

Persistent opioid use following surgical discharge: a prescription data linkage study comparing tapentadol and oxycodone as initial discharge opioid type

TINA LAM¹, TING XIA¹, NICHOLAS BIGGS², JOHN EVANS³, MICHAEL TRELOAR², OCTAVIAN CHENG⁴, KETAN KABU⁴, JENNIFER STEVENS⁵, MIKE DA GAMA², DAN I LUBMAN^{1,6}, SUZANNE NIELSEN^{1,6}.

¹ Monash Addiction Research Centre, Eastern Health Clinical School, Monash University, Peninsula Campus. Moorooduc Hwy, Frankston, Victoria 3199, Australia., ² NostraData, Level 1, 1-9 Derrick St, Kew, Victoria 3101, Australia., ³ Slade Pharmacy, 11-13 Palmer Court, Mount Waverley, Victoria 3149, Australia, ⁴ IQVIA, Level 8, 201 Pacific Highway St Leonards, NSW 2065 Australia. ⁵ St Vincent's Clinical School, UNSW Medicine, Level 5 deLacy Building, St Vincent's Hospital, Victoria St, Darlinghurst NSW 2010, ⁶ Turning Point, Eastern Health Clinical School, Monash University, 110 Church St, Richmond 3121, Victoria, Australia.

Presenter's email: tina.lam@monash.edu

Introduction:

There are 2.7 million surgeries conducted each year in Australia, and 3-10% of opioid-naïve patients prescribed postoperative opioids develop longer-term (persistent) opioid use. This study linked hospital-pharmacy and community-pharmacy data to understand whether persistent opioid use is influenced by initial postoperative opioid type (oxycodone or tapentadol).

Methods:

Patients were discharged from one of four large hospitals across three states. Risk-factors for persistence such as opioid experience, addictive disorders, mental disorders, and pain were identified from patient medication history up to 12 months prior to surgery. The primary outcome of persistence was any opioid use at 90 days post-discharge.

Key Findings:

The sample included 125,000 patients who had surgery between 2016–2021. Two-percent of the opioid naïve sample (did not have opioids in the 90 days prior to surgery) and 27% opioid-experienced patients were persistent. Persistence rates across the study period appeared largely stable for the opioid-experienced group, with some decreases in the opioid naïve sample. Patients discharged with tapentadol immediate release (n=21,000) appeared older and with poorer health indicators than those discharged with oxycodone immediate release (n=41,000). A regression will be presented on persistence rates at the time of the conference which controls for these demographic and clinical characteristics.

Discussion:

This study is anticipated to be the largest international sample of patients prescribed tapentadol reporting on the outcome of opioid persistence. Though retrospective prescription data will allow the identification of comorbidities, it may not capture other known risk factors of persistence such as specific surgery type and tobacco use.

Disclosure of Interest Statement:

The study is funded by an untied educational grant from Seqirus (CSL). SN is the recipient of an NHMRC Career Development Fellowship (#1163961). The funders will have no role in the study design, study conduct, analysis or data interpretation. Prior to publication, Seqirus will have the opportunity to review the manuscript and provide comment on factual inaccuracies, if identified.

TL, SN & DL have been investigators on untied education grants from Seqirus (CSL). In the past 5 years, SN has been an investigator on untied education grants from Indivior,

unrelated to the current work. SN has provided training to health care professionals on identifying and treating codeine dependence for which her institution has received payment from Indivior. DL has received speaking honoraria from the following: Astra Zeneca, Indivior, Janssen-Cilag, Lundbeck, Servier and Shire, and has participated on Advisory Boards for Indivior and Lundbeck.