Capsugel[®] Zephyr[™]

Dry-Powder Inhalation Capsule Portfolio

Customized approach to optimize performance of the product

Compatible with a large selection of device principles and opening systems

Available in both gelatin and hypromellose capsules

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Pharma & Biotech

Given patient convenience and compatibility with a range of formulations and doses, capsule based dry-powder inhalation (DPI) technology is becoming the preferred DPI drug delivery platform for respiratory and systemic applications.

Lonza's Capsugel® customized capsules, in both gelatin and hypromellose, are optimized to provide superior performance and compatibility between the capsule/device and capsule/formulation.

Our offer

DPI Portfolio

- Consistent powder release
- Customized approach to optimize performance of the end product
- Compatible with a large selection of device principles and opening systems
- •Ideal puncturing and cutting performance
- R&D and regulatory support throughout the development including QbD approach
- •Available in gelatin (Coni-Snap• Gelatin or Coni-Snap• Gelatin-PEG) and HPMC (Vcaps• or Vcaps• Plus) capsules

Customized Approach

STEP 1

Product Target Profile

PROJECT SYNOPSIS

Reference product, targeted market, regulatory route

TARGETED PATIENTS

Characteristics and needs

DEVICE SELECTION SUPPORTS, CHARACTERIZATION

STEP 2

Setting DPI Capsule Specifications

ACTIVE PRINCIPLE INGREDIENT (API) PROFILING

Formulation approach discussion

SUPPORT TO QbD APPROACH

On critical capsule parameters

RAPID SUPPLY OF R&D CAPSULE QUANTITIES

For preliminary tests

ON-SITE TECHNICAL SUPPORT

For first filling trials

STEP 3

Support Throughout Validation & Dossier Filling

CAPSULE BRANDING

Color matching Custom color & print development

RAPID SUPPLY OF CUSTOMIZED DPI CAPSULE

For validation / clinical batches

ON-SITE TECHNICAL SUPPORT

Scale-up, filling process optimization

QA & REGULATORY SUPPORT

Required statements for dossier filling, support on questions from agencies

R&D Added-Value Services

Water activity testing

compatibility testing Powder retention with standard lactose blend

Impact of storage conditions on performance

For more information visit capsugel.com, consult your Lonza representative or contact us at: US: 800-845-6973

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