



# Global Year Against Cancer Pain

OCTOBER 2008 – OCTOBER 2009

## Treatment-Related Pain

The diagnosis and treatment of cancer are often associated with pain. Pain can arise from invasive diagnostic and therapeutic procedures, surgery, chemotherapy, radiation therapy, and hormonal, immunological, and biological therapies. Treatment-related pain may lead to interruptions in therapy, changes in the cancer regimen, and in some cases, cessation of potentially curative therapy. Several of these pain episodes are short-lived; however, some can lead to chronic, debilitating pain conditions. The prevalence of many of these pain syndromes has not been clearly identified. Examples of diagnostic and treatment-related pain in cancer patients include:

### Diagnostic and Therapeutic Invasive Procedures

- Lumbar puncture
- Bone marrow biopsy
- Venipuncture
- Paracentesis
- Thoracentesis

### Surgery

- Acute postoperative pain
- Phantom limb pain/postamputation pain
  - Post-nephrectomy syndrome
  - Post-mastectomy syndrome
  - Post-thoracotomy syndrome
  - Post-radical neck dissection
- Pelvic floor myalgia

### Radiation

- Skin reactions
- Enteritis
- Radiation fibrosis
- Myelopathy
- Osteoradionecrosis
- Neuropathy/plexopathies

### Chemotherapy

- Mucositis
- Arthralgias/myalgias
- Abdominal pain due to diarrhea or constipation
- Peripheral neuropathy
  - Vincristine/vinblastine
  - Paclitaxel/docetaxel
  - Cisplatin/oxaliplatin/carboplatin
  - Thalidomide
  - Bortezomib

### Immunotherapy

- Arthralgia, myalgia

### **Hormonal therapy**

- Pain flares

### **Targeted therapies (e.g., trastuzumab, rituximab)**

- Arthralgia/myalgia
- Chest pain

### **Angiogenesis inhibitors (e.g., bevacizumab)**

- Bone pain

Some of these syndromes provide a unique opportunity to develop therapies to prevent pain (e.g., chemotherapy-induced peripheral neuropathy, arthralgia/myalgia). Research is needed to identify mechanisms and targeted therapies that will prevent pain without affecting the antitumor efficacy of the chemotherapy drug. When prevention is not feasible, aggressive pain management is warranted to prevent chronic pain syndromes.

### **References**

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