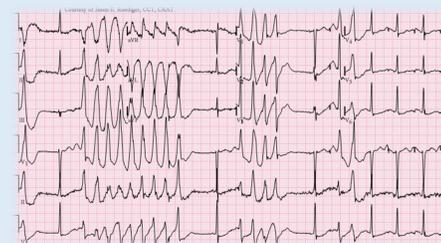


# ANALYSIS OF THE RISK OF QT INTERVAL PROLONGATION IN INSTITUTIONALISED ELDERLY PATIENTS IN A NURSING HOME

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**BACKGROUND:** The QT-interval prolongation in the electrocardiogram can trigger an arrhythmia (Torsades de Pointes) that usually resolves spontaneously, although sometimes it can cause ventricular-fibrillation and sudden-death. Drugs are a frequent cause of QT-interval prolongation, therefore, it is recommended to analyze the risk of QT-interval prolongation especially in elderly polymedicated patients.



**PURPOSE:** To know the prevalence of patients belonging to a Nursing Home (NH) with prescription of drugs with defined and potential risk for producing prolongation of QT-interval. Assess the concomitance of these drugs and history and/or cardiac pathologies.

**MATERIALS AND METHODS:** Descriptive cross-sectional study.

## Selected patients:



Patients belonging to a NH who had active electronic-prescription.

**Main variable:** Percentage of patients treated with drugs with defined and potential risk of QT-interval prolongation (DR-QT and PR-QT, respectively), according to the levels of evidence in the AZCERT-list. Concomitant prescription of these drugs in a single patient is also assessed.

### Secondary variables:

- Main therapeutic groups prescribed with DR and PR-QT.
- Concomitance of their prescription along with history and/or cardiac pathologies.

Demographic, clinical and analytical data were obtained from the electronic-clinical-history and treatment data from the electronic-prescription-program.

## RESULTS:

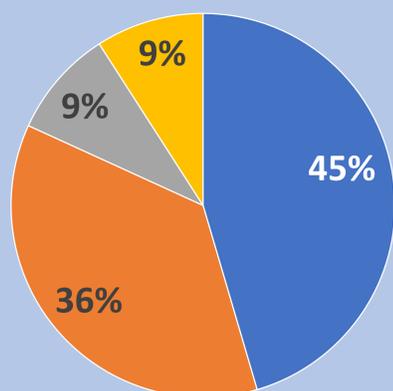
### 87 PATIENTS:

- average age: 66 years (52-101).
- 55.2% (48/87) men.
- 70% assisted (70/87).

Percentage of patients treated with DR-QT and PR-QT drugs and concomitance of their prescription along with history and/or cardiac pathologies:

	Percentage of patients	History and/or cardiac pathologies.
DR-QT drugs	11/87 (13%)	3/11
PR-QT drugs	11/87 (13%)	6/11
DR-QT + PR-QT drugs	2/87	None
PR-QT + PR-QT drugs	2/87	2/2

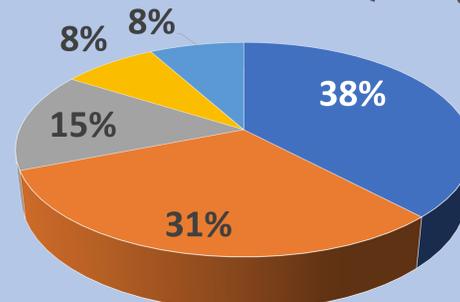
Percentage of patients treated with DR-QT drugs



■ Antidepressants ■ Antipsychotics  
■ Antiarrhythmics ■ Others

Percentage of patients treated with PR-QT drugs

■ Antipsychotics  
■ Antidepressants  
■ Genitourinary  
■ Musculoskeletal  
■ Others



**CONCLUSIONS:** A quarter of institutionalized elderly patients in a NH are being treated with an DR and/or PR-QT drugs, in almost half of the cases with a history and/or cardiac pathology. The main therapeutic groups involved were **antidepressants and antipsychotics.**