MEDICINE INFORMATION

Cytarabine

Information for patients and caregivers. Read this with your treatment calendar and the instructions from your oncology team.

At a glance

Treatment	Cytarabine; Ara-C; injectable products
Used in selected settings	Acute myeloid leukaemia, acute lymphoblastic leukaemia and lymphoma
How it is given	By intravenous infusion, injection under the skin, or into spinal fluid in specialist protocols using a suitable preparation. Standard-dose and high-dose treatment have different risks.
Before you start	Save your 24-hour oncology number and have a thermometer and written medicine calendar available.

What this treatment is and how it works

An antimetabolite that interferes with DNA (the genetic material inside cells) production, particularly in rapidly dividing leukaemia cells.

When it may be used

Your team may use this treatment in the following settings: Acute myeloid leukaemia, acute lymphoblastic leukaemia and lymphoma. The choice depends on the exact diagnosis, stage, previous treatment, health and treatment aim. Treatment may aim to cure cancer, lower the risk of recurrence, or control cancer and symptoms, depending on the setting.

A listed use is not a claim that every brand is licensed for that use in every country. Your oncologist will explain why this treatment is appropriate for you.

Before treatment

Before starting, tell the team about previous cancer treatment, allergies, infection symptoms, heart, lung, kidney or liver disease, hearing or nerve problems, diabetes and all medicines you take. Discuss pregnancy, contraception and fertility. Ask for a written treatment calendar, supportive-medicine instructions and a 24-hour oncology contact number. Baseline blood tests usually include a full blood count and kidney and liver function; additional tests depend on the medicine and your health. Before chemotherapy that reaches the whole body, the team should check for current or past hepatitis B infection. If a test is positive, extra monitoring or antiviral treatment may be needed to prevent the virus becoming active again. The team will coordinate testing and treatment; do not delay urgent cancer treatment yourself.

How treatment is given and the schedule

By intravenous infusion, injection under the skin, or into spinal fluid in specialist protocols using a suitable preparation. Standard-dose and high-dose treatment have different risks.

A 7-day continuous infusion is one part of some acute myeloid leukaemia (AML) induction regimens. Other protocols use twice-daily doses, high-dose courses or different schedules. These calendars must not be mixed.

The dose is calculated for your treatment and health. Rest periods, delays or dose changes may be needed. Do not change doses or treatment dates yourself, except to follow specific instructions to stop a medicine and seek help for warning symptoms. The team will give you a revised plan when needed.

During an infusion, tell the nurse immediately about pain, burning, swelling or leaking around the cannula or line. Do not massage the area or apply heat or ice unless the team instructs you.

Tests and monitoring during treatment

Frequent blood counts, kidney and liver tests and infection assessment are required. High-dose courses include checks of coordination, speech and balance, and usually prescribed eye drops to prevent eye inflammation.

At each review, describe symptoms since the previous dose, including problems that have already settled. Blood tests can detect effects before you feel them. Your team may delay, reduce, omit or stop a medicine if results or symptoms make this necessary. The decision depends on the exact protocol; a normal result does not make new symptoms safe to ignore.

Side effects: what to expect

Frequency varies with the dose, schedule, cancer and other treatments. “Common or more frequent” is a practical grouping, not a single percentage for every patient. Some serious effects appear in more than one group because severity and frequency are different.

You are unlikely to have all of these effects. This is not an exhaustive list. Tell the team about any new or troublesome symptom, including one not mentioned here.

Common or more frequent side effects

Practical care and when to ask for help

Possible effect	What you can do	When to contact the team
Low blood counts	White cells fight infection, red cells carry oxygen and platelets help clotting. Treatment can lower one or more of these. Wash hands, avoid close contact with people who are unwell and keep blood-test appointments.	Call immediately for fever, shaking chills or feeling suddenly unwell. Report unusual bruising, bleeding, marked tiredness or increasing breathlessness. Do not wait for a blood-test result before seeking help.

Possible effect	What you can do	When to contact the team
Feeling or being sick	Take preventive anti-sickness medicines at the prescribed times. Try small meals and frequent small drinks; avoid strong food smells if they worsen nausea.	Contact the team the same day if medicines are not controlling symptoms. Seek urgent advice if you cannot keep fluids down, feel faint or pass much less urine.
Sore mouth or throat	Use a soft toothbrush and the mouth-care plan from your team. Choose soft, moist foods and avoid alcohol-containing mouthwash or foods that sting.	Contact the team if pain affects eating or drinking, or if white patches or ulcers develop. Inability to swallow fluids, fever or severe pain needs urgent assessment.
Loose or frequent stools	Keep a record of stools. Take frequent small drinks and use the diarrhoea medicine prescribed for your regimen. Oral rehydration solution may help if the team recommends it.	Contact the team promptly for diarrhoea that continues or increases. Fever, blood, severe pain, dizziness or difficulty drinking needs urgent assessment. Drug-specific stop instructions below take priority.
Reduced appetite or changes in eating	Try smaller, frequent meals with protein and energy-rich foods you tolerate. Ask for a dietitian if your weight or intake is falling.	Report ongoing weight loss or difficulty eating. Inability to drink or signs of dehydration needs same-day urgent advice.
Skin changes	Use gentle cleansers, a plain moisturiser, protective clothing and broad-spectrum sunscreen. Avoid applying new herbal or medicated products without advice.	Report a new or worsening rash. Blisters, peeling skin or sores involving the mouth or eyes need urgent medical assessment.
Tiredness and reduced stamina	Balance rest with short periods of gentle activity. Prioritise tasks and accept help with shopping, meals or transport. Tell the team about poor sleep or pain.	Report fatigue that prevents basic activities or is worsening. Sudden breathlessness, chest pain, fainting or confusion needs urgent assessment.

Other reported side effects (frequency varies)

These effects may be common in some treatment settings, less common in others, or have no reliable frequency estimate. Their position here does not mean they are necessarily less frequent or less serious.

A fever-and-aches reaction called cytarabine syndrome can occur. It may include rash or eye soreness, but infection must still be excluded. Eye inflammation and neurological effects are especially relevant at high doses.

Report these at review, or sooner if worsening. Use the urgent guidance for symptoms that affect breathing, drinking, urination, walking, consciousness or bleeding.

Important serious side effects, including rare effects

Serious does not always mean rare. Where reliable incidence is unavailable, no numerical frequency is assigned. The action to take matters even when the likelihood is uncertain.

High-dose cytarabine neurological injury

New unsteadiness, slurred speech, clumsiness, unusual sleepiness or confusion needs immediate assessment. The team may hold further doses and perform neurological tests. Risk is especially important with high-dose treatment and impaired kidney function.

Inflammation or injury in the lungs

A new cough, breathlessness, chest discomfort or falling exercise tolerance needs urgent oncology contact. Severe or rapidly worsening breathing difficulty is an emergency. Infection and other causes must also be considered.

Severe bowel inflammation or damage

Severe abdominal pain, a swollen abdomen, bloody diarrhoea, persistent vomiting or fever with bowel symptoms needs urgent assessment. Do not treat these symptoms simply by taking extra antidiarrhoeal medicine or laxatives.

Tumour lysis syndrome

When many cancer cells break down quickly, blood salts and kidney function can change dangerously. Preventive fluids or medicines and blood tests may be needed. Reduced urine, severe cramps, palpitations, vomiting or confusion requires urgent assessment.

Serious infection or sepsis

Low white cells can allow an infection to become life-threatening quickly. Fever, shaking chills, rapid breathing, confusion or sudden deterioration needs immediate help. Infection is possible even with a normal temperature.

When to seek urgent help

Follow your hospital’s temperature instructions. If you have not been given a threshold, contact the oncology team immediately for a temperature of 37.5°C (99.5°F) or above, below 36°C (96.8°F), shaking chills or feeling suddenly unwell. Do not wait for a fever if you are deteriorating. Check your temperature before taking a fever-reducing medicine when possible, but do not delay seeking help.

Emergency assessment now

Seek emergency medical help immediately for severe breathing difficulty, chest pain, collapse, a seizure, new confusion, sudden one-sided weakness, uncontrolled bleeding or swelling of the face or throat. Tell emergency staff that you are receiving cancer treatment and when the last dose was given. Do not drive yourself if seriously unwell.

Practical advice for this treatment

Use every prescribed eye-drop dose for the full stated period during high-dose treatment. Report clumsiness, slurred speech, new unsteadiness or unusual sleepiness immediately, even if mild.

Medicines, interactions and vaccinations

Give the oncology pharmacist a complete list of prescription medicines, over-the-counter products, vitamins, herbal and Ayurvedic remedies and supplements. Ask before starting anything new. Do not stop prescribed medicines, including anticoagulants or infection-prevention medicines, without a coordinated plan. Live vaccines are generally unsuitable while immunity is suppressed; discuss vaccine type and timing with the team. Non-live vaccines may be offered, although protection can be reduced. Follow any specific stop-and-call instructions for the cancer medicine on this page or in your written treatment plan.

Other medicines affecting marrow, kidneys or the nervous system need review. The timing of intrathecal treatment and cranial radiotherapy requires specialist coordination.

Pregnancy, fertility and breastfeeding

Chemotherapy can harm a developing baby and may affect fertility temporarily or permanently. Discuss sperm, egg or embryo storage before treatment when feasible. If you could become pregnant, or your partner could become pregnant, use effective contraception during treatment and for the drug-specific period afterwards. Ask for a written end date based on every medicine in your plan: the required period differs by product and can extend for months. Periods stopping does not guarantee infertility. Tell the team immediately about a suspected pregnancy. Do not breastfeed during treatment; restart only after the team confirms the interval for the exact medicine and formulation.

Everyday life

Gentle activity, regular meals and rest can help you cope. Prepare food hygienically and drink according to your individual fluid plan. Avoid smoking; ask whether alcohol is safe with your exact treatment and other medicines. Plan work, travel and driving around symptoms and monitoring visits. Do not drive if dizzy, sleepy, weak, visually affected or impaired by neuropathy. You can usually be close to family and friends: chemotherapy does not make you radioactive. Follow the unit’s instructions for handling urine, vomit, laundry and sexual precautions for the period it specifies.

When to contact the oncology team

Contact the oncology team the same day for persistent vomiting or diarrhoea, difficulty drinking, reduced urine, mouth pain affecting eating, new cough, jaundice, a painful or spreading rash, unusual bruising, worsening constipation or new nerve symptoms. Use the more urgent instructions for the particular symptom when given above. If the team cannot be reached and you are unwell, seek urgent medical care.

Write down your hospital’s daytime and out-of-hours numbers before treatment. CTI’s general contact details do not replace the emergency number provided by your treating hospital.

After treatment

Keep the planned blood tests and follow-up appointments after the last dose. Blood counts and immunity may take time to recover, and some effects can start or persist later. Contact the team about symptoms rather than waiting for a routine visit. Keep a treatment summary, including drug names, dates and any serious reactions, for future doctors. Response may be assessed with examination, scans or blood or marrow tests, depending on the cancer.

Words you may hear

AML	Acute myeloid leukaemia, a cancer of blood-forming cells.

Frequently asked questions

Why do nurses ask me to write or check my balance?

These checks can detect early effects of high-dose cytarabine on coordination.

Why do I need eye drops if my eyes feel normal?

They are preventive treatment during high-dose courses. Use them on the schedule provided rather than waiting for symptoms.

Will I get every side effect listed?

No. Many people have only some of them. Your dose, other medicines, health and previous treatment all affect risk. Reporting symptoms early often makes them easier to manage.

Does having few side effects mean treatment is not working?

No. Side effects do not reliably show how well cancer treatment is working. The team assesses response using the appropriate tests.

Can a dose be reduced or delayed?

Yes. Blood counts, organ function or side effects may require a delay, reduction, omission or change. The team balances safety with the treatment aim; do not change doses yourself. Follow the specific instructions to stop a medicine and seek help if a warning symptom occurs.

Can I take vitamins, herbal or Ayurvedic products?

Check every product with the oncology pharmacist first. “Natural” does not mean interaction-free, and some products can affect the liver, bleeding or drug levels.

What should I have ready at home?

A thermometer, the 24-hour oncology number, a treatment calendar, your medicine list and prescribed symptom medicines. Arrange help with transport or meals if needed.

When should I call instead of waiting for the next appointment?

Use the urgent-help instructions on this page. Fever, sudden illness, uncontrolled symptoms or difficulty drinking should not wait until the next treatment visit.

Related combination guides

- 7+3 / DA induction family

Sources and further reading

Summary of Product Characteristics

Product-specific details vary by formulation and treatment protocol.

Professional reference resources. These describe the specific product, warnings, interactions, monitoring and adverse effects. For US substitutes, the document is prescribing information rather than an SmPC. Check the product actually dispensed in India.

- Cytarabine 100 mg/ml - Hospira UK. Accessed 16 October 2026. Current company-supplied/regulatory product information; not asserted to be the originator brand.

Other authoritative references

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