

# BC Cancer Protocol Summary for the Treatment of Multiple Myeloma Using Melphalan and Prednisone

**Protocol Code**

*MYMP*

**Tumour Group**

*Lymphoma*

**Contact Physician**

*Dr. Kevin Song*

## ELIGIBILITY:

- Multiple myeloma
- All patients with myeloma who are judged candidates for chemotherapy

## EXCLUSIONS:

- None

## TESTS:

- **Baseline** (required before first treatment): CBC and diff, platelets, bilirubin, ALT, serum protein electrophoresis, calcium, creatinine
- Baseline (required, but results do not have to be available to proceed with first treatment; results must be checked before proceeding with cycle 2): skeletal survey X-rays, HBsAg, HBcoreAg
- Before each treatment: CBC and diff, platelets, serum protein electrophoresis (if paraprotein detected originally), calcium, creatinine
- If clinically indicated: skeletal survey X-rays (at least annually)

## PREMEDICATIONS:

- None

## TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
melphalan	9 mg/m <sup>2</sup> /day on days 1 to 4	PO
predniSONE	100 mg/day on days 1 to 4	PO

Repeat every 28 days.

Treatment can be given for up to one year or up to 6 months after a plateau phase has been achieved (which ever is shorter)

Discontinue when no further response detectable for at least two cycles (usually established by plateau of monoclonal paraprotein level).

**DOSE MODIFICATIONS:** apply on the day of treatment

1. **Hematological**

ANC (x10 <sup>9</sup> /L)	Platelets (x10 <sup>9</sup> /L)	Dose (melphalan)
greater than or equal to 3.0	greater than or equal to 200	Increase by 2 mg/day
1.0 to less than 3.0	greater than or equal to 100	100% of previous dose
less than 1.0	less than 100	Check CBC & diff weekly, resume treatment when ANC is greater than 1 and platelets greater than 100 and use new interval of 6 weeks. If after 6 weeks ANC is still less than 1 or platelets less than 100, reduce dose of melphalan to 75 %

2. **Renal dysfunction:** Dose modification required for melphalan. Refer to BC Cancer Drug Manual.

**PRECAUTIONS:**

1. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
2. **Hepatitis B Reactivation:** All lymphoma patients should be tested for both HBsAg and HBcoreAb. If either test is positive, corticosteroids should be omitted from treatment and such patients should be treated with lamivudine 100 mg PO daily during chemotherapy and continue for one year from treatment completion for patients who are HBsAg positive and for six months for patients who are HBcoreAb positive. 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.
3. **Need for irradiated blood products:** Patients receiving an autotransplant require irradiated blood products from 7 days prior to collection to 3 months post transplant (6 months if total body irradiation conditioning) to eliminate the risk of potentially life-threatening transfusion-related graft-versus-host-disease. All other myeloma patients do not require irradiated blood products

**Call Dr. Kevin Song (Leukemia/BMT) or Dr Laurie Sehn (Lymphoma) or tumour group delegate with any problems or questions regarding this treatment program. (Leukemia/BMT at (604) 875-4863 or after hours (604) 875-4111; Lymphoma at (604) 877-6000 or 1-800-663-3333)**

**References:**

1. Standard treatment, see current hematology textbooks
2. Rajkumar SV, Gertz MA, Kyle RA, Greipp PR. Current Therapy for Multiple Myeloma. Mayo Clin Proc. 2002;77:813-822