

## Package leaflet: Information for the user

### Gemcitabine 200 mg powder for solution for infusion Gemcitabine 1 g powder for solution for infusion Gemcitabine 2 g powder for solution for infusion gemcitabine

**Read all of this leaflet carefully before you start using this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have further questions, please ask your doctor, nurse or pharmacist.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet:**

1. What Gemcitabine is and what it is used for
2. What you need to know before you use Gemcitabine
3. How to use Gemcitabine
4. Possible side effects
5. How to store Gemcitabine
6. Contents of the pack and other information

#### **1. What Gemcitabine is and what it is used for**

Gemcitabine belongs to a group of medicines called “cytotoxics”. These medicines kill dividing cells, including cancer cells.

Gemcitabine may be given alone or in combination with other anti-cancer medicines, depending on the type of cancer.

Gemcitabine is used in the treatment of the following types of cancer:

- non-small cell lung cancer (NSCLC), alone or together with cisplatin.
- pancreatic cancer.
- breast cancer, together with paclitaxel.
- ovarian cancer, together with carboplatin.
- bladder cancer, together with cisplatin.

#### **2. What you need to know before you use Gemcitabine**

##### **Do not use Gemcitabine:**

- if you are allergic to gemcitabine or any of the other ingredients of this medicine (listed in section 6).
- if you are breast-feeding.

##### **Warnings and precautions**

Before the first infusion you will have samples of your blood taken to check if your liver and kidneys are working well enough for you to receive this medicine. Before each infusion you will have samples of your blood taken to check if you have enough blood cells to receive Gemcitabine. Your doctor may decide to change the dose or delay treating you depending on your general condition and if your blood cell counts are too low.

Periodically you will have samples of your blood taken to check how well your kidneys and liver are working.

Talk to your doctor, nurse or hospital pharmacist before using Gemcitabine.

If you have ever developed a severe skin rash or skin peeling, blistering and/or mouth sores after using gemcitabine.

If you have, or have previously had liver disease, heart disease, vascular disease or problems with your kidneys talk to your doctor or hospital pharmacist as you may not be able to receive Gemcitabine.

If you have recently had, or are going to have radiotherapy, please tell your doctor as there may be an early or late radiation reaction with Gemcitabine.

If you have been vaccinated recently, please tell your doctor as this can possibly cause bad effects with Gemcitabine.

If during treatment with this medicine, you get symptoms such as headache with confusion, seizures (fits) or changes in vision, call your doctor right away. This could be a very rare nervous system side effect named posterior reversible encephalopathy syndrome.

If you develop breathing difficulties or feel very weak and are very pale, please tell your doctor as this may be a sign of kidney failure or problems with your lungs.

If you develop generalised swelling, shortness of breath or weight gain, please tell your doctor as this may be a sign of fluid leaking from your small blood vessels into the tissue.

Serious skin reactions including Stevens-Johnson syndrome, toxic epidermal necrolysis and acute generalized exanthematous pustulosis (AGEP) have been reported in association with gemcitabine treatment. Seek medical attention immediately if you notice any of the symptoms related to these serious skin reactions described in section 4.

### **Children and adolescents**

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

### **Other medicines and Gemcitabine**

Please tell your doctor or hospital pharmacist if you are taking or have recently taken any other medicines, including vaccinations and medicines obtained without a prescription.

### **Pregnancy, breast-feeding and fertility**

#### **Pregnancy**

If you are pregnant, or thinking about becoming pregnant, tell your doctor. The use of Gemcitabine should be avoided during pregnancy. Your doctor will discuss with you the potential risk of taking Gemcitabine during pregnancy. Women of childbearing age should use effective contraception during treatment with gemcitabine and for 6 months after receiving the last dose.

#### **Breast-feeding**

If you are breast-feeding, tell your doctor.

You must discontinue breast-feeding during Gemcitabine treatment.

#### **Fertility**

Men are advised not to father a child during and for 3 months following treatment with Gemcitabine and should therefore use effective contraception during treatment with gemcitabine and for 3 months afterwards. If you would like to father a child during the

treatment or in the 3 months following treatment, seek advice from your doctor or pharmacist. You may want to seek counselling on sperm storage before starting your therapy.

### **Driving and using machines**

Gemcitabine may make you feel sleepy, particularly if you have consumed any alcohol. Do not drive a car or use machinery until you are sure that Gemcitabine treatment has not made you feel sleepy.

### **Gemcitabine contains sodium**

The 200 mg vial contains less than 1 mmol sodium (23 mg) per vial, that is to say essentially 'sodium-free'.

The 1000 mg vial contains less than 1 mmol sodium (23 mg) per vial, that is to say essentially 'sodium-free'.

The 2000 mg vial contains 35 mg sodium (main component of cooking/table salt) in each vial. This is equivalent to 1.75% of the recommended maximum daily dietary intake of sodium for an adult.

## **3. How to use Gemcitabine**

The usual dose of Gemcitabine is 1000-1250 mg for every square metre of your body's surface area. Your height and weight are measured to work out the surface area of your body. Your doctor will use this body surface area to work out the right dose for you. This dosage may be adjusted, or treatment may be delayed depending on your blood cell counts and on your general condition.

How frequently you receive your Gemcitabine infusion depends on the type of cancer that you are being treated for.

A hospital pharmacist or doctor will have dissolved the Gemcitabine powder before it is given to you.

You will always receive Gemcitabine by infusion into one of your veins. The infusion will last approximately 30 minutes.

If you have further questions on the use of this product ask your doctor or pharmacist.

## **4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

### **You must contact your doctor immediately if you notice any of the following:**

- Bleeding from the gums, nose or mouth or any bleeding that would not stop, reddish or pinkish urine, unexpected bruising (since you might have less platelets than normal which is very common).
- Tiredness, feeling faint, becoming easily breathless or if you look pale (since you might have less haemoglobin than normal which is very common).
- Mild to moderate skin rash (very common) / itching (common), or fever (very common); (allergic reactions).

- Temperature of 38°C or greater, sweating or other signs of infection (since you might have less white blood cells than normal accompanied by fever also known as febrile neutropenia) (common).
- Pain, redness, swelling or sores in your mouth (stomatitis) (common).
- Irregular heart rate (arrhythmia) (uncommon)
- Extreme tiredness and weakness, purpura or small areas of bleeding in the skin (bruises), acute renal failure (low urine output or no urine output), and signs of infection. These may be features of thrombotic microangiopathy (clots forming in small blood vessels) and haemolytic uraemic syndrome, which may be fatal.
- Difficulty breathing (it is very common to have mild breathing difficulty soon after the Gemcitabine infusion which soon passes, however uncommonly or rarely there can be more severe lung problems)
- Severe chest pain (myocardial infarction) (rare).
- Severe hypersensitivity/allergic reaction with severe skin rash including red itchy skin, swelling of the hands, feet, ankles, face, lips, mouth or throat (which may cause difficulty in swallowing or breathing), wheezing, fast beating heart and you may feel you are going to faint (anaphylactic reaction) (very rare).
- Generalised swelling, shortness of breath or weight gain, as you might have fluid leakage from small blood vessels into the tissues (capillary leak syndrome) (very rare)
- Headache with changes in vision, confusion, seizures or fits (posterior reversible encephalopathy syndrome) (very rare)
- Severe rash with itching, blistering or peeling of the skin (Stevens-Johnson syndrome, toxic epidermal necrolysis) (very rare).
- A red, scaly widespread rash with bumps under the swollen skin (including your skin folds, trunk, and upper extremities) and blisters accompanied by fever (Acute Generalized Exanthematous Pustulosis (AGEP)) (frequency not known).

**Other side effects with Gemcitabine may include:**

**Very common side effects** (may affect more than 1 in 10 people)

- Low white blood cells
- Difficulty breathing
- Vomiting
- Nausea
- Hair loss
- Liver problems: found through abnormal blood test results
- Blood in urine
- Abnormal urine tests: protein in urine
- Flu like symptoms including fever
- Swelling of ankles, fingers, feet, face (oedema)

**Common side effects** (may affect up to 1 in 10 people)

- Poor appetite (anorexia)
- Headache
- Insomnia
- Sleepiness
- Cough
- Runny nose
- Constipation
- Diarrhoea
- Itching
- Sweating

- Muscle pain
- Back pain
- Fever
- Weakness
- Chills
- Infections

**Uncommon side effects** (may affect up to 1 in 100 people)

- Scarring of the air sacs of the lung (interstitial pneumonitis)
- Wheeze (spasm of the airways)
- Scarring of the lungs (abnormal chest X ray/scan)
- Heart failure
- Kidney failure
- Serious liver damage, including liver failure
- Stroke

**Rare side effects** (may affect up to 1 in 1,000 people)

- Low blood pressure
- Skin scaling, ulceration or blister formation
- Sloughing of the skin and severe skin blistering
- Injection site reactions
- Severe lung inflammation causing respiratory failure (adult respiratory distress syndrome)
- A skin rash like severe sunburn which can occur on skin that has previously been exposed to radiotherapy (radiation recall).
- Fluid in the lungs
- Scarring of the air sacs of the lung associated with radiation therapy (radiation toxicity)
- Gangrene of fingers or toes
- Inflammation of the blood vessels (peripheral vasculitis)

**Very rare side effects** (may affect up to 1 in 10,000 people)

- Increased platelet count
- Inflammation of the lining of the large bowel, caused by reduced blood supply (ischaemic colitis)
- Low haemoglobin level (anaemia), low white blood cells and low platelet count will be detected by a blood test.
- Thrombotic microangiopathy: clots forming in small blood vessels

**Not known:** frequency cannot be estimated from the available data

- Sepsis: when bacteria and their toxins circulate in the blood and starts to damage the organs
- Pseudocellulitis: Skin redness with swelling

You might have any of these symptoms and/or conditions. You must tell your doctor as soon as possible when you start experiencing any of these side effects.

If you are concerned about any side effects, talk to your doctor.

**Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via HPRC Pharmacovigilance Website: [www.hpra.ie](http://www.hpra.ie). By reporting side effects you can help provide more information on the safety of this medicine.

**5. How to store Gemcitabine**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the carton and label after <EXP>. The expiry date refers to the last day of that month.

Store below 25°C.

Reconstituted solution: The product should be used immediately. When prepared as directed, chemical and physical in-use stability of reconstituted solutions of gemcitabine were demonstrated for 24 hours at 25°C. Further dilution by a healthcare provider may be done. Solutions of reconstituted gemcitabine should not be refrigerated, as crystallisation may occur.

Diluted solution: The chemical and physical in-use stability of diluted solutions of gemcitabine was demonstrated for 30 days at 25°C.

Do not use Gemcitabine if you notice any particulate matter and / or discolouration.

This medicine is for single use only.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## **6. Contents of the pack and other information**

### **What Gemcitabine contains**

The active substance is gemcitabine. Each vial contains 200, 1000 or 2000 mg of gemcitabine (as gemcitabine hydrochloride).

The other ingredients are mannitol (E421), sodium acetate trihydrate, hydrochloric acid (for pH adjustment) and sodium hydroxide (for pH adjustment).

### **What Gemcitabine looks like and contents of the pack**

Gemcitabine is a white to off-white powder, for solution for infusion in a vial. Each pack of Gemcitabine contains 1 vial.

### **Marketing Authorisation Holder**

Fresenius Kabi Deutschland GmbH  
Else-Kröner-Straße 1,  
61352 Bad Homburg v.d.Höhe  
Germany

### **Manufacturer:**

Fresenius Kabi Deutschland GmbH  
Pfungstweide 53  
61169 Friedberg  
Germany

**This medicine is authorised in the Member States of the European Economic Area and in the United Kingdom (Northern Ireland) under the following names:**

Belgium: Gemcitabine Fresenius Kabi 38 mg/ml poeder voor oplossing voor infusie

France: Gemcitabine Kabi 38 mg/ml, poudre pour solution pour perfusion  
Hungary: Gemcitabin Kabi 38mg/ml por oldatos infúzióhoz  
Ireland: Gemcitabine 200 mg powder for solution for infusion  
Gemcitabine 1 g powder for solution for infusion  
Gemcitabine 2 g powder for solution for infusion

Slovenia: Gemcitabin Kabi 38 mg/ml prašek za raztopino za infundiranje  
United Kingdom: Gemcitabine 38 mg/ml powder for solution for infusion  
(Northern Ireland)

This leaflet was last revised in May 2024

**The following information is intended for healthcare professionals only:**

**Instructions for use, handling and disposal.**

1. Use aseptic techniques during the reconstitution and any further dilution of gemcitabine for intravenous infusion administration.
2. Calculate the dose and the number of Gemcitabine vials needed.
3. Reconstitute the 200 mg vials with 5 ml of 9 mg/ml (0.9 %) sterile sodium chloride solution for injection, without preservative, the 1000 mg vial with 25 ml sterile sodium chloride solution for injection, without preservative and the 2000 mg vial with 50 ml sterile sodium chloride solution for injection, without preservative. Shake to dissolve. The total volume after reconstitution is 5.26 ml (200 mg vial), 26.3 ml (1000 mg vial) or 52.6 ml (2000 mg vial) respectively. This dilution yields a gemcitabine concentration of 38 mg/ml, which includes accounting for the displacement volume of the lyophilised powder. Further dilution with sterile sodium chloride 9 mg/ml (0.9%) solution for injection, without preservative may be done. The resulting solution is clear and ranges in colour from colourless to light straw-coloured.
4. Parenteral medicinal products should be inspected visually for particulate matter and discolouration prior to administration. If particulate matter is observed, do not administer.
5. Solutions of reconstituted gemcitabine should not be refrigerated, as crystallisation may occur.  
Chemical and physical in-use stability has been demonstrated for 24 hours at 25°C. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at room temperature, unless reconstitution has taken place in controlled and validated aseptic conditions.
6. Chemical and physical in-use stability for the diluted injection has been demonstrated for 30 days at 25°C. From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at room temperature, unless dilution has taken place in controlled and validated aseptic conditions.
7. Gemcitabine solutions are for single use only. Any unused product or waste material should be disposed of in accordance with local requirements.

**Preparation and administration precautions**

The normal safety precautions for cytostatic agents must be observed when preparing and disposing of the infusion solution. Handling of the solution for infusion should be done in a safety box and protective coats and gloves should be used. If no safety box is available, the equipment should be supplemented with a mask and protective glasses.

If the preparation comes into contact with the eyes, this may cause serious irritation. The eyes should be rinsed immediately and thoroughly with water. If there is lasting irritation, a doctor should be consulted. If the solution is spilled on the skin, rinse thoroughly with water.

**Disposal**

Any unused product should be disposed of in accordance with local requirements.