MEDICINE INFORMATION

High-dose etoposide and carboplatin with stem cell support

Patient information about high-dose chemotherapy and the return of your own stem cells for selected germ cell cancers.

At a glance

Treatment	Etoposide + Carboplatin
When it may be used	This approach is used for selected people with germ cell cancer that has returned after earlier treatment.
How it is given	Etoposide and carboplatin are given by drip into a vein before your own stem cells are returned through a vein.
Before you start	Tell the team about kidney or hearing problems and previous chemotherapy.

What this treatment is and how it works

Etoposide and carboplatin are chemotherapy medicines. High doses can damage the marrow for a time. Returning your own previously collected stem cells helps blood cell production recover.

When it may be used

A specialist team considers previous treatment, response, kidney function and general health.

Before treatment

Ask how stem cells will be collected, when admission will take place and what support you will need afterwards.

How treatment is given

Chemotherapy is given through a vein in hospital over several days. Your collected cells are returned through a vein on transplant day, often called day zero. Ask whether one or more courses are planned.

Tests and monitoring during treatment

The team checks blood counts, kidney function, salts, temperature, mouth symptoms and fluid balance. They may check hearing and use blood tumour markers or scans to assess response.

If you need a blood transfusion

You need irradiated blood components around the time of your own stem cell transplant. If you need red cells or platelets, tell the transfusion team about your treatment so they can arrange irradiated components. These are specially treated before transfusion to prevent a rare, serious reaction. Ask how long the precaution applies and whether you should carry a transfusion alert card or letter.

Side effects

Common or more frequent side effects

- **Very low blood counts.** There is a period after conditioning when the marrow makes few new blood cells. During this time the team watches for infection and bleeding and may give transfusions. Ask which blood counts the team is watching before discharge. Use the transplant unit's contact instructions even if your temperature is normal and you feel suddenly unwell.
- **Sore mouth or throat.** The lining of the mouth and throat can become sore enough to make drinking or swallowing medicine uncomfortable. Tell the ward early so it can offer pain relief and assess your intake. Your team may also use fluids or nutrition support for a period while the lining heals.
- **Diarrhoea, poor appetite and nausea.** Tell the nurses how many loose stools you are having and if you are drinking less. They may check for common causes and help replace lost fluid. Ask about foods that are easier to tolerate.

Other reported side effects

Report ringing in the ears, reduced hearing, trouble swallowing or much less urine. The team may arrange fluids, nutrition support or transfusions during recovery.

Serious effects to recognise

- **Hearing or balance changes.** Platinum chemotherapy can cause ringing in the ears or hearing loss. Ask if you need a baseline or follow-up hearing test. Report new ringing, poorer hearing or changes that make it hard to follow conversations. Your team can check how this affects the next treatment.

Tell staff immediately about rash, wheezing or dizziness during treatment. Report passing much less urine than usual.

When to seek urgent help

Tell staff immediately if you are in hospital. If you are at home, call your hospital's 24-hour treatment number for fever, shaking chills, bleeding, ongoing diarrhoea, difficulty drinking, reduced urine or new breathlessness. Follow your hospital's written temperature instructions. If you have no written threshold, call at 37.5°C (99.5°F) or above, or below 36°C (96.8°F). Call if you feel very unwell even when your temperature is normal.

Seek emergency care for severe breathing difficulty, swelling of the face or throat, chest pain, collapse or bleeding that will not stop.

Practical advice for this treatment

Prepare before admission

Your own stem cells are collected and stored before the high-dose chemotherapy. Ask whether you will receive one or more courses and when stem cells will be returned. Arrange support for the admission and discharge period and let the team know if travel or a place to stay near hospital might be difficult.

Report symptoms while your marrow recovers

You may need platelet or red-cell transfusions, infection prevention medicines and regular blood tests while your counts are low. Tell the ward if sores make swallowing difficult or if you develop diarrhoea or bleeding. Once home, use the transplant unit number for fever or sudden illness.

Ask which treatments affect hearing and kidneys

High-dose carboplatin and earlier cisplatin can affect hearing. Tell the team about any ringing, balance problems or difficulty following conversations. Ask how kidney function will affect treatment planning and how these problems are followed over time.

Medicines, interactions and vaccinations

Check all medicines with the transplant pharmacist. Ask about infection prevention, care for mouth soreness and when vaccines can restart.

Everyday life

Ask what to bring for an admission and how long to plan for help at home. Share the urgent number with caregivers before discharge.

Pregnancy, fertility and breastfeeding

Discuss fertility preservation and ask when contraception or breastfeeding precautions may end. Ask for advice specific to high-dose chemotherapy and stem cell support.

After treatment

Blood tests track the return of blood cells. Ask about hearing and kidney follow-up and when tumour markers or scans will be checked again.

Frequently asked questions

Why do you give back my stem cells?

High-dose chemotherapy damages the marrow that makes your blood cells. Stem cells collected from you earlier are returned afterwards to help it recover. You will still need close monitoring for infection, bleeding and other side effects while blood counts recover.

Is this the same as regular carboplatin and etoposide?

It uses the same drugs at higher doses in a specialist transplant plan.

What is day zero?

It is the day your collected stem cells are returned.

Why does the team check hearing?

Platinum drugs can affect hearing. Report new ringing or reduced hearing promptly.

Will I need a second course?

Some plans include more than one. Ask what is planned and what the team will review before proceeding.

When will I hear whether treatment has worked?

Ask when the team will review tumour markers, scans and recovery.

Individual medicine guides

- Etoposide
- Carboplatin

Sources and further reading

Read this guide alongside your hospital's plan. Ask your pharmacist to confirm the exact product dispensed in India and follow the instructions for that product.

Summary of Product Characteristics (SmPC) and prescribing information

- Etoposide infusion - Irish HPRA SmPC
- Carboplatin infusion - UK SmPC
- Intravenous etoposide - US prescribing information

Clinical protocols and other references

- British Society for Haematology guideline on irradiated blood components
- Canadian National Advisory Committee recommendations on irradiated blood components

Additional sources

- Study of high-dose etoposide and carboplatin with stem cell rescue

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