

Title – Rani’s “Robotic Pill”

Abstract

The RaniPill™ capsule is a swallowable robotic pill disguised as a capsule that delivers a drug into the intestinal wall. This ingestible, capsule-like device deploys inside the small intestine and injects a drug payload sealed inside a dissolvable microneedle. A number of biotherapeutic agents were successfully formulated into microtablets with no impact on activity/integrity of the molecule, providing evidence for the concept of the solid drug payload delivery in the RaniPill. Successful proof-of-concept studies in appropriate animal models as well as in humans have demonstrated this innovative concept of oral biotherapeutic delivery by using the robotic RaniPill capsule.

Speaker Bio

Radhika Korupolu, Ph.D heads the formulation and bioanalytical group at Rani Therapeutics. Her professional interests are drug-device combination products, formulations, drug delivery, PK, PK/PD, and bioanalytical assay development. She has published numerous articles, reviews and book chapters in peer-reviewed scientific journals. She also holds several US Patents.