

BC Cancer Protocol Summary for Prevention of Skeletal Related Events Secondary to Breast Cancer Metastases Using Pamidronate

Protocol Code

BRAVPAM

Tumour Group

Breast

Contact Physician

Dr. Karen Gelmon

ELIGIBILITY:

- To prevent skeletal related events for metastatic breast cancer

TESTS:

- Completion of necessary dental work is recommended prior to starting pamidronate
- Baseline and every **12 weeks**: serum creatinine (Ok to use labs done within 28 days of infusion date for baseline and ongoing treatment)
- If clinically indicated: serum calcium* and albumin (or ionized calcium)
*corrected calcium (mmol/L) = total calcium (mmol/L) + (0.02 x [40 – albumin in g/L])

PREMEDICATIONS:

- None

TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
pamidronate	90 mg	IV in 250 mL NS over 1 hour

Repeat **every 4 weeks**

DOSE MODIFICATIONS:

1. Renal dysfunction:

- There is limited experience with pamidronate in patients with serum creatinine greater than 440 micromol/L or a creatinine clearance less than 30 ml/minute. For patients who show evidence of deterioration in renal function while on pamidronate, treatment should be withheld until renal function returns to within 10% of baseline value. Renal deterioration is defined as follows:
 - patients with a normal baseline creatinine: increase of 44.2 micromol/L
 - patients with an abnormal baseline creatinine: increase of 88.4 micromol/L

PRECAUTIONS:

1. Pamidronate should NEVER be given as a bolus since severe local reactions and thrombophlebitis may result from high concentrations.
2. **Symptomatic hypocalcemia** (e.g., muscle spasms, irritability) may occur and may require calcium supplement. Avoid concomitant use of other calcium lowering agents such as corticosteroids and loop diuretics.
3. After the use of bisphosphonates, there is a persistent risk of jaw osteonecrosis. Patients in whom bisphosphonates are planned should have prophylactic assessment and management by a dentist and all later dental work should be undertaken cautiously by dental specialists experienced in the recognition and management of jaw osteonecrosis
4. Duration of treatment: The BC Cancer Breast Systemic Tumour Group recommends a maximum continuous exposure of patients to bisphosphonates of 2-3 years, due to increasing incidence of atypical femoral fractures with prolonged use. However patients may be treated for longer if additional clinical benefit is likely in the judgement of their treating oncologist.

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

References:

1. Badros A, et al. J Clin Oncol 2006;24:945-52.
2. Schilcher J, et al. N Engl J Med 2011;364:1728-378.
3. Van Poznak CH, et al. J Clin Oncol 2011;29(4):1221-7.
4. Pfizer Canada. Pamidronate disodium product monograph. Kirkland, Quebec. 11 December 2018