A	REGIMEN NAME	PROMACE-CYTABOM Chemotherapy

Cancer Non-Hodgkin's Lymphoma (High Grade) Curative Intent

EXCLUDED/ARCHIVED: a regimen which is no longer in use and is listed for reference purposes only, although the use of such a regimen may be appropriate in a situation where a standard regimen is deemed inadequate for specific clinical reasons.

B DRUG REGIMEN

PROMACE Arm			
CYCLOPHOSPHAMIDE (Round to nearest 10mg)	650mg/m²	IV	Day 1
DOXORUBICIN (Round to nearest 1mg)	25mg/m²	IV	Day 1
ETOPOSIDE (Round to nearest 10mg)	120mg/m²	IV	Day 1
PREDNISONE	60mg/m²	PO for 14 days	Days 1 to 14
(Outpatient prescription in multiples of 5mg & 50mg tablets)			
CYTABOM Arm			
CYTARABINE (Round to nearest 25mg)	300mg/m²	IV	Day 8
BLEOMYCIN (Round to nearest 1 unit)	5units/m²	IV	Day 8
VINCRISTINE (Round to nearest 0.1mg - to a maximum of 2mg)	1.4mg/m^2	IV	Day 8
METHOTREXATE (Round to nearest 2.5mg)	120mg/m²	IV	Day 8
LEUCOVORIN	25mg/m²	PO	q6h for 4 doses Starting 24 hrs after Methotrexate
(Outpatient prescription in multiples of 5mg tablets)			

C CYCLE FREQUENCY

REPEAT EVERY 21 DAYS

For a Usual Total of at least 6 Cycles; or 2 Cycles Beyond Complete Remission

D PREMEDICATION AND SUPPORTIVE MEASURES

ANTIEMETIC REGIMEN:
DAY 1 - HESKETH LEVEL 4
DAY 8 - HESKETH LEVEL 3

Prophylactic Co-trimoxazole DS 1 tab BID (Bactrim, Septra) is recommended

E DOSE MODIFICATIONS

Doses should be modified according to the protocol by which the patient is being treated. The following recommendations are in use at some centres.

Hematologic Toxicities
See **Appendix 6** for general recommendations.

Renal Dysfunction

Creatinine Clearance	
0.2-0.8mL/sec	**REDUCE** Methotrexate to ***50%*** dose **REDUCE** Bleomycin to ***75%*** dose and **REDUCE** Etoposide to ***75%*** dose
<0.2mL/sec	**OMIT** Methotrexate **REDUCE** Bleomycin to ***50%*** dose and **REDUCE** Etoposide to ***50%*** dose

There is no consistent evidence indicating a need for Cyclophosphamide dosage medication in patient with renal impairment. Dosage may be halved or interval increased by 50-100% if CrCl <0.3mL/sec.

E DOSE MODIFICATIONS (cont.)

Hepatic Dysfunction

Bilirubin (µmol/L)	*% usual dose*
1-2X ULN	**REDUCE** Doxorubicin to ***50%*** dose **REDUCE** Vincristine to ***50%*** dose and **REDUCE** Etoposide to ***50%*** dose
2-4X ULN	**REDUCE** Doxorubicin to ***50%*** dose **REDUCE** Vincristine to ***50%*** dose and **REDUCE** Etoposide to ***50%*** dose
2-3X ULN	**REDUCE** Methotrexate to ***75%*** dose
>3X ULN	**OMIT** Methotrexate
>4X ULN	**OMIT** Doxorubicin & Etoposide

Neurotoxicity

Symptom	*% usual dose of Vincristine*
1. areflexia only	100%
2. abnormal buttoning, writing	67%
3. moderate motor neuropathy (± cranial)	Hold until recovery then reduce dose by 50%
4. severe motor neuropathy	Omit

F ADVERSE EFFECTS

Refer to the Cyclophosphamide, Doxorubicin, Etoposide, Prednisone, Cytarabine, Bleomycin, Vincristine, Methotrexate and Leucovorin for full details of adverse effects.

Most frequently occurring adverse effects

- Myelosuppression
- Hyperuricemia
- Stomatitis
- Nausea and vomiting
- Neurotoxicity
- Stomatitis
- Vesicant
- Cardiotoxicity
- Hyperglycemia
- Gastric irritation
- Hemorrhagic cystitis
- Alopecia
- Insomnia
- Constipation
- Pulmonary toxicity (with Bleomycin doses > 500 units)
- Hypotension

G INTERACTIONS

Refer to the Cyclophosphamide, Doxorubicin, Etoposide, Prednisone, Cytarabine, Bleomycin, Vincristine, Methotrexate and Leucovorin for full details.

H DRUG ADMINISTRATION AND SPECIAL PRECAUTIONS

Refer to the Cyclophosphamide, Doxorubicin, Etoposide, Prednisone, Cytarabine, Bleomycin, Vincristine, Methotrexate and Leucovorin for full details.

I CLINICAL MONITORING

- Clinical toxicity assessment (including gastrointestinal, stomatitis, local toxicity, cardiotoxicity, neurotoxicity, hypersensitivity, pulmonary toxicity, constipation and cystitis).
- Routine blood glucose test.
- CBC before each cycle. Interim counts should be done in first cycle and repeated if dose modification necessary.
- Baseline and regular cardiac examination for patients with cardiac risk factors (including prior therapy with Epirubicin, Mitoxantrone, or other cardiotoxic drug) and cumulative doxorubicin doses > 450mg/m^2.
- Baseline blood pressure at each treatment of etoposide; monitor for hypotension.

J ADMINISTRATION INFORMATION

Patient visit	Approximately 2 hours
Approximate drug cost (chemotherapy only)	$ 274.00 per treatment cycle

Complexity Value*

Regimen	123 Per cycle
Pharmacy	32 Per cycle
Chemo Nursing	91 Per cycle

* Complexity value is the fixed time spent in minutes by nursing and pharmacy with respect to administration for each treatment cycle.

K KEY REFERENCE(S)

Longo DL, DeVita VT Jr, Duffey PL, et al. Superiority of Promace-Cytabom over Promace-MOPP in the treatment of advanced diffuse agressive lymphoma. Results of a prospective randomized trial. J Clin Oncol, 1991; 9: 25-38

Fisher RI, Gaynor ER, Dahlberg S et al. A phase III comparison of CHOP vs. m-BACOD vs ProMACE-CytaBOM vs. MACOP-B in patients with intermediate- or high-grade non-Hodgkin's lymphoma: results of SWOG-8516 (Intergroup 0067), the National High-Priority Lymphoma Study. Ann Oncol 1994;5 Suppl 2:91-5

L OTHER NOTES

In a large comparative trial (vs. ProMACE-CytaBOM vs. MACOP-B vs. M-BACOD), CHOP was not signifcantly different for overall survival rates, but had a lower toxic fatality rate than the other regimens. CHOP was concluded to be the best available treatment for advanced intermediate and high-grade non-Hodgkin's lymphoma.

This regimen should only be given by hematologists trained in the care of high grade lymphoma patients, and practicing in institutions with adequate acute care designed to support high grade lymphoma patients.