

Read this entire leaflet carefully before you start taking this medicine.

- Keep this leaflet. You may need to read it again.
- If you have further question, ask your doctor or your pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.

What is in this leaflet?

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

1. What Adriabin® is and what it is used for

Doxorubicin, the active substance of Adriabin®, is an anthracycline antineoplastic antibiotic. It is thought to have multiple modes of action including intercalation of DNA leading to an inhibition of DNA and RNA synthesis, inhibition of topoisomerase II, free radical formation, and alterations in cell membranes. Doxorubicin is a cell-cycle non-specific agent. It also has antibacterial and immunosuppressant properties. Adriabin® is used for treatment of acute leukemias, Hodgkin's lymphoma, non-Hodgkin's lymphoma, some solid tumors including breast cancer, advanced soft-tissue sarcoma, some papillary bladder tumors (bladder instillation), recurrent superficial bladder tumors (bladder instillation), transitional cell carcinoma (bladder instillation), carcinoma in situ (bladder instillation).

2. What you need to know before you take Adriabin®
Do not use Adriabin®:

- If you have an allergy (hypersensitivity) to doxorubicin, other similar medicines called anthracyclines or anthracenediones or any of the other ingredients of this medicine (listed in section 6).
- If you have low blood cell counts, as it can lower them further.
- If you have previously been treated with doxorubicin or similar chemotherapy drugs like pharomurubicin, idarubicin, epirubicin or daunorubicin as previous treatment with these similar medicines can increase the risk of side effects with this medicine.
- If you have suffered from severe heart trouble in the past, or are presently receiving treatment for this.
- If you have severe liver problems.

Warnings and precautions

Talk to your doctor, pharmacist or nurse before being given Adriabin®. Your doctor will assess your health carefully before prescribing this medicine. Make sure your doctor knows before you start taking Adriabin®:

- If you have or have ever had heart disease, either before or during radiotherapy
- If you have had or are due to have live or live-attenuated vaccinations.
- If you are currently taking or have recently taken Trastuzumab (a medicine used in the treatment of certain cancers). Trastuzumab can remain in the body for up to 7 months. As Trastuzumab may affect the heart, you should not use Adriabin® for up to 7 months after you have stopped taking trastuzumab. If Adriabin® is used before this time, then your heart function should be carefully monitored.

Adriabin® may also cause the following:

- Decreased blood cells and bone marrow function
 - Abnormal cell growth and infertility
 - Blood found in the urine
 - Severely impaired liver function
 - Damage to body tissue including that of the heart, skin, liver and the thin layer which lines the body cavities and passages
 - Clotting blockages in blood flow
 - High levels of uric acid in the blood
- Refer to section 4 for further information.

Hepatic impairment

Adriabin® should be used with caution in mild to moderate impairment; avoid in severe impairment.

Dose adjustments: Dose reduction is recommended according to bilirubin concentration.

Doses of Adriabin® should be adjusted as follows in patients with liver dysfunction:

- serum-bilirubin concentrations of 12 to 30 micrograms/mL: half the normal dose
- serum-bilirubin greater than 30 micrograms/mL: quarter of the usual dose.

Other Anti-cancer Medicines

Problems are more likely to occur if you have been given other anticancer medicines especially at high doses just before or at the same time as Adriabin®. You will be given time to recover from the effects of the anticancer drug before you begin treatment with this medicine. Your doctor will want to monitor you carefully during and after treatment (see section 3 for more information).

Other medicines and Adriabin®

Please tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines obtained without a prescription, particularly any of the following:

- Some medicines effect the concentration and clinical effect of Adriabin®. (e.g. verapamil, phenobarbital, phenytoin, St. John's Wort). Please tell your doctor or pharmacist if you are taking any of these medicines.
- Cyclosporine: which can make the effects of Adriabin® stronger and may result in prolonged decrease in bone marrow and blood cells (coma and seizures have also been described with concomitant administration of cyclosporine and Adriabin®).
- Calcium Channel Blockers: medicines for your heart.
- Sorafenib: used to treat inoperable liver cancer and advanced kidney cancer.
- Pacitaxel: which can make the effects of doxorubicin stronger.

Pregnancy

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before being given this medicine because it may cause birth defects. Effective contraception should be used during and for at least 6 months after treatment in men or women.

If you are sexually active, you are advised to use effective birth control to prevent pregnancy during treatment, whether you are male or female.

Breast-feeding

You should stop breast-feeding before starting treatment with this medicine as some of the drug may get into your breast milk and possibly harm your child.

Administration in the elderly

The dose may need to be reduced in the elderly; in patients over 70 years of age, a total cumulative dose of 450 mg/m² has been recommended.

Administration in children

Adriabin® is used for paediatric malignancies; adult dosage regimens may be suitable for children, but dose reductions may be needed, particularly in young children.

Driving and using machines

There are no special precautions and you can drive and operate machinery as long as you feel fully recovered following your hospital treatment.

3. How to take Adriabin®

If you are prescribed Adriabin® it will only be given to you by doctors or nurses experienced in giving chemotherapy. This medicine will be given to you by a doctor or nurse through a drip (infusion) into a vein.

Your doctor will decide what dose to give and the number of days treatment you will receive depending on your condition. The dose is decided by taking into account the condition you have, your height and weight. From your height and weight the doctor will work out your body surface area; and it is this that your dose is calculated from.

While one course of treatment may sometimes be enough, more often your doctor will advise further courses in either one, three or four weeks time.

It may take several courses before your illness is under control and you feel better.

Dilution of Adriabin®

Dilute Adriabin® Injection in 0.9% Sodium Chloride Injection, or 5% Dextrose Injection.

Protect from light following preparation until completion of infusion.

Use within 1 hour. If not used within 1 hour, discard the diluted product.

Usual Dosage:

When used as a single agent, the recommended starting dose of Adriabin® per cycle in adults is 60-75 mg/m² of body surface area. The total starting dose per cycle may be given as a single dose or divided over 3 successive days or in divided doses given on days 1 and 8.

Under conditions of normal recovery from drug-induced toxicity (particularly bone marrow depression and stomatitis), each treatment cycle can be repeated every 3 to 4 weeks.

If it is used in combination with other antitumor agents having overlapping toxicity, the dosage of Adriabin® may need to be reduced to 30-60 mg/m² every three weeks. If dosage is to be calculated on the basis of body weight, it has already been shown that giving Adriabin® as a single dose every three weeks greatly reduces the distressing toxic effect, mucositis. However there are still some who believe that dividing the dose over three successive days (0.4-0.8 mg/kg or 20-25 mg/m² on each day) gives greater effectiveness even though at the cost of higher toxicity. If dosage is to be calculated on the basis of body weight, 1.2-2.4 mg/kg should be given as a single dose every three weeks.

Regular checks by your doctor during your treatment with Adriabin® solution

During treatment your doctor will be making regular checks of your:

- **Blood:** To check for low blood cell counts that may need treatment.
- **Heart Function:** Heart damage can occur when high doses of Adriabin® are given. This may not be detected for several weeks; so regular tests may be required during this period.
- **Liver:** Using blood tests, your doctor will check that this medicine is not affecting the way it functions in a harmful way.

- **Blood uric acid levels:** Adriabin® may increase uric acid levels in the blood which might cause gout. Another medicine may be given if your uric acid levels are too high.

If you receive high doses of Adriabin®

High doses can worsen side effects like sores in the mouth or may decrease the number of white blood cells and platelets in the blood. Should this happen, you may need antibiotics or blood transfusions. Mouth ulcers can be treated to make them less uncomfortable as they heal.

Incompatibilities

Prolonged contact with any solution of an alkaline pH should be avoided as it will result in hydrolysis of the drug. Adriabin® should not be mixed with heparin due to chemical incompatibility which may lead to precipitation when the drugs are in certain proportions.

Adriabin® can be used in combination with other antitumor agents, but it is not recommended that it be mixed with other drugs.

Adriabin® should not be mixed with fluorouracil since it has been reported that these drugs are incompatible to the extent that a precipitate might form. If concomitant therapy with Adriabin® and fluorouracil is required, it is recommended that the IV line be flushed between the administration of these drugs.

4. Possible side effects

Please contact your doctor or nurse immediately if you notice any of the following side effects:

- Feeling dizzy, feverish, short of breath with a tight chest or throat or have an itchy rash. This type of allergic reaction can be very serious.
- Anemia (a low red blood cell count) that can leave you feeling tired and lethargic.
- White blood cell counts can also drop, increasing the chance of infections and a raised temperature (fever).
- Platelets can be affected which could make you bruise or bleed more easily. It is important to seek medical advice if this happens. Your doctor should test your blood cell count during treatment.
- Adriabin® may also cause decreased activity in your bone marrow.

Other side effects that may occur are as follows:

Common or very common

Alopecia, anemia, anxiety, appetite decreased, arrhythmias, arthralgia, asthenia, bone marrow depression, breast pain, cachexia, cardiovascular disorder, chest discomfort, chills, constipation, cough, decreased leucocytes, dehydration, depression, diarrhea, dizziness, drowsiness, dry mouth, dysphagia, dyspnea, dysuria, electrolyte imbalance, epistaxis, eye inflammation, fever, gastrointestinal discomfort, gastrointestinal disorders, headache, hyperhidrosis, hypersensitivity, hypertension, hyperthermia, hypotension, increased risk of infection, influenza like illness, infusion related reaction, insomnia, malaise, mucosal abnormalities, muscle complaints, muscle tone increased, muscle weakness, nail disorder, nausea, nerve disorders, neutropenia, oedema, oral disorders, pain, scrotal erythema, sensation abnormal, sepsis, skin reactions, skin ulcer, syncope, taste altered, thrombocytopenia, vasodilation, vision blurred, vomiting, weight decreased, abnormal ECG results, raised levels of liver enzymes, inflammation in the mouth, blood poisoning, conjunctivitis (usually causing red watery eyes)

Uncommon

Confusion, embolism and thrombosis

Rare or very rare

Secondary oral neoplasms, severe cutaneous adverse reactions (SCARs)

Frequency not known

Asthma, congestive heart failure, secondary malignancy, throat tightness

5. How to store Adriabin®

- Keep out of the reach and sight of children.
- Do not use Adriabin® after the expiry date which is stated on the carton after "Exp."
- Store refrigerated at 2°C to 8°C.
- Protect from light.
- Protect from freezing.
- Discard unused portion.
- Storage of vials of solution under refrigeration may result in formation of a gelled product; if gelling occurs, place vials at room temperature for 2 to 4 hours to return the product to a slightly viscous, mobile solution.



6. Contents of the pack and other information

What Adriabin® contains

- The active substance is Doxorubicin Hydrochloride, 1 mL of concentrate contains 2.00 mg Doxorubicin Hydrochloride.
- The other ingredients are sodium chloride, water for injections and hydrochloric acid.

What Adriabin® looks like and contents of the pack

Adriabin® is a red solution with a pH of 2.5-4.5. This medicinal product is a concentrate for solution for infusion, in an amber glass vial of 5 mL (Adriabin® 10) and 25 mL (Adriabin® 50).

 Sobhan Oncology Co.	
Leaflet	Doxorubicin (Adriabin)
Color	PANTONE 295 U 
Size	210 mm x 310 mm Tolerance: 1±mm
Grammage	58-70 g/m ²
File Name	DOBV-0000-LF-02/s
date	02.08.03