



PRESS RELEASE

SYNAIRGEN PLC
(‘Synairgen’ or the ‘Company’)

Presentation of data regarding barrier function-improving peptide (SNG-3) at the American Thoracic Society International Conference

Southampton, UK – 23 May 2008: Researchers from Synairgen, the company developing novel therapies for asthma and chronic obstructive pulmonary disease (‘COPD’), have found that the cells which line the airways (the epithelium) of asthmatics do not form a robust barrier as a defence against certain environmental factors. This defect in barrier function is thought to be a key contributor to asthma susceptibility enabling the known triggers of asthma, such as allergens, pollutants and viruses, to penetrate through the epithelium to aggravate the already inflamed underlying tissue. Synairgen is developing an epithelial-selective peptide (SNG-3) to improve barrier function.

During this week’s American Thoracic Society 2008 International Conference¹, Synairgen presented data generated from its human *in vitro* model platform, demonstrating that SNG-3 improves barrier function in asthmatic cells and furthermore protects against reductions in epithelial barrier function driven by exposure to environmental pollutants such as cigarette smoke. Synairgen has also shown that the effects of SNG-3 are determined by its route of administration. Apically-applied EGF (equivalent to inhaled delivery) improved barrier function, whereas basolateral application (equivalent to injected delivery) did not have any beneficial impact on barrier function. This topical delivery is advantageous in respect of the anticipated safety profile of SNG-3.

Synairgen announced earlier in the year that it had initiated manufacturing process development with a view to supporting further preclinical studies.

Professor Stephen Holgate, Non-Executive Director and Co-Founder of Synairgen, said:

“The Synairgen hypothesis is that, as with the skin and the gut, the leaky lining of the lungs is a fundamental defect driving asthma. It is exciting to have developed models of this defective barrier that we can now use to develop candidates such as SNG-3.”

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Notes for Editors

About Synairgen

Synairgen is a drug discovery and development company founded by Professors Stephen Holgate, Donna Davies and Ratko Djukanovic, focused on identifying and out-licensing new pharmaceutical products which address the underlying causes of asthma and chronic obstructive pulmonary disease. Synairgen is listed on AIM (LSE: SNG).

For more information about Synairgen please see www.synairgen.com.

Asthma statistics

- There are approximately 22 million asthmatics in the USA(2)
- The economic cost to the USA is \$19.7 billion per year(3)
- Asthma accounts for 1,770,000 emergency department visits per year in the USA(2)
- The cost of emergency department visits and in-patient care in relation to asthma in the USA is \$4.7 billion(3)
- 50% of the total cost of the asthma is apportioned to 10% of the asthmatic population with the severest disease(4)

References

1. The American Thoracic Society's International Conference is the principal global scientific meeting for basic scientists, drug developers and physicians specialising in respiratory diseases such as asthma and COPD (www.thoracic.org).
2. American Lung Association. Trends in Asthma Morbidity and Mortality. 2007 www.lungusa.org
3. Morbidity & Mortality: 2007 Chart Book on cardiovascular, lung and blood diseases produced by National Heart, Lung, and Blood Institute
4. P.J. Barnes, B. Johnson, J.B. Klim. The Costs of Asthma. Eur Respir J 1996 9, 636-642