# **BONES IN FOCUS:** WHAT YOU NEED TO KNOW TO KEEP YOUR BONES STRONG

#### What are bone metastases and how can they affect my bone health?

*Bone metastases* are cancerous cells that have spread from a tumor in another organ to the bone.<sup>1</sup>

Bone metastases can weaken the bone and cause serious bone problems, including<sup>2</sup>



Broken bones (fractures)



The need for radiation treatments to the bone



The need for surgery to prevent or repair broken bones



Pressure on the spinal cord (spinal cord compression)

Exercising while living with bone metastases can affect your risk of a serious bone problem. It requires planning and care. Be mindful of how you feel, and talk with your healthcare team before beginning or changing an exercise routine.<sup>3</sup>

### What can I do to prevent serious bone problems?

Your doctor may prescribe one of the following *bone-targeting medicines* to help keep your bones strong.<sup>1</sup>



Biologics work by blocking a signal to the cells that break down bone<sup>1</sup> — Given as an injection under the skin once every 4 weeks<sup>5</sup>



Bisphosphonates work by interfering with the cells that break down bone<sup>1</sup>

Given as an intravenous (IV) infusion every 3 to 4 weeks

# What are the most common side effects of bone-targeting medicines?

Some patients experience tiredness/ weakness, low phosphate levels in the blood, nausea, and feeling breathless or winded<sup>5</sup> Talk to your healthcare team about potential side effects

## Are there serious risks I should be aware of?

Lower than normal levels of calcium (hypocalcemia) may occur because less bone breakdown may result in less calcium being released into the bloodstream, which can be life-threatening<sup>1</sup>

Symptoms of hypocalcemia include muscle stiffness, twitching, spasms, or cramps<sup>5</sup> Take calcium and vitamin D as directed by your doctor<sup>5</sup>

A serious jaw bone problem, called osteonecrosis of the jaw, has occurred in some patients using bone-targeting medicines<sup>1</sup>

Signs and symptoms include soft tissue swelling and redness, loose teeth, gum or jaw infections, and slow healing after dental work<sup>5,9</sup> Keep your mouth healthy while on treatment and talk to your doctor about any upcoming dental work<sup>1,10</sup>

Tell your doctor if you experience any of these symptoms

# TAKE AN ACTIVE ROLE IN PREVENTING SERIOUS BONE PROBLEMS

- / Talk to your healthcare team about your risk for serious bone problems
- Ask about the potential benefits and risks of using a bone-targeting medicine
- For your best chance at success with a bone-targeting medicine, adhere to the treatment schedule you and your doctor set

**References: 1.** American Cancer Society. Bone metastasis. American Cancer Society Web site. https://www.cancer.org/treatment/understanding-yourdiagnosis/bone-metastasis/what-is-bone-mets.html. Revised May 2, 2016. Accessed February 13, 2017. **2.** Brodowicz T, O'Byrne K, Manegold C. Bone matters in lung cancer. *Ann Oncol.* 2012;23(9):2215-2222. **3.** America Cancer Society. Physical activity and the cancer patient. American Cancer Society Web site. https://www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/physical-activity-and-the-cancer-patient.html. Revised March 24, 2014. Accessed February 13, 2017. **4.** Gralow JR, Biermann JS, Farooki A, et al. NCCN Task Force report: bone health in cancer care. *J Natl Compr Canc Netw.* 2013;11(suppl 3):s1-s50. **5.** Product B Prescribing Information, Company U. **6.** Talreja DB. Importance of antiresorptive therapies for patients with bone metastases from solid tumors. *Cancer Manag Res.* 2012;4:287-297. **7.** Coleman R, Body JJ, Aapro M, Hadji P, Herrstedt J; on behalf of the ESMO Guidelines Working Group. Bone health in cancer patients: ESMO Clinical Practice Guidelines. *Ann Oncol.* 2014;25(suppl 3):iii124-iii137. **8.** Van Poznak CH, Temin S, Yee GC, et al. American Society of Clinical Oncology executive summary of the clinical practice guideline update on the role of bone-modifying agents in metastatic breast cancer. *J Clin Oncol.* 2011;29(9):1221-1227. **9.** Campisi G, Fedele S, Fusco V, et al. Epidemiology, clinical manifestations, risk reduction and treatment strategies of jaw osteonecrosis in cancer patients exposed to antiresorptive agents. *Future Oncol.* 2014;10(2):257-275. **10.** American Dental Association. Osteoporosis and oral health. American Dental Association Web site. www.mouthhealthy.org/en/az-topics/o/osteoporosis-and-oral-health. Accessed February 13, 2017.



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