



**PRESS RELEASE**

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

**INTERFERON LAMBDA INTELLECTUAL PROPERTY LICENSED FROM IMPERIAL  
INNOVATIONS**

***New drug discovery candidate for treatment of asthma  
added to Synairgen portfolio***

Southampton, UK - Synairgen plc (LSE: SNG), the drug discovery company focused on the underlying causes of asthma and chronic obstructive pulmonary disease (‘COPD’), announces that it has obtained an exclusive licence to certain intellectual property from Imperial Innovations Ltd, a subsidiary of Imperial Innovations Group plc (LSE: IVO), relating to the use of interferon lambda (‘IFN $\lambda$ ’), a recently discovered interferon, in the treatment of respiratory disease.

The results of an Imperial College study into the production of IFN $\lambda$ , suggesting its role in the defence of rhinovirus infection, were published online yesterday in Nature Medicine.

This worldwide licence complements Synairgen’s existing intellectual property in respect of the use of interferon beta (‘IFN $\beta$ ’) to combat respiratory attacks associated with the common cold virus in severe asthma patients. Under the terms of the licence, Synairgen has paid an undisclosed initial fee and will pay milestones to Imperial Innovations based upon the development of the programme and any potential out-licence transaction in respect of IFN $\lambda$  which may occur.

Interferons are produced by the body’s immune system in response to viral infection and have the ability to inhibit virus replication. Synairgen’s focus is on the rhinovirus (common cold virus), which is the most common trigger for the worsening of asthma symptoms (otherwise known as an asthma exacerbation). Treatment of asthma exacerbations represents a significant element of the \$16 billion annual cost of the disease in the US. Synairgen’s first therapy for the treatment of asthmatics in this area is inhaled IFN $\beta$ , which is currently in Phase I clinical trials.

Richard Marsden, Managing Director of Synairgen said, *“This licence is a good addition to our interferon-based anti-rhinovirus programme. There is a good body of evidence showing IFN $\beta$ ’s ability to boost the lungs’ natural defence against rhinovirus in asthmatics and studies on IFN $\lambda$  are revealing similar properties. We are pleased to add this potentially exciting new interferon into our overall programme.”*

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For further information, please contact:

**Synairgen plc**  
Richard Marsden, Managing Director

**Tel: 02380 512 800**

**Hogarth Partnership**  
Melanie Toyne-Sewell / Georgina Briscoe / Charlie Field

**Tel: 020 7357 9477**

## **Notes to Editors**

### **1. Background to Synairgen**

Synairgen was founded by Professors Stephen Holgate, Donna Davies and Ratko Djukanovic, a world-renowned respiratory research team from the University of Southampton, and spun-out from the University of Southampton in June 2003. In October 2004, the Company floated on AIM, raising £10.0 million (£9.0 million net of expenses) to enhance its research and development capabilities and invest in its proprietary programmes. Further information may be found at [www.synairgen.com](http://www.synairgen.com).

### **2. Online publication in Nature Medicine**

A brief communication entitled "Role of deficient type III interferon- $\lambda$  production in asthma exacerbations" was published online in Nature Medicine on 13 August 2006 and may be found at <http://www.nature.com/nm/journal/v12/n9/full/nm1462.html>

### **3. Asthma statistics**

- In the United States, there are approximately 20 million asthmatics (1).
- The annual economic cost of asthma to the US is \$16 billion (1).
- There are 1,900,000 emergency department visits due to asthma per year in the US (1).
- The cost of emergency department visits and in-patient care in relation to asthma in the US is \$4.1billion (1).
- There is evidence that as many as 80% of asthma exacerbations which resulted in emergency department visits can be associated with rhinovirus infections (3).
- It has been shown that the severest 10% of the asthmatic population take up over 50% of the total cost of the disease (2).

### **4. Information about common colds and rhinovirus**

- Adults get an average of two to four colds per year, mostly between September and May (4).
- Young children suffer from an average of six to eight colds per year (4).
- Asthmatics contract as many colds as non-asthmatics (5).
- Asthmatics have similar upper respiratory tract (nose and throat) symptoms as non-asthmatics (5).
- Asthmatics frequently suffer lower respiratory tract (the airways in the lung) infections (5).

## **References**

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