Systemic Anti Cancer Treatment Protocol

Etoposide Oral
Sarcoma

PROTOCOL REF: MPHAETOPOR
(Version No. _1.0)

Approved for use in:

Second line treatment onwards for:
Advanced Sarcoma
Osteosarcoma
Ewings sarcoma
Rhabdomyosarcoma
Other high grade bone sarcomas

Dosage:

Drug	Dosage	Route	Frequency
Etoposide	50 to 100mg twice daily for 7 to 14 days	Oral	Every 21 days as tolerated

Alternative schedule:

Etoposide 100mg daily for 21 days, repeated every 28 days.

Repeat every 21 days (this may vary depending on individual patient circumstances)

Give for up to 6 cycles and review. Continue based on response, tolerability and patient choice
In patients with significant frailty or co-morbidity yet chemotherapy is deemed appropriate etoposide dose may be reduced further to 50mg daily and/or duration reduced to 5 to 7 days

Notes:

Etoposide is available as 50mg or 100mg capsules
Swallow capsules whole with a glass of water on an empty stomach
Take 1 hour before or two hours after a meal
Do not make up missed doses or double up next dose
If patients are unable to swallow then the injection may be given orally. 100mg capsule = 70mg oral injection. Syringes must be prepared by the aseptic pharmacy
Mask the unpleasant taste of the oral injection by taking with juice, cola or similar

Significant Drug Interactions

Warfarin / coumarin anticoagulants – avoid if possible as causes unpredictable fluctuations in INR. Consider switching to a low molecular weight heparin.
Ciclosporin – possible reduction in etoposide clearance at high doses of ciclosporin
St Johns Wort – Increase metabolism of etoposide
Atovaquone – Increase etoposide levels

Supportive treatments:

Anti-emetic risk - low
Domperidone 10mg oral tablets, up to 3 times a day or as required

Extravasation risk:

Not applicable

Main Toxicities:

Note that this is a very low dose of etoposide and is usually well tolerated but adverse events may still occur.
Myelosuppression, nausea vomiting, diarrhoea, mucositis, allergic reactions, alopecia, transient alterations in LFT, rarely peripheral neuropathy

Investigations and treatment plan

	Pre	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Comments
Medical Assessment	X		X		X		X	Alternate cycles
Nursing Assessment	X	X	X	X	X	X	X	Every cycle
FBC	X	X	X	X	X	X	X	Every day 1
U&E & LFT	X		X	X	X	X	X	Every cycle
Serum Creatinine	X		X	X	X	X	X	Every cycle
CrCl (Cockroft and Gault)	X							If reduced or borderline SrCr
CT scan	X							If appropriate
Informed Consent	X							
PS recorded	X	X	X	X	X	X	X	Every cycle
Toxicities documented	X	X	X	X	X	X	X	
Weight recorded	X	X	X	X	X	X	X	

Dose Modifications and Toxicity Management:

Haematological toxicity

Proceed on day 1 if:-

ANC ≥ 1.0 x 10^9/L	Platelets ≥ 100 x 10^9/L

If platelets are 75 to 100 x 10^9/L discuss with consultant

Delay 1 week on day 1 if:-

ANC ≤ 0.9 x 10^9/L	Platelets ≤ 99 x 10^9/L

For patients delayed more than 2 weeks due to haematological toxicity, arrange for a review appointment with the consultant, dose reduction or reduced course length may be considered.

Non-haematological toxicity

Renal

CrCl mL/min	Etoposide dose
>50	100%
15-50	75%
<15	Do not give

Hepatic

There is no specific guidance but most studies have reduced doses with severe hepatic impairment because etoposide is metabolised in the liver. The following is for initial treatment. If there is toxicity then further reductions will be needed based on nadir blood counts and individual tolerances.

ALT / AST transaminases		Bilirubin	Etoposide dose
≤1.5 ULN	AND	≤1.5 ULN	100%
1.5 – 5 ULN	AND/ OR	1.5 – 3 ULN	50%
≥ 5 x ULN	OR	≥ 3 x ULN	Contraindicated

References:

Kebudi R, Gorgun O, Ayan I. Oral etoposide for recurrent/progressive sarcomas of childhood. Pediatric blood & cancer. 2004;42(4):320-4.

Summary of Product Characteristics Vepesid, Electronic Medicines Compendium https://www.medicines.org.uk/emc/medicine/7051 accessed Jan 16