

BACKGROUND



Ensuring the safety of chemotherapy preparations is a **major challenge** for cancer treatment preparation units



Since 2014, use of a **digital video monitoring system Drugcam®** (Eurekam) based on artificial intelligence and computer vision



Interest : **supervision, traceability** end **real time validation** of the critical steps to the cytotoxic drug preparation process, replacing the double visual check

OBJECTIVES



- Quantify and characterize the errors detected by the system
- Provide an **overview** of ten years of use

MATERIALS & METHODES



- Prospective, single-centre descriptive** study (2014-2024) in which all detected errors were recorded in an Excel® spreadsheet (requirement ISO 9001 standard)
- Each error was **rated** according to 4 severity levels : minor, moderate, major and critical
- Activity data were **extracted** from the preparation scenarios generated by the system's control module and **analysed**



RESULTS

321 093

preparations performed over 10 years

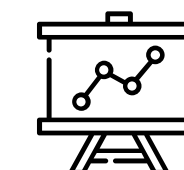
561

critical errors detected

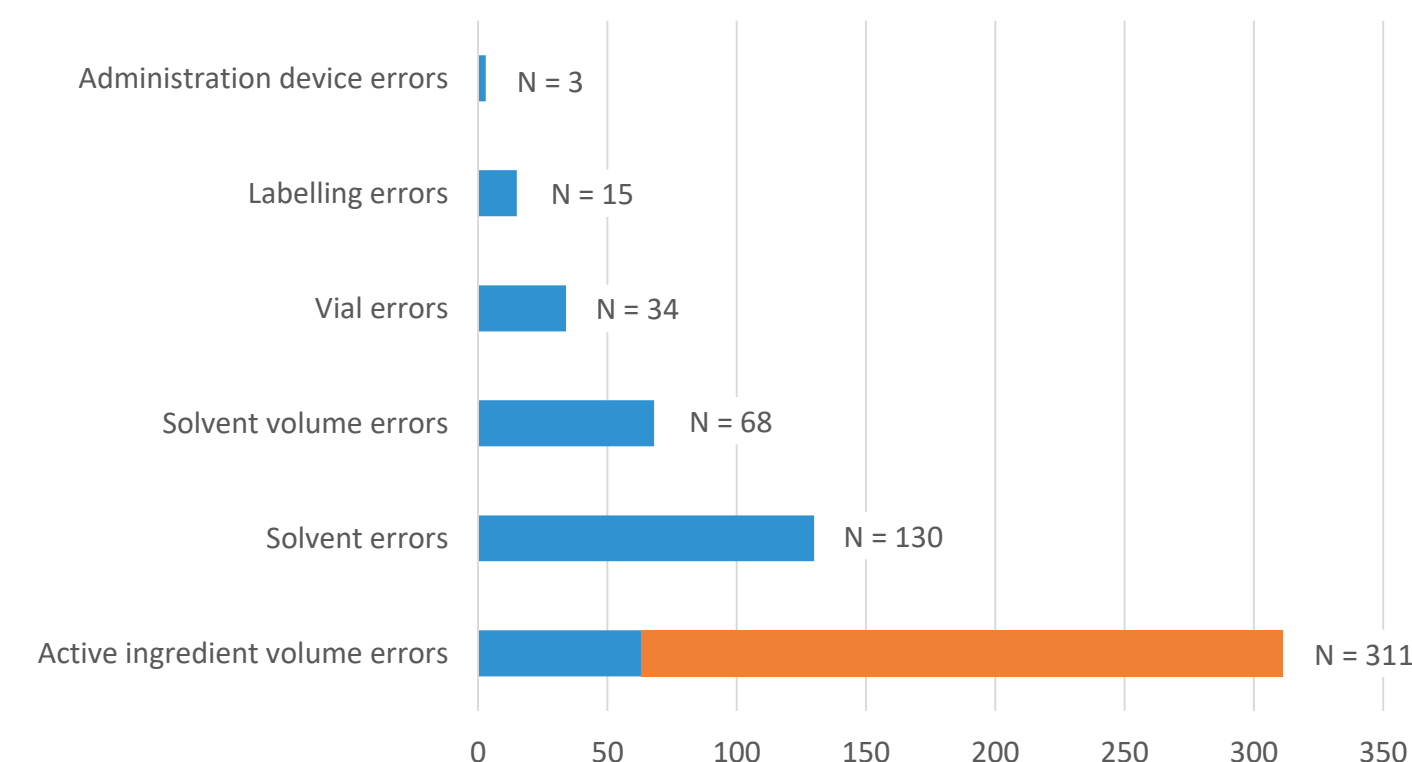
1,75‰

overall rate of intercepted critical errors

- Classification of errors** detected by the system Drugcam®:
 - Criticality level assigned: critical
 - Analysis during a non-compliance reunion
- Over 320,000 preparations carried out over 10 years:
 - 561 errors** intercepted by the system during preparation
 - Overall error rate** of 1.75 per 1,000 preparations
 - Main type of error: **active ingredient volume** (79.7% of overdoses compared with 20.3% underdoses)



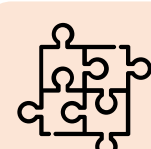
Distribution of critical errors intercepted by type (2014-2024)



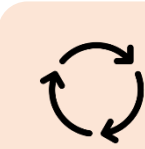
CONCLUSION



This study represents the largest real-world published to date on the use of a digital video monitoring system



System Drugcam® enables the quantification, identification and prevention of potentially serious medication errors in cytotoxic drug preparation units



Beyond ensuring the safety of anticancer preparations, this tool can also be used to assess operators' practices and support the training of new pharmacy technicians