

HumabFc : Improvement of therapeutic efficacy of recombinant monoclonal antibodies
 Didier Scherrer, LFB Biotechnology, Head of Research

Contact of the speaker Address : Cell: Email :	Didier Scherrer, LFB Biotechnology, 3, avenue des tropiques, BP 50052 91942 COURTABOEUF CEDEX - FRANCE + 33 (0)6 07 67 63 31 scherrerd@lfb.fr
Other speaker Company or Lab / Title Address : Phone: Email :	Philippe MONDON MILLEGEN SA ,Chief Technical Officer Immeuble BIOSTEP - Bâtiment A , Rue Pierre et Marie Curie, BP 38183 31681 LABEGE cedex- FRANCE + 33 (0)5 61 28 70 10 philippe.mondon@millegen.com
Executive Summary of the presentation	<p>MilleGen, a Directed Molecular Evolution company (DME), and LFB S.A. (Laboratoire français du Fractionnement et des Biotechnologies S.A.) have entered into a strategic collaboration. The objective is to design new generation of recombinant monoclonal antibodies (Mabs), therapeutically more effective, thereby more economical, by improving their pharmacokinetics and effector functions.</p> <p>Antibodies are one of the fastest growing segments of the pharmaceutical and biotechnology industries. Despite significant progress, traditional development of antibody-based therapies has proved difficult. For this reason, there is a need for R&D programs focusing on new approaches to antibody development, such as discovering methods for enhancing antibody efficacy, allowing a reduction of treatment dose and cost.</p> <p>The combination of MilleGen's DME platform Mutagen™ with LFB's know-how and expertise in therapeutic antibody discovery and development allows generating a new and innovative platform dedicated to the enhancement of therapeutic efficacy. In a first phase, MilleGen has applied its Mutagen™ technology to genetically engineer the Fc region of the antibody. Several mutations were identified to optimize the Fc region (patent filed). In a second step, LFB S.A. will conduct pre-clinical evaluation of antibody candidates in particular in the field of onco-hematology.</p>
Actors and Partners (including international)	<p>The project led by MilleGen and LFB S.A. also includes an academic laboratory (Inserm U858, Toulouse, France), involved in the molecular and cellular engineering of recombinant antibodies.</p>
Funding	<p>Both partners obtained grants from the French government for this R&D project, labeled by the "Cancer BioSanté Midi Pyrénées" competitiveness area.</p>