Cost Effectiveness Analysis of Oliceridine Compared with Morphine in the Management of Postoperative Moderate to Severe Acute Pain in a High-Risk Population

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OBJECTIVE
To estimate cost-effectiveness of oliceridine compared to morphine for postoperative pain in high-risk patients.

METHODS
The overview of the economic model methodology is shown in Figure 1. We directly compared costs and outcomes of patients managed with demand dosing of oliceridine (0.35 mg and 0.5 mg) to those with morphine (1 mg), using a decision tree with a 24-hour time horizon (with cost estimates across a sample population of 1,000 surgeries treated with either oliceridine or morphine).

RESULTS
- Incremental cost of OIRD, vomiting and somnolence was estimated at $3,975, $1,035, and $591, respectively (Table 2).
- Use of oliceridine for patients at higher risk for the emergence of OIRD provides additional overall cost savings by $38,491.

CONCLUSIONS
- Among patients at higher risk for this development of opioid-related adverse outcomes, oliceridine has a favorable overall impact on the total cost of postoperative care compared to the use of the conventional opioid morphine despite a modest increase in pharmacy costs.

REFERENCES

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