MONOGRAPH

daCTINomycin

Scope (Staff):	Medical, Pharmacy, Nursing
Scope (Area):	All Clinical Areas

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this DISCLAIMER

QUICKLINKS

Dosage/Dosage Adjustments	Administration	Compatibility	Monitoring

DRUG CLASS

Cytotoxic antibiotic. Also known as Actinomycin D. [1, 2, 3]

daCTINomycin is a High Risk Medicine.

daCTINomycin is a Cytotoxic Medication.

Extravasation: daCTINomycin is a vesicant. [4, 5] Refer to Extravasation of Antineoplastic (Cytotoxic) Agents Policy.

Emetogenic Rating: High. [6] Refer to Chemotherapy Induced Nausea and Vomiting (CINV) Guideline.

INDICATIONS AND RESTRICTIONS

- daCTINomycin can only be prescribed by oncologists or haematologists as per protocol for the treatment of malignancy.

CONTRAINDICATIONS

- Hypersensitivity to daCTINomycin or any component of the formulation. [2]

PRECAUTIONS

- Risk of hepatic sinusoidal obstructive syndrome (SOS) / veno-occlusive liver disease (VOD); increased risk in children <4 years of age.[2, 5, 7]
- Use with caution in patients who have received and avoid in those who are currently receiving radiation therapy unless mandated in protocol as an increased incidence of gastrointestinal toxicity and marrow suppression and radiation dermatological recall have been reported.[2, 5, 7]
- daCTINomycin therapy may be reduced or withheld during and for a period post radiation therapy – refer to treatment protocol.[2, 5, 7]
- Cytotoxic precautions are to be followed when handling patient waste for 7 days following administration.

FORMULATIONS

Listed below are products available at PCH, other formulations may be available, check with pharmacy if required:

- Vial contains 500 micrograms of daCTINomycin; powder for injection. [1, 8]

Imprest location: Formulary One

DOSAGE & DOSAGE ADJUSTMENTS

Dosage as per treatment protocol in the OIMS (Oncology Information Management System).

Renal impairment:

- No dose adjustments necessary - refer to treatment protocol.[5]

Hepatic impairment:

- Dose adjustments required as per treatment protocol.

Treatment related toxicity:

- Dose adjustment as per treatment protocol.

RECONSTITUTION & ADMINISTRATION

Handle as cytotoxic.

dacTINomycin must be compounded in a cytotoxic drug safety cabinet by pharmacy personnel who have appropriate training and validation in aseptic and cytotoxic drug reconstitution and handling techniques.

- Reconstitute the vial with 1.1 mL of water for injections to make a concentration of 500 micrograms/mL.[3, 8]
- Further dilute 1 mL (500 micrograms) to 10 mL with sodium chloride 0.9% to give a final concentration of 50 micrograms/mL.[3, 8]
- The prescribed dose is drawn up and supplied in a closed-system syringe.

Intravenous injection:

- Inject by slow IV push over 1 to 15 minutes or as per treatment protocol. If given via a peripheral line give via a side port of a free-flowing infusion of a compatible fluid, preferably into a large vein.[8, 9]
- Flush the line thoroughly at the end of the injection.

COMPATIBILITY *(LIST IS NOT EXHAUSTIVE)*

Compatible fluids:

Glucose 5%, sodium chloride 0.9%.[3, 8]

Compatible and INCOMPATIBLE drugs:

Antineoplastic therapies are not routinely administered with other medications. Consult two or more drug references (*Compatibilities of IV drugs*) or pharmacy when there is a requirement for medications to be given concurrently.

MONITORING

- Monitor full blood count at the start of each cycle and as per treatment protocol.[1, 2, 9]
- Monitor renal and liver function.[1, 2, 9]

ADVERSE EFFECTS

Common: (>20% of patients)

Nausea, vomiting, myelosuppression, alopecia. [3]

Infrequent: (5% to 20% of patients)

Anorexia, diarrhoea, mucositis, cheilitis, radiation recall reactions, fatigue, lethargy, malaise. [3]

Rare: (<5% of patients)

Anaphylaxis, abdominal pain, extravasation (local ulceration), elevated liver function tests, hepatitis, hepatomegaly, sinusoidal obstruction syndrome (SOS or VOD), proctitis, acne, skin eruptions, hypocalcaemia, fever, ulcerative stomatitis, oesophagitis and/or enteritis, myalgia, growth retardation, pneumonitis, secondary malignancies. [3]

STORAGE

Vial: Protect from light. Store below 25°C. [8]

Reconstituted solution: Stable for up to 10 hours at 25ºC or stable for up to 24 hours at 2 to 8°C. Protect from light. [8]

Diluted solution: Stable for up to 10 hours at 25ºC or stable for up to 24 hours at 2 to 8°C. Protect from light. [8]

INTERACTIONS

This medication may interact with other medications; consult PCH approved references (e.g. Clinical Pharmacology), a clinical pharmacist or PCH Medicines Information Service on extension 63546 for more information.

Please note: The information contained in this guideline is to assist with the preparation and administration of **Dactinomycin**. Any variations to the doses recommended should be clarified with the prescriber prior to administration

Related CAHS internal policies, procedures and guidelines

Cytotoxic Biotherapy Agents Administration

Cytotoxic Biotherapy Agents Extravasation

Cytotoxic Biotherapy Agents Safety

Chemotherapy Induced Nausea and Vomiting Management

References

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File Path:	W:\Safety & Quality\CAHS\CLOVERS MEDICAL Pharmacy\Procedures Protocols and Guidelines\Medication Monographs_Word\PCH.MED.daCTINomycin.DOCX		
Document Owner:	Chief Pharmacist		
Reviewer / Team:	Pharmacist, Ward 1A CNM, Oncology Consultant		
Date First Issued:	November 2019	**Last Reviewed:**	Aug 2023
Amendment Dates:	*Aug 2023*	**Next Review Date:**	Aug 2026
Approved by:	CAHS Medication Safety Committee	**Date:**	Jul 2023
Endorsed by:	CAHS Drug and Therapeutics Committee	**Date:**	Aug 2023
Standards Applicable:	NSQHS Standards: NSMHS: N/A Child Safe Standards: N/A		

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