



► **CLINICAL ASSISTANCE:** CFI PROVIDES CLINICAL ASSISTANCE AND SERVICES FOR PATIENTS IN NEED



► **ADVOCACY:** CFI IS ACTIVE AT LOCAL, REGIONAL, AND NATIONAL LEVELS TO BEST REPRESENT THE NEEDS OF ALL PEOPLE



► **EDUCATION:** CFI IS COMMITTED TO THE TRAINING OF FUTURE CF HEALTHCARE WORKERS AND TO THE CF COMMUNITY AT LARGE

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Cystic Fibrosis

Update

Cystic Fibrosis Update is a regular newsletter featuring pertinent and interesting information related to cystic fibrosis care. The information presented reflects the views of the editor alone and does not represent medical advice. Please contact your physician to discuss any of the issues raised before starting any new therapies.

North American CF Conference *Update of Therapies*

Every year I attend the North American CF Conference and search for information about a therapy that is brand new to me as well as for new information about older therapies. Last October, I presented what I learned in *CFI Update* as a top 10 list. On the heels of this year's conference, let's revisit this topic.

As reported in the CFI Newsletter earlier this year, **AZLI** (Rated 2009 #1 prospect), or aztreonam lysinate for inhalation, has been FDA approved and marketed as **Cayston**. Additional data was presented this year showing that Cayston resulted in greater improvements in both FEV1 and respiratory symptoms when compared to TOBI in an open label study that many of you participated in.

Inhaled Levaquin (Aeroquin) continues to progress through the clinical trial process. In a phase II trial in 151 patients, 28 days of one particular dose of Aeroquin resulted in a significant reduction in Pseudomonas in sputum as well as a near 11% increase in lung function by the end of the 28 day study period. Additionally, very high sputum levels of the drug and low blood levels of the drug were documented in the same study,

indicating low side effect profile. A phase III trial is just getting underway.

A combined antibiotic, **fosfomycin and tobramycin for inhalation**, has successfully completed a Phase 2 study. In this 28

nosa and MRSA was also decreased with this combination.

Gallium nitrate is an FDA drug used to treat cancer related side effects. It is also known to kill Pseudomonas aeruginosa in biofilms including resistant strains. In a Phase I study in 18 adults with CF, a 5 day intravenous infusion using 2 different doses was given. An inhalation preparation was also evaluated in a separate study showing significant activity (approx. 10 times higher than TOBI or Cayston). No toxicity appeared in animal studies.

Use of **hypertonic saline (HS)** has been used for years with a renewed interest occurring several years ago. While the benefits of enhancing mucus clearance are seen in some patients, an unexpected recent finding showed that inhalation of 7%HS caused a paralysis in the tiny airway hair cells called cilia that are needed to help the lungs move debris out of the lungs. The length of this effect and how to avoid this are still to be explored. While increased use of 7%HS during hospitalizations is commonly used, a recent report failed to show any additional benefit of this therapy compared to standard therapy.

Others in the News...

Pseudomonas Vaccines

Pulse Steroids in ABPA

Once a Day Insulin for Diabetes

Inhaled Mannitol

Arikace (Inhaled Amikacin)

Vertex 809

IV Colisitin

Denufosol

day study in 135 individuals over 18 years of age who first took Cayston for 28 days, the lung function that was increased by Cayston in the 28 days was sustained with the combination antibiotics compared to a loss of lung function gains in the placebo group. The concentration of Pseudomonas aerugi-



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