

Adriamycin (doxorubicin)

Effective Date: 10/22/13

Date Developed: 9/3/13 by Albert Reeves MD
Last Approval Date 1/26/16, 1/24/17, 1/23/18, 1/22/19, 2/18/20, 8/3/21, 2/1/22, 1/31/23, 2/13/24, 2/18/25

Adriamycin inhibits nucleotide replication and the action of DNA and RNA polymerases via nucleotide base intercalation (a form of substitution).

Prior Authorization Criteria:

Labeled Indications:

Breast cancer, adjuvant therapy: Treatment component of adjuvant therapy (multi-agent) in women with evidence of axillary lymph node involvement following resection of primary breast cancer

Other cancers: Treatment of acute lymphoblastic leukemia, acute myeloid leukemia, bladder cancer (transitional cell, metastatic), bone sarcoma (metastatic), breast cancer (metastatic), bronchogenic carcinoma (metastatic), Hodgkin lymphoma, non-Hodgkin lymphomas, neuroblastoma (metastatic), ovarian cancer (metastatic), soft tissue sarcoma (metastatic), thyroid carcinoma (metastatic), Wilms tumor (metastatic).

Adrenocortical carcinoma, advanced; Adult T-cell leukemia/lymphoma; Endometrial carcinoma; Hepatocellular carcinoma, intermediate stage, chemoembolization; Hepatocellular carcinoma, metastatic; Multiple myeloma; Neuroendocrine tumors, pancreatic; Renal carcinoma, advanced; Salivary gland cancers, advanced; Thymomas and thymic malignancies; Uterine sarcoma; Waldenström macroglobulinemia

Note: See VCHCP Policy for Prescription Medication for Off-Label Use for details.

Dosage: Usual or typical adult dosages: I.V.: - 30-75 mg/m²/dose

Usual/typical pediatric dosages: I.V.: - 25-75 mg/m²/dose

Note: Refer to product literature for specific dosing protocols for each disease and for hepatic impairment



Note: Utilize patient's actual body weight (full weight) for calculation of body surface area- or weight-based dosing

Dosing: Adjustment for Toxicity

The following delays and/or dose reductions have been used:

Neutropenic fever/infection: Consider reducing to 75% of dose in subsequent cycles ANC

<1000/mm³: Delay treatment until ANC recovers to ≥1000/mm³

Platelets <100,000/mm³: Delay treatment until platelets recover to ≥100,000/mm³

How Supplied: 2mg/mL (5, 10, 25, 100 mL)

Precautions: acute and chronic cardiotoxicity (dysrhythmias, CHF); neutropenia; thrombocytopenia; alopecia; secondary malignancy (AML, MDS); myelosuppression; severe tissue damage from extravasation; several drug interactions; may increase radiation-induced toxicity to the myocardium, mucosa, skin, and liver; children are at increased risk for developing delayed cardiotoxicity

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Revision Date	Content Revised (Yes/No)	Contributors	Review/Revision Notes
1/24/17	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/23/18	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
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8/3/21	Yes	Howard Taekman, MD; Robert Sterling, MD	Dosage and Precautions section updated
2/1/22	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
1/31/23	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/13/24	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/18/25	Yes	Howard Taekman, MD; Robert Sterling, MD	Removed Prior authorization criteria and added Labeled Indication section, changed the word "Unlabeled" to "Off-Label."