

Dexrazoxane Hydrochloride

Printed from <https://www.cancerquest.org/zh-hans/geihuanzhe/yaowuxinxi/dexrazoxane-hydrochloride> on 01/22/2025



Brand name: Totect®

IUPAC: 4-[(2S)-2-(3,5-dioxopiperazin-1-yl)propyl]piperazine-2,6-dione

FDA approval: Yes

[Manufacturer Link](#)

Usage:

Dexrazoxane Hydrochloride (Totect®) is used to treat tissue damage due to extravasation of intravenous anthracycline chemotherapy.[1](#)

- [1](#)Totect Prescribing Information. http://totect.com/pdf/prescribing_information.pdf

Mechanism:

The full mechanism of dexrazoxane activity is unknown, there is some evidence that it inhibits topoisomerase II, an enzyme involved in DNA replication and transcription of RNA.[1](#)

The diagram below shows the 3D molecular structure of Dexrazoxane, the parent compound of Dexrazoxane Hydrochloride.



- [1](#)Totect Prescribing Information. http://totect.com/pdf/prescribing_information.pdf

Side effects:

Side Effects include: Nausea, Vomiting, Fever, Infection.[1](#)

- [1](#)Totect Prescribing Information. http://totect.com/pdf/prescribing_information.pdf

Contraindications:

Patients on dexrazoxane treatment can develop myelosuppression--decreased levels of platelets and red and white blood cells--and therefore should be closely monitored. Women who are nursing, pregnant, or plan to become pregnant should be warned that dexrazoxane poses a potential danger to the fetus or infant.[1](#)

- [1](#)Totect Prescribing Information. http://totect.com/pdf/prescribing_information.pdf