

BC Cancer Protocol Summary for Treatment of Acute Bone Pain Secondary to Breast Cancer Metastases using IV Zoledronic Acid

Protocol Code

BRAVZOL

Tumour Group

Breast

Contact Physician

Dr. Nathalie LeVasseur

ELIGIBILITY:

Patient must have:

- Advanced breast cancer with radiological and/or clinical evidence of metastases to bone, **and**
- Acute pain crisis, **or**
- **Aim** to decrease skeletal related events

Patient should have:

- Adequate renal function (**creatinine clearance greater than or equal to 30 mL/minute**)

TESTS:

- Completion of necessary dental work is recommended prior to starting zoledronic acid
 - Baseline and prior to each treatment: creatinine
 - If clinically indicated, **at baseline and throughout treatment**: calcium*, albumin, 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
zoledronic acid	4 mg	IV in 100 mL NS over 15 minutes

Repeat **every 4 weeks or every 12 weeks**. **Option to switch between both dosing regimens per provider discretion.**

Duration of treatment: 2 to 3 years (see Precautions).

DOSE MODIFICATIONS:

1. Renal dysfunction:

Creatinine clearance (mL/minute)	Dose
Greater than or equal to 60	4 mg
50 to less than 60	3.5 mg
40 to less than 50	3.3 mg
30 to less than 40	3 mg
Less than 30	Not recommended

- There is limited experience with zoledronic acid in patients with creatinine greater than 440 micromol/L; caution is required.

PRECAUTIONS:

- Zoledronic acid should NEVER be administered as a bolus, as high concentrations can lead to severe local reactions and thrombophlebitis.
- Symptomatic hypocalcemia** (e.g., muscle spasms, irritability) may occur and may require calcium supplementation. Concomitant use of other calcium lowering agents such as corticosteroids and loop diuretics should be avoided.
- Following the use of bisphosphonates, there remains a persistent risk of osteonecrosis of the jaw. Patients scheduled to receive bisphosphonates should undergo a prophylactic dental assessment and management. Any subsequent dental procedures should be undertaken cautiously by dental specialists experienced in recognizing and managing osteonecrosis of the jaw.
- Duration of treatment: The BC **Cancer** Breast Systemic Tumour Group recommends a continuous exposure to bisphosphonates of up to 2-3 years, due to increasing incidence of atypical femoral fractures with prolonged use. However, patients may be treated for longer durations if the clinical benefit is felt to outweigh the risks, at the discretion of their treating oncologist.

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

References:

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