

Company**BioSerenTach Inc.****Presenter****Kanji
Takada**

**Novel oral and percutaneous DDSs for macromolecules
proteins, DNA, RNA, peptides, GLP-1 receptor agonist (semaglutide)**

1. GI-MAPS (Gastrointestinal Mucoadhesive Patch System)

Tablet having 3 layers, (1) surface layer for GI site targeting, (2), drug layer having absorption enhancer, (3) base layer protecting drug from hydrolysis

Solve Bioavailability problem: EPO 7.2%, G-CSF 23%

2. Dissolving Micropiles (DMs)

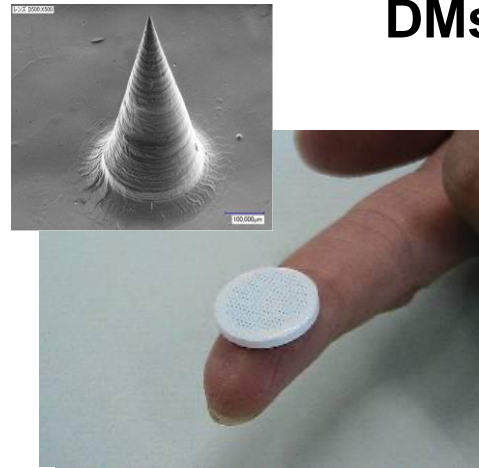
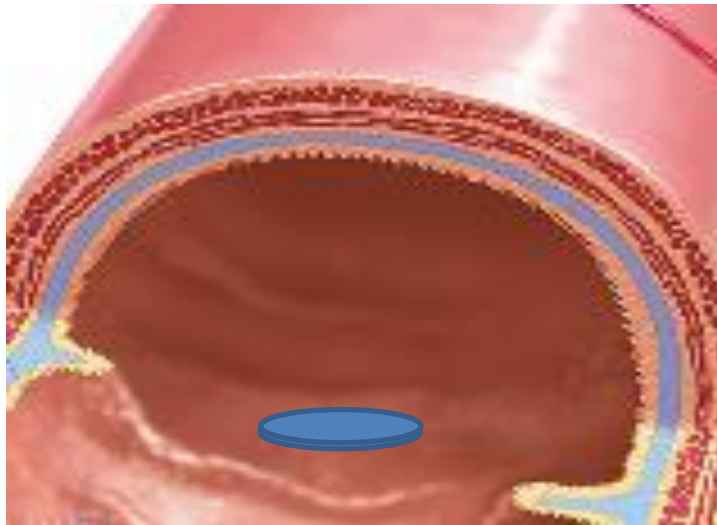
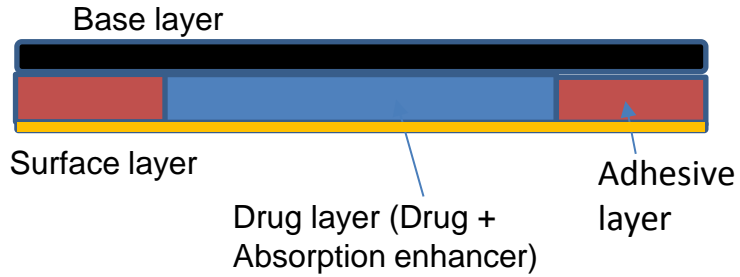
Micropile array chip containing drug at acral site

100% absorption is possible

Base polymer is dextran, chondroitin sulfate, hyaluronic acid

**High BA: GH 100%, EPO 69%, Insulin 98%, Heparin 100%,
Desmopressin 95%, Leuprolide 99%**

GI-MAPS



DMs

