

# Tiagem®

## Gemcitabine

Concentrate for Solution for Infusion

Read this leaflet carefully before you start taking Tiagem®. This leaflet provides answers to the most common questions. If you have any further questions, ask your doctor or pharmacist. This medicine has been prescribed for your current illness only. Do not take it in similar conditions and do not pass it on to others. The information in this leaflet was last updated on the date listed on the bottom of the page. More recent information on the medicine may be available. You should ensure that you speak to your doctor or pharmacist to obtain the most up-to-date scientific information on the medicine. The latest version of this leaflet is available on [www.nanoalvand.com](http://www.nanoalvand.com).

### What is in this leaflet

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### 1. What Tiagem® is and what it is used for

Tiagem® belongs to a group of medicines called "cytotoxics". These medicines kill dividing cells, including cancer cells.

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

Tiagem® 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 take Tiagem®

#### Do not take Tiagem®

- 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

Talk to your doctor, pharmacist, or nurse before taking Tiagem®.

Before the first infusion you will have samples of your blood taken to evaluate if you have sufficient kidney and liver function.

Before each infusion you will have samples of your blood taken to evaluate if you have enough blood cells to receive Tiagem®. 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 evaluate your kidney and liver function.

Tell your doctor if:

- you have, or have previously had liver disease, heart disease, vascular disease or problems with your kidneys.
- you have recently had, or are going to have radiotherapy as there may be an early or late radiation reaction with gemcitabine.
- you have been vaccinated recently as this can possibly cause bad effects with gemcitabine.
- during treatment with this medicine, you get symptoms such as headache with confusion, consciousness impairment, seizures (fits), headache, visual abnormalities, focal neurological signs, and acute high blood pressure. Call your doctor right away. This could be a very rare nervous system side effect named posterior reversible encephalopathy syndrome.
- you develop breathing difficulties or feel very weak and are very pale (may be a sign of problems with your lungs or kidney failure).
- you are suffering from alcoholism, as this medicinal product contains ethanol (alcohol).
- you are suffering from epilepsy, as this medicinal product contains ethanol (alcohol).
- you experience capillary leak syndrome (CLS) when fluids from your small blood vessels leak out into the tissue. Symptoms can include swelling of the legs, face and arms, weight gain, hypoalbuminemia (too little of the matter called protein in the blood), severe hypotension (low blood pressure), acute renal impairment and pulmonary edema (lungs fill with fluid).

#### Children and adolescents

Tiagem® is not recommended in children and adolescents below 18 years of age due to insufficient data on safety and efficacy.

#### Other medicines and Tiagem®

Tell your doctor, nurse or pharmacist if you are taking, have recently taken or might take any other medicines including vaccinations.

#### Pregnancy and breast-feeding

##### Pregnancy-Females

If you are pregnant or think you may be pregnant or are planning to have a baby, tell your doctor. The use of Tiagem® should be avoided during pregnancy. Your doctor will discuss with you the potential risk of taking Tiagem® during pregnancy.

##### Pregnancy-Males

Men are advised not to father a child during and up to 6 months following treatment with Tiagem®. If you would like to father a child during the treatment or in the 6 months following treatment, seek advice from your doctor or pharmacist. You may want to seek counselling on sperm storage before starting your therapy.

##### Breast-feeding

You must discontinue breast-feeding during Tiagem® treatment.

#### Driving and using machines

Tiagem® may make you feel sleepy, particularly if you have consumed any alcohol. The amount of alcohol in this medicinal product may impair your ability to drive or use machines. Do not drive a car or use machinery until you are sure that treatment with Tiagem® has not made you feel sleepy.

#### Tiagem® contains alcohol

Tiagem® contains ethanol anhydrous 44 % w/v, i.e. up to 9.9 g per maximum daily dose (2250 mg).

This amount of alcohol in this medicinal product:

- is harmful for those suffering from alcoholism.
- should be taken into account in pregnant or breast-feeding women, children and high-risk groups such as patients with liver disease, or epilepsy.
- may alter the effects of other medicines.
- may impair your ability to drive or use machines.

#### Tiagem® contains sodium

Tiagem® contains 206 mg (9.0 mmol) of sodium per maximum daily dose (2250 mg). This should be taken into consideration by patients on a controlled sodium diet.

### 3. How to take Tiagem®

The recommended dose of Tiagem® is 1000-1250 mg for every square meter 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 Tiagem® depends on the type of cancer that you are being treated for.

A nurse or doctor will have diluted Tiagem® before it is given to you.

You will always receive Tiagem® 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. Tell your doctor if you get any side effects, including those not listed in this leaflet.

#### 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 hemoglobin 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 (common).
- irregular heart rate (arrhythmia) (frequency not known).
- 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 (hemolytic uremic syndrome). It may be fatal (uncommon).
- 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).

- generalized 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).

#### Other side effect with Tiagem® may include:

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

- low white blood cells
- low platelet count
- 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
- edema (swelling of ankles, fingers, feet, face)

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

- anorexia (poor appetite)
- headache
- insomnia
- sleepiness
- cough
- runny nose
- constipation
- diarrhea
- itching
- sweating
- muscle pain
- back pain
- fever
- weakness
- chills
- infections

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

- interstitial pneumonitis (scarring of the air sacs of the lung)
- spasm of the airways (wheeze)
- abnormal chest X ray/scan (scarring of the lungs)
- heart failure
- stroke
- serious liver damage, including liver failure
- kidney failure

**Rare** (may affect up to 1 in 1000 people)

- low blood pressure
- skin scaling, ulceration or blister formation
- injection site reactions
- gangrene of fingers or toes
- fluid in the lungs
- adult respiratory distress syndrome (severe lung inflammation causing respiratory failure)
- radiation recall (a skin rash like severe sunburn) which can occur on skin that has previously been exposed to radiotherapy
- radiation toxicity: scarring of the air sacs of the lung associated with radiation therapy
- inflammation of the blood vessels (peripheral vasculitis)
- sloughing of skin and severe skin blistering

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

- increased platelet count
- ischemic colitis (inflammation of the lining of the large bowel, caused by reduced blood supply)
- low hemoglobin level (anemia), 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

- sepsis: when bacteria and their toxins circulate in the blood and starts to damage the organs
- pseudo-cellulitis: skin redness with swelling

### 5. How to store Tiagem®

- Keep this medicine out of the sight and reach of children.
- Do not use this medicine after the expiry date.
- Store below 30°C.
- Store in the original package in order to protect from light.
- The prepared solution for infusion is stable for

up to 24 hours at room temperature (30°C) and refrigerator (2°C to 8°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 under the responsibility of the user.

- Cytotoxic agent. Must be transported, stored and used according to guidelines for handling of cytotoxic compounds.

- 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 Tiagem® contains

The active substance is gemcitabine as hydrochloride. The other ingredients are polyethylene glycol 300, polypropylene glycol, sodium hydroxide, hydrochloric acid, and ethanol.

#### What Tiagem® looks like and contents of the pack

Tiagem® is a clear, colorless to pale yellow, and free of particulate matter solution.

Tiagem® is supplied in two strengths. One vial of Tiagem® concentrate for solution for infusion contains 200 mg/2 ml or 1000 mg/10 ml of gemcitabine. Each vial packed in a box with a leaflet.

Not all strengths may be marketed.

#### For medical or healthcare professionals only

- The concentration of gemcitabine in Tiagem® may differ from other gemcitabine products.
- Concentration must be noticed (100 mg/ml) or life-threatening overdose may occur.
- Tiagem® must be diluted before use.
- Use aseptic techniques during preparation of gemcitabine for intravenous infusion administration.
- Tiagem® is a clear, colorless to pale yellow solution with a concentration of 100 mg/ml gemcitabine. The total quantity of Tiagem® required for an individual patient should be diluted with sterile sodium chloride 9 mg/ml (0.9%) solution. Further dilution with the same diluent can be done to a final concentration of 0.1 to 9 mg/ml. Diluted solution is a clear, colorless to slightly yellow solution.
- DEHP (di-(2-ethylhexyl) phthalate) content may leach from PVC containers upon storage of diluted solution of gemcitabine concentrate for solution for infusion in the plasticized polyvinyl chloride (PVC) containers. Consequently, the preparation, storage and administration of diluted solution should be carried out using non-PVC-containing equipment.
- Each vial is for single use and should be used immediately after opening. If not used immediately, in-use storage times and conditions are the responsibility of the user.
- After dilution, chemical and physical in-use stability after dilution in 0.9% sodium chloride solution has been demonstrated for 24 hours at temperatures below 30°C and 2°C to 8°C.
- From a microbiological point of view, the solution for infusion should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user.
- Preparation of the infusion solution**
- Tiagem® contains 100 mg gemcitabine per ml concentrate solution. The concentrate solution should be diluted prior to administration.
- Aseptically withdraw the required amount of Tiagem® using a calibrated syringe.
- The required volume of Tiagem® must be injected into infusion bag containing sodium chloride 9 mg/ml (0.9%) solution for infusion.
- Mix the infusion bag manually using a rocking motion. Further dilution with the same diluent can be done to a final concentration of approximately 0.1 to 9 mg/ml. Considering the maximum dose of ~2.25 g gemcitabine, the concentration of 4.5 mg/ml (achieved with 500 ml of diluent) to 9 mg/ml (achieved with 250 ml of diluent) corresponds to the osmolality of approximately 1000 mOsmol/Kg to 1700 mOsmol/kg.
- As with all parenteral medicinal products, Tiagem® should be inspected visually for particulate matter and discoloration prior to administration. If particulate matter is observed, do not administer.

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