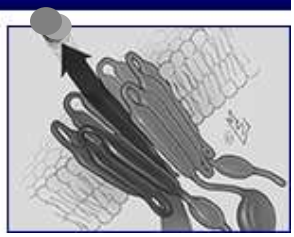
AHEAD OF THE CURVE
EMERGING CF THERAPIES 2009



Ongoing Research into other Emerging Therapies – Pam Zeitlin, MD, PhD

Learning Objectives:

1. To review salt and water balance across non CF and CF airways

2. To evaluate options for activation of nonCFTR-dependent chloride channels

3. To discuss option for inhibition of epithelial sodium channels

4. To review development of osmotic agent aerosols.

This speaker has disclosed that his/her presentation may reference the following unlabeled/unapproved use of drugs or products: Amiloride, Bronchitol, cobiprostone, Denufosol, lubiprostone, mannitol, Moli1901

Abstract:

This is a review of current research directed at restoring normal ion and water transport in CF lungs. The CFTR protein is a master controller of sodium and chloride channels. We provide a discussion of the interactions between CFTR and the other ion channels—ENaC, CaCC, ORCC, and ClC-2. Progress in developing drugs to regulate these non-CFTR channels is put into the context of the disease. Activators of chloride channels and inhibitors of sodium channels do not require functional CFTR and are not dependent on the type of CFTR mutation. Finally, osmotic agents delivered by aerosol are in testing to improve chest clearance and lung function.