# CONDITIONS OF USE AND TOLERANCE OF TRAMADOL IN THE HOSPITALIZED ELDERLY

Laurie Ferret<sup>1</sup>, Grégoire Ficheur<sup>1</sup>, Sophie De Courrèges<sup>1</sup>, Régis Beuscart<sup>1</sup>, Emmanuel Chazard<sup>1</sup>, Jean-Baptiste Beuscart<sup>1,2</sup>

1. Department of Health Informatics, EA2694, Lille School of Medicine, Lille 2 University, Lille, France 2. Department of Geriatrics, Lille University Hospital, Lille, France

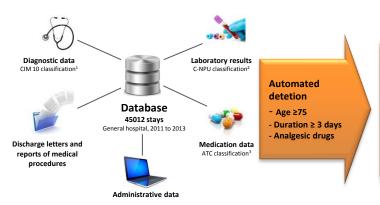
# Introduction-objectives

Pain is a very frequent symptom in elderly people and is often difficult to manage. There are few data on the safety of tramadol in routine practice.

The objective of the present study was to describe the prescriptions of tramadol in elderly hospitalized patients and to assess its tolerance.

## Methods

We analysed computerized medical data on a total 45,012 stays in a 222-bed general hospital in northern France between 2011 and 2013. We automatically detected analgesic prescriptions in patients aged 75 and over, with a focus on concomitant prescriptions of tramadol and compounds that can accentuate adverse drug reactions associated with tramadol. Kramer's algorithm was used to assess the causal relationships between tramadol and gastrointestinal adverse events.



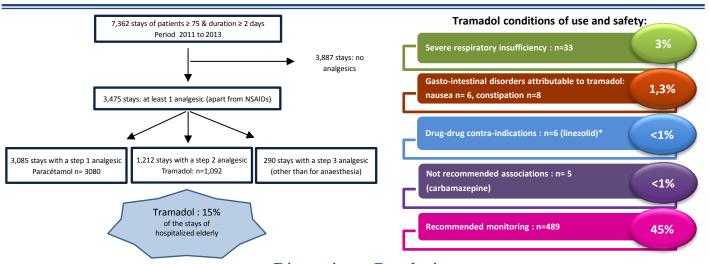
### **Description of analgesic prescriptions**

- Step 1 analgesics (except NSAI)
- Step 2 analgesics
- Step 3 analgesics

#### Tramadol conditions of use and safety

- Drug-drug interactions (automated detection)
- Severe respiratory insufficiency (expert review)
- Gastrointestinal adverse events: causality assessment according to Kramer's algorithm4 (expert review)

### Results



# **Discussion - Conclusion**

In the present hospital-based study, analgesic drugs were administered in about 50% of the stays by patients aged 75 or over. Tramadol is the second most frequently prescribed analgesic after paracetamol. Our results based on retrospective data suggest that tramadol prescriptions are realized in accordance with the recommendations and that the digestive tolerance is satisfactory. In contrast, the presence of tramadol prescriptions in patients with respiratory insufficiency emphasizes the lack of alternative treatment options. Prospective studies could allow a deeper assessment of tramadol's tolerance.

Acknowledgments: This study was part of a broader project (PSIP) funded by the Fondation pour la Recherche Médicale (FRM). We sincerely thank all the physicians and pharmacists who participated in the PSIP project in their respective departments, notably Dr. Michel Luyckx, Dr. Pascale Leurs, Dr. Olivier Brimont, Dr. Zine Baarir and Dr. Philippe Lecocq The study was approved by the French National Data Protection Commission (Commission Nationale de l'Informatique et des Libertés; reference number: 1487204) and the local independent ethics committee in January 2008.

- World Health Organization, International Classification of Diseases, www.who.int IUPAC. International Union of Pure and Applied Chemistry, www.iupac.org

- Anatomical and Therapeutical Classification, www.whocc.no/atc.ddd\_index
- Kramer MS. An algorithm for the operational assessment of adverse drug reactions. JAMA 1979
- \* In France, since january 2016 linezolid is no more a contra indication but is not recommended with tramado









