



# AB101. SOH22ABS235. Does intraoperative use of opioids increase the risk of cancer recurrence?

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**Background:** Opioids are a class of medication commonly used pre, intra and post operatively to decrease the experience of pain. There have been recent reports and research of a positive correlation between increased opioid use during oncological resection and cancer recurrence. The purpose of this literature review is to research and summarise relevant research available on the use of opioids in cancer surgery, and its role in the recurrence of such cancer. There are conflicting reports on the role, and outcomes, of opioid use during oncological resection surgery. The aim of this literature review is to decipher the relevant research and answer the question of whether, or not, opioid use during oncological resection surgery should continue.

**Methods:** Search for relevant literature was carried out using key words conducted on Pubmed, UpToDate, cancer research Ireland and the Journal of Anaesthesia. All studies in the English language and appearing in peer-reviewed journals were included. Studies reporting increase or decrease in cancer signalling, cell growth and unhindered cell proliferation on both animal and cell lines were included.

**Results:** The initial search found 239 relevant articles, 45 were has relevant data extracted for this literature review.

**Conclusions:** It is difficult to determine from the available

research if intraoperative opioid use should be decreased in cancer resection surgery. At present there are a significant amount of variables including dosing, neoplasia origin, pre-operative opioid use and the use of alternative analgesia. In summary, more research would have to be carried out indefinitely determine the effect of intraoperative opioid use on cancer recurrence including in both human and animal models.

**Keywords:** Opioids; cancer resection; structured review; surgery; anaesthesia

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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