is not recommended for use in children under 18 years of age due to insufficient data on safety and efficacy.

CONTRAINDICATIONS

- Hypersensitivity to gemcitabine or to any of the excipients
- Breast-feeding

WARNINGS AND PRECAUTIONS

Schedule-dependent Toxicity

In clinical trials evaluating the maximum tolerated dose of Gemcitabine, prolongation of the infusion time beyond 60 minutes or more frequent than weekly dosing resulted in an increased incidence of clinically significant hypotension, severe flu-like symptoms, myelosuppression, and asthenia. The half-life of Gemcitabine is influenced by the length of the infusion.

Myelosuppression

Myelosuppression manifested by neutropenia, thrombocytopenia, and anemia occurs with Gemcitabine as a single agent and the risks are increased when Gemcitabine is combined with other cytotoxic drugs. In clinical trials, Grade 3-4 neutropenia, anemia, and thrombocytopenia occurred in 25%, 8%, and 5%, respectively of patients receiving single-agent. The frequencies of Grade 3-4 neutropenia, anemia, and thrombocytopenia varied from 48% to 71%, 8 to 28%, and 5 to 55%, respectively, in patients receiving Gemcitabine in combination with another drug.

Pulmonary Toxicity and Respiratory Failure

Pulmonary toxicity, including interstitial pneumonitis, pulmonary fibrosis, pulmonary edema, and adult respiratory distress syndrome (ARDS), has been reported. In some cases, these pulmonary events can lead to fatal respiratory failure despite discontinuation of therapy. The onset of pulmonary symptoms may occur up to 2 weeks after the last dose of Gemcitabine. Discontinue Gemcitabine in patients who develop unexplained dyspnea, with or without bronchospasm, or have any evidence of pulmonary toxicity.

Hemolytic Uremic Syndrome
Hemolytic Uremic Syndrome to include fatalities from renal failure or the requirement for dialysis can occur in patients treated with Gemcitabine. In clinical trials, HUS was reported in 6 of 2429 patients (0.25%). Most fatal cases of renal failure were due to HUS. Assess renal function prior to initiation of Gemcitabine and periodically during treatment. Consider the diagnosis of HUS in patients who develops anemia with evidence of microangiopathic hemolysis, elevation of bilirubin or LDH, or reticulocytosis; severe thrombocytopenia; or evidence of renal failure (elevation of serum creatinine or BUN). Permanently discontinue Gemcitabine in patients with HUS or severe renal impairment. Renal failure may not be reversible even with discontinuation of therapy. Renal failure may not be reversible even with discontinuation of therapy.

Hepatic Toxicity
Drug-induced liver injury, including liver failure and death, has been reported in patients receiving Gemcitabine alone or in combination with other potentially hepatotoxic drugs. Administration of Gemcitabine in patients with concurrent liver metastases or a pre-existing medical history or hepatitis, alcoholism, or liver cirrhosis can lead to exacerbation of the underlying hepatic insufficiency. Assess hepatic function prior to initiation of Gemcitabine and periodically during treatment. Discontinue Gemcitabine in patients that develop severe liver injury.

Embryofetal Toxicity
Gemcitabine can cause fetal harm when administered to a pregnant woman, based on its mechanism of action. Gemcitabine was teratogenic, embryotoxic, and fetotoxic in mice and rabbits. If this drug is used during pregnancy, or if a woman becomes pregnant while taking Gemcitabine, the patient should be apprised of the potential hazard to a fetus.

Exacerbation of Radiation Therapy Toxicity
Gemcitabine is not indicated for use in combination with radiation therapy.

Concurrent (given together or ≤7 days apart) — Life-threatening mucositis, especially esophagitis and pneumonitis occurred in a trial in which Gemcitabine was administered at a dose of 1000 mg/m2 to patients with non-small cell lung cancer for up to 6 consecutive weeks concurrently with thoracic radiation.

Non-concurrent (given >7 days apart) — Excessive toxicity has not been observed when Gemcitabine is administered more than 7 days before or after radiation. Radiation recall has been reported in patients who receive Gemcitabine after prior radiation.

Capillary Leak Syndrome
Capillary leak syndrome (CLS) with severe consequences has been reported in patients receiving Gemcitabine as a single agent or in combination with other chemotherapeutic agents. Discontinue Gemcitabine if CLS develops during therapy.

Posterior Reversible Encephalopathy Syndrome

Posterior reversible encephalopathy syndrome (PRES) has been reported in patients receiving Gemcitabine as a single agent or in combination with other chemotherapeutic agents. PRES can present with headache, seizure, lethargy, hypertension, confusion, blindness, and other visual and neurologic disturbances. Confirm the diagnosis of PRES with magnetic resonance imaging (MRI) and discontinue Gemcitabine if PRES develops during therapy.

DRUG INTERACTIONS

No specific interaction studies have been performed.

Radiotherapy

Concurrent (given together or 7 days apart) - Toxicity associated with this multimodality therapy is dependent on many different factors, including dose of gemcitabine, frequency of gemcitabine administration, dose of radiation, radiotherapy planning technique, the target tissue, and target volume. Pre-clinical and clinical studies have shown that gemcitabine has radiosensitising activity. In a single trial, where gemcitabine at a dose of 1,000 mg/m^2 was administered concurrently for up to 6 consecutive weeks with therapeutic thoracic radiation to patients with non-small cell lung cancer, significant toxicity in the form of severe, and potentially life threatening mucositis, especially oesophagitis, and pneumonitis was observed, particularly in patients receiving large volumes of radiotherapy [median treatment volumes 4,795 cm^3]. Studies done subsequently have suggested that it is feasible to administer gemcitabine at lower doses with concurrent radiotherapy with predictable toxicity, such as a phase II study in nonsmall cell lung cancer, where thoracic radiation doses of 66 Gy were applied concomitantly with an administration with gemcitabine (600 mg/m^2, four times) and cisplatin (80 mg/m^2 twice) during 6 weeks. The optimum regimen for safe administration of gemcitabine with therapeutic doses of radiation has not yet been determined in all tumour types. Non-concurrent (given >7 days apart) - Available information does not indicate any enhanced toxicity when gemcitabine is administered more than 7 days before or after radiation, other than radiation recall. Data suggest that gemcitabine can be started after the acute effects of radiation have resolved or at least one week after radiation. Radiation injury has been reported on targeted tissues (e.g. oesophagitis, colitis, and pneumonitis) in association with both concurrent and non-concurrent use of gemcitabine.

Others

Yellow fever and other live attenuated vaccines are not recommended due to the risk of systemic, possibly fatal, disease, particularly in immunosuppressed patients.

PREGNANCY & LACTATION:

Pregnancy:

There are no adequate data from the use of gemcitabine in pregnant patients.

Studies in animals have shown reproductive toxicity. Based on results from animal studies and the mechanism of action of gemcitabine, this substance should not be used during pregnancy, unless clearly necessary. Women should be advised not to become pregnant during treatment with gemcitabine and to warn their attending physician immediately, should this occur.

Lactation:

It is not known whether gemcitabine is excreted in human milk and adverse events on the suckling child cannot be excluded. Breast-feeding must be discontinued during gemcitabine therapy.

Fertility:
In fertility studies, gemcitabine caused hypospermatogenesis in male mice. Therefore, men being treated with gemcitabine are advised not to father a child during and up to 6 months after treatment and to seek further advice regarding cryoconservation of sperm prior to treatment because of the possibility of infertility due to therapy with gemcitabine.

UNDESIRABLE EFFECTS
The most commonly reported adverse reactions associated with gemcitabine treatment include: nausea, with or without vomiting, and raised liver transaminases (aspartate aminotransferase (AST)/alanine aminotransferase (ALT)) and alkaline phosphatase, reported in approximately 60% of patients; proteinuria and haematuria reported in approximately 50% of patients; dyspnoea reported in 10-40% of patients (highest incidence in lung cancer patients); allergic skin rashes occurring in approximately 25% of patients, and associated with itching in 10% of patients.The frequency and severity of the adverse reactions are affected by the dose, infusion rate, and intervals between doses. Dose-limiting adverse reactions are reductions in thrombocyte, leucocyte, and granulocyte counts. The following table of undesirable effects and frequencies is based on clinical trials. Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness. Frequencies are defined as: Very common (≥1/10); common (≥ 1/100 to <1/10); uncommon (1/1,000 to <1/100); rare (1/10,000 to <1/1,000); very rare (< 1/10,000), not known (cannot be estimated from the available data).

System Organ Class	**Frequency Grouping**
Blood and lymphatic system disorders	Very common : • Leucopenia (frequency of neutropaenia grade 3 is 19.3% and of grade 4 is 6%) • Thrombocytopaenia • Anaemia Bone marrow suppression is usually mild to moderate and mostly affects the granulocyte count Common : • Febrile neutropenia Very rare : • Thrombocytosi
Immune system disorders	Very Rare : • Anaphylactoid reaction
Metabolism and nutrition disorders	Common : • Anorexia
Nervous system disorders	Common : • Headache • Insomnia • Somnolence
Cardiac disorders	Rare : • Myocardial infarct

Vascular disorders	Rare : • Hypotension
Respiratory, thoracic and mediastinal disorders	Very common : • Dyspnoea (usually mild and passes rapidly without treatment) Common : • Cough • Rhinitis Uncommon : • Interstitial pneumonitis • Bronchospasm-usually mild and transient but may require parenteral treatmen
Gastrointestinal disorders	Very common : • Vomiting • Nausea Common : • Diarrhoea • Stomatitis & ulceration of the mouth
Constipation Hepatobiliary disorders	Very common : • Elevation of liver transaminases (aspartate aminotransferase (AST) and alanine aminotransferase (ALT)) and alkaline phosphatase Common : • Increased bilirubin Rare : • Increased gamma glutamyl transferase (GGT)
Skin and subcutaneous tissue disorders	Very common : • Allergic skin rash frequently associated with pruritus • Alopecia Common : • Itching • Sweating Rare : • Ulceration • Vesicle and sore formation • Scaling Very rare : • Severe skin reactions, including desquamation and bullous skin eruptions
Musculoskeletal and connective tissue disorders	Common : • Back pain • Myalgia
Renal and urinary disorders	Very common : • Haematuria • Mild proteinurea
General disorders and	Very common :

administration	• Influenza-like symptoms (the most common symptoms site conditionsare fever, headache, chills, myalgia, asthenia, and anorexia. Cough, rhinitis, malaise, perspiration and sleeping difficulties have also been reported) • Oedema/peripheral oedema-including facial oedema. Oedema is usually reversible after stopping treatment Common : • Fever • Asthenia • Chills Rare : • Injection site reactions (mainly mild in nature)
Injury, poisoning, and procedural complications	Very common : • Radiation toxicity

From reported Post-marketing experience (spontaneous reports)
Nervous system disorders
Cerebrovascular accident

Cardiac disorders
Arrythmias, predominantly supraventricular in nature Heart failure

Vascular disorders
Clinical signs of peripheral vasculitis and gangrene

Respiratory, thoracic and mediastinal disorders

Pulmonary oedema
Adult respiratory distress syndrome

Gastrointestinal disorders
Ischaemic colitis

Hepatobiliary disorders
Serious hepatotoxicity, including liver failure and death

Skin and subcutaneous tissue disorders
Severe skin reactions, including desquamation and bullous skin eruptions, Lyell's Syndrome, Stevens-Johnson Syndrome

Renal and urinary disorders
Renal failure
Haemolytic uraemic syndrome

Injury, poisoning and procedural complications

Radiation recall

Combination use in breast cancer
The frequency of grade 3 and 4 haematological toxicities, particularly neutropaenia, increases when gemcitabine is used in combination with paclitaxel.

However, the increase in these adverse reactions is not associated with an increased incidence of infections or haemorrhagic events.

Fatigue and febrile neutropaenia occur more frequently when gemcitabine is used in combination with paclitaxel. Fatigue, which is not associated with anaemia, usually resolves after the first cycle.

OVERDOSAGE
There is no known antidote for overdose of gemcitabine. Single doses of up to 5.7 g/m2 have been administered as intravenous infusions over 30 minutes every two weeks, with clinically acceptable toxicity. In the event of suspected overdose, the patient should be monitored with appropriate blood counts and should receive supportive therapy as necessary.

EXPIRY DATE:
Do not use later than the date of expiry.

STORAGE
Store below 25^{o}C. Protect from light & moisture.

PRESENTATION
GEMITRATE 200, GEMITRATE 1000 and GEMITRATE 1400 are availabe in single use vial.

MARKETED BY


TORRENT PHARMACEUTICALS LTD.
Torrent House, Off Ashram Road,
Ahmedabad-380 009, INDIA

GEMI/JUL 2014/Ver 02