MEDICINE INFORMATION

Mitomycin and capecitabine with radiotherapy

Patient information about mitomycin and capecitabine during radiotherapy for anal cancer, including tablet timing and skin or bowel symptoms.

At a glance

Treatment	Mitomycin + Capecitabine
When it may be used	The combination is used as part of radiotherapy for some people with anal cancer.
How it is given	Mitomycin is given through a vein. You take capecitabine tablets by mouth on the days your team specifies. Radiotherapy is delivered by a machine outside the body.
Before you start	Bring your medicine list and tell the team about kidney or heart problems, bowel symptoms or previous treatment.

What this treatment is and how it works

Mitomycin and capecitabine are chemotherapy medicines. They are used with radiotherapy in this plan. Capecitabine changes into fluorouracil in the body and can help radiation work against cancer cells.

When it may be used

Your team will explain which visits are for radiotherapy, mitomycin and review.

Before treatment

Ask whether you need a test for dihydropyrimidine dehydrogenase (DPD) deficiency. Capecitabine becomes fluorouracil in the body, and low DPD activity can increase the risk of severe side effects.

How treatment is given

Mitomycin is given through a vein. Capecitabine tablets are usually taken on radiotherapy days under the schedule prescribed. Follow the pharmacy’s instructions for taking them with food. If a radiation appointment moves, ask what to do about the tablets.

Tests and monitoring during treatment

The team checks blood counts, kidney function, bowel and bladder symptoms and skin around the treated area. Tell them about difficulty sitting, washing, eating or drinking.

Side effects

Common or more frequent side effects

- **Changes in blood counts.** Treatment can lower the white cells that fight infection, the red cells that carry oxygen and the platelets that stop bleeding. You may feel tired or get breathless sooner than usual. Let the unit know about nosebleeds, new bruises or small red or purple spots. Fever or shaking chills needs a call to the urgent number even if your next blood test is already booked.
- **Skin soreness in the area treated.** The skin around the anus, genitals or inner thighs can become red, tender or broken during radiotherapy, and may take time to recover. Ask which products the radiotherapy team recommends and whether they need to be used at a particular time. Tell it if pain interferes with sitting, washing or sleeping.
- **Bowel and bladder changes.** Pelvic radiotherapy can cause urgency, frequent stools and discomfort around the anus. Some people have burning or a frequent urge to pass urine. Tell the team early, particularly if you have trouble drinking or see blood. It may assess for infection or recommend medicines to ease symptoms.
- **Hand and foot symptoms.** Palms and soles can become sore, red, dry or cracked with capecitabine. Tell the unit if it hurts to walk or hold things. Ask about creams, footwear and reducing friction, and let the team know before your next dose if the symptoms are becoming painful.

Other reported side effects

Report pain or burning passing urine, worsening skin soreness or a change in bowel frequency. Tell the nurse if mitomycin causes pain or burning at the drip site.

Serious effects to recognise

- **Diarrhoea with dehydration or fever.** Contact the unit promptly for repeated watery stools, blood in stools, fever, severe belly pain or increasing dizziness. Follow the treatment-specific diarrhoea instructions. Tell the team if you cannot drink, are passing much less urine or have taken medicine for the symptoms already.
- **Chest pain or breathlessness.** Capecitabine can occasionally affect the heart. Seek emergency care for new chest pain or pressure, sudden breathlessness or fainting. Tell staff that you are taking capecitabine.

Severe diarrhoea and early severe mouth sores can be signs of capecitabine toxicity. Mitomycin can rarely cause serious kidney or lung problems.

When to seek urgent help

Call your hospital’s 24-hour cancer care number straight away for fever, shaking chills, ongoing diarrhoea, bleeding, reduced urine, new breathlessness or mouth sores that prevent drinking. 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

Match capecitabine to the radiotherapy calendar

Ask the team which days to take capecitabine and what to do if a radiation appointment is moved. Follow the written instructions for taking tablets with meals. Call for advice if you miss or vomit a dose. Mitomycin is given separately as a drip.

Get a plan for skin, bowel and bladder symptoms

Pelvic radiotherapy can make the skin sore and affect bowel movements or urination. Ask which creams are suitable and when to apply them. Call for pain that is hard to manage or stools that are much more frequent or watery than usual. Early advice can help you keep drinking and continue care safely.

Keep the pharmacy informed about other medicines

Tell the team if you take warfarin or another blood thinner. Ask about testing for low activity of dihydropyrimidine dehydrogenase, often shortened to DPD, before capecitabine. Even with a reassuring test, unexpectedly severe diarrhoea or mouth sores needs prompt advice.

Medicines, interactions and vaccinations

Tell your team if you take warfarin or have recently used brivudine for shingles. Ask before new products for the treated skin, diarrhoea remedies or vaccines.

Everyday life

Ask which creams and washing routines are suitable for your skin. Keep a separate written plan for capecitabine and radiation days.

Pregnancy, fertility and breastfeeding

Discuss fertility, contraception and breastfeeding before treatment. Ask about sexual health, pelvic changes and support after treatment if relevant.

After treatment

Skin and bowel symptoms can continue or worsen for a short time after radiotherapy ends. Ask how to manage these symptoms and when the team will check the response.

Frequently asked questions

Do I take capecitabine on days without radiotherapy?

Follow the written plan from your oncology team. If a radiation visit is cancelled, call the unit before deciding whether to take that day's tablets. Ask it to mark any revised dates on your calendar.

Why take capecitabine with food?

The prescribed tablets have instructions about meals. Use the directions from your pharmacy.

What is DPD?

It is an enzyme that helps break down fluorouracil. Low activity can increase the risk of severe effects.

What if a cream makes my skin sting?

Tell the radiotherapy team and ask which products are suitable for that area.

Can skin soreness get worse after the last visit?

It can. Follow the skin care plan and call for signs of infection or worsening pain.

What if my hands or feet become sore?

Report it before skin breaks or soreness interferes with walking or using your hands.

Individual medicine guides

- Mitomycin
- Capecitabine

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

- Mitomycin (Mitocin) - UK SmPC for the injectable product
- Capecitabine (Xeloda) - EU SmPC
- Intravenous mitomycin US prescribing information

Clinical protocols and other references

- eviQ guidance on DPD deficiency and capecitabine
- eviQ mitomycin and capecitabine chemoradiation for anal cancer

Additional sources

- eviQ patient information for anal cancer mitomycin, capecitabine and radiotherapy

Editorially approved by Dr (Prof) Vijay Agarwal

Professor and Lead Consultant - Medical Oncology

Review record updated: 14 November 2026 · Editorial review policy