

# **Consulting on Advanced Biologicals**

Leading you through licensing.

# Christopher A Bravery, PhD

**Regulatory Scientist** 



### **PROFILE**

With a PhD and post doctoral experience in Immunology Christopher embarked on a commercial career in Regenerative Medicine in 1997. Over the following years he has undertaken various roles and this combined experience has endowed him with a broad understanding of the issues that face Companies in this sector.

After greater than eight years in industrial R&D roles spanning large Pharma and start-up Biotech, Christopher moved to the UK competent authority, the Medicines and Healthcare products Regulatory Agency (MHRA) as a Pharmaceutical (Quality/CMC) Assessor in the biologicals and biotechnology unit. As an assessor Christopher was responsible for reviewing new license applications (MAA), variations (Type IB/II), clinical trial applications and scientific advice for both MHRA and EMA. Assessment work included monoclonal antibodies, recombinant proteins (including biosimilars) and other complex biologicals through the centralised procedure (EMA). With his strong background in cell therapy Christopher became a UK representative on the Cell Products Working Party (CPWP<sup>1</sup>) and through that, one of the authors of the EMA guideline on Cell-Based Medicinal Products and other related guidelines. Together with the Gene Therapy Working Party the CPWP also provided a scientific draft of the dossier requirements for ATMP's (the so called Annex I<sup>2</sup>) including revised ATMP definitions. At the MHRA Christopher was a member of the Advanced Therapies Steering Committee.

Prior to founding AdvBiols, Christopher worked for a mediumsize consulting group working on over 30 projects including 11 ATMP's and a number of biosimilar products.

Christopher founded AdvBiols in order to focus on novel and unusual biological products, including ATMP, and other products that require imaginative regulatory strategies. Project work includes preclinical (and nonclinical), quality (CMC) and EU regulatory (combined with a working understanding of US FDA). Activities include preclinical strategy, gap analysis, regulatory strategy, due diligence, agency interactions, CMC, nonclinical, clinical trial applications (CTA) and marketing authorisation. Time-permitting, Christopher also undertakes both in-house and externally supported research activities.

Christopher is regularly invited to chair, speak and run workshops at national and international conferences.

# **EDUCATION**

Ph.D

Imperial College, London Research into human T cell recognition of porcine endothelial cells.

B.Sc. (hons.)

Brunel University, London Applied Biochemistry.

## **PROFESSIONAL EXPERIENCE**

Current

Consulting on Advanced Biologicals Ltd Director/owner London UK.

<u>TrakCel</u> Advisory Board Cardiff, UK

2008 - 2009

Director of regulatory Affairs, ATMP. ERA Consulting, London, UK.

2005 - 2008

Pharmaceutical Assessor, Licensing Division. MHRA, London, UK.

2001 - 2005

Senior Scientist/Team Leader Intercytex Ltd., Manchester, UK.

1998 - 2001

Laboratory Head

**Imutran** Ltd. (A Novartis Pharma AG Co.), Cambridge, UK.

1996 - 1998

Research Fellow, Immunology Dept, **Guys Hospital**, London UK.

1995-1996

Research Assistant, Dept Haematology, **Royal Free Hospital**, London.

1990-1995

Research Assistant, Dept Cardiothoracic surgery, **National Heart and Lung Institute**, London, UK.

Working party no longer exists.

 $<sup>^2\,</sup>$  Published by the EU Commission as Directive 2009/120/EC



# **Consulting on Advanced Biologicals**

Leading you through licensing.

#### **PROFESSIONAL MEMBERSHIPS**

**British Standards Institute (BSI)** 

Regenerative Medicine Committee (RGM/1, ISO/TC 150)

Biotech Committee (BT/1, ISO/TC 276)

**International Society for Cell Therapy (ISCT)** 

European Legal and Regulatory Committee

Product and Process Development sub-committee

(of the Commercialisation Committee)

Global Regulatory Perspectives (GRP) workshop

(Annual meeting) organising committee.

Parenteral Drug Association (PDA)

Member

#### **CONTACT DETAILS**

cbravery@advbiols.com

Mobile: +44 (0)7773 427460 Phone: +44 (0)20 7159 0864

## **Selected Publications**

The Delivery of Regenerative Medicines and Their Impact on Healthcare (2010) Chapter 19: A Catalyst for Change. Regulating Regenerative Medicines in Europe CRC Press Editor(s): Catherine Prescott and Dame Julia Polak.

Regulating interface science Healthcare products: myths and uncertainties

Christopher A Bravery

J. R. Soc. Interface December 6, 2010 7 Suppl 6 S789-S795

PAS 83:2012 (BSI), Developing human cells for clinical applications in the European Union and the United States of America. Guide.

Technical Author

Free Download

Potency assay development for cellular therapy products: an ISCT\* review of the requirements and experiences in the industry".

Christopher A. **Bravery**, Jessica Carmen, Timothy Fong, Wanda Oprea, Karin H.Hoogendoorn, Juliana Woda, Scott R. Burger, Jon A. Rowley, Mark L. Bonyhadi, Wouter Van't Hof

Cytotherapy Volume 15, Issue 1, Pages 9-19.e9, January 2013

"Reference materials for cellular therapeutics

Christopher A. Bravery, Anna French

Cytotherapy. 2014 Sep;16(9):1187-96.

Do human leukocyte antigen-typed cellular therapeutics based on induced pluripotent stem cells make commercial sense?

Christopher A Bravery

Stem Cells Dev. 2015 Jan 1;24(1):1-10.

Measurement reliability over the cellular therapeutic product lifecycle

Christopher A Bravery

Regulatory rapporteur, May 2015, 12(5), 12 - 16

## Also contributed to:

PAS 93:2011 Characterization of human cells for clinical applications. Guide <u>Free Download</u>.

PAS 84:2012, Cell therapy and Regenerative medicine glossary

Free Download