

Professor. Terence O'Brien  
School of Translational Medicine  
Department of Neuroscience  
**Email:** Terence.O'Brien@monash.edu  
**Web address:** [https://supervisorconnect.med.monash.edu/research-projects?combine=Terence+O%27Brien&shs\\_term\\_node\\_tid\\_depth=507&sort\\_by=title&sort\\_order=ASC](https://supervisorconnect.med.monash.edu/research-projects?combine=Terence+O%27Brien&shs_term_node_tid_depth=507&sort_by=title&sort_order=ASC),  
<https://www.monash.edu/medicine/ccs/neuroscience/research/obrien-group>



## Biography

Professor Terence (Terry) O'Brien MB, BS, MD, FRACP, FRCPE, FAHMS, FAES is Chair of Medicine (Neurology) and Head of The School of Translational Medicine, Monash University, and Program Director Alfred Brain and Deputy Director of Research, Alfred Health. He is the former Van Cleef Roet Chair of Neuroscience, Monash University (2017-20) and James Stewart Chair of Medicine, The Royal Melbourne Hospital, University of Melbourne (2008-2017).

The mission of the Central Clinical that he leads is to undertake high quality, internationally significant, research, research training and teaching across a broad range of basic and clinical medical fields, and to translate these to improve treatment and outcomes of patients. The School has 16 Departments and Centres (<https://www.monash.edu/medicine/ccs/centres>), and is part of the Sub-Faculty of Translational Medicine and Public Health led by Foundation Dean, Professor Stephen Jane.

Prof. O'Brien has received 18 awards for his research from national and international scientific bodies, including the Ambassador for Epilepsy Award of the International League Against Epilepsy (2017), The Dreifuss-Penry Epilepsy Award of the American Academy of Neurology (2006), The Eccles Lecturer and Medallion of The Australian Neuroscience Society and The Neurosurgical Society of Australia (2011), Election as Fellow of the Australian Academy of Health and Medical Sciences (2016), The Fritz E. Dreifuss Lecture and Award of The American Epilepsy Society (2022) and The James Lance Oration and Award, the highest award of The Australian and New Zealand Association of Neurologists (2023). Prof. O'Brien has trained students and fellows from many countries of the world, including Holland, Belgium, France, United Kingdom, Brazil, Israel, India, New Zealand, Indonesia, Malaysia and China.

He has supervised to completion 49 doctoral students, 11 masters students, 70 honours/medical research students, 28 clinical epilepsy fellows and 21 post-doctoral research fellows. He is currently supervising 20 PhD students, 1 Masters Students (MPhil), 1 undergraduate/medical students, 6 clinical epilepsy fellows and 14 post-doctoral research fellows. Many of his former students/fellows have gone on to obtain independent NHMRC funding, or the equivalent, for their research, and to be significant research and/or clinical leaders in their own right.

## Qualifications

1 Dec 2000 → ... Doctor of Medicine, MD

1 Dec 1998 → ... Bachelor of Medicine, Bachelor of Surgery, MB, BS

1 Jul 1997 → ... Fellow of the Royal Australasian College of Physicians (Neurology and Clinical Pharmacology), FRACP

## Employment

### Professor (Research) & Acting Dean

School of Translational Medicine

MONASH UNIVERSITY

2 Mar 2020 → present

### Department of Neuroscience

MONASH UNIVERSITY

1 Mar 2017 → present

### President

Epilepsy Society of Australia

Glenelg, Australia

1 Nov 2018 → present

### Program Director, Alfred Brain

Alfred Hospital

Melbourne, Australia

1 Jul 2018 → present

### **Professorial Fellow**

University of Melbourne  
Parkville, Australia  
1 Dec 2017 → present

### **Director of Neurology**

Alfred Hospital  
Melbourne, Australia  
1 Oct 2017 → present

## **Research outputs**

### **The role of the adenosine system in epilepsy and its comorbidities**

Baltos, J. A., Casillas-Espinosa, P. M., Rollo, B., Gregory, K. J., White, P. J., Christopoulos, A., Kwan, P., O'Brien, T. J. & May, L. T., Jul 2024, In: *British Journal of Pharmacology*. 181, 14, p. 2143-2157 15 p.

### **Shared genetic aetiology of Alzheimer's disease and age-related macular degeneration by APOC1 and APOE genes**

Zhang, X., Zhu, Z., Huang, Y., Shang, X., O'Brien, T. J., Kwan, P., Ha, J., Wang, W., Liu, S., Zhang, X., Kiburg, K., Bao, Y., Wang, J., Yu, H., He, M. & Zhang, L., 15 Apr 2024, In: *BMJ Neurology Open*. 6, 1, 10 p., e000570.

### **The Australian Traumatic Brain Injury Initiative: Review and Recommendations for Outcome Measures for Use With Adults and Children After Moderate-to-Severe Traumatic Brain Injury**

Ponsford, J. L., Hicks, A. J., Bagg, M. K., Phyland, R., Carrier, S., James, A. C., Lannin, N. A., Rushworth, N., O'Brien, T. J., Cameron, P. A., Cooper, D. J., Hill, R., Gabbe, B. J., Fitzgerald, M. & the AUS-TBI Initiative Investigators, 1 Apr 2024, In: *Neurotrauma Reports*. 5, 1, p. 387-408 22 p.

### **PRECISION-TBI: a study protocol for a vanguard prospective cohort study to enhance understanding and management of moderate to severe traumatic brain injury in Australia**

Jeffcote, T., Battistuzzo, C. R., Plummer, M. P., McNamara, R., Anstey, J., Bellapart, J., Roach, R., Chow, A., Westerlund, T., Delaney, A., Bihari, S., Bowen, D., Weeden, M., Trapani, A., Reade, M., Jeffree, R. L., Fitzgerald, M., Gabbe, B. J., O'Brien, T. J., Nichol, A. D., & 3 others Cooper, D. J., Bellomo, R. & Udy, A., Feb 2024, In: *BMJ Open*. 14, 2, 7 p., e080614.

### **Investigating the Association Between Extended Participation in Collision Sports and Fluid Biomarkers Among Masters Athletes**

Giesler, L. P., O'Brien, W. T., Symons, G. F., Salberg, S., Spitz, G., Wesselingh, R., O'Brien, T. J., Mychasiuk, R., Shultz, S. R. & McDonald, S. J., 1 Jan 2024, In: *Neurotrauma Reports*. 5, 1, p. 74-80 7 p.

### **Tau Phosphorylation Patterns in the Rat Cerebral Cortex After Traumatic Brain Injury and Sodium Selenate Effects: An EpiBio4rx Project 2 Study**

Saletti, P. G., Casillas-Espinosa, P. M., Lisgaras, C. P., Mowrey, W. B., Li, Q., Liu, W., Brady, R. D., Ali, I., Silva, J., Yamakawa, G., Hudson, M., Li, C., Braine, E. L., Coles, L., Cloyd, J. C., Jones, N. C., Shultz, S. R., Moshé, S. L., O'Brien, T. J., Galanopoulou, A. S., & 1 others for the EpiBioS4Rx Study Group, Jan 2024, In: *Journal of Neurotrauma*. 41, 1-2, p. 222-243 22 p.

### **Characterizing cognitive function in patients with autoimmune encephalitis: an Australian prospective study**

Griffith, S. P., Wesselingh, R., Seery, N., Rushen, T., Kyndt, C., Long, B., Seneviratne, U., Buzzard, K., Butzkueven, H., O'Brien, T. J., Alptsis, R., Malpas, C. B. & Monif, M., 2024, In: *Journal of Neurology*. 27, p. 310–324 15 p.

### **The Australian Traumatic Brain Injury Initiative: Systematic Review of the Effect of Acute Interventions on Outcome for People With Moderate-Severe Traumatic Brain Injury**

Keeves, J., Gadowski, A., McKimmie, A., Bagg, M. K., Antonic-Baker, A., Hicks, A. J., Clarke, N., Brown, A., McNamara, R., Reeder, S., Roman, C., Jeffcote, T., Romero, L., Hill, R., Ponsford, J. L., Lannin, N. A., O'Brien, T. J., Cameron, P. A., Rushworth, N., Fitzgerald, M., & 3 others Gabbe, B. J., Cooper, D. J. & the AUS-TBI Initiative Investigators, 2024, (Accepted/In press) In: *Journal of Neurotrauma*. 16 p.

**The Australian Traumatic Brain Injury Initiative: Systematic Review and Consensus Process to Determine the Predictive Value of Pre-existing Health Conditions for People with Moderate-Severe Traumatic Brain Injury**

Antonic-Baker, A., Auvrez, C., Tao, G., Bagg, M. K., Gadowski, A., McKimmie, A., Hicks, A. J., Hill, R., Romero, L., Ponsford, J. L., Lannin, N. A., Gabbe, B. J., Cameron, P. A., Cooper, D. J., Rushworth, N., Fitzgerald, M., O'Brien, T. J. & the AUS-TBI Initiative Investigators, 2024, (Accepted/In press) In: Journal of Neurotrauma. 15 p.

**Author Correction: Variants in SART3 cause a spliceosomopathy characterised by failure of testis development and neuronal defects (Nature Communications, (2023), 14, 1, (3403), 10.1038/s41467-023-39040-0)**

Ayers, K. L., Eggers, S., Rollo, B. N., Smith, K. R., Davidson, N. M., Siddall, N. A., Zhao, L., Bowles, J., Weiss, K., Zanni, G., Burglen, L., Ben-Shachar, S., Rosensaft, J., Raas-Rothschild, A., Jørgensen, A., Schittenhelm, R. B., Huang, C., Robevska, G., van den Bergen, J., Casagrande, F., & 23 othersCyza, J., Pachernegg, S., Wright, D. K., Bahlo, M., Oshlack, A., O'Brien, T. J., Kwan, P., Koopman, P., Hime, G. R., Girard, N., Hoffmann, C., Shilon, Y., Zung, A., Bertini, E., Milh, M., Ben Rhouma, B., Belguith, N., Bashamboo, A., McElreavey, K., Banne, E., Weintrob, N., BenZeev, B. & Sinclair, A. H., Dec 2023, In: Nature Communications. 14, 1, 1 p., 3566.

**Development and validation of a peripheral cell ratio and lactate score for differentiating status epilepticus from prolonged psychogenic nonepileptic seizures**

Tan, T. H. L., Sanfilippo, P., Colman, B., Perucca, P., Kwan, P., O'Brien, T. J. & Monif, M., Dec 2023, In: Epilepsia Open. 8, 4, p. 1460-1473 14 p.

**Diurnal circadian clock gene expression is altered in models of genetic and acquired epilepsy**

Yamakawa, G. R., Patel, M., Lin, R., O'Brien, T. J., Mychasiuk, R. & Casillas-Espinosa, P. M., Dec 2023, In: Epilepsia Open. 8, 4, p. 1523-1531 9 p.

**EEG based automated seizure detection – A survey of medical professionals**

Wong, S., Simmons, A., Rivera-Villicana, J., Barnett, S., Sivathamboo, S., Perucca, P., Kwan, P., Kuhlmann, L., Vasa, R. & O'Brien, T. J., Dec 2023, In: Epilepsy & Behavior. 149, 10 p., 109518.

**Genome-wide identification and phenotypic characterization of seizure-associated copy number variations in 741,075 individuals**

Montanucci, L., Lewis-Smith, D., Collins, R. L., Niestroj, L. M., Parthasarathy, S., Xian, J., Ganesan, S., Macnee, M., Brünger, T., Thomas, R. H., Talkowski, M., Lal, D., Helbig, I., Leu, C. & Epi25 Collaborative, Dec 2023, In: Nature Communications. 14, 1, 19 p., 4392.

**P2X7 receptor antagonism by AZ10606120 significantly reduced in vitro tumour growth in human glioblastoma**

Kan, L. K., Drill, M., Jayakrishnan, P. C., Sequeira, R. P., Galea, E., Todaro, M., Sanfilippo, P. G., Hunn, M., Williams, D. A., O'Brien, T. J., Drummond, K. J. & Monif, M., Dec 2023, In: Scientific Reports. 13, 1, 12 p., 8435.

**Principles for delivering improved care of people with functional seizures: Closing the treatment gap**

Winton-Brown, T., Wilson, S. J., Felmingham, K., Rayner, G., O'Brien, T. J., O'Brien, P., Mohan, A., Velakoulis, D. & Kanaan, R., Dec 2023, In: Australian and New Zealand Journal of Psychiatry. 57, 2, p. 1511-1517 7 p.

**Utility of Acute and Subacute Blood Biomarkers to Assist Diagnosis in CT-Negative Isolated Mild Traumatic Brain Injury**

Reyes, J., Spitz, G., Major, B. P., O'Brien, W. T., Giesler, L. P., Bain, J. W. P., Xie, B., Rosenfeld, J. V., Law, M., Ponsford, J. L., O'Brien, T. J., Shultz, S. R., Willmott, C., Mitra, B. & McDonald, S. J., 14 Nov 2023, In: Neurology. 101, 20, p. e1992-e2004 13 p.

**Familial Mesial Temporal Lobe Epilepsy: Clinical Spectrum and Genetic Evidence for a Polygenic Architecture**

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**E2730, an uncompetitive  $\gamma$ -aminobutyric acid transporter-1 inhibitor, suppresses epileptic seizures in a rat model of chronic mesial temporal lobe epilepsy**

Ali, I., Silva, J., Casillas-Espinosa, P. M., Braine, E., Yamakawa, G. R., Hudson, M. R., Brady, R. D., Major, B., Thergarajan, P., Haskali, M. B., Wright, D. K., Jupp, B., Vivash, L., Shultz, S. R., Mychasiuk, R., Kwan, P., Jones, N. C.,

Fukushima, K., Sachdev, P., Cheng, J. Y., & 1 others O'Brien, T. J., Oct 2023, In: *Epilepsia*. 64, 10, p. 2806-2817 12 p.

**Inherent Susceptibility to Acquired Epilepsy in Selectively Bred Rats Influences the Acute Response to Traumatic Brain Injury**

Leung, W. L., Dill, L. K., Perucca, P., O'Brien, T. J., Casillas-Espinosa, P. M. & Semple, B. D., Oct 2023, In: *Journal of Neurotrauma*. 40, 19-20, p. 2174-2192 19 p.

**Neuropsychological function in psychosis of epilepsy**

Allebone, J., Kanaan, R. A., Rayner, G., Maller, J., O'Brien, T. J., Mullen, S. A., Cook, M., Adams, S. J., Vogrin, S., Vaughan, D. N., Kwan, P., Berkovic, S. F., D'Souza, W. J., Jackson, G., Velakoulis, D. & Wilson, S. J., Oct 2023, In: *Epilepsy Research*. 196, 5 p., 107222.

**An international survey of SEEG cortical stimulation practices**

Cockle, E., Rayner, G., Malpas, C., Alpitsis, R., Rheims, S., O'Brien, T. J. & Neal, A., Sept 2023, In: *Epilepsia Open*. 8, 3, p. 1084-1095 12 p.

**GWAS meta-analysis of over 29,000 people with epilepsy identifies 26 risk loci and subtype-specific genetic architecture**

International League Against Epilepsy Consortium on Complex Epilepsies, Sept 2023, In: *Nature Genetics*. 55, 9, p. 1471-1482 12 p.

**Image data harmonization tools for the analysis of post-traumatic epilepsy development in preclinical multisite MRI studies**

Bhagavatula, S., Cabeen, R., Harris, N. G., Gröhn, O., Wright, D. K., Garner, R., Bennett, A., Alba, C., Martinez, A., Ndode-Ekane, X. E., Andrade, P., Paananen, T., Cizek, R., Immonen, R., Manninen, E., Puhakka, N., Tohka, J., Heiskanen, M., Ali, I., Shultz, S. R., & 13 others Casillas-Espinosa, P. M., Yamakawa, G. R., Jones, N. C., Hudson, M. R., Silva, J. C., Braine, E. L., Brady, R. D., Santana-Gomez, C. E., Smith, G. D., Staba, R., O'Brien, T. J., Pitkänen, A. & Duncan, D., Sept 2023, In: *Epilepsy Research*. 195, 6 p., 107201.

**MicroRNA biomarkers for diagnosis of mild traumatic brain injury and prediction of persistent symptoms: A prospective cohort study**

Mitra, B., Major, B. P., Reyes, J., Surendran, N., Bain, J., Giesler, L. P., O'Brien, W. T., Sorich, E., Willmott, C., Shultz, S. R., O'Brien, T. J., Rosenfeld, J. V. & McDonald, S. J., Sept 2023, In: *Journal of Clinical Neuroscience*. 115, p. 38-42 5 p.

**Sleep and respiratory abnormalities in adults with developmental and epileptic encephalopathies using polysomnography and video-EEG monitoring**

Sivathamboo, S., Myers, K. A., Pattichis, A., White, E. J., Ku, K. N., O'Brien, T. J., Perucca, P. & Kwan, P., Sept 2023, In: *Epilepsia Open*. 8, 3, p. 1157-1168 12 p.

**Unjustified allegation on cancer risks in children of mothers with epilepsy taking high-dose folic acid during pregnancy—No proof of a causal relationship**

von Wrede, R., Witt, J. A., Auvin, S., Devlin, A., Lagae, L., Marson, A., Meador, K. J., O'Brien, T. J., Park, J., Surges, R., Trinkka, E., Wiebe, S. & Helmstaedter, C., Sept 2023, In: *Epilepsia*. 64, 9, p. 2239-2243 5 p.

**A Multidimensional Assessment of Activities of Daily Living, Mental Status, Communication, and Social Abilities Among Older Adults in Shenzhen, China: Cross-Sectional Study**

Wang, J., Kwan, P., Zhang, G., Shen, M., Piccenna, L., O'Brien, T. J. & Zhang, L., 10 Aug 2023, In: *JMIR Public Health and Surveillance*. 9, 14 p., e43612.

**Levetiracetam Pharmacokinetics and Brain Uptake in a Lateral Fluid Percussion Injury Rat Model**

Coles, L. D., Saletti, P. G., Lisgaras, C. P., Casillas-Espinosa, P. M., Liu, W., Li, Q., Jones, N. C., Shultz, S., Ali, I., Brady, R., Yamakawa, G., Hudson, M., Silva, J., Braine, E., Mishra, U., Cloyd, J. C., O'Brien, T. J., Moshé, S. L., Galanopoulou, A. S. & EpiBioS4Rx Study Group, 1 Aug 2023, In: *Journal of Pharmacology and Experimental Therapeutics*. 386, 2, p. 259-265 7 p.

**20 Changes in mRNA expression in the temporal lobe of patients with drug resistant epilepsy: a focus on neuroinflammation**

Tan, T. H. L., Perucca, P., Kwan, P. K. L., O'Brien, T. J. & Monif, M., Aug 2023, In: *BMJ Neurology Open*. 5, S1, p. A9 1 p., 20.

**Effects of the T-type calcium channel  $Ca_v3.2$  R1584P mutation on absence seizure susceptibility in GAERS and NEC congenic rats models**

Casillas-Espinosa, P. M., Lin, R., Li, R., Nandakumar, N. M., Dawson, G., Braine, E. L., Martin, B., Powell, K. L. & O'Brien, T. J., Aug 2023, In: *Neurobiology of Disease*. 184, 11 p., 106217.

**Spike and wave discharges detection in genetic absence epilepsy rat from Strasbourg and patients with genetic generalized epilepsy**

Li, R., Millist, L., Foster, E., Yuan, X., Guvenc, U., Radfar, M., Marendy, P., Ni, W., O'Brien, T. J. & Casillas-Espinosa, P. M., Aug 2023, In: *Epilepsy Research*. 194, 8 p., 107181.

**The sulfonadyns: a class of aryl sulfonamides inhibiting dynamin I GTPase and clathrin mediated endocytosis are anti-seizure in animal models**

Odell, L. R., Jones, N. C., Chau, N., Robertson, M. J., Ambrus, J. I., Deane, F. M., Young, K. A., Whiting, A., Xue, J., Prichard, K., Daniel, J. A., Gorgani, N. N., O'Brien, T. J., Robinson, P. J. & McCluskey, A., Aug 2023, In: *RSC Medicinal Chemistry*. 14, 8, p. 1492–1511 20 p.

**Neuroinflammation: A Common Pathway in Alzheimer's Disease and Epilepsy**

Liaw, Y., Retinasamy, T., Arulsamy, A., Ali, I., Jones, N. C., O'Brien, T. J. & Shaikh, M. F., 25 Jul 2023, In: *Journal of Alzheimer's Disease*. 94, s1, p. S253-S265 13 p.

**Impact of epilepsy surgery on quality of life: Systematic review and meta-analysis**

Shakhatreh, L., Foster, E., Siriratnam, P., Neal, A., Carney, P. W., Jackson, G. D., O'Brien, T. J., Kwan, P., Chen, Z. & Ademi, Z., Jul 2023, In: *Epilepsia*. 64, 7, p. 1709-1721 13 p.

**Improving the treatment of functional seizures through a public specialist outpatient clinic**

Higson, L., Hipgrave, W., O'Brien, T. J., Rayner, G., Alpitsis, R., Kanaan, R. A. & Winton-Brown, T., Jul 2023, In: *Epilepsy & Behavior*. 144, 6 p., 109259.

**The Influence of Substance Use on Traumatic Brain Injury Recovery and Rehabilitation Outcomes: The Outcome-ABI Study**

Xie, E., Pellegrini, M., Chen, Z., Jolliff, L., Crotty, M., Ratcliffe, J., Morarty, J., O'Brien, T. J. & Lannin, N. A., Jul 2023, In: *Archives of Physical Medicine and Rehabilitation*. 104, 7, p. 1115-23 9 p.

**Social Cognition in Behavioral Variant Frontotemporal Dementia and Pathological Subtypes: A Narrative Review**

Dilcher, R., Malpas, C. B., O'Brien, T. J. & Vivash, L., 27 Jun 2023, In: *Journal of Alzheimer's Disease*. 94, 1, p. 19-38 20 p.

**Variants in SART3 cause a spliceosomopathy characterised by failure of testis development and neuronal defects**

Ayers, K. L., Eggers, S., Rollo, B. N., Smith, K. R., Davidson, N. M., Siddall, N. A., Zhao, L., Bowles, J., Weiss, K., Zanni, G., Burglen, L., Ben-Shachar, S., Rosensaft, J., Raas-Rothschild, A., Jørgensen, A., Schittenhelm, R. B., Huang, C., Robevska, G., van den Bergen, J., Casagrande, F., & 23 othersCyza, J., Pachernegg, S., Wright, D. K., Bahlo, M., Oshlack, A., O'Brien, T. J., Kwan, P., Koopman, P., Hime, G. R., Girard, N., Hoffmann, C., Shilon, Y., Zung, A., Bertini, E., Milh, M., Ben Rhouma, B., Belguith, N., Bashamboo, A., McElreavey, K., Banne, E., Weintrob, N., BenZeev, B. & Sinclair, A. H., 9 Jun 2023, In: *Nature Communications*. 14, 1, 21 p., 3403.

**Predictive models for starting antiseizure medication withdrawal following epilepsy surgery in adults**

Ferreira-Atuesta, C., de Tisi, J., McEvoy, A. W., Miserocchi, A., Khoury, J., Yardi, R., Vegh, D. T., Butler, J., Lee, H. J., Deli-Peri, V., Yao, Y., Wang, F. P., Zhang, X. B., Shakhatreh, L., Siriratnam, P., Neal, A., Sen, A., Tristram, M., Varghese, E., Biney, W., & 24 othersGray, W. P., Peralta, A. R., Rainha-Campos, A., Gonçalves-Ferreira, A. J. C., Pimentel, J., Arias, J. F., Terman, S., Terziev, R., Lamberink, H. J., Braun, K. P. J., Otte, W. M., Rugg-Gunn, F. J., Gonzalez, W., Bentes, C., Hamandi, K., O'Brien, T. J., Perucca, P., Yao, C., Burman, R. J., Jehi, L., Duncan, J. S., Sander, J. W., Koepp, M. & Galovic, M., 1 Jun 2023, In: *Brain*. 146, 6, p. 2389-2398 10 p.

**EEG datasets for seizure detection and prediction— A review**

Wong, S., Simmons, A., Rivera-Villicana, J., Barnett, S., Sivathamboo, S., Perucca, P., Ge, Z., Kwan, P., Kuhlmann, L., Vasa, R., Mouzakis, K. & O'Brien, T. J., Jun 2023, In: *Epilepsia Open*. 8, 2, p. 252-267 16 p.

**Early preclinical plasma protein biomarkers of brain trauma are influenced by early seizures and levetiracetam**

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**Metrapone abolishes spike-wave discharge seizures in genetic absence epilepsy rats from Strasbourg by reducing stress hormones**

Dezsi, G., Ozturk, E., Harris, G., Paul, C., O'Brien, T. J. & Jones, N. C., Jun 2023, In: *Epilepsia*. 64, 6, p. 1684-1693 10 p.

**Risk of sudden unexpected death in epilepsy (SUDEP) with lamotrigine and other sodium channel-modulating antiseizure medications**

Nightscales, R., Barnard, S., Laze, J., Chen, Z., Tao, G., Auvrez, C., Sivathamboo, S., Cook, M. J., Kwan, P., Friedman, D., Berkovic, S. F., D'Souza, W., Perucca, P., Devinsky, O. & O'Brien, T. J., Jun 2023, In: *Epilepsia Open*. 8, 2, p. 334-345 12 p.

**Systematic Review of Cost-Effectiveness Analysis for Surgical and Neurostimulation Treatments for Drug-Resistant Epilepsy in Adults**

Kee, N. N., Foster, E., Marquina, C., Tan, E. J., Pang, S. S. T., O'Brien, T. J., Kwan, P., Jackson, G., Chen, Z. & Ademi, Z., 2 May 2023, In: *Neurology*. 100, 18, p. e1866-e1877 13 p.

**Monitoring the acute and subacute recovery of cognitive ocular motor changes after a sports-related concussion**

Symons, G. F., O'Brien, W. T., Abel, L., Chen, Z., Costello, D. M., O'Brien, T. J., Kolbe, S., Fielding, J., Shultz, S. R. & Clough, M., 1 May 2023, In: *Cerebral Cortex*. 33, 9, p. 5276-5288 13 p.

**Disease-modifying effects of sodium selenate in a model of drug-resistant, temporal lobe epilepsy.**

Casillas-Espinosa, P. M., Anderson, A., Harutyunyan, A., Li, C., Lee, J., Braine, E. L., Brady, R. D., Sun, M., Huang, C., Barlow, C. K., Shah, A. D., Schittenhelm, R. B., Mychasiuk, R., Jones, N. C., Shultz, S. R. & O'Brien, T. J., May 2023, In: *eLife*. 12, 28 p., e78877.

**Serum neurofilament light as a biomarker of vulnerability to a second mild traumatic brain injury**

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**Specific fetal malformations following intrauterine exposure to antiseizure medication**

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Bilateral trigeminal amyloidoma: An unusual case of trigeminal neuropathy with a review of the literature. Case report  
O'Brien, T. J., McKelvie, P. A. & Vrodos, N., 1 Jan 1994, In: Journal of Neurosurgery. 81, 5, p. 780-783 4 p.

Apparent hydrocephalus and chronic multiple sclerosis: a report of two cases.  
O'Brien, T., Paine, M., Matotek, K. & Byrne, E., 1 Dec 1993, In: Clinical and Experimental Neurology. 30, p. 137-143 7 p.

## Projects

### Central Clinical School (CCS) Research Support

O'Brien, T.  
14/06/22 → 14/06/23

### "Integrative-omics" for precision medicine in the epilepsies

Scheffer, I. E., Gecz, J., Halgamuge, S., O'Brien, T., Petrou, S., Berkovic, S. F., Perucca, P., Howell, K. B., Hildebrand, M. S., Palmer, E. E. & Sadikovic, B.  
1/01/22 → 31/12/26

### 3D printer - Stratasys Objet30 Pro:

Kwan, P., O'Brien, T., Jones, N., Casillas-Espinosa, P., Hudson, M., Wright, D., Alan, T., French, C., Chan, J. & Jayawardena, A.  
1/10/21 → 31/12/22

### A 2-year prospective study to evaluate the onset of action of Mavenclad in subjects with highly active relapsing multiple sclerosis.

Skibina, O. & O'Brien, T.  
5/12/18 → 5/12/23

### A 57-Week, Multicenter, Active-treatment, Open-label Extension Trial of CVL-865 as Adjunctive Therapy in Adults with Drug-Resistant Focal Onset Seizures.

O'Brien, T., Nicolo, J., Nikpour, A., Wijayath, M., D'Souza, W. J., Reutens, D. C., Carney, P., Somerville, E. R., Mullen, S. A. & Frasca, J.  
18/12/20 → 31/12/24

### A Double-Blind, Placebo-Controlled, Inpatient, Dose-Ranging Efficacy Study of Staccato Alprazolam (STAP-001) in Subjects with Epilepsy with a Predictable Seizure Pattern. ENGAGE study.

O'Brien, T., Kwan, P. & Mullen, S. A.  
20/02/19 → 31/12/19

### A Double-Blind, Randomized, Placebo-Controlled, Safety and Efficacy Study of ANAVEX2-73 in patients with Rett Syndrome.

O'Brien, T.  
5/04/19 → 31/12/22

**A Double-blind, Placebo-controlled Study Investigating the Safety, Tolerability, Efficacy and Pharmacokinetics of EP1, an Enriched Cannabidiol Oil, in Children and Adolescents with Medication Resistant, Refractory Epilepsy.**

O'Brien, T.

10/01/19 → 31/12/19

**A Multicenter, Double-blind, Randomized, Placebo-Controlled Trial with an Open-Label Extension Phase of Perampanel as Adjunctive Treatment in Subjects at Least 2 years of Age with Inadequate Controlled Seizures Associated with Lennox-Gastaut Syndrome.**

O'Brien, T.

28/11/18 → 28/11/20

**A Multicenter, Long-Term Extension study to evaluate the safety, tolerability, and efficacy of AL002 in participants with Alzheimer's Disease**

O'Brien, T. & Stewart, N.

2/05/23 → 2/05/25

**A Multicenter, Open-label Extension Study to Evaluate the Safety, Pharmacodynamics, and Clinical Effects of WVE-120101 in Patients with Huntington's Disease.**

O'Brien, T. & Burn, K.

1/09/20 → 30/04/23

**A Multicenter, Open-label Extension Study to Evaluate the Safety, Pharmacodynamics, and Clinical Effects of WVE-120102 in Patients with Huntington's Disease.**

O'Brien, T. & Burn, K.

1/09/20 → 30/04/23

**A Multicenter, Open-label, Single-arm Study to Evaluate Long-term Safety, Tolerability, and Efficacy of Brivaracetam in Study Participants 2 to 26 Years of Age with Childhood Absence Epilepsy or Juvenile Absence Epilepsy.**

O'Brien, T.

22/04/22 → 31/12/27

**A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel group study to Evaluate the Efficacy, Safety, and Tolerability of Soticlestat as Adjunctive Therapy in Pediatric and Adult Subjects with Lennox-Gastaut Syndrome (LGS).**

O'Brien, T.

16/03/22 → 31/12/24

**A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel group study to Evaluate the Efficacy, Safety, and Tolerability of Soticlestat as Adjunctive Therapy in Pediatric and Young Adult Subjects with Dravet Syndrome (DS).**

O'Brien, T.

16/03/22 → 31/12/24

**A Multicenter, Randomized, Double-blind, Placebo-controlled, Phase 1b/2a Study of WVE-120101 Administered Intrathecally in Patients with Huntington's Disease.**

O'Brien, T., Bertram, K. & Burn, K.

18/09/19 → 31/10/21

**A Multicenter, Randomized, Double-blind, Placebo-controlled, Phase 1b/2a Study of WVE-120102 Administered Intrathecally in Patients with Huntington's Disease.**

O'Brien, T., Bertram, K. & Burn, K.

18/09/19 → 31/10/21

**A Phase 1 Study Evaluating the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Immunogenicity of Single and Multiple Doses of AL003 in Healthy Participants and in Participants with Mild to Moderate Alzheimer's Disease**

O'Brien, T. & Burn, K.

7/05/20 → 31/12/20



**A Phase 1b/2a randomized, double-blind, placebo-controlled, parallel-group, dose-escalation study to investigate the safety, tolerability, pharmacokinetics, pharmacodynamics, and exploratory efficacy of LP352 in subjects with developmental and epileptic encephalopathies**

O'Brien, T. & Smith, R.

11/05/23 → 11/05/25

**A Phase 2 Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of AL002 in Participants with Early Alzheimer's Disease**

O'Brien, T.

7/09/21 → 31/12/24

**A Phase 2, Double-Blind, Randomized, Placebo-Controlled Study to Assess Intracerebroventricular (ICV) Delivery of CT-010 via an Implantable Pump and a Cranial Port and Double Lumen Catheter (ICVRX) in Subjects with Focal Seizures, with Temporal Lobe Onset with or without Secondary Generalization**

O'Brien, T. & Germaine, J.

17/06/20 → 31/12/24

**A Phase 2, Open-label Study of PRAX-944 to Assess the Safety, Tolerability, Pharmacokinetics, and Efficacy of Escalating Multiple Oral Doses in Adults with Generalized Epileptic Syndromes with Absence Seizures.**

O'Brien, T. & Germaine, J.

9/10/18 → 20/07/19

**A Phase 2, double-blind, placebo-controlled trial of sodium selenate as a disease modifying treatment for chronic drug resistant temporal lobe epilepsy (SELECT Trial)**

O'Brien, T., Vivash, L., Churilov, L., Kwan, P., Carney, P., Perucca, P., Nicolo, J., Cook, M. J., Gillinder, L., Casillas-Espinosa, P., Hovens, C. M., Malpas, C., Shultz, S., Velakoulis, D., Lawn, N. D., Johns, H., Wijayath, M., Burford, J., Wait, L., D'Souza, W. J. & Reutens, D. C.

1/02/23 → 31/01/28

**A Phase 2, multicenter, open-label, long-term safety study of LP352 in subjects with developmental and epileptic encephalopathy who completed Study LP352-201 and are candidates for continuous treatment for up to 52 weeks**

O'Brien, T.

19/10/23 → 20/10/25

**A Phase 2A, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy, Safety and Pharmacokinetics of ES-481 in Adult Patients with Drug Resistant Epilepsy.**

O'Brien, T., Mullen, S. A., Nicolo, J. & Reutens, D. C.

18/01/21 → 18/07/21

**A Phase 2b/3, Double-Blind, Randomized, Placebo-Controlled 48-week Safety and Efficacy trial of ANAVEX2-73 for the Treatment of Early Alzheimer's Disease (AD).**

O'Brien, T.

8/01/19 → 31/12/20

**A Phase 3, Double-blind, Randomized, Placebo-controlled Trial of Adjunctive Ganaxolone (GNX) Treatment in Children and Adults with Tuberous Sclerosis Complex (TSC)-related Epilepsy (Trust TSC)**

O'Brien, T. & Germaine, J.

5/10/23 → 4/10/25

**A Phase 3, Open-label Study of Adjunctive Ganaxolone (GNX) Treatment in Children and Adults with Tuberous Sclerosis Complex (TSC)-related Epilepsy**

O'Brien, T.

19/04/24 → 19/04/26

**A Phase 3, Prospective, Open-Label, Multisite, Extension of Phase 3 Studies To Assess the Long-Term Safety and Tolerability of Soticlestat as Adjunctive Therapy in Subjects With Dravet Syndrome or Lennox-Gastaut Syndrome (ENDYMION 2)**

O'Brien, T.  
14/09/22 → 1/06/24

**A Phase I Study Evaluating the Safety, Tolerability, Pharmacokinetics, Pharmacodynamics, and Immunogenicity of Single and Multiple Doses of AL002 in Healthy Participants and in Participants with Mild to Moderate Alzheimer's Disease.**

O'Brien, T. & Brodtmann, A.  
30/05/19 → 31/12/19

**A Phase IIa, Randomized, Double Blind, Placebo Controlled, Single Ascending Dose, Safety and Pharmacokinetic / Pharmacodynamic Study of INP103 (POD L-dopa) Administered in the Presence of Benserazide to L-dopa Responsive Parkinson's Disease Patients.**

O'Brien, T. & Bertram, K.  
15/03/18 → 15/03/20

**A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Safety and Tolerability of GRF6021 Infusions in Subjects with Parkinson's Disease and Cognitive Impairment.**

Bertram, K. & O'Brien, T.  
8/04/19 → 30/04/20

**A Randomized, Double-blind, Placebo-controlled, Parallel-group, Phase 2 Study to Evaluate the Safety and Efficacy of CT1812 in Subjects with Mild to Moderate Alzheimer's Disease.**

O'Brien, T.  
10/01/19 → 31/12/20

**A Therapeutic Intervention, Open Label Study to Compare the Efficacy and Safety of Graded Exercise Compared to Passive Stretching in Subjects Who Have Sustained a Mild Traumatic Brain Injury**

O'Brien, T., Barlow, K., Levi, C. R. & Jankelowitz, S.  
5/05/20 → 31/12/23

**A double-blind, randomized, placebo-controlled, multicenter, outpatient, parallel-group study to assess the efficacy and safety of staccato alprazolam in study participants 12 years of age and older with epilepsy with stereotypical prolonged seizures**

O'Brien, T.  
7/03/23 → 7/03/25

**A multicenter, randomized, double-blind, placebo-controlled, parallel-group study to evaluate the efficacy and safety of padevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy.**

O'Brien, T., Kwan, P., D'Souza, W. J., Berkovic, S. F., Carney, P., Nikpour, A., Reutens, D. C. & Frasca, J.  
10/10/19 → 31/12/21

**A national Magnetic Particle Imaging Facility**

Egan, G., Davis, T., Hagemeyer, C., O'Brien, T., Martino, M., Bansal, V. & Crosbie, J.  
7/02/19 → 31/12/19

**A randomized, dose-finding and confirmatory, double-blind, placebo-controlled, parallel-group multicenter study with a 2-stage adaptive design and randomized withdrawal to evaluate the efficacy, safety, and tolerability of brivaracetam as monotherapy in patients 2 to 25 years of age with childhood absence epilepsy or juvenile absence epilepsy.**

O'Brien, T.

**A randomized, double-blind, placebo-controlled, parallel group, multicenter trial of CVL-865 as adjunctive therapy in adults with drug-resistant focal onset seizures (REALIZE TRIAL)**

O'Brien, T., Nicolo, J., Nikpour, A., Wijayath, M., D'Souza, W. J., Reutens, D. C., Carney, P., Somerville, E. R., Mullen, S. A. & Frasca, J.  
5/06/20 → 31/12/23

**ADVANCE: Addressing Dementia Via Agitation-Centered Evaluation**

Gleason, A., O'Brien, T., Woodward, M. C. & Clarnette, R.  
10/01/19 → 15/09/19

**ARISE: pAdsevonil in drug-Resistant Epilepsy. A randomized, double-blind, placebo-controlled, dose finding study to evaluate the efficacy and safety of Padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug resistant epilepsy.**

O'Brien, T., Kwan, P., D'Souza, W. J., Berkovic, S. F., Wijayath, M., Carney, P., Lawn, N. D., Seneviratne, U., Reutens, D. C., Zentner, C. & Frasca, J.  
11/12/18 → 11/12/19

**An Extension Study of ANAVEX2-73 in Patients with Mild to Moderate Alzheimer's Disease.**

Darby, D., O'Brien, T. & Burn, K.  
16/03/20 → 31/12/21

**An Open Label Extension on the Examination of the Combination of Dronabinol and Acetazolamide for Treatment of Obstructive Sleep Apnoea (OSA)**

O'Brien, T.  
22/06/21 → 31/12/24

**An Open-Label Ascending Single-Dose, and Randomized, Double-blind, Placebo-controlled, Ascending Multiple-Dose Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of CST-2032 in Healthy Volunteers and Subjects with Mild Cognitive Impairment or Parkinson's Disease**

O'Brien, T. & Kerris, J.  
29/07/21 → 31/12/24

**An Open-Label Extension Study to Investigate the Long-Term Safety, and Tolerability of Intracerebroventricular (ICV) Delivery of Valproate in Subjects with Focal Seizures, with Temporal Lobe Onset with or without Secondary Generalization**

O'Brien, T.  
3/09/21 → 31/12/24

**An informatics approach to predict outcomes and monitor intervention efficacy following moderate to severe traumatic brain injury**

Fitzgerald, M., Gabbe, B., Lannin, N., Vallmuur, K., Curtis, K., Harrison, J., Young, J. T., Menon, D. K., Cullen, J. C., Armstrong, E., Eades, S., Cameron, P., Cooper, J., Fitzgerald, M., Balogh, Z., Fatovich, D., Honeybul, S., Jeffree, R. L., McNamara, R., Mitchell, G. J., Delaney, A., Reade, M. C., Wells, A., Williams, J. K., Ponsford, J., McDonald, S., Kendall, E., Ownsworth, T., Simpson, G., Togher, L., Hassett, L., Fleming, J., Williams, G. P., Collins-Praino, L., Reeder, S., Mobbs, R., Vickers, J. C., Anderson, V., Barlow, K., Holland, A. J. A., Scheinberg, A., Semple, B., Parizel, P. M., O'Brien, T., Law, M., Rose, S. E., Varma, D., Nasrallah, F., Shultz, S., Hellewell, S., Bosio, E., King, K., Parr, M., Udy, A., Hill, A. F., Olver, J., Teague, W. J., Egan, G., Fisher, M., York, L., Bynevelt, M., Maas, A. I., O'Reilly, G., McDonald, S., Capell, J., Gilroy, J., Walsham, J., Newcombe, V., Geraghty, T. J., Joyce, C. J., Rosenfeld, J., Elcock, M., Ross, J., Bragge, P., Meka, S., Chai, K., Cowen, G., Hasseler, L., Ercole, A., Wagland, J., Alexander, T., Babl, F. E., Bidargaddi, N., Mahoney, A. J., Wright, D., Crowe, L. M., Robinson, S., Rushworth, N., Hansen, M., Ellis, D., Zeeman, H., Francis, R., Whitley, L. & Reid, C. M.  
1/07/21 → 30/06/23

**An open-label, multicenter, extension study to evaluate the safety and efficacy of Padsevonil as adjunctive treatment of focal-onset seizures in adult subjects with drug-resistant epilepsy.**

O'Brien, T., Perucca, P., D'Souza, W. J., Berkovic, S. F., Wijayath, M., Carney, P., Seneviratne, U., Reutens, D. C., Zentner, C., Frasca, J. & Nikpour, A.  
4/06/19 → 31/12/21

**An open-label, multicenter, outpatient extension study to evaluate the safety and tolerability of staccato alprazolam in study participants 12 years of age and older with stereotypical prolonged seizures**

O'Brien, T.  
10/03/23 → 10/03/25

**An open-label, non-randomized, single-arm pilot study to evaluate the safety and efficacy of blood-brain barrier transient opening using NavifUS System in patients with mild Alzheimer's Disease.**

O'Brien, T. & Burn, K.  
13/08/20 → 31/12/23

**An open-label, non-randomized, single-arm pilot study to evaluate the safety and efficacy of multiple pulsed focused ultrasound treatment in patients with drug resistant temporal lobe epilepsy**

O'Brien, T.  
29/03/23 → 28/03/25

**AEP: Australian Epilepsy Project**

Kwan, P., O'Brien, T., Ademi Delaney, Z. & Piccenna, L.  
Florey Institute of Neuroscience and Mental Health (FINMH) (Victoria)  
3/06/21 → 30/06/26

**Biomarkers of Brain Concussion**

Shultz, S., O'Brien, T., Kosofsky, B., Germaine, J., Smith, R., Fielding, J., Clough, M. & Wright, D.  
14/11/18 → 30/06/22

**Brain glutamate imaging by ultra-high-field MRI for prediction of post-stroke epilepsy**

Kwan, P., O'Brien, T., Cloud, G., Hand, P., Yan, B., Nicolo, J. & Wright, D.  
11/03/19 → 8/03/21

**Brain injury in intimate partner violence: Insight into a silent pandemic**

Shultz, S., O'Sullivan, M. J., Fitz-Gibbon, K., Meyer, S., van Donkelaar, P., Christie, B. R., Mychasiuk, R., McDonald, S., Law, M., Vivash, L., O'Brien, T., Ponsford, J., Jupp, B., Chen, Z., Mitra, B. & Marks, J.  
National Health and Medical Research Council (NHMRC) (Australia)  
1/01/22 → 31/12/24

**CLADIN sub study. Effect of CLADribine on Innate Immune Response (CLADIN). MS Immunity Project.**

Monif, M., Butzkueven, H. & O'Brien, T.  
27/06/19 → 9/09/22

**CORE-VNS:Comprehensive Outcomes Registry in Subjects with Epilepsy Treated with Vagus Nerve Stimulation Therapy.**

O'Brien, T.  
24/09/18 → 31/12/23

**Calcium channel modulation to prevent post-traumatic epilepsy**

O'Brien, T., Galanopoulou, A. S., Casillas-Espinosa, P., Shultz, S., Jones, N. & Moshé, S. L.  
1/05/23 → 30/04/26

**Cardiorespiratory function as a non-invasive biomarker for detecting seizures with artificial intelligence: Utilising data from long-term patient recordings from an epilepsy monitoring unit**

O'Brien, T., Kwan, P., Sivathamboo, S., Perucca, P., Ge, Z., Le, T., Phung, D., Bonnington, P. & Piccenna, L.  
8/04/19 → 8/04/20

**Changzhou Trendi Medical Technology Co Ltd - Equipment Research Agreement**

O'Brien, T.  
Changzhou Trendi Medical Technology Co Ltd  
1/03/21 → 29/02/24

**Developing new treatments and identifying biomarkers to enable transformational, precision medicine based care for patients with drug resistant epilepsy**

O'Brien, T.  
National Health and Medical Research Council (NHMRC) (Australia)  
1/01/20 → 31/12/24

**Development and validation of a salivary ketone point-of-care test**

Kwan, P., Kaul, N., Chan, J., O'Brien, T., Chen, Z. & Nation, J.  
Shenzhen Children's Hospital, Mx3 Diagnostics  
27/08/19 → 31/08/23

**Dose finding crossover trial investigating the effect of dronabinol combined with acetazolamide on Apnoea Hypopnea Index (AHI) in adults with obstructive sleep apnoea (OSA).**

O'Brien, T.  
24/09/20 → 31/12/24

**Drug screening using Homer1 patient's iPSCs-derived neurons for clinical trials of precision medicine**

Javaid, S., Rollo, B., Antonic-Baker, A., Kwan, P. & O'Brien, T.  
Homer Hack Ltd  
17/04/23 → 30/09/24

**Educational Grant - Monash Alfred 2021 Movement Disorders Fellowship**

O'Brien, T. & Bertram, K.  
Ipsen (Australia)  
1/02/21 → 31/01/22

**Evaluating Huperzine as an anti-seizure agent in the GAERS model of GGE with absence seizures.**

Casillas-Espinosa, P. & O'Brien, T.  
25/08/20 → 24/11/20

**Evaluating the effectiveness and safety of sodium selenate as a disease modifying treatment for patients with behavioural variant Frontotemporal Dementia (bvFTD)**

O'Brien, T., Malpas, C., Velakoulis, D., Piguet, O., Kalincik, T., Walterfang, M. A., Ahmed, R., Bush, A. I., Darby, D. G. & Brodtmann, A.  
Department of Health and Aged Care (Australia)  
1/04/19 → 31/03/25

**Exercise therapy for mild traumatic brain injury (mTBI) and persistent post-concussion symptoms (PPCS) across the lifespan**

O'Brien, T., Leddy, J., Willmott, C., Mitra, B., Shultz, S., Chen, Z., McDonald, S., Morokoff, A., Caeyenberghs, K., Ponsford, J., Rushworth, N., Akhlaghi, H., Davies, K. & Olver, J.  
Department of Health and Aged Care (Australia)  
1/06/21 → 31/05/24

**First Seizure Assessment and Management.**

Foster, E. & O'Brien, T.  
5/02/18 → 4/02/19

**First Seizure Management in Australia**

Foster, E. & O'Brien, T.  
5/02/18 → 4/02/21

**First Seizures: Patient Reported Outcome Measures**

Ademi Delaney, Z., Foster, E., Kwan, P., Chen, Z., O'Brien, T., Liew, D. & Zomer, E.  
30/04/20 → 30/03/24

**Glioblastoma - inhibition of P2X7R as a potential therapeutic target for treatment of this aggressive cancer.**

Monif, M., Hunn, M., Drummond, K. J., McLean, C., Jones, N., Sanfilippo, P. & O'Brien, T.  
1/01/22 → 31/12/25

**HIT-IQ kinematics and observation of head impacts in Australian football**

Mitra, B., McDonald, S., Willmott, C., Shultz, S., Makdissi, M. & O'Brien, T.  
1/01/22 → 31/12/23

**How does chronic epilepsy result in cardiac electrophysiological dysfunction?**

O'Brien, T., Powell, K. L., Delbridge, L. M. D., Pilowsky, P. M. & Royle, C.  
National Health and Medical Research Council (NHMRC) (Australia)  
1/01/18 → 31/12/19

**Human Epilepsy: Understanding biology to improve outcomes**

Berkovic, S. F., Jackson, G. D., Gecz, J., Connelly, A., Scheffer, I. E., O'Brien, T., Calamante, F., Petrou, S. & Reid, C. A.  
National Health and Medical Research Council (NHMRC) (Australia)  
23/04/18 → 31/12/20

**Human high-throughput in-vitro phenotypic screening for new epilepsy drugs**

Rollo, B., Kwan, P., O'Brien, T., Langmead, C., Baell, J., Casillas-Espinosa, P., May, L., Ayers, K. L. & Sumer, H.  
1/06/22 → 1/01/23

**INFORMED: Integrative approaches For Optimizing Recognition, Management and Education of concussion at the community sports level**

Mitra, B., McDonald, S., Ponsford, J., Shultz, S., Fitzgerald, M., Willmott, C., O'Brien, T., Law, M., McKay, A., O'Sullivan, M. J., Hellewell, S., Natoli, R., Caeyensberghs, K., Makdissi, M., Chen, Z. & Whiley, L.

**INFORMED: Integrative approaches For Optimizing Recognition, Management and Education of concussion at the community sports level**

Mitra, B., McDonald, S., Ponsford, J., Shultz, S., Fitzgerald, M., Willmott, C., O'Brien, T., Law, M., McKay, A., O'Sullivan, M. J., Hellewell, S., Natoli, R., Caeyensberghs, K., Makdissi, M., Chen, Z. & Whiley, L.  
1/07/22 → 31/05/25

**Identification and Forecasting of Seizure from EEG data recorded from rodents in Laboratory settings using QA/QC and Machine Learning Algorithms**

Casillas-Espinosa, P., O'Brien, T. & Knight, K.  
1/12/18 → 30/11/20

**Identification and Forecasting of Seizure from EEG data recorded from rodents in Laboratory settings using QA/QC and Machine Learning Algorithms Stage 2**

O'Brien, T., Casillas-Espinosa, P. & Knight, K.  
Monash University – Internal Faculty Contribution  
1/06/19 → 30/05/21

**Improvement First Seizure Assessment and Management**

O'Brien, T., Puccia, P., Liew, D., Ademi Delaney, Z. & Carney, P.  
Monash University – Internal University Contribution, Epilepsy Foundation  
1/12/20 → 31/12/22

**Infections promote post-traumatic epilepsy and poor outcomes after traumatic brain injury**

Semple, B., O'Brien, T. & Li, J.  
United States Department of Defense (DOD)  
4/01/21 → 29/09/24

**Intracerebral delivery of Neuropeptide Y through human-induced pluripotent stem cell-derived progenitors (NPY-hiPSC-NPs) as a disease-modifying approach treatment for drug-resistant epilepsy**

Antonic-Baker, A., O'Brien, T., Jones, N., Kwan, P. & Javaid, S.

**MAGPIX**

Monif, M., Hibbs, M., Tarlinton, D. & O'Brien, T.

1/01/21 → 31/12/21

**MCIS: Characterising Mild Cognitive Impairment using multimodal biomarkers.**

O'Brien, T. & Vivash, L.

17/08/20 → 31/12/21

**Manufacturing and commercialization of [18F]-PET radiotracers**

Stupple, P., Baell, J., Hawkey, L., Mudududdla, R., O'Brien, T., Vivash, L., Jupp, B., Santamaria, G., Ware, R. E., Stephens, A. & Mueller, A.

10/04/21 → 26/09/25

**Measuring inflammation in brain and blood for predicting risk of post-traumatic epilepsy**

Ali, I., Jones, N., O'Brien, T., Dedeurwaerdere, S., Wright, D. & Vivash, L.

United States Department of Defense (DOD)

30/09/21 → 29/06/24

**Movement Disorders 2022 Fellowship**

O'Brien, T. & Bertram, K.

1/01/22 → 31/12/22

**NHMRC Equipment Grant - Lateral Fluid Percussion Injury (LFPI) Device**

Vivash, L., Leung, J., Casillas-Espinosa, P., Ali, I., O'Brien, T., Shultz, S. & Jones, N.

1/11/23 → 31/12/24

**NHMRC Equipment Grant - Quanterix SIMOA HD-1 Analyser**

Shultz, S., Kwan, P., Medcalf, R., O'Brien, T., Mitra, B., Coughlan, M., Jones, N., Van Der Walt, A., Butzkueven, H., Semple, B. & Hutton, E.

Monash University – Internal Faculty Contribution, Monash University – Internal Department Contribution

1/01/19 → 31/12/19

**NSV Early Career Fellowship Hugh Simpson**

Simpson, H. & O'Brien, T.

**Open Label Extension Study for Patients with Early Alzheimer's Disease (AD) Enrolled in Study ANAVEX2-73-AD-004.**

O'Brien, T. & Burn, K.

7/02/20 → 31/12/25

**Optimisation of first seizure management: a retrospective data linkage analysis**

Foster, E., O'Brien, T., Kwan, P., Liew, D., Ademi Delaney, Z. & Chen, Z.

Brain Foundation

1/01/20 → 31/12/20

**PRECISION-TBI: PRECISION-TBI – Promoting evidence-based, data driven care for critically ill moderate-to-severe TBI patients**

Udy, A., Cooper, J., Jeffree, L., Bellomo, R., Nichol, A., O'Brien, T., Bellapart, J., Menon, D. K., McNamara, R., Fitzgerald, M., Togher, L., Delaney, A., Anstey, J. R., Honeybul, S., Hunn, M., Reddi, B. A. J., Adamides, A. A., Wells, A. & Lewis, P.

1/06/21 → 31/05/25

**Perampanel in glioma associated seizures - efficacy and safety: a pilot phase II randomised controlled trial.(PEGASUS)**

O'Brien, T., Neal, A., Kwan, P., Drummond, K. J., Morokoff, A., Desmond, P. M., Moffat, B. M., Perucca, P., Gonen, O., Yuen, T. I., Murphy, M. A., Bulluss, K. J. & Cher, L. M.

1/09/18 → 1/09/20

**PERSONAL: Personalised Selection of Medication for Newly Diagnosed Adult Epilepsy – the PERSONAL Trial**

Kwan, P., Chen, Z., Lannin, N., Ademi Delaney, Z., Ge, Z., Reutens, D., O'Brien, T., D'Souza, W. J., Perucca, P., Reeder, S., Nikpour, A., Wong, C., Kiley, M., Saw, J., Nicolo, J., Seneviratne, U., Carney, P., Jones, D., Somerville, E. R. & Stapleton, C.

1/02/23 → 31/01/27

**Phase 1b Open-label, Dose-Identification Study of XPro1595 in Patients with Mild to Moderate Alzheimer's Disease with Elevated high sensitivity C-reactive protein in Blood.**

O'Brien, T., Burn, K., Woodward, M. C., Lai, R., Clarnette, R., Brodtmann, A. & Nestor, P. J.  
25/09/19 → 31/08/22

**Phase 2, Open-label Study of PRAX-944 to Assess the Safety, and Efficacy of Escalating Multiple Doses in Adults with Refractory Absence Seizures**

O'Brien, T., Kwan, P., Germaine, J., Smith, R., Casillas-Espinosa, P., Reddy, K. & Piccenna, L.  
18/02/19 → 18/02/20

**Positive allosteric modulation of anti-convulsant G protein-coupled receptor signalling to treat drug-resistant epilepsy**

May, L., Webb, G., Carlsson, J., Baltos, J., TN Nguyen, A., Christopoulos, A., Miao, Y., O'Brien, T., Rollo, B., Casillas-Espinosa, P., Gregory, K., Scammells, P. & Nguyen, T.  
1/01/22 → 31/12/25

**Pre-clinical evaluation of selective adenosine A1 receptor positive allosteric modulators for the treatment of drug-resistant epilepsy**

Kwan, P., May, L., Rollo, B., O'Brien, T., Casillas-Espinosa, P., Howden, S., Christopoulos, A., Gregory, K., Scammells, P., Baltos, J., Elliot, D., TN Nguyen, A., Langmead, C., Antonic-Baker, A., Sumer, H., Javaid, S. & Gu, J.  
1/06/22 → 31/05/27

**Prevention of post-stroke epilepsy in patients with acute ischaemic stroke at high risk of developing seizures.**

Kwan, P., O'Brien, T., Yan, B., Nicolo, J., Cloud, G., Moffat, B. A., Wright, D. & Neal, A.  
25/01/19 → 31/12/22

**Probable Progressive Supranuclear Palsy research**

O'Brien, T.  
30/09/21 → 30/09/25

**RENAISSANCE Study: A Phase 2, Multicenter, Open Label Safety and Tolerability Study of SPN-817 in Adult Patients with Treatment Resistant Epilepsy**

O'Brien, T., Nicolo, J., Perucca, P., Reutens, D. C., Carney, P., Somerville, E. R., Wijayath, M. & Wong, T.  
19/12/22 → 18/12/24

**REVEAL – Research Evaluating Vagal Excitation and Anatomical Linkages**

Osborn, J., Eberly, L., Ikramuddin, S., Lim, H. H., Macefield, V., Nahas, Z. H., Aaronson, S. T., Baker, S. E., Camilleri, M., Conway, C. R., Crawford, P., Darrow, D. P., Drawz, P. E., Dudley, S. C., Fonkoue, I. T., George, M. S., Henry, T. R., Hering, B. J., Ingram, M., Johnson, M. D., Keller-Ross, M. L., Lim, K. O., Loavenbruck, A., McCarty, C. A., Meyer, M., Micera, S., Mueller, B., Murray, T., Netoff, T., O'Brien, T., Panoskaltis-Mortari, A., Park, M. C., Puchalska, P., Ramachandran, S., Singh, A., Talkachova, A., Tignanelli, C., Walczak, T., Williams, N., Willie, J. T. & Worrell, G.  
NIH - National Institutes of Health (United States of America)  
1/09/23 → 31/08/25

**REVEAL – Research Evaluating Vagal Excitation and Anatomical Linkages (Clinical Core)**

Osborn, J. W., Macefield, V. & O'Brien, T.  
1/09/23 → 31/08/24

**Reversing post-traumatic epilepsy**

Casillas-Espinosa, P., O'Brien, T., Shah, A., Anderson, A., Huang, E., Shultz, S., Jones, N. & Schittenhelm, R.  
30/09/21 → 30/09/24

**Seizure Detection Using Electrocardiogram Recordings and Kaoskey TRIO Software Study (KAOSKEY-K-001).**

O'Brien, T. & Thomas, J.  
1/05/20 → 31/12/21



**Seizure Detection and Classification Using Eyelid Movements: A Video-EEG Monitoring Study (OPTALERT-0-001).**

O'Brien, T., Kwan, P. & Thomas, J.

18/09/19 → 31/12/23

**Sodium Selenate as a Disease Modifying Treatment for Progressive Supranuclear Palsy (Sodium Selenate for PSP)**

O'Brien, T., Bertram, K., Vivash, L., Evans, A. H., Kimber, T. E., O'Sullivan, J. D., Malpas, C., Fielding, J., Velakoulis, D. & Law, M.

1/06/20 → 31/05/25

**Spinal Cord Research**

Davies, S., Davies, J. & O'Brien, T.

StepAhead Australia

13/07/19 → 30/06/22

**Testing novel anti-epileptic compounds in human in vitro seizure model.**

Rollo, B., O'Brien, T. & Kwan, P.

Epidarex Exeed Ltd

11/01/21 → 10/04/21

**Testing of Epidarex Exeed compounds for anti-epileptiform activity in a human neural in vitro assay**

Rollo, B., O'Brien, T., Kwan, P. & Javaid, S.

1/09/21 → 1/03/22

**Testing of the effect of E2730 treatment on multimodality in-vivo biomarkers of GABAergic function in healthy rats and preclinical chronic epilepsy models**

O'Brien, T., Kwan, P., Ali, I., Casillas-Espinosa, P., Jones, N., Jupp, B., Vivash, L., Wright, D., Mychasiuk, R. & Major, B.

Eisai Inc (United States of America)

22/10/20 → 21/10/21

**REVIVER: The Assessment of a Novel Form of Exercise on Parkinsonism**

Sinclair, B., O'Brien, T., Bertram, K., Fielding, J., Clough, M. & White, O.

Redmond Company Pty Ltd

15/12/18 → 29/07/21

**The Development and Management of Post-Traumatic Epilepsy.**

Laing, J., O'Brien, T., Kwan, P. & Perucca, P.

Brain Foundation

2/12/18 → 31/12/19

**The contribution of monocytes and P2X7 Receptor in Multiple Sclerosis relapse.**

Monif, M., Butzkueven, H., O'Brien, T. & Stankovich, J.

2/03/21 → 31/12/21

**The contribution of monocytes and P2X7 Receptor in Multiple Sclerosis relapse.**

Monif, M., Butzkueven, H., O'Brien, T. & Stankovich, J.

2/02/22 → 31/12/23

**The development and management of post traumatic epilepsy**

Laing, J. & O'Brien, T.

1/01/19 → 31/01/21

**The role of microglia and P2X7 Receptor in human gliomas – a translational study**

Monif, M., Drummond, K. J., O'Brien, T., Williams, D. & Kan, K.

Brain Foundation

1/01/19 → 31/12/19

**Transforming the paradigm of epilepsy care with precision medicine**

Wolvetang, E. J., Kwan, P., Vadlamudi, L., O'Brien, T., Ge, Z., Anderson, A., Shaker, M., Antonic-Baker, A., Leeson, H., Rollo, B. & Javaid, S.

Department of Health and Aged Care (Australia)

1/06/21 → 31/05/24

**Translational platform for epilepsy therapy and biomarker discovery**

Galanopoulou, A. S., Moshe, S., Mowrey, W. B., Branch, C., Fleysher, R., Cui, M., Staba, R. J., Mazarati, A., Sankar, R., Agoston, D., Duncan, D., Cabeen, R., Coles, L., O'Brien, T., Toga, A. W., Bragin, A., Engel, J., Vespa, P., Harris, N., Wright, D., Jones, N., Shultz, S., Casillas-Espinosa, P., Hudson, M., Ali, I. & Braine, E.

NIH - National Institutes of Health (United States of America)

15/04/22 → 31/03/23

**UNCOVERING THE HIDDEN GENETICS OF NON-LESIONAL FOCAL EPILEPSY**

Perucca, P., Berkovic, S. F., O'Brien, T., Kwan, P., Hildebrand, M. S., Scheffer, I. E. & McIntosh, A.

20/02/20 → 28/02/23

**Use of software for the analysis and study of neurological and psychiatric conditions in the pre-clinical setting**

O'Brien, T. & Casillas-Espinosa, P.

15/01/18 → 15/01/19