

## Early achievements track-record

### 1) Publications as main author

All articles listed below were selected for publication by a peer review process. (n) denotes the number of independent citations according to ISI Web of Knowledge<sup>SM</sup> on December 1st, 2015. (IF) is the 5-year impact factor according to Journal Citation Reports (JCR).

1. (15) Desestret V, Riou A, Chauveau F, Cho TH, Devillard E, Marinescu M, Ferrera R, Rey C, Chanal M, Angoulvant D, Honnorat J, Nighoghossian N, Berthezène Y, Nataf S, **Wiart M.** *In vitro and in vivo models of cerebral ischemia show discrepancy in therapeutic effects of M2 macrophages.* PLoS One **2013**;8(6):e67063 (IF: 4.244)
2. (4) Marinescu M, Langer M, Durand A, Olivier C, Chabrol A, Rositi H, Chauveau F, Cho TH, Nighoghossian N, Berthezene Y, Peyrin F, **Wiart M.** *Synchrotron Radiation X-Ray Phase Micro-computed Tomography as a New Method to Detect Iron Oxide Nanoparticles in the Brain.* Mol Imaging Biol **2013**;15:552-559 (IF: 3.084)
3. (3) Marinescu M, Chauveau F, Durand D, Riou A, Cho TH, Dencausse A, Ballet S, Nighoghossian N, Berthezène Y, and **Wiart M.** *Monitoring therapeutic effects in experimental stroke by serial USPIO-enhanced MRI.* European Radiology, **2013**; 23:37-47 (IF: 3.557)
4. (6) Riou A, Chauveau F, Cho TH, Marinescu M, Nataf S, Nighoghossian N, Berthezène Y, and **Wiart M.** *MRI assessment of intra-carotid route for macrophage delivery after transient cerebral ischemia.* NMR in biomedicine, **2013**;26:115-123 (IF: 3.513)
5. (8) Brisset JC, Sigovan M, Chauveau F, Riou A, Devillard E, Desestret V, Touret M, Nataf S, Honnorat J, Canet-Soulas E, Nighoghossian N, Berthezène Y, and **Wiart M.** *Quantification of iron-labeled cells with positive contrast in mouse brain.* Mol Imaging Biol, **2011**;13:672-678 (IF: 3.084)
6. (12) Brisset JC, Desestret V, Devillard E, Marcellino S, Chauveau F, Lagarde F, Nataf S, Honnorat J, Nighoghossian N, Berthezène Y, and **Wiart M.** *Quantitative effects of cell internalization of two types of ultrasmall superparamagnetic iron oxide nanoparticles at 4.7T and 7T.* European Radiology, **2010**;20(2):275-285 (IF: 3.557)
7. (36) Desestret V, Brisset JC, Devillard E, Moucharrafie S, Nataf S, Honnorat J, Nighoghossian N, Berthezène Y, and **Wiart M.** *Early stage investigations of USPIO-induced signal changes after focal cerebral ischemia in mice.* Stroke, **2009**;40:1834-1841 (IF: 6.831)
8. (65) **Wiart M**, Davoust N, Pialat JB, Desestret V, Moucharrafie S, Cho TH, Mutin M, Langlois JB, Beuf O, Honnorat J, Nighoghossian N, Berthezene Y. *MRI monitoring of neuro-inflammation in mouse focal ischemia.* Stroke, **2007**;38(1) :131-137 (IF: 6.831)
9. (69) Nighoghossian N, **Wiart M**, S. Cakmak, Berthezene Y, Derex L, Cho TH, Nemoz C, Chappuis F, Tisserand JL, Pialat JB, Trouillas P, Froment JC, Hermier M. *Inflammatory response after ischemic stroke: a USPIO-enhanced MRI study in patients.* Stroke, **2007**;38(2):303-307 (IF: 6.831)

10. (26) **Wiart M**, Curiel L, Gelet A, Lyonnet D, Chapelon JY, Rouviere O. *Influence of perfusion on high-intensity focused ultrasound prostate ablation: a first-pass MRI study*, Magn Reson Med, **2007**;58(1):119-127 (IF: 3.948)

11. (31) Pialat JB, Cho TH, Beuf O, Moucharrafie S, Langlois JB, Nemoz C, Janier M, Berthezene Y, Nighoghossian N, Desvergne B, **Wiart M**. *MRI monitoring of focal cerebral ischemia in peroxisome proliferator-activated receptor (PPAR)-deficient mice*. NMR in biomedicine, **2007**;20(3):335-342. (IF: 3.513)

12. (5) **Wiart M**, Carme S, Mai W, Larsson H, Neyran B, Canet-Soulas E. *In vivo quantification of regional myocardial blood flow: Validity of the fast exchange approximation for intravascular T1 contrast agent and long inversion time*. Magn Reson Med **2006**;56(2):340-347 (IF: 3.948)

## 2) Invited presentations to internationally established conferences

1. *Molecular MRI in ischemic stroke*. In European Summer School of the Lundbeck Foundation Nanomedicine Centre for Individualized Management of Tissue Damage and Regeneration, Grenaa (Danemark), 18-21 September, 2012.

2. *The value of MRI in the evaluation of therapeutic strategies of ischemic stroke*. In European Summer School of Experimental models of brain diseases: stroke, glioma and multiple sclerosis, Caen (France), 5-6 April, 2012.

3. *Imaging inflammation in stroke using MRI*. In Summer meeting of the British Pharmaceutical Society (BPS), Endinburgh (United Kingdom), 8-10 July 2009.

4. *Iron oxide contrast agents*. In 17th annual meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu (Hawaii, USA), 18-24 April 2009.

5. *Magnetic resonance imaging (MRI) using cell labelling in small animal models*. In 25th annual meeting of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB), Valencia (Spain), 2-4 October 2008.

6. *Magnetic resonance imaging (MRI) of inflammation in stroke*. In 29th annual international conference of the IEEE Engineering in Medicine and Biology Society (IEEE-EMBS), Lyon (France), 23-26 August 2007.

## 3) Prize and Awards

2005 **Young Investigator Award** at the international Symposium on Contrast Media Research (CMR 2005): *Magnetic resonance imaging of cerebral ischemia with ultrasmall superparamagnetic particles of iron oxide in mice*

1998 **European prize** of the APERR (Association pour l'étude et la recherche en radiologie, Association for radiological study and research): *Assessment of a rapid MRI technique for the detection of a pulmonary perfusion defect in patients*