What is Temozolomide?

Temozolomide (TMZ) is a type of chemotherapy drug used worldwide for the treatment of high grade gliomas and, more specifically, anaplastic astrocytoma (Grade 3) and glioblastoma (Grade 4). (For more information on tumour types and grading, see our ‘What is a brain tumour?’ fact sheet).

This fact sheet contains information you may find helpful if you or someone you care for is receiving TMZ.

In this fact sheet:

- What is Temozolomide?
- How is Temozolomide taken?
- How does Temozolomide work?
- What are the side-effects of Temozolomide?
- Further information

What are the side-effects of Temozolomide?

Like all chemotherapy drugs TMZ may cause one or more side-effects. This section lists some of the most common side-effects of TMZ.

- Pneumonia – If you are being treated with TMZ, you run an increased risk of developing a type of pneumonia known as Pneumocystis Jirovecii Pneumonia or PCP. This is a fungal infection of the lungs, caused by a fungus that is common in the environment and can cause infection in...
people with weakened immune systems. For this reason your oncologist may prescribe a preventative antibiotic to reduce the chance of getting this infection.

- **Low blood count** – TMZ treatment can cause a ‘low platelet count’. Platelets help the blood clot and so a low platelet counts can increase the risk of bleeding significantly. If the results of blood tests show a low platelet count your doctor might consider delaying your treatment or reducing the dose you receive. In rare cases TMZ can cause a more serious blood condition known as ‘pancytopenia’. Pancytopenia is when red and white blood cells, as well as platelets are lower than normal. In such cases, you might receive blood and platelet transfusions (injections of blood) and G-CSF support (injections which help boost immunity).

- **Infection** – A lower white blood cell count caused by TMZ treatment may weaken your resistance to infection. If you are being treated with TMZ, you might be advised to avoid individuals with infection as much as possible. You should be given written information about what to do and who to contact if you get a temperature, sore throat or other signs of an infection. You should inform your oncologist immediately if you experience any symptoms such as a sore throat or high temperature.

- **Fatigue** – People have reported feeling tired during and for a period of six-twelve months following their treatment.

- **Nausea and vomiting** – Nausea is one of the most common side-effects of TMZ and doctors usually prescribe anti-emetic (anti-sickness) medication to manage it.

- **Loss of appetite** – If you are experiencing a lack of appetite as a result of TMZ treatment you may ask to speak to a dietician who can monitor your weight and give you advice on how to supplement your diet.

- **Constipation** – Constipation is another common side-effect of TMZ treatment. If you suffer from TMZ-induced constipation, you can ask your doctor for some medication that might help manage this symptom.

- **Amenorrhoea** – If you are female you might temporarily stop having periods.

- **Loss of fertility** – TMZ can in some cases cause infertility in both men and women. Before starting treatment with TMZ, your doctor should discuss available options for preserving your fertility with you.

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**Further information**

This factsheet covers the main drug characteristics and most common side-effects. However, the material covered here is not exhaustive. If you require the full, detailed drug information on Temozolomide, you can find it here: [http://www.medicines.org.uk/emc/medicine/7027](http://www.medicines.org.uk/emc/medicine/7027)

**Questions you might want to ask your doctor**

- What should I do if I miss a dose or take too much by mistake?
- How do I manage any side-effects TMZ may cause?
- If I begin to feel ill do I visit my GP, make an appointment at clinic or call 999?
- What are the most common side effects and what should I expect?
- What do I do if I struggle with swallowing the tablets; can I take it in another form?
- What should I do if friends have infections?
- Are there any inoculations or vaccines I should avoid taking?
- Are there any inoculations or vaccines you recommend I should get?
- Will my GP be informed of my treatment protocol, how will they be involved in my treatment?
What if I have further questions?

If you require further information, any clarification or wish to discuss any concerns, please contact our Support and Information Team:

Call: 0808 800 0004
(free from landlines and most mobiles:
3, O2, Orange, T-mobile, EE, Virgin and Vodafone)
Email: support@thebraintumourcharity.org
Join our closed Facebook group:
bit.ly/supportonfacebook

About us

The Brain Tumour Charity makes every effort to ensure that we provide accurate, up-to-date and unbiased facts about brain tumours. We hope that these will add to the medical advice you have already been given. Please do continue to talk to your health team if you are worried about any medical issues.

The Brain Tumour Charity is at the forefront of the fight to defeat brain tumours. We fund pioneering research to increase survival, raise awareness of the symptoms and effects of brain tumours and provide support for everyone affected to improve quality of life.

We rely 100% on charitable donations to fund our vital work. If you would like to make a donation, or want to find out about other ways to support us including fundraising, leaving a gift in your will or giving in memory, please visit us at thebraintumourcharity.org, call us on 01252 749043 or email fundraising@thebraintumourcharity.org

About this fact sheet

This fact sheet has been written and edited by The Brain Tumour Charity’s Support and Information Team. The accuracy of information has been verified by leading health professionals specialising in neuro-oncology. Our fact sheets have been produced with the assistance of patient and carer representatives and up-to-date, reliable sources of evidence. If you would like a list of references for any of the fact sheets, or would like more information, please contact us.