MEDICINE INFORMATION

TCHP for HER2-positive breast cancer

Patient information about TCHP for HER2-positive breast cancer, including what happens at treatment visits and how to manage side effects.

At a glance

Treatment	Docetaxel + Carboplatin + Trastuzumab + Pertuzumab
When it may be used	TCHP is one option before surgery for selected people with HER2-positive breast cancer.
How it is given	Docetaxel and carboplatin are given by drip into a vein. Trastuzumab and pertuzumab are given by drip or together as an injection under the skin if prescribed in that form.
Before you start	Save your hospital's 24-hour cancer care number and check the instructions for medicines you take at home before treatment.

What this treatment is and how it works

Docetaxel and carboplatin interfere with the way cancer cells divide. Trastuzumab and pertuzumab attach to different parts of human epidermal growth factor receptor 2 (HER2), a protein found at higher levels on some breast cancer cells. Using both antibodies helps block growth signals in different ways. The treatment can also affect healthy cells.

When it may be used

Your team uses the HER2 test and other features of the cancer, including its size and whether it involves nearby lymph nodes, to decide whether TCHP is suitable. When treatment is given before surgery it is called neoadjuvant treatment. The findings at surgery help your team decide which treatment comes next.

Before treatment

Tell your team about previous heart problems, kidney problems, hearing changes, tingling or numbness, and medicines or supplements you take. You will have blood tests and a heart scan to see how well your heart pumps. The team may prescribe a steroid to take before docetaxel. If you miss it, tell the unit before treatment so they can advise you.

If you have diabetes, ask how to check your blood sugar on steroid days. Ask which medicines to take before leaving home and which the nurse will give in the unit. Make sure you have the 24-hour number and know where to go if you feel unwell.

How treatment is given

The medicines are given at hospital, usually every three weeks during the chemotherapy part of the plan. The targeted medicines may be given through a drip, or as a combined injection under the skin when that formulation is prescribed. The first visit can take longer. Your team will explain the calendar, medicines to prevent sickness and whether you need an injection to support your white blood cells.

Ask how many cycles are planned, whether you need to return for the white-cell support injection and which medicines to take at home. Tell the nurse about stinging, redness or swelling around the drip site, or symptoms such as chills, dizziness or rash during treatment.

Tests and monitoring during treatment

Blood counts and kidney function help the team decide if the next cycle can go ahead. Heart scans are repeated during HER2-targeted treatment. Tell the team about diarrhoea, difficulty drinking, new swelling or changes in breathing, and any tingling that affects walking, balance or tasks such as doing up buttons.

Your team may examine the breast and use imaging to assess response before surgery. A delay or adjustment can give blood counts time to recover or help prevent a side effect from worsening. Ask what the team will check before the next cycle.

Side effects

Common side effects

- **Diarrhoea and nausea.** Keep the medicines and instructions your team gave you within reach. Tell the team if stools become more frequent, symptoms continue despite treatment or you struggle to drink.
- **Low blood counts.** Lower white cells increase infection risk. Low red cells can make you tired or breathless, and low platelets can make bruising or bleeding easier.
- **Mouth, taste and appetite changes.** Tell the team if soreness or taste changes make it difficult to eat. Ask about mouth care and help with maintaining your weight.
- **Hair and nail changes.** Hair loss and nail changes can occur. Ask before treatment about options for managing hair loss and what nail symptoms to report.
- **Tingling or numbness.** Let the team know early if you start dropping things, feel less steady or find buttons harder to manage.

Other reported side effects

Carboplatin can affect hearing and the kidneys, and docetaxel can cause fluid retention. Report ringing in the ears, changes in hearing, reduced urine or increasing swelling. Your team can assess whether symptoms are related to treatment.

Serious effects to recognise

Low infection-fighting white cells can allow infections to become serious quickly. A reaction to a drip can cause chills, flushing, rash, wheezing or dizziness. Tell the nurse immediately if symptoms start during treatment. Trastuzumab and pertuzumab can reduce how well the heart pumps. New breathlessness, swelling or palpitations need assessment.

When to seek urgent help

Call your hospital's 24-hour cancer care number straight away for fever, shaking chills, feeling suddenly unwell, persistent diarrhoea or vomiting, inability to drink, unusual bleeding, or new shortness of breath. Follow your hospital's 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 without a fever.

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

Organise the steroid and nausea medicines

Docetaxel may require steroid tablets before treatment. Check the first dose and call the unit if you miss it. Clarify which anti-sickness medicines should be taken regularly after carboplatin and which to use if symptoms break through.

Keep a plan for diarrhoea

Pertuzumab can cause diarrhoea, particularly early in treatment. Ask which bowel changes to record and when to start any prescribed medicine. Call for frequent watery stools, dizziness, fever or difficulty drinking.

Know what happens around surgery

If TCHP is given before surgery, the team will review the response and later use the operation results to plan further treatment. Ask which appointments may continue for HER2-directed treatment and heart checks.

Medicines, interactions and vaccinations

Bring a list of all prescribed and non-prescription products. Ask your team before adding remedies or supplements and before a vaccination. Tell other healthcare staff that you are receiving chemotherapy and HER2-targeted treatment.

Pregnancy, fertility and breastfeeding

TCHP can harm a developing baby and can affect fertility. Ask about fertility preservation before starting if this matters to you. Follow the contraception and breastfeeding advice for all four medicines. Some requirements continue after the chemotherapy part ends.

Everyday life

Plan for help at home if you feel tired after treatment. Keep water, the medicines your team prescribed for symptoms and the hospital number where you can reach them. Tell the team early about diarrhoea or sore mouth, especially if you are eating or drinking less.

After treatment

The team will explain when to expect surgery and which HER2-targeted treatment may continue afterwards. Keep heart checks and follow-up visits. Report lingering tingling, breathlessness or swelling.

Ask when the surgical pathology results will be discussed. The laboratory examines the tissue removed at surgery. The findings, including whether invasive cancer remains, help your team decide the next part of treatment.

Frequently asked questions

What is the difference between TCH and TCHP?

TCH contains docetaxel, carboplatin and trastuzumab. TCHP also includes pertuzumab.

Do all four medicines continue after surgery?

Ask your team which medicines will continue and when to have your next heart check. The tissue removed at surgery shows whether any invasive cancer remains. This result helps the team choose the next HER2-targeted treatment.

What should I do if diarrhoea starts at home?

Follow your written advice and contact your hospital if the diarrhoea continues, is getting worse or makes it difficult to drink.

Why do I need a heart scan when I feel well?

Trastuzumab and pertuzumab can affect how well the heart pumps before you notice symptoms. The scan gives your team a measurement to compare over time.

What if I forget the steroid before docetaxel?

Call the unit and tell them which dose you missed. Follow their instructions before taking any extra tablets.

How long does the first visit take?

It often takes longer than later visits because the team needs time to give the medicines and watch for reactions. Ask your unit for an estimate before arranging transport.

Can trastuzumab and pertuzumab be given as an injection?

Some teams use a combined injection under the skin when that product is suitable and available. The chemotherapy medicines are still given through a drip.

What is the injection after chemotherapy for?

If prescribed, it helps your body make infection-fighting white blood cells. Ask when it is due and who will give it.

What if I feel hot or shivery during the drip?

Tell your nurse immediately. The team can assess whether this is an infusion reaction and treat it.

What if my fingers feel numb?

Tell the team before the next cycle, especially if it affects grip or balance. They can assess whether the chemotherapy plan needs adjusting.

Should I report ringing in my ears?

Yes. Tell your team about new ringing or changes in hearing so they can check the cause.

What if I have a temperature at home?

Use the written instructions from your treating hospital and call the 24-hour number straight away. Call if you feel suddenly unwell even without a fever.

Can I ask about scalp cooling?

Ask before the first cycle whether it is suitable and available. The unit can explain what it involves and how much time to allow.

Does a delay mean that the treatment is failing?

A delay often gives blood counts or side effects time to improve. Ask the team what they are monitoring and when they will reassess.

When do pregnancy and breastfeeding precautions end?

Ask for a written date based on the last dose of each medicine. The precautions can continue after the chemotherapy has finished, especially if targeted treatment is ongoing.

Individual medicine guides

- Docetaxel
- Carboplatin
- Trastuzumab
- Pertuzumab

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

- Docetaxel (Taxotere) - EU product page with SmPC
- Carboplatin infusion - UK SmPC
- Trastuzumab (Herceptin) - EU SmPC

- Pertuzumab (Perjeta) - EU SmPC
- Fixed-dose pertuzumab and trastuzumab injection (Phesgo) - EU SmPC
- Perjeta FDA prescribing information

Clinical protocols and other references

- eviQ TCHP protocol before breast cancer surgery
- TRYPHAENA trial, including the four-drug TCHP arm

Additional sources

- eviQ patient information on TCHP before breast cancer surgery
- Macmillan Cancer Support, targeted therapies for breast cancer
- Cancer Research UK, targeted and immunotherapy drugs for breast cancer
- Macmillan Cancer Support, docetaxel patient information

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