Preview of the Eighth World Congress on Inflammation

16-20 June 2007, Copenhagen, Denmark.

Authored by Charlotte Jago, Thomson Scientific, London, UK Email: charlotte.jago@thomson.com

Thomson Scientific's coverage of this conference will focus on various presentations of relevance to the pharmaceutical sector. Particular attention will be given to identifying emerging key topics within pharmacological research, highlighting recent developments in drug discovery programs with associated preclinical results, and new pharmaceutical targets. In addition, we will be reporting on novel drug entities disclosed at the numerous oral and poster presentations. Researchers from industry and academia participating at the meeting will be presenting pharmacological and clinical investigations of a diverse and comprehensive range of potential therapeutic and diagnostic targets. In addition to the in-house editor who will be reporting from the conference, we will also receive reports from a number of commissioned scientists who are experts in their respective fields.

Introduction

This year's World Congress on Inflammation (WCI) is the eighth biennial meeting organized by the International Association of Inflammation Societies (IAIS) in locations ranging from Brighton, UK, to Melbourne, Australia. The Congress is being held this year in Denmark's capital, Copenhagen, at the heart of the Medicon Valley biotech cluster, and will span five interest-packed days from June 16 to 20.

The event's Grand Opening the Saturday will be marked with an opening ceremony and a plenary lecture by Jules Hoffman, Director of the CNRS Institute of Molecular and Cellular Biology, on an innate immunity paradigm. Each of the three middles days of the conference start with a plenary or honorary lecture: Lars Fugger of the UK's John Radcliffe Hospital and Denmark's Aarhus University Hospital will discuss multiple sclerosis risk factors; Francesca Levi-Schaffer from Israel's Hebrew University will talk about the cellular players in allergic inflammation; and Andreas Radbruch, Director of the German Rheumatism Research Center, will focus on long-lived plasma cells in immunity and inflammation. The days will then divide into three symposia tracks in the morning, followed by three focus group and free communication paths in the afternoon. The posters to be presented will be available for viewing throughout the event, and the evenings will provide opportunities for discussion and socializing, in the forms of a church concert, the Congress Dinner and a City Hall reception. The final day of the congress will begin with an honorary lecture by Salvador Moncada, Director of the Wolfson Institute for Biomedical Research at University College London, who is receiving the IAIS Lifetime Achievement Award. The final meeting session will comprise eight presentations of breaking news.

Coverage

The 2007 WCI covers the full spectrum of inflammation, from its causes and mechanisms, through to the many inflammatory conditions and disease states, and their potential treatments and cures. Each symposium, focus group and free communication session concentrates on one aspect of inflammation. Thomson Scientific's coverage of these presentations will include the intersection of cancer and inflammation, allergy, chemokines and cytokines, circulation, PLA2, skin inflammation and novel therapeutics. Research and data will also be presented in areas such as proteases, tissue damage, coagulation, the nervous system, dermatology, genetics, signal transduction and skin inflammation, and concerning disease states including inflammatory bowel disease, autoimmunity, arthritis and rheumatic diseases.

Of the many informative talks to be given, and posters to be presented at this meeting, the highlights are expected to include the following.

New data from phase I p38 MAP kinase inhibitor trial

Phase I data on Array BioPharma's ARRY-797, the first clinical data for this p38 MAP kinase inhibitor for cancer and inflammation, are to be presented by Array's Kevin Koch on Monday. The dose-escalation, healthy volunteer study was designed to assess safety, tolerability, pharmacokinetics and biomarkers. In preclinical studies, ARRY-797 augmented the activity of cisplatin and temozolomide, and inhibited tumor growth when used as a single agent in multiple myeloma models. In April 2007, a CE Unterberg Towbin analyst said that a "clean safety signal" from the phase I trial would be a significant positive due to toxicity issues observed with previous p38 inhibitors.

LEO Pharma is also developing p38 MAP kinase inhibitors, and on Wednesday Lene Jensen will present data on LEO-15520 from various inflammatory models, including collagen-induced arthritis and psoriasis.

ROCK inhibitors

James Ellis of Surface Logix is to deliver two talks concerning his company's Rho kinase (ROCK) inhibitor program. The efficacy of one compound in the series in a fibrosis model will be discussed on Sunday, while that of another compound, SLx-2119, in a septic liver injury model will feature in Wednesday's breaking news session. According to data presented at international meetings in 2005 and 2006, SLx-2119 inhibited tumor growth in a human sarcoma xenograft model, delayed growth in a second tumor model, and improved various disease parameters in the ApoE knockout mouse atherosclerosis model.

Inhibiting PI3K gamma

Two Merck Serono delegates, Miriam Canavese and Vittoria Ardissone, will be presenting data on one compound from their company's PI3K gamma inhibitor series in preclinical dermatitis and arthritis models. According to previously reported and published data, another compound from the same program, suppressed joint inflammation and cartilage damage in a murine collagen-induced arthritis model, and reduced glomerulonephritis and prolonged life span in a mouse model of systemic lupus.

C5a receptor targeting

Peter Whitfeld of G2 Therapies will report on the generation of anti-human-C5a receptor (C5aR) mAbs in a presentation in the breaking news session on Wednesday. Preclinical data will also be described. In February 2006, G2 Therapies signed a deal worth $108 million to codevelop C5aR antibodies with Novo Nordisk.

MIF inhibition in arthritis models

Also on the Wednesday, Eric Morand of Cortical is to discuss preclinical arthritis data on the macrophage migration inhibitory factor (MIF) inhibitor, COR-100140. As presented at the Seventh WCI in Melbourne, Australia, the drug has already been shown to reduce synovitis, joint swelling, and cartilage and bone damage in antigen (mBSA)-induced arthritis (AIA) in mice, and to decrease lesion size and macrophage numbers in a murine atherosclerosis model.

Pick of the posters

The efficacy of Novartis' broad spectrum matrix metalloprotease inhibitor, PKF-242-484, in a murine cigarette smoke-exposure model of chronic obstructive pulmonary disorder will be presented by Christopher S Stevenson. The drug has previously shown efficacy in acute lung inflammation mouse models in vivo, reducing neutrophil and lymphocyte influx and TNF alpha release into the airways.

Osprey Pharmaceuticals' OPL-CCL2-LPM leukocyte population modulator, an anti-CCL2 recombinant fusion protein comprising a chemokine-binding moiety linked to the Shiga-A1subunit toxin, has already been shown to have no systemic toxicity in preliminary animal studies. At the Eighth World Congress, Osprey's Laura McIntosh will discuss the effect of the agent on anti-thymocyte serum-induced mesangioproliferative glomerulonephritis in rats.

Mustapha Allam from ProMetic BioSciences is to present data from preclinical inflammation studies of the company's anticancer agent, PBI-1393. The drug was assessed in vitro and in the rat air pouch model. A phase Ib/II trial of PBI-1393 in combination with chemotherapy for cervical cancer began in January 2007.