## IMI Scientific Symposium– Brussels, Belgium

Supersaturation as driving force for intestinal absorption resulting in an increased oral bioavailability: case example with posaconazole

Innovative Tools for Oral Biopharmaceutics

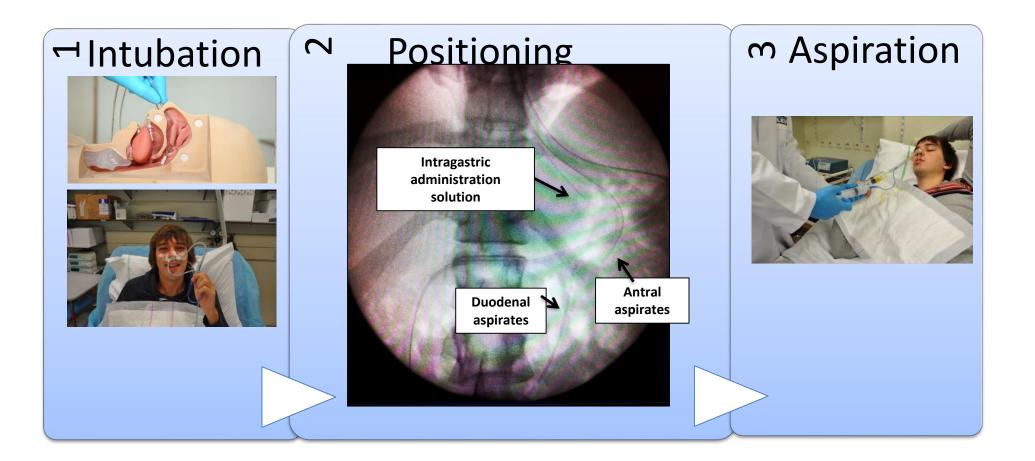
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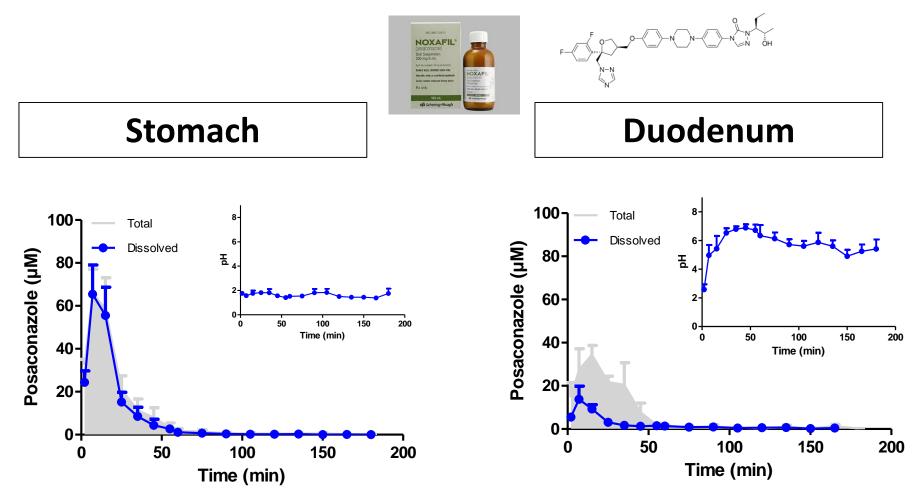
## **Clinical Aspiration Studies**





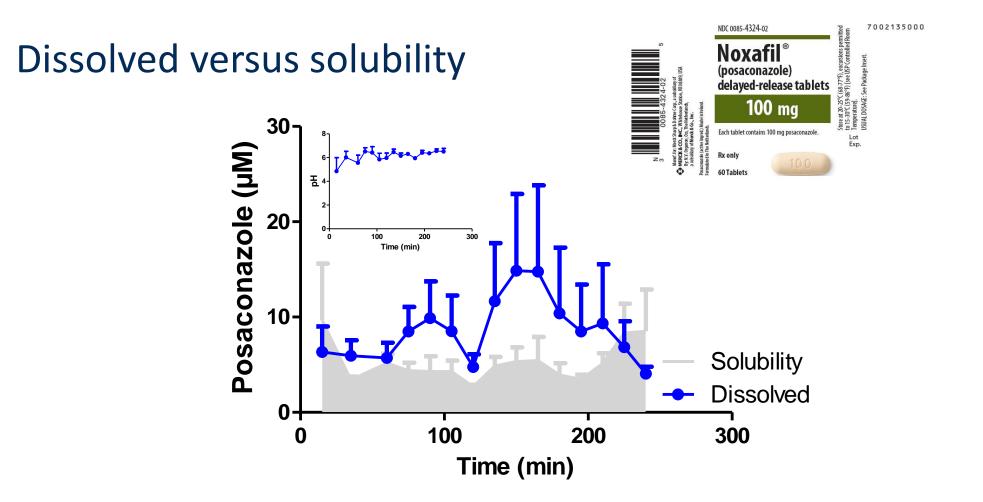


## Intragastric administration of posaconazole solution









→ Solid dispersion manufactured by hot-melt extrusion in combination with HPMC-AS





## Conclusion

- This technique allowed us to **study the behavior of a drug** in the gastrointestinal tract of humans
- We helped a pharmaceutical company in developing a new drug formulation with a better systemic exposure and, consequently, this helps **patients**!



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Pharmaceutics, Drug Delivery and Pharmaceutical Technology

Supersaturation and Precipitation of Posaconazole Upon Entry in the Upper Small Intestine in Humans

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Pharmaceutics, Drug Delivery and Pharmaceutical Technology

Gastrointestinal and Systemic Monitoring of Posaconazole in Humans After Fasted and Fed State Administration of a Solid Dispersion

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