

Treating Osteoporosis During Covid-19

KEY MESSAGES FOR GENERAL PRACTITIONERS

*There is limited data available to guide osteoporosis management during the Covid-19 pandemic. These recommendations are based on expert opinion. **

New treatment starts:

- Do not delay osteoporosis (OP) evaluation and treatment in patients at high risk for fracture (patients with recent fragility fracture or FRAX 10 year fracture risk \geq 20%)
- Use FRAX risk assessment without BMD to assess fracture risk when bone mineral density testing is not available
- Oral bisphosphonate (BP) easiest option for new starts

Patients already on treatment:

- OP therapies do not increase the risk or severity of COVID-19 infection
- COVID-19 may increase risk of thrombotic events; caution should be used with estrogen and raloxifene, both of which may modestly increase thrombotic risk
- Standard pre-treatment blood work can be avoided if these labs have been normal in the last 12 months and patients' health is stable. Exceptions:
 - Impaired renal function
 - Zoledronic acid infusion
 - High risk of developing hypocalcemia (malabsorptive disorders, chronic kidney disease stages 4-5)

Alternative methods of delivering parenteral osteoporosis treatments:

- 1) Off-site clinics remote from Covid-19 hot spots
- 2) Home delivery and administration
- 3) Self-injection of denosumab/Prolia and/or romosozumab/Evenity. Amgen ProVital Patient Service Specialist 1-877-776-1002 will guide your patient through it. Self injection video for denosumab: <https://youtu.be/I91s7J8bZe4>

Denosumab (Prolia®): If injections are delayed by more than one month (that is seven months after the last Prolia injection), loss of BMD and increases in new vertebral fractures may occur. If ongoing treatment with denosumab is not feasible: transition to oral BP.

Intravenous (IV) bisphosphonate (zoledronic acid/Aclasta):

- Delays of several months unlikely to be harmful
- Protective effects are long-lasting
- Consider switch to oral BP (if tolerated) if > 18 months has passed since last infusion

For patients on teriparatide (Forteo®) or romosozumab (Evenity®): contact the treating specialist for guidance

Calcium, Vitamin D, exercise and fall prevention: With COVID distancing there may be difficulties maintaining osteoporosis nutrition, supplement, and exercise recommendations.

- 1200 mg elemental calcium daily from diet and supplement combined, best from diet
- 2000 IU Vitamin D3 daily by supplement (some data that insufficiency associated with more COVID infections)
- 20 minutes of walking exercise daily, including gait and balance training and/or resistance exercises to help maintain muscle strength and prevent falls

It is vitally important that all osteoporosis patients continue some regular physical activity. Home-based example resources:

- Osteoporosis Canada: <https://osteoporosis.ca/oc-replay/exercise-at-home-during-covid-19-with-dr-lora-giangregorio/>
- Fraser Health "Strategies and Activities for Independent Living (SAIL) – suggest level 2 and/or 3: https://patienteduc.fraserhealth.ca/search/results?q=SAIL&f_language_facet=English&sort=score+desc&p=1&ps=10&bu=%2F

* **BC COALITION OF OSTEOPOROSIS PHYSICIANS ADAPTED FROM JOINT GUIDANCE DOCUMENT FROM AMERICAN SOCIETY FOR BONE AND MINERAL RESEARCH (ASBMR), AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS (AACE), ENDOCRINE SOCIETY, EUROPEAN CALCIFIED TISSUE SOCIETY (ECTS) AND NATIONAL OSTEOPOROSIS FOUNDATION (NOF)**