

Tramadol Extended-Release Tablets

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Tramadol is an oral analgesic that has been approved in the US for >10 years and in Europe for >30 years for the management of moderate to moderately severe pain. While the efficacy and safety of immediate-release tramadol are well established, the requirement of administration every 4–6 hours^[1] makes this formulation less than optimal for the long-term management of chronic pain, due to the possible lack of continuous analgesic coverage throughout the day and night. Additionally, the repeated peaks and troughs in tramadol levels that occur with frequent administration may be associated with a higher incidence of adverse effects.

Other agents recommended for the long-term management of chronic pain, such as NSAIDs (including cyclo-oxygenase 2 [COX-2] inhibitors) and scheduled opioids, also have certain limitations that may impair their clinical utility.^[2] NSAID use is associated with gastrointestinal toxicity (often necessitating concomitant use of gastroprotective agents), renal toxicity^[2] and increased cardiovascular risk.^[3] COX-2 inhibitors are similarly associated with renal toxicity^[2] and increased cardiovascular risk.^[4] Scheduled opioid use has been associated with impaired cognitive function^[5] and fear of dependence, tolerance or abuse.^[6]

In September 2005, the US FDA approved an extended-release formulation of tramadol (ULTRAM® ER¹ [tramadol HCl] extended-release tablets, 100–300mg) for the management of moderate to moderately severe chronic pain in adults who require around-the-clock pain management for an extended period of time.^[7] This once-daily tramadol formulation has demonstrated analgesic efficacy in placebo-controlled trials in subjects with osteoarthritis pain.^[8,9] Significant efficacy was observed on

the first day of administration in one trial,^[9] and was sustained for the entire 12-week trial duration. The most common adverse events are consistent with those observed with immediate-release tramadol, including nausea, constipation, dizziness, somnolence and vomiting.^[8,9]

Early implementation of this extended-release tramadol formulation offers the potential for effective management of chronic pain, while avoiding the safety issues associated with NSAIDs, including COX-2 inhibitors, and may delay or avoid patients' progression to scheduled opioids. ▲

References

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1 The use of trade names is for product identification purposes only and does not imply endorsement.