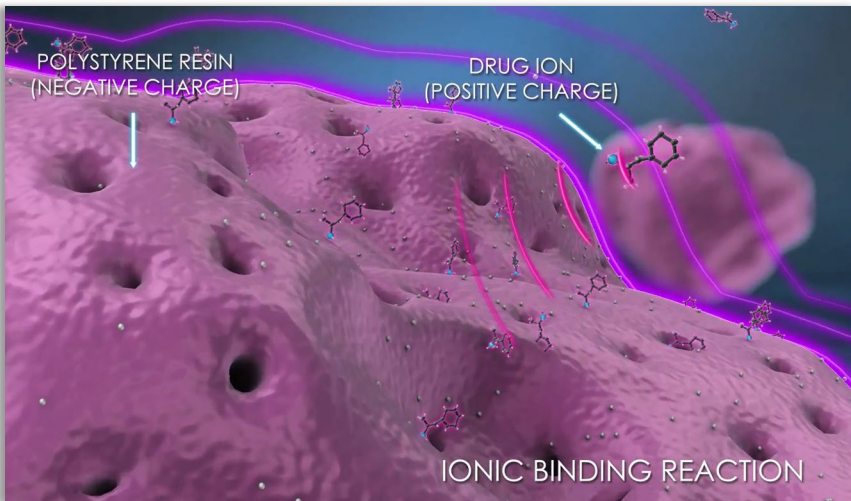


What is **LiquiXR[®]** Technology?

LiquiXR[®] drug delivery technology utilizes an ion-exchange resin



- Ion-exchange resins are made of negatively charged, polystyrene
- Any active moiety that can be protonated and is water-soluble can complex with the ion-exchange resin to form micron-sized drug-resin particles

1

Drug-resin particles can be coated with a polymer of varying thickness

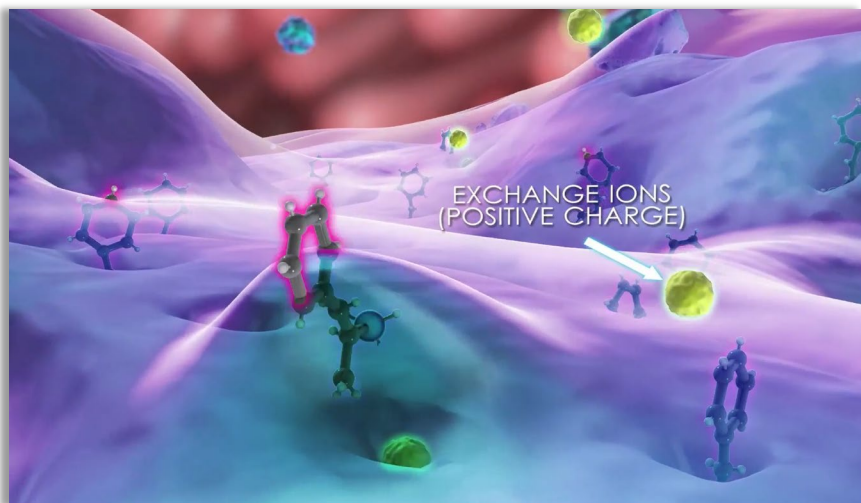


- Solid, uncoated particles provide for immediate-release of active drug product
- Portions of drug-resin particles can be coated with an aqueous, pH-independent polymer
- Polymer coating applied to drug-resin particles is of varying thickness which allows for programmed, extended release of active drug product

2

What is **LiquiXR[®]** Technology?

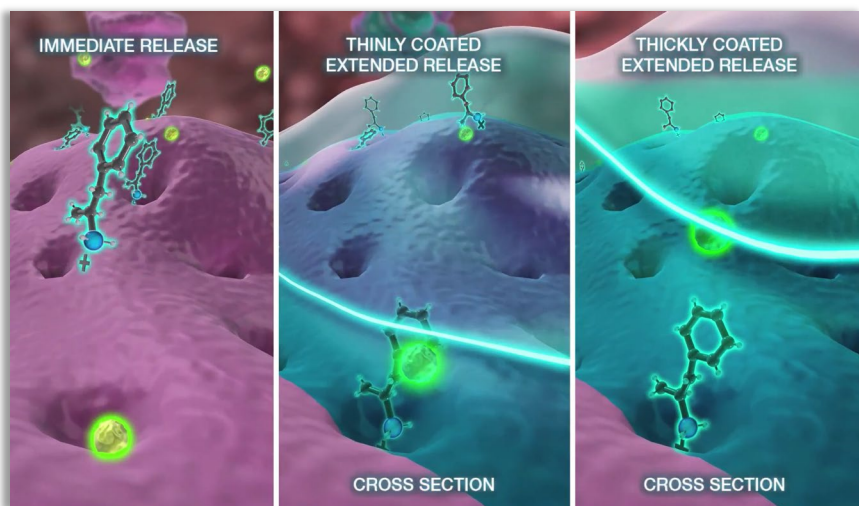
Active drug moiety is released from the drug-resin particles via ion exchange and diffusion



- Once ingested, positively charged ions from the gastrointestinal tract, like sodium, diffuse across the polymer coating and displace the drug from the resin
- The drug then diffuses back across the coating to the gastrointestinal tract
- These micron-sized, drug-resin particles can be formulated into a variety of dosage forms (tablets, liquids, films, capsules)

3

Extended-release coating of variable thickness slows the diffusion of ions entering and exiting the drug-resin particles



- The extent of drug release is based on diffusion rate across the polymer coating which is pH-independent
- The mechanism of drug release allows for rapid absorption and sustained plasma levels after once-daily dosing
 - Technology allows for development of customizable release profiles
 - Release profiles can last up to 24 hours
- The ion-exchange resins are excreted unchanged in the feces

4