TEMOZOLOMIDE with concurrent RT

INDICATION (ICD10) C71, C72

1. First-line treatment of patients with newly diagnosed glioblastoma (GBM) as an adjunct for radiotherapy. PS 0, 1, 2 (PS 3 due to a neurological deficit treatment may be appropriate)

REGIMEN

Days 1, 8, 15, 22*, 29* and 36*	**TEMOZOLOMIDE**	75mg/m^2	oral	once daily for 7 days

CYCLE FREQUENCY AND NUMBER OF CYCLES

One 42 day cycle only. Patients having 6 weeks RT receive 6 weeks temozolomide.
*Patients ≥65 years with hypermethylation receiving 40Gy in 15 fractions only receive 21 days temozolomide.
*Patients ≤70 years receiving 30 fractions receive 42 days temozolomide.
After completing Temozolomide with RT and following a 4 week break start temozolomide regimen for 6 cycles.

ADMINISTRATION

Available as various strength capsules
Take on an empty stomach

ANTI-EMETICS

High emetic risk
NB patients are usually already taking dexamethasone.

CONCURRENT MEDICATION REQUIRED

Temozolomide	Prophylactic antibiotics – co-trimoxazole 960mg od three times a week during chemo radiotherapy or dapsone 100mg od if allergic to co-trimoxazole.

EXTRAVASATION AND TYPE OF LINE / FILTERS

Not applicable

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E and LFTs every 7 days
Neutrophils x 10^9/L ≥1.5
Platelets x 10^9/L ≥100
Serum creatinine every cycle
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

Haematological

Temozolomide

Neutrophils <1.5x10^9/l and platelets <100x10^9/l then stop treatment, but continue to monitor FBC, and treatment may be restarted if levels go above thresholds.

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
Clinical assessment	X	
SACT assessment (PS and toxicities)	X	X
FBC	X	X
U&E, calcium, magnesium & LFT	X	X
CrCl	X	X
CT scan	X	
Informed consent	X	
Height	X	
Weight recorded	X	X