ERIBULIN

INDICATION (ICD10) C50

Check the most recent Blueteq eligibility criteria before prescribing. Blueteq registration required. (www.england.nhs.uk/publication/national-cancer-drugs-fund-list/) (ERIB1)

1. Eribulin for the treatment of advanced breast cancer after 2 or more chemotherapy regimens. (TA423)

REGIMEN

Days 1 and 8

ERIBULIN 1.23mg/m^2 in #ml sodium chloride 0.9% IV infusion over 5 minutes
(Eribulin equivalent to eribulin mesylate 1.4mg/m^2)

diluent volume for dose prescribed as per national standardised product specification

CYCLE FREQUENCY AND NUMBER OF CYCLES

Every 21 days until disease progression

ANTI-EMETICS

Moderate risk days 1 and 8 (Ondansetron od days 1 and 8, dexamethasone 8mg od days 1 and 8, but dexamethasone can be reduced if not nauseous)

CONCURRENT MEDICATION REQUIRED

GCSF	Consider GCSF following a treatment delay or dose omission

EXTRAVASATION AND TYPE OF LINE / FILTERS

Eribulin – inflammitant

Filters not required
Peripheral line

INVESTIGATIONS

Blood results required before SACT administration
FBC, U&E and LFTs every dose (days 1 and 8)
Mg^{++} baseline
Neutrophils x 10^9/L ≥1.5 cycle 1, then ≥1.0 subsequent cycles
Platelets x 10^9/L ≥100 cycle 1, then ≥75 subsequent cycles
INR baseline
ECHO baseline required if patient has preexisting cardiac disease.
Baseline weight and every cycle

MAIN TOXICITES AND ADVERSE REACTIONS

Eribulin	Myelosuppression Peripheral neuropathy QT prolongation (caution with other QT prolonging drugs eg ondansetron, domperidone, metoclopramide)

DOSE MODIFICATIONS

Haematological

Day 1 or 8*

ANC <1x10^9/l neutropenia not complicated by fever	delay treatment
ANC <1x10^9/l neutropenia complicated by fever or infection	delay treatment, then on retreatment 0.97mg/m^2
ANC <0.5x10^9/l lasting more than 7 days	delay treatment, then on retreatment 0.97mg/m^2
Platelets <75x10^9/l	delay treatment
Platelets <50x10^9/l thrombocytopenia complicated by haemorrhage or requiring blood or platelet transfusion	delay treatment, then on retreatment 0.97mg/m^2
Platelets <25x10^9/l thrombocytopenia	delay treatment, then on retreatment 0.97mg/m^2

*Day 8 unlicensed dose modifications

ANC <1x10^9/l on day 8	Omit day 8 dose and consider 0.97mg/m^2 dose at start of next cycle
Platelets <75x10^9/l on day 8	Omit day 8 dose and consider 0.97mg/m^2 dose at start of next cycle

Reoccurrence of any haematological reactions as specified above	
Despite reduction to 0.97mg/m^2	0.62mg/m^2
Despite reduction to 0.62mg/m^2	Consider discontinuation
Do not re-escalate the eribulin dose after it has been reduced.	

Non-haematological

Grade 3 or 4 or non-haematological toxicities on day 1 or 8	delay treatment, then on retreatment 0.97mg/m^2
Any Grade 3 or 4 in the previous cycle	0.97mg/m^2
Reoccurrence of any non-haematological adverse reactions as specified above	
Despite reduction to 0.97mg/m^2	0.62mg/m^2
Despite reduction to 0.62mg/m^2	Consider discontinuation
Do not re-escalate the eribulin dose after it has been reduced.	

Hepatic impairment

Child-Pugh scores are based on ascites, encephalopathy, INR, albumin, total bilirubin

Mild hepatic impairment (Child-Pugh A)	give 0.97mg/m^2.
Moderate hepatic impairment (Child-Pugh B)	give 0.62mg/m^2.
Severe hepatic impairment (Child-Pugh C)	has not been studied but it is expected that a more marked dose reduction is needed if eribulin is used in these patients.

Renal impairment

Creatinine clearance <50ml/min	may need a dose reduction.

REFERENCES

1. SPC March 2019
2. Lancet 2011 Mar 12;377(9769):914-23. Epub 2011 Mar 2.
3. Cortes, J et al; JCO 2010; 28 (25): 3922-3928