



Nationality : french
Date of birth : February 8, 1990
Personal email : brice.ozenne@orange.fr
Personal phone number : (+45) 52 328 128
Personal address : 3 Emblasgade, 1 t.h., 2100 Copenhagen Ø, Denmark

CURRENT POSITION

November 2015- Now: **Postdoctoral researcher** ([page personnelle](#))

Section of Biostatistics, University of Copenhagen
Øster Farimagsgade 5, 1014 Copenhagen, Denmark

Neurobiology Research Unit
Copenhagen University Hospital, Rigshospitalet
Building 6931, Blegdamsvej 9, DK-2100 Copenhagen, Denmark

Mon research work is organized around three topics:

- the development of **latent variable models** for the analysis of complex data (software `lavaSearch2`). I apply these developments on neuroimaging data and data from psychological tests to investigate the relationship between the brain response and depression.
- the analysis of registry data with **time to events outcomes** and **competing risks** (software `riskRegression`). My developments have, for instance, been applied to compare preventive stroke treatments using the danish registry data.
- the development of **generalized pairwise comparisons** to handle multiple and heterogenous outcomes (software `BuyseTest`). A typical application is the assessment of new chemotherapy where being able to balance the benefit (longer in survival time) and the risk (treatment side effects) in an interpretable way is important.

EDUCATION

2012 - 2015 : Ph.D. in biostatistics, University Lyon 1, Lyon, France.

Thesis Title: [Statistical modelling for the prognosis of stroke patients](#).

2011 - 2012 : Master's degree in biostatistics (m2 b3s), university lyon, Lyon, France.

Carried out in double degree with the École Centrale de Lyon.

2009 - 2012 : Engineering diploma from the École Centrale de Lyon, Lyon, France.

Erasmus at Politecnico di Milano (2nd semester 2011).

SKILLS

Language

French (native language), english (fluent), basics in italian and danish.

Software

Good knowledge of **R**, L^AT_EX and [orgmode](#).

Basic knowledge but common use of C++, lisp (for [GNU Emacs](#)) and git/github (via [magit](#)).

GRANTS

2017-2019: MARIE CURIE Individual Fellowships (200 000€)

2017-2020: Lundbeck Fellowships (140 000€)

SCIENTIFIC OUTPUT

Publications (methodological)

Published:

1. **Ozenne, Brice**, Anne Lyngholm Sørensen, Thomas Scheike, Christian Torp-Pedersen, and Thomas Alexander Gerds. riskregression: Predicting the risk of an event using cox regression models. *R Journal*, 9(2):440–460, 2017. URL <https://journal.r-project.org/archive/2017/RJ-2017-062/index.html>
2. Julien Péron, Marc Buyse, **Ozenne, Brice**, Laurent Roche, and Pascal Roy. An extension of generalized pairwise comparisons for prioritized outcomes in the presence of censoring. *Statistical methods in medical research*, 27(4):1230–1239, aug 2016a. doi: 10.1177/0962280216658320. URL <https://doi.org/10.1177%2F0962280216658320>
3. **Ozenne, Brice**, Fabien Subtil, and Delphine Maucort-Boulch. The precision–recall curve overcame the optimism of the receiver operating characteristic curve in rare diseases. *Journal of clinical epidemiology*, 68(8):855–859, aug 2015b. doi: 10.1016/j.jclinepi.2015.02.010. URL <https://doi.org/10.1016%2Fj.jclinepi.2015.02.010>
4. **Ozenne, Brice**, Fabien Subtil, Leif Østergaard, and Delphine Maucort-Boulch. Spatially regularized mixture model for lesion segmentation with application to stroke patients. *Biostatistics*, 16(3):580–595, mar 2015c. doi: 10.1093/biostatistics/kxv004. URL <https://doi.org/10.1093%2Fbiostatistics%2Fkxv004>

Submitted:

1. **Ozenne, Brice**, Thomas Harder Scheike, Laila Stærk, and Thomas Alexander Gerds. On the estimation of average treatment effects with right censored time to event outcome and competing risks. *Submitted (biometrical journal)*, c
2. **Ozenne, Brice**, Patrick Fisher, and Esben Budtz-Jørgensen. Small sample maximum likelihood inference in latent variable models. *Submitted (JRSS-C)*, b

In progress:

1. **Ozenne, Brice**, Sebastian Elgaard Ebert, and Esben Budtz-Jørgensen. Controlling the familywise error when performing multiple comparisons in a linear latent variable model. a
2. Julien Péron, Maryam Idlhaj, Marc Buyse, Joris Gai, Pascal Roy, Laurence Collette, Delphine Maucourt-Boulch, and **Ozenne, Brice**. An unbiased estimation of the net survival benefit in the presence of censored observations

Software development (package for the R software)

- **BuyseTest** (author and maintainer): generalized pairwise comparisons. Implementation of the extension described in [Péron et al., 2016a]. Available on [CRAN](#) and on [Github](#).
- **lavaSearch2** (author and maintainer): Inference and diagnostic tools for latent variable models. Methodology described in [**Ozenne, Brice et al.**, b] and [**Ozenne, Brice et al.**, a]. Available on [CRAN](#) and on [Github](#).
- **riskRegression** (contributor): computation of absolute risks and average treatment effects. Methodology described in [**Ozenne, Brice et al.**, 2017] and [**Ozenne, Brice et al.**, c]. Available on [CRAN](#) and on [Github](#).

Publications (clinical applications)

1. Camilla Borgsted, **Ozenne, Brice**, Brenda Mc Mahon, Martin K Madsen, Liv V Hjordt, Ida Hageman, William FC Baaré, Gitte M Knudsen, and Patrick M Fisher. Amygdala response to emotional faces in seasonal affective disorder. *Journal of affective disorders*, 229:288–295, mar 2018. doi: 10.1016/j.jad.2017.12.097. URL <https://doi.org/10.1016%2Fj.jad.2017.12.097>
2. Liv Vadskjær Hjordt, Vibeke H Dam, **Ozenne, Brice**, Ida Hageman, Brenda Mc Mahon, Erik Lykke Mortensen, Gitte M Knudsen, and Dea Siggaard Stenbæk. Self-perceived personality characteristics in seasonal affective disorder and their implications for severity of depression. *Psychiatry research*, 262:108–114, apr 2018. doi: 10.1016/j.psychres.2018.02.015. URL <https://doi.org/10.1016%2Fj.psychres.2018.02.015>
3. Mette Thrane Foged, Kirsten Vinter, Louise Stauning, Troels W Kjær, **Ozenne, Brice**, Sándor Beniczky, Olaf B Paulson, Lars H Pinborg, et al. Verbal learning and memory outcome in selective amygdalohippocampectomy versus temporal lobe resection in patients

with hippocampal sclerosis. *Epilepsy & Behavior*, 79:180–187, feb 2018. doi: 10.1016/j.yebeh.2017.12.007. URL <https://doi.org/10.1016%2Fj.yebeh.2017.12.007>

4. L. Staerk, T. A. Gerds, G. Y. H. Lip, **B. Ozenne**, A. N. Bonde, M. Lamberts, E. L. Fosbøl, C. Torp-Pedersen, G. H. Gislason, and J. B. Olesen. Standard and reduced doses of dabigatran, rivaroxaban and apixaban for stroke prevention in atrial fibrillation: a nationwide cohort study. *Journal of Internal Medicine*, 283(1):45–55, sep 2017a. doi: 10.1111/joim.12683. URL <https://doi.org/10.1111%2Fjoim.12683>
5. Liv Vadskjær Hjordt, Dea Siggaard Stenbæk, **Ozenne**, **Brice**, Brenda Mc Mahon, Ida Hageman, Steen Gregers Hasselbalch, and Gitte Moos Knudsen. Season-independent cognitive deficits in seasonal affective disorder and their relation to depressive symptoms. *Psychiatry research*, 257:219–226, nov 2017. doi: 10.1016/j.psychres.2017.07.056. URL <https://doi.org/10.1016%2Fj.psychres.2017.07.056>
6. Vincent Beliveau, Melanie Ganz, Ling Feng, **Ozenne**, **Brice**, Liselotte Højgaard, Patrick M Fisher, Claus Svarer, Douglas N Greve, and Gitte M Knudsen. A high-resolution in vivo atlas of the human brain’s serotonin system. *Journal of Neuroscience*, 37(1): 120–128, 2017. ISSN 0270-6474. doi: 10.1523/JNEUROSCI.2830-16.2016. URL <http://www.jneurosci.org/content/37/1/120>
7. Dea S Stenbæk, Patrick M Fisher, **Ozenne**, **Brice**, Emil Andersen, Liv V Hjordt, Brenda McMahon, Steen G Hasselbalch, Vibe G Frokjaer, and Gitte M Knudsen. Brain serotonin 4 receptor binding is inversely associated with verbal memory recall. *Brain and behavior*, 7(4): e00674, mar 2017. doi: 10.1002/brb3.674. URL <https://doi.org/10.1002%2Fbrb3.674>
8. Laila Staerk, Emil Loldrup Fosbøl, Morten Lamberts, Anders Nissen Bonde, Kasper Gadsbøll, Caroline Sindet-Pedersen, Ellen A Holm, Thomas Alexander Gerds, **Ozenne**, **Brice**, Gregory YH Lip, et al. Resumption of oral anticoagulation following traumatic injury and risk of stroke and bleeding in patients with atrial fibrillation: a nationwide cohort study. *European heart journal*, 39(19):1698–1705a, nov 2017b. doi: 10.1093/eurheartj/ehx598. URL <https://doi.org/10.1093%2Feurheartj%2Fehx598>
9. PM Fisher, **Ozenne**, **B**, C Svarer, D Adamsen, S Lehel, WFC Baaré, PS Jensen, and GM Knudsen. Bdnf val66met association with serotonin transporter binding in healthy humans. *Translational psychiatry*, 7(2):e1029–e1029, feb 2017. doi: 10.1038/tp.2016.295. URL <https://doi.org/10.1038%2Ftp.2016.295>
10. Mette Thrane Foged, Ulrich Lindberg, Kishore Vakamudi, Henrik BW Larsson, Lars H Pinborg, Troels W Kjær, Martin Fabricius, Claus Svarer, **Ozenne**, **Brice**, Carsten Thomsen, et al. Safety and eeg data quality of concurrent high-density eeg and high-speed fmri at 3 tesla. *PloS one*, 12(5):e0178409, may 2017. doi: 10.1371/journal.pone.0178409. URL <https://doi.org/10.1371%2Fjournal.pone.0178409>
11. Julien Péron, Pascal Roy, **Ozenne**, **Brice**, Laurent Roche, and Marc Buyse. The net chance of a longer survival as a patient-oriented measure of treatment benefit in

randomized clinical trials. *JAMA oncology*, 2(7):901, jul 2016c. doi: 10.1001/jamaoncol.2015.6359. URL <https://doi.org/10.1001%2Fjamaoncol.2015.6359>

12. Laila Staerk, Emil Loldrup Fosbøl, Gregory YH Lip, Morten Lamberts, Anders Nissen Bonde, Christian Torp-Pedersen, **Ozenne, Brice**, Thomas Alexander Gerds, Gunnar Hilmar Gislason, and Jonas Bjerring Olesen. Ischaemic and haemorrhagic stroke associated with non-vitamin k antagonist oral anticoagulants and warfarin use in patients with atrial fibrillation: a nationwide cohort study. *European heart journal*, page ehw496, oct 2016. doi: 10.1093/eurheartj/ehw496. URL <https://doi.org/10.1093%2Feurheartj%2Fehw496>
13. Julien Péron, Pascal Roy, Thierry Conroy, Françoise Desseigne, Marc Ychou, Sophie Gourgou-Bourgade, Trevor Stanbury, Laurent Roche, **Ozenne, Brice**, and Marc Buyse. An assessment of the benefit-risk balance of folfirinox in metastatic pancreatic adenocarcinoma. *Oncotarget*, 7(50), oct 2016b. doi: 10.18632/oncotarget.12761. URL <https://doi.org/10.18632%2Foncotarget.12761>
14. **Ozenne, Brice**, Tae-Hee Cho, Irene Klærke Mikkelsen, Marc Hermier, Lars Ribe, Götz Thomalla, Salvador Pedraza, Jean-Claude Baron, Pascal Roy, Yves Berthezène, et al. Evaluation of early reperfusion criteria in acute ischemic stroke. *Journal of Neuroimaging*, 25(6):952–958, may 2015a. doi: 10.1111/jon.12255. URL <https://doi.org/10.1111%2Fjon.12255>
15. Laure Hermitte, Tae-Hee Cho, **Ozenne, Brice**, Norbert Nighoghossian, Irene Klærke Mikkelsen, Lars Ribe, Jean-Claude Baron, Leif Østergaard, Laurent Derex, Niels Hjort, et al. Very low cerebral blood volume predicts parenchymal hematoma in acute ischemic stroke. *Stroke*, 44(8):2318–2320, may 2013. doi: 10.1161/strokeaha.113.001751. URL <https://doi.org/10.1161%2Fstrokeaha.113.001751>

TEACHING

L : lecture, PC : practical classes

- 2016 - 2017 : [Statistical analysis of repeated measurements](#) for Phd students in medical sciences (18h, PC).
[Structural Equation Models](#) for Master students in statistics (2h, L).
- 2015 - 2016 : [Statistical analysis of repeated measurements](#) for Phd students in medical sciences (18h, PC).
- 2014 - 2015 : [Bayesian statistics](#) for Master students in public health (6h, PC).
[Survival Analysis](#) for Master students in public health (18h, PC).
- 2013 - 2014 : [Bayesian statistics](#) for Master students in public health (6h, PC).

SUPERVISION

- 2015 - Now : **statistical consultant** at NRU ([Neurobiology Research Unit](#)).
Advise neuroscientists and psychologists.