PureIMS has global rights to Colistin Cyclops™, a colistin pre-filled dry powder inhaler for the treatment of pulmonary *Pseudomonas aeruginosa* infections in cystic fibrosis (CF) and non-CF bronchiectasis. PureIMS is a clinical-stage pharmaceutical company focused on developing and commercializing innovative inhaled therapies for the treatment of systemic and respiratory diseases with significant unmet medical needs.



Colistin

Colistimethate sodium (colistin) and tobramycin are effective antibiotics against *Pseudomonas aeruginosa* (Psa) and are, therefore, used to treat pulmonary Psa infections in cystic fibrosis and bronchiectasis. Pulmonary Psa infection is associated with increased sputum production, more extensive bronchiectasis, more hospitalizations and reduced quality of life.

Colistin can be administered by inhalation or infusion, but the available inhalers are very burdensome to the patient, as is parenteral administration. This reduces patient adherence to therapy and ultimately therapeutic efficacy. Colistin Cyclops™ provides an answer to the problems associated with other colistin administration routes and devices.

In addition to Colistin Cyclops™ PureIMS also develops Tobramycin Cyclops™. This enables continuous alternating inhaled therapy between colistin and tobramycin from very similar easy-to-use inhalers for maximum patient friendliness.

Colistin Cyclops™

Cyclops™:

Cyclops[™] is a **credit card-size**, **easy-to-use**, **pre-filled**, **disposable dry powder inhaler (DPI)** that PureIMS offers for high-dose drugs and emergency applications.



This patent-protected DPI can be produced cost-effectively because of its simple yet sophisticated design. Upon inhalation it uses the patient's breath to disperse the dry powder into small particles appropriately sized for deep lung deposition and, if required, rapid absorption of the drug into the circulation. Cyclops™ has several advantages over standard-of-care products across key therapeutic areas.

The above-mentioned attributes enable its **easy**, **hygienic** and **effective use** on a worldwide scale.

Colistin Cyclops™:

Colistin CyclopsTM carries a formulation with a high drug load and has excellent *in vitro* and *in vivo* performance. Colistin CyclopsTM has clear advantages compared to other treatments such as nebulization and Colobreathe[®]. It offers patients easier, faster and more convenient handling. Cleaning of the disposable CyclopsTM is not necessary.

Colistin Cyclops™ causes less side-effects (like coughing) compared to Colobreathe®, because of the much lower, more efficient dose and higher resistance to air flow of Cyclops™. In addition, Colistin Cyclops™ is pre-filled and therefore does not require the sometimes complex handling of capsules.

Named patient program:

PureIMS produces Colistin Cyclops[™] for a named patient program in the Netherlands. To date (September 2022) over 50,000 doses of Colistin Cyclops[™] have been prescribed to patients. The product is reimbursed by all payers.

Regulatory:

Discussions with the EMA are ongoing to establish the clinical program for Colistin Cyclops™. EMA endorses the necessity for new inhaled antibiotics.

Manufacturing and IP Protection

PureIMS has a GMP manufacturing facility licensed for the production of Cyclops™ IMPs. Cyclops™ is IP-protected until at least 2035.

Contact

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