

Rev. Professor. Alasdair Coles PhD FRCP

Genzyme Professor of Neuroimmunology, University of Cambridge
Honorary Consultant Neurologist, Addenbrooke's Hospital



Group website is at: <http://www.colescambridge.org.uk>

30th June 2017

Degrees & qualifications

BA Physiology (Oxon)	1987	Class I; Martin Wronker Prize for best performance
BM BCh (Oxon)	1990	
MRCP (London)	1993	
PhD (Cantab)	1998	
FRCP	2008	

Clinical Trials Experience

As Principal Investigator or Chief Investigator

Phase 2a trial of alemtuzumab in progressive multiple sclerosis (Coles Annals Neurology 1999)
Phase 2a trial of alemtuzumab in relapsing multiple sclerosis (Coles Journal of Neurology 2005)
Phase 1 trial of SM3 (mutant alemtuzumab) in MS (Sommerfield..Coles J Immunol 2007)
Phase 2a trial of alemtuzumab in relapsing multiple sclerosis (Coles NEJM 2008)
Phase 3 trial of alemtuzumab in treatment naïve relapsing multiple sclerosis (Coles Lancet 2012)
Phase 3 trial of alemtuzumab in treated relapsing multiple sclerosis (Cohen, Coles Lancet 2012)
Phase 1 trial of an anti-IL7R antibody in MS (GSK sponsored) (2012-2013, stopped early)
Phase 2a trial of keratinocyte growth factor to prevent autoimmunity after alemtuzumab (ongoing)
Phase 4 follow-up study of patients completing the alemtuzumab phase 2/3 trials (ongoing)
Phase 2a trial of bexarotene as a remyelinating therapy in multiple sclerosis (starting March 2017)
Phase 2a trial of immunotherapy in immune-mediated psychosis (under development)

Clinical Trial Oversight

2010- Member, Ethics Committee of the TRANSEURO programme (human foetal cell transplantation as a treatment of Parkinson's disease)
2013- Chair of the Trial Oversight Committee, Alemtuzumab and rheumatoid arthritis – an immunisation study. Chief Investigator: Prof Isaacs. EudraCT: 2010-021146-22

Recent Grant Support

2012-17 Developmental clinical studies - preventing autoimmunity after alemtuzumab treatment of MS, from the **Medical Research Council** (with Joanne Jones as co-applicant). 2012. (£864,909) RG62835
2013-18 A randomised placebo-controlled study of the safety and tolerability of a retinoid-X receptor agonist's ability to promote remyelination in people with relapsing-remitting multiple sclerosis already on interferon-beta therapy: a phase 2a trial. A renewal to the Cambridge Centre for Myelin Repair Grant from the **MS Society of G Britain and N Ireland** (£490,000 not including excess treatment costs).
2014-17 Next Generation Fellowship from the **Freemason's Grand Charity** (£100,000)
2014-17 The neurology of religion: a study of mystical seizures from the **Templeton Foundation** (£117,000)
2014 A feasibility study of immunotherapy in antibody-associated psychosis. The **Stanley Medical Research Institute** (\$284,176) RG77862
2015 Imaging cerebral metabolism in multiple sclerosis using hyperpolarised carbon. **Multiple Sclerosis Society** (£39,900) as Co-PI (Ferdia Gallagher is PI)
2015 Does early treatment prevent progression? Long term follow-up of alemtuzumab patients. **Multiple Sclerosis Society** (£92,613) RG79876
2016 A randomised placebo-controlled trial of immunotherapy in patients with psychosis associated with anti-neuronal membrane antibodies (SINAPPS 2). **Medical Research Council**. (£2,466,231 fEC) with Co-PI: Peter Jones and Co-applicants: Belinda Lennox, Mike Zandi and James Wason.

Selected Publications

Coles A, Wing M, Smith S, Corradu F, Greer S, Taylor C, Weetman A, Hale G, Chatterjee VK, Waldmann H, Compston A. Pulsed monoclonal antibody treatment and autoimmune thyroid disease. **Lancet**. 1999 Nov 13; 354: 1691-5

Cox AL, **Coles AJ**, Nortje J, Bradley PG, Chatfield DA, Thompson SJ, Menon DK (2006), "An investigation of auto-reactivity after head injury." *J Neuroimmunol* 174(1-2):180-6

Coles AJ, Compston DA, Selmaj KW, Lake SL, Moran S, Margolin DH, Norris K, Tandon PK (CAMMS223 Trial Investigators). Alemtuzumab vs. interferon beta-1a in early multiple sclerosis. **New England Journal Medicine**. 2008 Oct 23;359(17):1786-801.

Jones JL, Phuah CL, Cox AL, Thompson SA, Ban M, Shawcross J, Walton A, Sawcer SJ, Compston A, **Coles AJ**. IL-21 drives secondary autoimmunity in patients with multiple sclerosis, following therapeutic lymphocyte depletion with alemtuzumab (Campath-1H). **J Clin Invest**. 2009 Jul;119(7):2052-61.

Somerfield J, Hill-Cawthorne GA, Lin A, Zandi MS, McCarthy C, Jones JL, Willcox M, Shaw D, Thompson SA, Compston AS, Hale G, Waldmann H, **Coles AJ**. A Novel Strategy To Reduce the Immunogenicity of Biological Therapies. **J Immunol**. 2010 Jul 1;185(1):763-8. Epub 2010 Jun 2.

Jones JL, Anderson JM, Phuah CL, Fox EJ, Selmaj K, Margolin D, Lake SL, Palmer J, Thompson SJ, Wilkins A, Webber DJ, Compston DA, **Coles AJ**. Improvement in disability after alemtuzumab treatment of multiple sclerosis is associated with neuroprotective autoimmunity. **Brain**. 2010 Aug;133(Pt 8):2232-47 Epub 2010 Jul 21.

Hill-Cawthorne GA, Button T, Tuohy O, Jones JL, May K, Somerfield J, Green A, Giovannoni G, Compston DA, Fahey MT, Coles AJ. Long term lymphocyte reconstitution after alemtuzumab treatment of multiple sclerosis. **J Neurol Neurosurg Psychiatry**. 2012 Mar;83(3):298-304.

Coles AJ, Fox E, Vladoic A, Gazda SK, Brinar V, Selmaj KW, Skoromets A, Stolyarov I, Bass A, Sullivan H, Margolin DH, Lake SL, Moran S, Palmer J, Smith MS, Compston DA. Alemtuzumab more effective than interferon β -1a at 5-year follow-up of CAMMS223 Clinical Trial. **Neurology**. 2012 Apr 3;78(14):1069-78.

Button T, Altmann D, Tozer D, Dalton C, Hunter K, Compston A, Coles A, Miller D. Magnetization transfer imaging in multiple sclerosis treated with alemtuzumab. **Mult Scler**. 2013 19(2), 241-244

Cohen JA, **Coles AJ [joint first author]**, Arnold DL, Confavreux C, Fox EJ, Hartung HP, Havrdova E, Selmaj KW, Weiner HL, Fisher E, Brinar VV, Giovannoni G, Stojanovic M, Ertik BI, Lake SL, Margolin DH, Panzara MA, Compston DA; for the CARE-MS I investigators. Alemtuzumab versus interferon beta 1a as first-line treatment for patients with relapsing-remitting multiple sclerosis: a randomised controlled phase 3 trial. **Lancet**. 2012 Nov 24;380(9856):1819-28

Coles AJ, Twyman CL, Arnold DL, Cohen JA, Confavreux C, Fox EJ, Hartung HP, Havrdova E, Selmaj KW, Weiner HL, Miller T, Fisher E, Sandbrink R, Lake SL, Margolin DH, Oyuela P, Panzara MA, Compston DA; for the CARE-MS II investigators. Alemtuzumab for patients with relapsing multiple sclerosis after disease-modifying therapy: a randomised controlled phase 3 trial. **Lancet**. 2012 Nov 24;380(9856):1829-39

Meyer D., **Coles, A.**, Oyuela, P., Purvis, A., & Margolin, D. H. (2013). Case report of anti-glomerular basement membrane disease following alemtuzumab treatment of relapsing-remitting multiple sclerosis. **Multiple Sclerosis and Related Disorders**. 2013; 2(1), 60-63.

McCarthy CL, Tuohy O, Compston DA, Kumararatne DS, **Coles AJ**, Jones JL. Immune competence after alemtuzumab treatment of multiple sclerosis. **Neurology**. 2013 2013 Sep 3;81(10):872-6

Jones JL, Thompson SA, Loh P, Davies JL, Tuohy OC, Curry AJ, Azzopardi L, Hill-Cawthorne G, Fahey MT, Compston A, **Coles AJ**. Human autoimmunity after lymphocyte depletion is caused by homeostatic T-cell proliferation. **Proc Natl Acad Sci U S A**. 2013 Dec 10;110(50):20200-5. doi: 10.1073/pnas.1313654110.

Tuohy O, Costelloe L, Hill-Cawthorne G, Bjornson I, Harding K, Robertson N, May K, Button T, Azzopardi L, Kousin-Ezewu O, Jones J, Compston DA, **Coles A**. Alemtuzumab treatment of multiple sclerosis: long-term safety and efficacy. **J Neurol Neurosurg Psychiatry**. 2014 May 21. pii: jnnp-2014-307721.

Kousin-Ezewu O, Azzopardi L, Parker RA, Tuohy O, Compston A, Coles A, Jones J. Accelerated lymphocyte recovery after alemtuzumab does not predict multiple sclerosis activity. **Neurology**. 2014 Jun 17;82(24):2158-64

Azzopardi L, Thompson SA, Harding KE, Cossburn M, Robertson N, Compston A, Coles AJ, Jones JL. Predicting autoimmunity after alemtuzumab treatment of multiple sclerosis. **J Neurol Neurosurg Psychiatry** 2014 Jul;85(7):795-8

Zandi MS, Paterson RW, Ellul MA, Jacobson L, Al-Diwani A, Jones JL, Cox AL, Lennox B, Stamelou M, Bhatia KP, Schott JM, Coles AJ, Kullmann DM, Vincent A. Clinical relevance of serum antibodies to extracellular N-methyl-D-aspartate receptor epitopes. **J Neurol Neurosurg Psychiatry**. 2014 Sep 22. pii: jnnp-2014-308736. doi: 10.1136/jnnp-2014-308736. [Epub ahead of print]

Scolding N, A, **Coles A**, Giovannoni G, Miller D, Rashid W, Schmierer K, Shehu A, Silber E, Young C, Zajicek J. Association of British Neurologists: revised (2015) guidelines for prescribing disease-modifying treatments in multiple sclerosis. *Pract Neurol*. 2015 Aug;15(4):273-9.