

Christopher A Bravery, PhD Consulting 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 (CPWP¹) 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 I²) 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 medium-size 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.

2014 - 2016

[TrakCel](#) 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.

¹ Working party no longer exists.

² Published by the EU Commission as Directive 2009/120/EC

1990-1995

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

(Annual meeting) organising committee.

Parenteral Drug Association (PDA)

Member

CONTACT DETAILS

cbravery@advbiols.com

Mobile: +44 (0)7773 427460

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)

Co-chair, European Legal and Regulatory Committee

Product and Process Development sub-committee
(of the Commercialisation Committee)

Global Regulatory Perspectives (GRP) workshop

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.](#)

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.

Regulating interface science Healthcare products: myths and uncertainties

Christopher A **Bravery**

[J. R. Soc. Interface](#) December 6, 2010 7 Suppl 6 S789-S795

Measurement reliability over the cellular therapeutic product lifecycle

Christopher A **Bravery**

[Regulatory rapporteur](#), May 2015, 12(5), 12 – 16

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](#)

Bravery, C. A. (2018). "Making the grade: untangling the myths of raw materials used for the manufacture of cell- and gene-based medicinal products." [Cell Gene Therapy Insights](#) 4(3): 207-225.

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

Bravery, C.A., Ball, O., Robinson, S.A. (2019) "EU market authorisation strategy – lessons from the first 22 ATMP submitted to the EMA" [Cell Gene Therapy Insights](#) (in-press) doi: 10.18609/cgti.2019.088

Also contributed to:

PAS 93:2011 Characterization of human cells for clinical applications. Guide

[Free Download.](#)

PAS 84:2012, Cell therapy and Regenerative medicine glossary

[Free Download](#)

"Reference materials for cellular therapeutics

Christopher A. **Bravery**, Anna French

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