



# READ IT BEFORE YOUR PATIENTS

## Bones

### **ESTRO ACROP guidelines for external beam radiotherapy of patients with uncomplicated bone metastases.**

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#### **SUMMARY**

After liver and lungs, bone is the third most common metastatic site (Nystrom et al., 1977). Almost all malignancies can metastasise to the skeleton but 80% of bone metastases originate from breast, prostate, lung, kidney and thyroid cancer (Mundy, 2002). Introduction of effective systemic treatment in many cancers has prolonged patients' survival, including those with bone metastases. Bone metastases may significantly reduce quality of life due to related symptoms and possible complications, such as pain and neurologic compromise. The most serious complications of bone metastases are skeletal-related events (SRE), defined as pathologic fracture, spinal cord compression, pain, or other symptoms requiring an urgent intervention such as surgery or radiotherapy. In turn, growing access to modern diagnostic tools allows early detection of asymptomatic bone metastases that could be successfully managed with local treatment avoiding development of SRE. The treatment for bone metastases should focus on relieving existing symptoms and preventing new ones. Radiotherapy is the standard of care for patients with symptomatic bone metastases, providing durable pain relief with minimal toxicity and reasonable cost-effectiveness. Historically, the dose was prescribed in one to five fractions and delivered using simple planning techniques. While 3D-conformal radiotherapy is still widely used for treating bone metastases, introduction of highly conformal radiotherapy techniques such as stereotactic body radiotherapy (SBRT) have opened new therapeutic possibilities that should be considered in selected patients with bone metastases.