# Lonza



Press release

# Cellectis bioresearch and Lonza achieve significant milestone on CHO-K1SV GS Knock-Out

- Cellectis bioresearch successfully deactivated the cell-based glutamine synthetase (GS) activity in CHO-K1SV host cell line, allowing for accelerated clone selection and shortened development times
- Removal of endogenous glutamine synthetase (GS) will facilitate the creation of highly productive recombinant cell lines

Paris (France) and Basel (Switzerland), July 20, 2011 – Cellectis bioresearch, the genome customization specialist and a commercial subsidiary of Cellectis (Alternext: ALCLS), and Lonza, a world leader in biotechnology production, announce today that they have reached a significant milestone in the development of a newly bioengineered cell line.

Using their proprietary meganuclease technology, Cellectis bioresearch successfully managed to deactivate (« knock-out ») the cell-based glutamine synthetase (GS) in CHO-K1SV, Lonza's proprietary host cell line. This achievement comes as part of an overall strategic plan to further advance the GS Gene Expression System™ offering and is expected to contribute to shortened development timelines critical for the early phases of bioproduction.

- "We are very pleased to deliver Lonza's engineered cell line ahead of time and to demonstrate the great potential of meganucleases for knock-outs in the bioproduction field", said Dr. Christophe Delenda, CSO of Cellectis bioresearch.
- "Removal of the cell-based GS activity will enable Lonza to make further improvements to its proprietary GS Gene Expression System™ and shorten development timelines via accelerated selection of highly productive clones and increased productivities", said Dr. Richard Alldread, Head of Technology Development and Strategic Projects, Lonza Development Services. "Lonza aims to have the new cell line available for services and licensing in late 2011".

Lonza's proprietary technology, the GS Gene Expression System™, uses selection via glutamine metabolism to rapidly generate high-yielding and stable recombinant cell lines. Hundreds of cell lines using the GS System™ have already been created to generate therapeutic proteins for clinical trials and in-market supply. Removal of the cell-based GS activity will enable further improvements to be made to the selection process for creating highly productive recombinant cell lines.

Press release I 1/2

Details of the payment from Lonza triggered by this milestone were not disclosed.

#### **About Cellectis bioresearch**

Cellectis bioresearch was incorporated as a subsidiary of Cellectis (Alternext: ALCLS) in June 2008. It provides life science researchers with ready- and easy-to-use tools for genome customization. These tools, based on sequence specific nucleases, enable the engineering of cells with optimized features for drug discovery, protein production and gene functional studies. The genome customization products and services can be purchased online from <a href="https://www.cellectis-bioresearch.com">www.cellectis-bioresearch.com</a>. Check the website for more information.

Follow Cellectis bioresearch on twitter: http://twitter.com/genegineer

#### **About Cellectis**

Cellectis improves life by applying its genome engineering expertise to a broad range of applications, including agriculture, bioresearch and human therapeutics. Cellectis is listed on the NYSE-Euronext Alternext market (code: ALCLS) in Paris.

For further information about Cellectis, visit our website at: www.cellectis.com Follow Cellectis on twitter: http://twitter.com/cellectis

#### **About Lonza**

Lonza is one of the world's leading suppliers to the pharmaceutical, healthcare and life science industries. Its products and services span its customers' needs from research to final product manufacture. Lonza is the global leader in the production and support of active pharmaceutical ingredients both chemically as well as biotechnologically. Biopharmaceuticals are one of the key growth drivers of the pharmaceutical and biotechnology industries. Lonza has strong capabilities in large and small molecules, peptides, amino acids and niche bioproducts, which play an important role in the development of novel medicines and healthcare products. In addition, Lonza is a leader in cell-based research, endotoxin detection and cell therapy manufacturing. Furthermore, the company is a leading provider of value chemical and biotech ingredients to the nutrition, hygiene, preservation, agro and personal care markets.

Lonza is headquartered in Basel, Switzerland and is listed on the SIX Swiss Exchange. In 2010, the company had sales of CHF 2.680 billion. Further information can be found at <a href="https://www.lonza.com">www.lonza.com</a>.

#### Disclaimer

This press release and the information contained herein do not constitute an offer to sell or subscribe, or a solicitation of an offer to buy or subscribe, for shares in Cellectis in any country. This press release contains forward-looking statements that relate to the Company's objectives based on the current expectations and assumptions of the Company's management only and involve unforeseeable risk and uncertainties that could cause the Company to fail to achieve the objectives expressed by the forward-looking statements above.

## For further information, please contact:

## Cellectis:

Sylvie Delassus Senior VP Corporate Communication +33 (0)1 41 83 99 00 media@cellectis.com

# **Lonza Group Ltd:**

Head of Corporate Communications Dominik Werner Tel +41 61 316 8798 Fax +41 61 316 9798 dominik.werner@lonza.com

Media Relations Melanie Disa Tel +1 201 316 9413 Fax +1 201 696 3533 melanie.disa@lonza.com Investor Relations Dirk Oehlers Tel +41 61 316 8540 Fax +41 61 316 9540 dirk.oehlers@lonza.com