

DRUG	‘Spread’ & Dilute	Localise & Neutralise	Management (see Table)
Aclarubicin	No	Yes	A
Aldesleukin (Interleukin 2)	Yes	No	B
Amsacrine	No	Yes	A
Arsenic Trioxide	Yes	No	General
Bleomycin	Yes	No	B
Carboplatin	Yes-after 1st 24hrs	Yes-during initial inflammatory reaction	C
Carmustine	No	Yes	D
Chlormethine Hydrochloride	No	Yes	E
Cisplatin	Yes-for treatment administered within 24hrs	Yes-for treatment commenced 24hrs post extravasation	F (see additional comments)
Cladribine	Yes	No	B
Crisantaspase	Yes	No	B
Cyclophosphamide	Yes	No	B
Cytarabine	Yes	No	B
Darcarbazine	No	Yes	A
Dactinomycin	No	Yes	A
Daunorubicin	No	Yes	A
Liposomal Daunorubicin	No	Yes	G then A (see additional comments)
Docetaxel	Yes	No	H
Doxorubicin	No	Yes	A
Liposomal Doxorubicin	No	Yes	G then A (see additional comments)
Epirubicin	No	Yes	A
Etoposide	Yes	No	G
Etoposide Phosphate	Yes	No	G
Fludarabine	Yes	No	B
Fluorouracil	No	Yes	G
Gemcitabine	Yes	No	B
Idarubicin	No	Yes	A
Ifosfamide	Yes	No	B

NICaN Acute Oncology Guidelines V2 – January 2022 **Chemotherapy Extravasation – Drug Specific Management Procedures**

α-Interferon	Yes	No	B
Irinotecan	Yes	No	G
Melphalan	Yes	No	B
Methotrexate	No	Yes	G
Mitomycin	No	Yes	A
Mitoxantrone	No	Yes	C
Oxaliplatin	Yes	No	I
Paclitaxel	Yes	No	H (see additional comments)
Pentostatin	Yes	No	B
Streptozocin	No	Yes	A
Teniposide	No	Yes	G
Thiotepa	Yes	No	B
Topotecan	No	Yes	D
Vinblastine	Yes	No	J
Vincristine	Yes	No	J
Videsine	Yes	No	J
Vinorelbine	Yes	No	J

A	Apply topical dimethylsulphoxide at extravasation site. Once area has dried, apply hydrocortisone 1% cream followed by 30 mins cold compression. Repeat 2 hourly for the first 24 hours after extravasation. For the next 7-10 days, apply dimethylsulphoxide 6 hourly alternating with hydrocortisone 1% cream, so treatment is being applied every 3 hours on an alternating basis. Avoid contact with good skin. If blistering occurs, stop applying dimethylsulphoxide and seek further advice
B	If a large volume has extravasated aspirate as much fluid as possible. Where a large volume is present in tissues, causing the patient pain, use the pin cushion technique to infiltrate the site with hyaluronidase (1500units in 2mL water for injection or sodium chloride 0.9%). Apply heat and compression to assist natural dispersal of the drug.
C	Aspirate as much fluid as possible. Give 100mg hydrocortisone injection via the cannula. Administer 100mg hydrocortisone by subcutaneous injection, in 0.2mL aliquots, around the circumference of the affected area. Apply hydrocortisone 1% cream and cover the affected area with an ice pack, on an intermittent basis, for first 24 hours.
D	Follow general procedure of management of cytotoxic extravasation. Treat with cold compression also.
E	Using the pin cushion technique infiltrate the area with 1-3mL sodium thiosulphate 2.98% followed by 100mg hydrocortisone injection to the infiltrated area. Apply cold compression intermittently for 12 hours.
F	Using the pin cushion technique infiltrate the affected area with 1-3mL of sodium thiosulphate 2.98%. Aspirate back, then give 1500units of hyaluronidase around the area. Apply heat and compression.
G	Give 100mg hydrocortisone injection via the cannula. Administer 100mg hydrocortisone by subcutaneous injection, in 0.2mL aliquots, around the circumference of the affected area. Apply hydrocortisone 1% cream and treat with pulsed cold compression for up to 24 hours.
H	Reconstitute 100mg hydrocortisone injection and mix with 10mg chlorphenamine injection, in a volume of 10mL. Infiltrate the extravasated area with 1-3mL of this mixture as 0.2mL pin cushion subcutaneous injections. Depending on the size of the area it may not be necessary to use the whole 3mL. Large volume extravasations may need as much as 10mL. Follow this with 1500units of hyaluronidase and warm compression. Use topical antihistamine cream for 4 days. In particularly severe cases give 1g sodium cromoglycate orally as soon as possible after injury. This can be followed by oral sodium cromoglycate 200mg QID for the next 3 days.
I	Infiltrate the area with hyaluronidase (1500units in 2mL water for injection) using the pin cushion technique. Gently massage the area to facilitate dispersion. Treat with warm compression. Depending on the nature and severity of the extravasation the medical team should consider the following: prescribe high dose oral steroids (dexamethasone 8mg BD for 2-3 days), prescribe oral analgesia (e.g. diclofenac SR 75mg BD) and consider a PPI. Consider referral to Plastic Surgery and/or Physiotherapy.
J	Infiltrate the area with hyaluronidase (1500units in 2mL water for injection or sodium chloride 0.9%), in 0.2mL aliquots, over and around the circumference of the affected area. Treat affected area with warm compression for first 24 hours. For the next 7 days apply a non-steroidal anti-inflammatory cream to the affected area, QID.

Cisplatin	As an intact molecule, cisplatin causes few problems when extravasated. Problems arise when it is left untreated. Within 4 to 6 weeks of an acute event a subcutaneous deposit of platinum precipitates in the tissues causing pain, inflammation and necrosis. Injuries not treated within 24 hours should be treated with intermittent cold compression and managed symptomatically.
Liposomal Daunorubicin & Liposomal Doxorubicin	Whilst the drug contained within the liposome is a vesicant, the formulation offers some protection. If untreated, liposomes may be degraded in the body over the next 2-3 weeks resulting in a full-blown extravasation within the next 7 to 10 days.
Paclitaxel	Inflammation and soft tissue reactions at the injection site have been reported after infusion of paclitaxel. This can progress to serious necrotic injury if not treated promptly. Paclitaxel has a greater risk classification than docetaxel because of the cremophor in its formulation. Prolonged infusions should be avoided.

Interrupt any systemic anti-cancer therapy including oral drugs until management discussed with the Acute Oncology Team, the patient's treating oncology team or Cancer Centre oncology on-call team