

# BCCA Protocol Summary for Treatment of Hodgkin Lymphoma with Cyclophosphamide, vinBLASTine, Procarbazine And Prednisone

**Protocol Code**

LYCVPPABO

**Tumour Group**

Lymphoma

**Contact Physician**

Dr. Kerry Savage

## ELIGIBILITY:

- Histology: Hodgkin lymphoma, all stages
- Only for patients who cannot be treated with (LY)ABVD due to a specific drug contraindication

## TESTS:

- Baseline (required before first treatment): CBC & diff, platelets, bilirubin, creatinine
- Baseline (required, but results do not have to be available to proceed with first treatment): HBsAg, HBcoreAg
- Before each treatment: CBC & diff, platelets, (and bilirubin if elevated at baseline)

## PREMEDICATIONS:

Ondansetron 8 mg PO pre-chemotherapy  
Dexamethasone 12 mg PO pre-chemotherapy

## TREATMENT:

### Day 1:

| Drug             | Dose                              | BCCA Administration Guideline   |
|------------------|-----------------------------------|---|
| VinBLASTine      | 6 mg/m <sup>2</sup> on day 1      | IV push   |
| Cyclophosphamide | 600 mg/m <sup>2</sup> on day 1    | IV in 100 to 250* mL NS over 20 minutes to 1 hour<br>(*use 250 mL for doses greater than 1000 mg) |
| Procarbazine     | 100 mg/m <sup>2</sup> on days 1-7 | PO  |
| Prednisone       | 45 mg/m <sup>2</sup> days 1-14    | PO in am with food  |

### Day 8:

| Drug                              | Dose                            | BCCA Administration Guideline                         |
|-----------------------------------|---------------------------------|---|
| Doxorubicin                       | 35 mg/m <sup>2</sup> on day 8   | IV push   |
| Vincristine<br>(* no cap on dose) | 1.4 mg/m <sup>2</sup> on day 8  | in 50 mL NS over 15 mins                              |
| Hydrocortisone                    | 100 mg on day 8                 | IV in 50 to 100 mL NS over 10 to 15 min pre-Bleomycin |
| Bleomycin                         | 10 unit/m <sup>2</sup> on day 8 | IV in 50 mL NS over 15 min                            |

Repeat each treatment cycle every 28 days.

**Limited stage:** ABVD x 2 cycles then PET scan

If PET negative -> ABVD x 2 more cycles

If PET positive or indeterminate -> involved field radiation

**Advanced stage:** ABVD x 6 then CT scan (and marrow biopsy if positive prior to ABVD)

If CR, no further treatment

If otherwise in CR but residual mass greater than 2 cm do PET scan  
 If PET negative, no further treatment  
 If PET positive and encompassable in a reasonable radiation field -> residual disease radiation  
 If PET positive and not encompassable in a reasonable radiation field -> close observation or biopsy to direct further treatment on proof of persistent lymphoma.

**DOSE MODIFICATIONS:**

**1. Hematological:**

Standard dose reduction for day 1

| ANC (x 10 <sup>9</sup> /L)   | Dose Modification  |
|------------------------------|--|
| greater than or equal to 0.8 | 100 %  |
| less than 0.8                | 100 % plus Filgrastim 300 mcg daily x 5 days, starting day 9 of each cycle |

Standard dose reduction for day 8

| ANC (x 10 <sup>9</sup> /L)   | Dose Modification                |
|------------------------------|----------------------------------|
| greater than or equal to 0.8 | 100 %                            |
| less than 0.8                | Omit Doxorubicin from this cycle |

\* The patient should be treated with Filgrastim (G-CSF) in doses sufficient to allow full dose treatment on schedule using the above dose modifications. Note: this guideline applies only if the treatment is potentially curative and after experience with one or more cycles of treatment indicate Filgrastim (G-CSF) is required. (See Pharmacare guidelines)

Transfuse as needed to keep hemoglobin greater than 90 g/L, platelets greater than 20 x 10<sup>9</sup>/L

**2. Neurotoxicity:** VinBLASTine and vincristine only

| Toxicity                    | Dose Modification |
|-----------------------------|-------------------|
| Dyesthesias, areflexia only | 100%              |
| Abnormal buttoning, writing | 67%               |
| Motor neuropathy, moderate  | 50%               |
| Motor neuropathy, severe    | Omit              |

**3. Hepatotoxicity:** Doxorubicin only:

| Bilirubin (mmol/L) | Dose Modification  |
|--------------------|--|
| 2-35               | 100%   |
| 35-85              | 50%  |
| greater than 85    | Omit Doxorubicin. Substitute Cyclophosphamide 525 mg/m <sup>2</sup> on day 8 |

Note: This adjustment is only necessary for the initial treatment. After the hyperbilirubinemia has resolved adjustment is only necessary if overt jaundice re-occurs. Serum bilirubin does not need to be requested before each treatment.

**4. Cardiotoxicity:** Doxorubicin only:

When Doxorubicin cannot be used due to proven cardiac dysfunction, each dose of Doxorubicin can be replaced by Etoposide 35 mg/m<sup>2</sup> IV on day 8 (Use non-PVC Equipment), 70 mg/m<sup>2</sup> PO on days 9 and 10.

**PRECAUTIONS:**

1. **Neutropenia:** fever or other evidence of infection must be assessed promptly and treated aggressively.

2. **Cardiac Toxicity:** Doxorubicin is cardiotoxic and must be used with caution, if at all, in patients with severe hypertension or cardiac dysfunction. Cardiac assessment is recommended if lifelong dose of 450 mg/m<sup>2</sup> to be exceeded. (BCCA Cancer Drug Manual)
3. **Extravasation:** Doxorubicin, vincristine and vinBLASTine cause pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
4. **Hypersensitivity:** If applicable, monitor etoposide infusion for the first 15 minutes for signs of hypotension. Refer to BCCA Hypersensitivity Guidelines.
5. **Hepatitis B Reactivation:** All lymphoma patients should be tested for both HBsAg and HBcoreAb. If either test is positive, such patients should be treated with Lamivudine 100 mg/day orally, for the entire duration of chemotherapy and for six months afterwards. Such patients should also be monitored with frequent liver function tests and hepatitis B virus DNA at least every two months. If the hepatitis B virus DNA level rises during this monitoring, management should be reviewed with an appropriate specialist with experience managing hepatitis and consideration given to halting chemotherapy.

**Call Dr. Kerry Savage or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.**

Date activated: 01 Jan 2004

Date revised: 01 June 2011 (Infusion section revised)

#### Reference

Klimo PK, Connors JM. The MOPP/ABV Hybrid program: Combination chemotherapy based upon early introduction of seven effective drugs for advanced Hodgkin's disease. J Clin Oncol 1985;3:1174-82.