

NON-HODGKIN LYMPHOMA TREATMENT REGIMENS: Peripheral T-Cell Lymphoma (Part 1 of 2)

The selection, dosing, and administration of anticancer agents and the management of associated toxicities are complex. Drug dose modifications and schedule and initiation of supportive care interventions are often necessary because of expected toxicities and because of individual patient variability, prior treatment, and comorbidities. Thus, the optimal delivery of anticancer agents requires a healthcare delivery team experienced in the use of such agents and the management of associated toxicities in patients with cancer. The cancer treatment regimens below may include both FDA-approved and unapproved uses/regimens and are provided as references only to the latest treatment strategies. Clinicians must choose and verify treatment options based on the individual patient.

REGIMEN	DOSING
First-line Therapy	
Clinical Trial (Preferred) ¹	
CHOP-21 (cyclophosphamide [Cytoxan] + doxorubicin [Adriamycin] + vincristine [Oncovin] + prednisone) ¹⁻⁴	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Days 1-5: Prednisone 100mg orally daily. Repeat cycle every 3 weeks for 6-8 cycles.
CHOE-21 (cyclophosphamide + doxorubicin + vincristine + prednisone + etoposide [VP-16, Etopophos]) ^{1,3,4}	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Days 1-3: Etoposide 100mg/m ² , plus Days 1-5: Prednisone 100mg orally daily. Repeat cycle every 3 weeks for 6-8 cycles.
CHOP-14 (cyclophosphamide + doxorubicin + vincristine + prednisone) ^{1,3,4}	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Days 1-5: Prednisone 100mg orally daily. Repeat cycle every 2 weeks for a 6-8 cycles.
CHOE-14 (cyclophosphamide + doxorubicin + vincristine + prednisone) ^{1,3,4}	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Days 1-3: Etoposide 100mg/m ² , plus Days 1-5: Prednisone 100mg orally daily. Repeat cycle every 2 weeks for a 6-8 cycles.
CHOP followed by ICE (cyclophosphamide + doxorubicin + vincristine + prednisone, followed by ifosfamide [Ifex] + carboplatin [Paraplatin] + etoposide) ^{1,5}	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Day 1: Carboplatin [mg dose = 5 x area under the curve (AUC)] IV on Day 1 (max dose 800mg). Days 1-5: Prednisone 100mg orally daily, followed by Days 1-3: Ifosfamide 5,000mg/m ² IV (give as 3 equally divided doses) + mesna IV (equivalent dose) over 2 hrs + etoposide 100mg/m ² IV daily. Repeat cycle every 3 weeks for 6-8 cycles.
CHOP followed by IVE alternating with intermediate dose methotrexate (cyclophosphamide + doxorubicin + vincristine + prednisone + ifosfamide + epirubicin [Elice] + etoposide alternating with methotrexate [MTX]) ^{1,6}	Day 1: Cyclophosphamide 750mg/m ² IV + doxorubicin 50mg/m ² IV + vincristine 1.4mg/m ² IV (max dose 2mg). Repeat cycle every 3 weeks for 6-8 cycles, plus Days 1-5: Prednisone 100mg orally daily for 1 cycle, followed by Days 1-3: Ifosfamide 3,000mg/m ² IV + etoposide 200mg/m ² IV, plus Day 1: Epirubicin 50mg/m ² IV + MTX 1,500mg/m ² IV. Repeat for 3 cycles.
Hyper CVAD alternating with high-dose methotrexate and cytarabine (cyclophosphamide + vincristine + doxorubicin + dexamethasone alternating with MTX + cytarabine [ARA-C; Cytosar-U]) ^{1,7,8}	Days 1-3: Cyclophosphamide 300mg/m ² IV every 12 hrs for 6 doses, plus mesna 600mg/m ² /day. Days 4-5: Doxorubicin 25mg/m ² continuous IV over 24 hrs. Days 4 and 11: Vincristine 2mg/m ² IV (first dose 12 hrs after last dose of cyclophosphamide). Days 1-4 and 11-14: Dexamethasone 40mg/day orally + G-CSF 5mcg/kg 24 hrs after the end of doxorubicin until granulocyte count >4,500/ μ L, followed by MTX and cytarabine (begins immediately after clinical and hematologic recovery from HyperCVAD course) Days 1-2: MTX 200mg/m ² IV bolus, followed by MTX 800mg/m ² IV over 24 hrs. Day 3: Cytarabine 3,000mg/m ² IV every 12 hrs for 4 doses. OR Day 3: Cytarabine 1,000mg/m ² IV for >60 years or serum creatinine >1.5mg/dL + folic acid 50mg orally 24 hrs after the end of MTX, followed by folic acid 15mg orally every 6 hrs for 8 doses. Repeat cycle every 3 weeks for 4 cycles.

continued

NON-HODGKIN LYMPHOMA TREATMENT REGIMENS: Peripheral T-Cell Lymphoma (Part 2 of 2)

REGIMEN	DOSING
References	
<ol style="list-style-type: none"> 1. NCCN Clinical Practice Guidelines in Oncology™. Non-Hodgkin's Lymphomas. v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/nhl.pdf. Accessed July 7, 2012. 2. Savage KJ, Chhanabhai M, Gascoyne RD, Connors JM. Characterization of peripheral T-cell lymphomas in a single North American institution by the WHO classification. <i>Ann Oncol.</i> 2004;15:1467-1475. 3. Pfreundschuh M, Trümper L, Kloess M, et al. German high-grade non-Hodgkin's Lymphoma Study Group. Two-weekly or 3-weekly CHOP chemotherapy with or without etoposide for the treatment of young patients with good-prognosis (normal LDH) aggressive lymphomas: results of the NHL-B1 trial of the DSHNHL. <i>Blood.</i> 2004;104:626-633. 4. Pfreundschuh M, Trümper L, Kloess M, et al. German high-grade non-Hodgkin's Lymphoma Study Group. Two-weekly or 3-weekly CHOP chemotherapy with or without etoposide for the treatment of elderly patients with aggressive lymphomas: results of the NHL-B2 trial of the DSHNHL. <i>Blood.</i> 2004;104:634-641. 	<ol style="list-style-type: none"> 5. Hertzberg MS, Crombie C, Benson W, et al. Outpatient-based ifosfamide, carboplatin and etoposide (ICE) chemotherapy in transplant-eligible patients with non-Hodgkin's lymphoma and Hodgkin's disease. <i>Ann Oncol.</i> 2003;14(Suppl1):i11-i16. 6. Sieniawski M, Angamuthu N, Boyd K, et al. Evaluation of enteropathy-associated T-cell lymphoma comparing standard therapies with a novel regimen including autologous stem cell transplantation. <i>Blood.</i> 2010;115:3664-3670. 7. Khouri IF, Romaguera J, Kantarjian H, et al. Hyper-CVAD and high-dose methotrexate/cytarabine followed by stem-cell transplantation: an active regimen for aggressive mantle-cell lymphoma. <i>J Clin Oncol.</i> 1998;16:3803-3809. 8. Escalón MP, Liu NS, Yang Y, et al. Prognostic factors and treatment of patients with T-cell non-Hodgkin lymphoma: the M. D. Anderson Cancer Center experience. <i>Cancer.</i> 2005;103:2091-2098.
(Created 08/2012) © 2012 Haymarket Media, Inc.	