

## OPTIMIZATION OF THE LIQUID ORAL FORMS PROCESS: EXAMPLE OF A SEMI-AUTOMATED DEVICE AND ITS QUALIFICATION

ABIVEN Gaël<sup>1</sup>, REGNIER Lucie<sup>1</sup>, LEROY Anne-Laure<sup>1</sup>, BOIVIN Pierre-Nicolas<sup>1</sup>, LESTER Marie-Antoinette<sup>1</sup> <sup>1</sup>Pharmacy department, Rennes University Hospital, Rennes, France



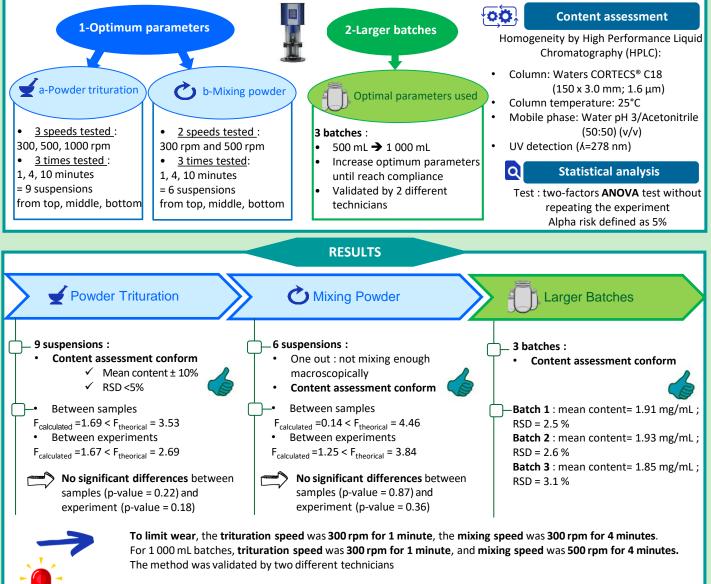
## **INTRODUCTION & AIM**

• Context : Manual production of oral suspensions causes operator musculoskeletal issues and limits batch sizes. Increasing batch sizes is essential due to rising hospital demand. The pharmacy has a mixer (Topitec<sup>®</sup> Touch, Wepa Pharma, Germany) that could potentially mix liquid forms.

**Objectives** : The study aimed to **evaluate** the **Topitec® Touch** ability to **produce oral suspensions** of **Melatonin 2 mg/mL** by optimizing and qualifying the semi-automated process.

## **MATERIALS & METHODS**

- → The study focused on an oral suspension of melatonin 2 mg/mL with content uniformity issues.
- → Using melatonin powder (Inresa, France), Syrspend<sup>®</sup> SF PH4 liquid (Fagron, Netherlands) and the mixer Topitec<sup>®</sup> Touch



Difficulties encountered included static electricity, which interfered with the proper mixing of the powder due to friction.

## CONCLUSION

The semi-automated process using the Topitec<sup>®</sup> Touch for Melatonin oral suspensions was optimized, qualified, and validated. It is possible to produce larger batches and save operators time.



Investigation of the applicability to other molecules and other vehicles (Inorpha® for example).