

# DOXORUBICIN

**Brand names** Caelyx, Myocet

**Used in the following combined preparations** None

## GENERAL INFORMATION

Doxorubicin is one of the most effective anticancer drugs. It is prescribed to treat a wide variety of cancers, usually in conjunction with other anticancer drugs. It is used in cancer of the lymph nodes (Hodgkin's disease), lung, breast, bladder, stomach, thyroid, and reproductive organs. It is also used to treat Kaposi's sarcoma in AIDS patients.

Nausea and vomiting after injection are the most common side effects. Although these symptoms are unpleasant, they tend to be less severe as the body adjusts to treatment. The drug may stain the urine bright red, but this is not harmful. More seriously,

because doxorubicin interferes with the production of blood cells, blood clotting disorders, anaemia, and infections may occur. Hair loss is also a common side effect. Heart rhythm disturbance and heart failure are possible, although less common, dose-dependent side effects. The heart failure is usually irreversible and is worsened by trastuzumab (Herceptin). The brand-name drugs Caelyx and Myocet are special formulations in which the doxorubicin is enclosed in fatty spheres. This makes the drug more suitable for treating certain types of cancers, for example AIDS-related Kaposi's sarcoma.

## QUICK REFERENCE

**Drug group** Cytotoxic anticancer drug (p.112)

**Overdose danger rating** Medium

**Dependence rating** Low

**Prescription needed** Yes

**Available as generic** Yes

## INFORMATION FOR USERS

**This drug is given only under medical supervision and is not for self-administration.**

### How taken/used



Injection, bladder instillation.

### Frequency and timing of doses

Every 1–3 weeks (injection); once a month (bladder instillation).

### Adult dosage range

Dosage is determined individually according to body height, weight, and response.

### Onset of effect

Some adverse effects may appear within one hour of starting treatment, but full beneficial effects may not be felt for up to 4 weeks.

### Duration of action

Adverse effects can persist for up to 2 weeks after stopping treatment.

### Diet advice

None.

### Storage

Not applicable. The drug is not normally kept in the home.

### Missed dose

The drug is administered in hospital under close medical supervision. If for some reason you miss your dose, contact your doctor as soon as you can.

### Stopping the drug

Discuss with your doctor. Stopping the drug prematurely may lead to a worsening of the underlying condition.

### Exceeding the dose

Overdosage is unlikely since treatment is carefully monitored and supervised.

## SPECIAL PRECAUTIONS

**Doxorubicin is prescribed only under close medical supervision, taking account of your present condition and medical history:**



### Pregnancy

Not usually prescribed. Doxorubicin may cause birth defects or premature birth. Discuss with your doctor.



### Breast-feeding

Not advised. The drug passes into the breast milk and may affect the baby adversely. Discuss with your doctor.



### Infants and children

Reduced dose necessary.



### Over 60

Increased risk of adverse effects. Reduced dose may be necessary.



### Driving and hazardous work

No known problems.



### Alcohol

No known problems.

## POSSIBLE ADVERSE EFFECTS

Nausea and vomiting generally occur within an hour of injection. Many people also experience hair loss and loss of appetite. Palpitations may

indicate an adverse effect of the drug on the heart. Since treatment is closely supervised in hospital, all adverse effects are monitored.

Symptom/effect	Frequency		Discuss with doctor		Stop taking drug now	Call doctor now
	Common	Rare	Only if severe	In all cases		
Nausea/vomiting	●			●		
Loss of appetite	●			●		
Hair loss	●			●		
Diarrhoea		●		●		
Mouth ulcers		●		●		
Skin irritation/ulcers		●		●		
Palpitations		●		●		●
Breathlessness		●		●		●

## INTERACTIONS

**Ciclosporin** Administration of ciclosporin while receiving doxorubicin can lead to

adverse effects on the nervous system.

## PROLONGED USE

Prolonged use of doxorubicin may suppress the activity of the bone marrow, leading to reduced production of all types of blood cell. It may also adversely affect the pumping capacity of the heart.

**Monitoring** Periodic checks on blood composition are usually required. Regular heart examinations are also carried out.