VIP
(Etoposide, ifosfamide, cisplatin)

Indication
Germ cell tumours (for use in UKP3BEP trial only)

Regimen details

Etoposide 100mg/m^2	1 litre 0.9% sodium chloride over 1 hour
Potassium chloride 20mmol & Magnesium sulphate 10mmol	1 litre 0.9% sodium chloride over 2 hours
Cisplatin 20mg/m^2	500ml 0.9% sodium chloride over 1 hours
Potassium chloride 20mmol & Magnesium sulphate 10mmol	1 litre 0.9% sodium chloride over 2 hours
Ifosfamide 1200mg/m^2	500ml 0.9% sodium chloride over 1 hours

Given daily for 5 days

Cycle frequency
Repeated every 21 days

Number of cycles
3-4 cycles

Administration
DIPSTICK URINE FOR BLOOD DURING INFUSION

Emetogenicity
Highly emetogenic

Additional supportive medication
Mesna 600mg/m^2 with ifosfamide, then 600mg/m^2 over 15 minutes in 50ml 0.9% sodium chloride 4 and 8 hours later
Filgrastim 5mcg/kg daily for 7 days starting on day 6

Investigations – pre first cycle
CT Thorax, Abdo, Pelvis
Audiometry
Baseline bloods: FBC, U&E, LFT, Ca, Uric Acid, Mg, LDH, AFP, HCG
Sperm banking
Discuss need for contraception
Written informed consent for course

Investigations –pre subsequent cycles
Weekly: FBC, U&E, LFT, LDH, AFP, HCG
Prior to day 1: Cockcroft > 60ml/min, CXR, medical review

Standard limits for administration to go ahead

If blood results not within range, authorisation to administer **must** be given by prescriber/ consultant.

Investigation	**Limit**
Neutrophil count	≥ 1.0 x 10^9/L
Platelet count	≥ 100 x 10^9/L
Creatinine clearance	≥ 60 mL/min
Bilirubin	<26
AST	<60

Dose modifications

EVERY DOSE MODIFICATION HAS TO BE DISCUSSED WITH CONSULTANT

Dose modification for renal dysfunction	
CrCl	**Etoposide Dose**
>60	Give 100% dose
46-60	Give 85% dose
30-45	Give 80% dose
<30	Give 75% dose
<15	Give 50% dose
CrCl	**Cisplatin Dose**
>60	Give 100%
51-60	Give 75%
40-50	Give 50%
<40	Contraindicated
Dialysis	Give 50%
CrCl	**Ifosfamide Dose**
> 60	100%
40-59	70%
<40	Clinical decision
Dose modification for hepatic impairment	
Bilirubin < 26 or AST < 60	**Etoposide 100% dose**
Bilirubin 26-51 or AST 60-180	**Etoposide 50% dose**
Bilirubin >51 or AST >180	**Omit etoposide**
Ifosfamide not recommended in patients with bilirubin >21 or AST > 2.5 x ULN	
Dose modification for encephalopathy	
Any grade 2+ personality change, seizure, confusional state indicating encephalopathy	**Omit ifosfamide**

Adverse effects - for full details consult product literature/ reference texts

Toxicities:	
Neutropenic sepsis & thrombocytopenia	Nausea & vomiting (severe)
Amenorrhoea & infertility (offer semen cryopreservation)	Peripheral neuropathy
Encephalopathy (Ifosfamide)	Mucositis
Tinnitus/deafness (Cisplatin)	Alopecia
Nephrotoxicity	Haemorrhagic cystitis (Ifosfamide)

THIS PROTOCOL HAS BEEN DIRECTED BY DR BIRTLE, DESIGNATED LEAD CLINICIAN FOR GERM CELL TUMOURS

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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