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

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Clinical Aspiration Studies

1. Intubation
2. Positioning
3. Aspiration

- Antral aspirates
- Duodenal aspirates
- Intragastric administration solution
Intragastric administration of posaconazole solution

Stomach

Duodenum
Dissolved versus solubility

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**!