



## Recently Introduced Products

Drug Name	Indication	Potential Impact	Expected Avg. Annual Cost
Glucagen HypoKit	For the treatment of severe hypoglycemic reactions which may occur in the management of insulin-treated persons with diabetes mellitus, when unconsciousness precludes oral carbohydrates	\$	N/A

\$: Est. drug plan expenditure increase of <1%\* \$\$: Est. drug plan expenditure increase of 1-5%\* \$\$\$: Est. drug plan expenditure increase of >5%\*

## Cayston<sup>®</sup> - A new treatment option for chronic respiratory infections associated with Cystic Fibrosis

Cystic Fibrosis (CF) is a fatal, genetic disorder that affects approximately 3 in 10,000 children born in Canada. CF is a disease that causes the body to produce abnormally thick mucus, impairing the functioning of the pancreas, liver, intestines and lungs. In the lungs, the accumulation of mucus causes progressive obstruction, difficulty breathing and susceptibility to bacterial infection. This is the principle cause of death in the majority of CF patients. CF is most common among Caucasians and affects men and women equally. The median life expectancy is 37 years of age<sup>1,2</sup>.

Current therapy for CF-associated pulmonary infections ranges from short-term use of one antibiotic agent to long-term use of multiple antibiotics, administered either orally, intravenously, or inhaled via nebulizer. Patients with CF require higher oral and intravenous antibiotic doses. This increases the risk of side effects, toxicity and the need for treatment monitoring, making inhalation an advantageous route of administration<sup>2</sup>.

Chronic cyclical administration of antibiotics in patients with *Pseudomonas aeruginosa* infection has been demonstrated to improve symptoms and pulmonary function. Until recently, TOBI<sup>®</sup> (tobramycin) was the only antibiotic on the market specifically formulated for inhalation. Cayston<sup>®</sup> (aztreonam) is a new inhaled antibiotic, approved for the treatment of chronic pulmonary infection involving *Pseudomonas aeruginosa* in patients with CF. Both TOBI<sup>®</sup> and Cayston<sup>®</sup> are taken for 28 days, followed by a rest period of 28 days. However, Cayston<sup>®</sup> is administered three times daily, whereas Tobi<sup>®</sup> is administered twice daily. Furthermore, TOBI<sup>®</sup> and Cayston<sup>®</sup> belong to two different antibiotic drug classes (aminoglycoside vs monobactam). As a result, Cayston<sup>®</sup> provides a treatment alternative for patients who do not respond to, have become resistant to, or are intolerant to TOBI<sup>®</sup><sup>2,3</sup>.

The average annual cost of treatment with Cayston<sup>®</sup> is \$26,295, whereas that of TOBI<sup>®</sup> is \$18,430. TOBI<sup>®</sup> is fully covered under all ClaimSecure plans and formularies. Since Cayston<sup>®</sup> is significantly more expensive than TOBI<sup>®</sup>, it will be placed under Special Authorization for all Managed Formularies and fully covered for open drug formularies. The Special Authorization program ensures that plan members have tried and failed or did not tolerate TOBI<sup>®</sup>. In addition, Special Authorization will allow for coordination of benefits with available provincial healthcare plans.

If you require additional information about Cayston<sup>®</sup>, please contact Genevieve Coutu, Clinical Pharmacist, Clinical Services Department, at (905) 949-3031 or 1-888-479-7587 ext.3031.

### Recommendation: Special Authorization

*ClaimSecure reserves the right to amend in part or in its entirety stated special authorization clinical guidelines*

#### References:

- 1) Cayston<sup>™</sup> Private Payer Submission Binder. Gilead Sciences Canada, December, 2009.
- 2) Sharma, GD. Cystic Fibrosis. <http://emedicine.medscape.com/article/1001602-overview> Accessed January 18, 2009.
- 3) Retsch-Bogart, GZ, P *et al.* Efficacy and safety of inhaled aztreonam lysine for airway pseudomonas in cystic fibrosis. *CHEST* 2009; 135, p. 1223- 1232.

