TEMOZOLOMIDE

INDICATION (ICD10) C71, C72

1. Relapsed high grade glioma following failure of first line chemotherapy.
2. Glioblastoma following concomitant Temozolomide and radiotherapy.
3. Temozolomide as adjuvant treatment for people with newly diagnosed anaplastic astrocytoma without 1p/19q codeletion following surgery and radiotherapy.
   PS 0, 1, 2 (PS 3 due to a neurological deficit treatment may be appropriate)

REGIMEN

Days 1 to 5	**TEMOZOLOMIDE**	150mg/m^2*	oral	once daily

*Cycle 2 onwards the dose may be increased to 200mg/m^2 daily providing neutrophils ≥1.5x10^9/l and platelets ≥100x10^9/l on day 24-28

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 28 days
Glioblastoma adjuvant – up to 6 to 12 cycles
Glioma relapsed high grade – continue until progression (monitor MR imaging every 3 months)
Anaplastic astrocytoma – up to 12 cycles

ADMINISTRATION

Available as various strength capsules
Take on an empty stomach

ANTI-EMETICS

Moderate risk days 1 to 5

CONCURRENT MEDICATION REQUIRED

Temozolomide	-

EXTRAVASATION AND TYPE OF LINE / FILTERS

Not applicable

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E and LFTs every cycle
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Temozolomide	Myelosuppression, rare protracted aplastic picture can occur Hepatic toxicity – may still occur several weeks after end of treatment Renal impairment

INTERACTIONS WHICH MAY REQUIRE DOSE MODIFICATIONS (not exhaustive list check SPC/BNF/Stockleys)

Temozolomide	Vaccines may increase risk of generalised infection.

DOSE MODIFICATIONS

Temozolomide

Dose level -1	Temozolomide dose 100mg/m^2/day	Reduction for prior toxicity
Dose level 0	Temozolomide dose 150mg/m^2/day	Cycle 1 dose
Dose level 1	Temozolomide dose 200mg/m^2/day	Cycles 2 to 12 dose in absence of toxicity

Haematological

Temozolomide

Neutrophils <1.5x10^9/l and platelets <100x10^9/l on day 28 then treatment should be delayed one week and then reduce by one dose level.

Hepatic impairment

Temozolomide

No need for dose adjustments is expected.

Renal impairment

Temozolomide

No need for dose adjustments is expected.

REFERENCES

1. CATNON trial
2. Stupp et al; NEJM February 2006
3. Giraud EL, de Lijster B, Krens SD, Desar IME, Boerrigter E, van Erp NP. Dose recommendations for anticancer drugs in patients with renal or hepatic impairment: an update. Lancet Oncol 2023; 24: e229.

Assessments

	Pre	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Ongoing
Clinical assessment	X		Pre cycle		Pre cycle	Every cycle
SACT assessment (PS and toxicities)	X	X	X	X	X	Every cycle
FBC	X	X	X	X	X	Every cycle
U&E, calcium, magnesium & LFT	X	X	X	X	X	Every cycle
CrCl	X	X	X	X	X	Every cycle
CT scan	X					At cycle 6, Inform consultant team if not booked
Informed consent	X					Verbal each cycle
Height	X					
Weight recorded	X	X	X	X	X	Every cycle