

## Drug Delivery Experts and Baywind Bioventures Announce Patent Applications in Biopolymer Salts and Oral Delivery

**SAN DIEGO, August 28, 2018** — Drug Delivery Experts, LLC (DDE Labs) and its technology collaboration partner Baywind Bioventures, LLC (BaywindBio) announced today the filing of two patent application families based on discoveries made in partnership over the past several years.

The first class of patents involves new salt forms of active pharmaceutical ingredients, including peptides, proteins, antibodies, oligonucleotides, and polysaccharides. Applying an organic chemistry approach to salt selection has resulted in biopolymer salts with unique properties. These salts will be used in a variety of new drug delivery, formulation, and pharmaceutical applications ranging from extended-release injectable formulations to co-formulation of active ingredients in injection systems, and stabilization. The salt approach has distinct advantages over other methods of encapsulation, resulting in formulations with high active content using a simple and efficient manufacturing process.

The second class of patents relates to a device technology designed for oral delivery of active agents to the GI tract. This unique delivery device enhances systemic bioavailability and allows controlled delivery to various regions within the GI system or other organs. The oral capsule device may be used for improving the systemic bioavailability of poorly absorbed compounds such as biologics, biopolymers, and small molecules. It can also be used for delivery of agents into the GI tract for diagnostic applications, or for altering the conditions in

the local environment. The capsule has clear-cut benefits over similar systems because it is formed from materials and components commonly used in pharmaceutical injection systems, allowing for ease of manufacture, good compatibility with biologics, and a low cost of goods.

The partnership provides DDE Labs access to certain technology applications through its operating agreement with BaywindBio, the patent holder and technology developer. Both patent classes are being actively developed to broaden the patent portfolio and maximize potential.

DDE Labs is a contract R&D company (CDMO) working with pharmaceutical, biotech, and virtual companies on formulation, drug delivery, pharmaceutical, generic, super-generic, biosimilar, and biobetter product opportunities. DDE Labs specializes in working with off-the-shelf approaches, its own proprietary technologies, or custom-building technologies from the ground up for its partners. DDE Labs is a premier laboratory facility in San Diego with a strong team of innovative researchers and scientists. For more information on DDE Labs, visit [www.ddelabs.com](http://www.ddelabs.com).

BaywindBio develops delivery-enabled pharmaceutical products with its partners and collaborators, leveraging the deep experience of the product and drug development team at DDE Labs. For more information on BaywindBio, visit [www.baywindbio.com](http://www.baywindbio.com).