

Publications

1. Tamion A, Hillenkamp M, Hillion A, Maraloiu VA, Vlaicu ID, Stefan M, Ghica D, Rositi H, Chauveau F, Blanchin MG, **Wiart M**, Dupuis V: Ferritin surplus in mouse spleen 14 months after intravenous injection of iron oxide nanoparticles at clinical dose, *Nano Research* 2016, 9:2398-2410.
2. Di Cataldo V, Geloen A, Langlois JB, Chauveau F, Theze B, Hubert V, **Wiart M**, Chirico EN, Rieusset J, Vidal H, Pialoux V, Canet-Soulas E: Exercise Does Not Protect against Peripheral and Central Effects of a High Cholesterol Diet Given Ad libitum in Old ApoE-/Mice. *Front Physiol* 2016, 7:453.
3. Cuccione E, Versace A, Cho TH, Carone D, Berner LP, Ong E, Rousseau D, Cai R, Monza L, Ferrarese C, Sganzerla EP, Berthezene Y, Nighoghossian N, **Wiart M**, Beretta S, Chauveau F: Multi-site laser Doppler flowmetry for assessing collateral flow in experimental ischemic stroke: Validation of outcome prediction with acute MRI. *J Cereb Blood Flow Metab* 2016
4. Berner LP, Cho TH, Haesebaert J, Bouvier J, **Wiart M**, Hjort N, Klaerke Mikkelsen I, Derex L, Thomalla G, Pedraza S, Ostergaard L, Baron JC, Nighoghossian N, Berthezene Y: MRI Assessment of Ischemic Lesion Evolution within White and Gray Matter. *Cerebrovasc Dis* 2016, **41**:291-297
5. Frindel C, Rouanet A, Giacalone M, Cho TH, Ostergaard L, Fiehler J, Pedraza S, Baron JC, **Wiart M**, Berthezene Y, Nighoghossian N, Rousseau D: Validity of shape as a predictive biomarker of final infarct volume in acute ischemic stroke. *Stroke* 2015, 46:976-981.
6. Rositi H, Frindel C, **Wiart M**, Langer M, Olivier C, Peyrin F, Rousseau D: Computer vision tools to optimize reconstruction parameters in x-ray in-line phase tomography. *Phys Med Biol* 2014, 59:7767-7775
7. Durand A, Chauveau F, Cho TH, Kallus C, Wagner M, Boutitie F, Maucort-Boulch D, Berthezene Y, **Wiart M**, Nighoghossian N: Effects of a TAFI-Inhibitor Combined with a Suboptimal Dose of rtPA in a Murine Thromboembolic Model of Stroke. *Cerebrovasc Dis* 2014, 38:268-275.
8. Rositi H, Frindel C, Langer M, **Wiart M**, Olivier C, Peyrin F, Rousseau D: Information-based analysis of X-ray in-line phase tomography with application to the detection of iron oxide nanoparticles in the brain. *Opt Express* 2013, **21**:27185-27196.
9. Riou A, Chauveau F, Cho TH, Marinescu M, Nataf S, Nighoghossian N, Berthezene Y, **Wiart M**: MRI assessment of the intra-carotid route for macrophage delivery after transient cerebral ischemia. *NMR Biomed* 2013, **26**:115-123.
10. 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.
11. Marinescu M, Chauveau F, Durand A, Riou A, Cho TH, Dencausse A, Ballet S, Nighoghossian N, Berthezene Y, **Wiart M**: Monitoring therapeutic effects in experimental stroke by serial USPIO-enhanced MRI. *Eur Radiol* 2013, **23**:37-47.
12. Desestret V, Riou A, Chauveau F, Cho TH, Devillard E, Marinescu M, Ferrera R, Rey C, Chanal M, Angoulvant D, Honnorat J, Nighoghossian N, Berthezene 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**:e67063
1. Cho TH, Aguettaz P, Campuzano Larrea O, Charriaut-Marlangue C, Riou A, Berthezene, Y, Nighoghossian N, Ovize M, **Wiart M**, Chauveau, F. Pre- and post-treatment with cyclosporine A in a rat model of transient focal cerebral ischaemia with multimodal MRI screening, *International Journal of Stroke*, 2013;8(8):669-674.

- 13.Durand A, Chauveau F, Cho TH, Bolbos R, Langlois JB, Hermitte L, **Wiart M**, Berthezène Y, Nighoghossian N. Spontaneous reperfusion after in situ thromboembolic stroke in mice. (2012) *PLoS One*;7(11):e50083.
- 14.Chauveau F, Cho TH, Riou A, Langlois JB, Berthezène Y, Nighoghossian N, **Wiart M**. Does acute behavioral testing reflect successful ischemia in rats with transient middle cerebral artery occlusion?, *International Journal of Stroke*, 2012;7(6):465-72.
- 15.Chauveau F, Cho TH, Perez M, Guichardant M, Riou A, Aguettaz P, Picq M, Lagarde M, Berthezène Y, Nighoghossian N, **Wiart M**. Brain-targeting form of docosahexaenoic acid for experimental stroke treatment: MRI evaluation and anti-oxidant impact. *Curr Neurovasc Res*, 8(2):95-102, 2011.
- 16.Ritzenthaler T, Cho TH, **Wiart M**, Berthiller J, Østergaard L, Hermier M, Derex L, Berthezène Y, Nighoghossian N. Assessment of baseline hemodynamic parameters within infarct progression areas in acute stroke patients using perfusion-weighted MRI. *Neuroradiology*. 53(8):571-576, 2011.
- 17.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, **Wiart M**. Quantification of iron-labeled cells with positive contrast in mouse brains. *Molecular Imaging and Biology*, 13(4):672-678, 2011.
- 18.Chauveau F, Cho TH, Berthezène Y, Nighoghossian N, **Wiart M**. Imaging inflammation in stroke using magnetic resonance imaging. *Int J Clin Pharmacol Ther*, 48(11):718-728, 2010.
- 19.Chauveau F, Moucharrafie S, **Wiart M**, Brisset JC, Berthezène Y, Nighoghossian N, and Cho TH. In vivo MRI assessment of permanent middle cerebral artery occlusion by electrocoagulation: pitfalls of procedure. *Experimental & Translational Stroke Medicine*, 2:4, 2010.
- 20.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*, 20(2):275-285, 2010.
- 21.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*, 40:1834-1841, 2009.
- 22.Abdullah S, Pialat JB, **Wiart M**, Duboeuf F, Mabrut JF, Bancel B, Rode A, Ducerf C, Baulieux J, and Berthezène Y. Characterization of hepatocellular carcinoma and colorectal liver metastasis by means of perfusion MRI. *J Magn Reson Imaging*, 28(2):544-546, 2008.
- 23.Nighoghossian N, **Wiart M**, and Berthezène Y. Novel Applications of Magnetic Resonance Imaging to Image Tissue Inflammation after Stroke. *J Neuroimaging*, 28(2):390-395, 2008.
- 24.Cho TH, Nighoghossian N, **Wiart M**, Desestret V, Cakmak S, Berthezène Y, Derex L, Louis-Tisserand GL, Trouillas P, Honnorat J, Froment JC, and Hermier M. USPIO-enhanced MRI of neuroinflammation at the sub-acute stage of ischemic stroke, preliminary data. *Cerebrovasc Dis*, 24(6):544-546, 2007.
- 25.**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*, 58(1):119-127, 2007
- 26.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.

27. **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.
28. 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.
29. **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.
30. Carme S, Mai W, Mazzadi A, Janier M, Revel D, Magnin I, **Wiart M**, Neyran B, Canet Soulas E. Importance of parametric mapping and deconvolution in analyzing MR myocardial perfusion images. *Invest Radiol* 2006;41(4):374-383.
31. Hermier M, Nighoghossian N, Derex L, **Wiart M**, Nemoz C, Berthezene Y, Froment JC. Hypointense leptomeningeal vessels at T2*-weighted MRI in acute ischemic stroke. *Neurology* 2005;65(4):652-653.
32. Pialat JB, **Wiart M**, Nighoghossian N, Adeleine P, Derex L, Hermier M, Froment JC, Berthezene Y. Evolution of Lesion Volume in Acute Stroke Treated by Intravenous t-PA. *J Magn Reson Imaging* 2005;22(1):23-8.
33. Derex L, Hermier M, Adeleine P, Pialat JB, **Wiart M**, Berthezene Y, Philippeau F, Honnorat J, Froment JC, Trouillas P, Nighoghossian N. Clinical and imaging predictors of intracerebral haemorrhage in stroke patients treated with intravenous tissue plasminogen activator, *J Neurol Neurosurg Psychiatry* 2005;76:70-5.
34. **Wiart M**, Fournier L, Novikov V, Shames D, Fu YJ, Roberts T, Shalinsky D, Brasch R. Magnetic Resonance Imaging detects early changes in tumor microvascular permeability after treatment with the matrix metalloprotease inhibitor Prinomastat. *Technol Cancer Res Treat* 2004; 3: 377-82.
35. Derex L, Nighoghossian N, Hermier M, Pialat JB, **Wiart M**, Philippeau F, Adeleine P, Honnorat J, Froment JC, Berthezene Y, Trouillas P, Magnetic Resonance Imaging: Significance of Early Ischemic Changes on Computed Tomography. *Cerebrovasc Dis*. 2004;18:232-235.
36. Derex L, Hermier M, Adeleine P, Pialat JB, **Wiart M**, Berthezene Y, Froment JC, Trouillas P Nighoghossian N. Influence of the site of arterial occlusion on multiple baseline hemodynamic MRI parameters and post-thrombolytic recanalization in acute stroke. *Neuroradiology* 2004;46:883-7.
37. Hermier M, Ibrahim A, **Wiart M**, Adeleine P, Cotton F, Dardel P, Derex L, Berthezene Y, Nighoghossian N, Froment JC. The delayed perfusion sign at MRI. *J Neuroradiol* 2003;30:172-9.
38. Hermier M, Nighoghossian N, Derex L, Adeleine P, **Wiart M**, Berthezene Y, Cotton F, Pialat JB, Dardel P, Honnorat J, Trouillas P, Froment JC. Hypointense transcerebral veins at T2*-weighted MRI: a marker of hemorrhagic transformation risk in patients treated with intravenous tissue plasminogen activator. *J Cereb Blood Flow Metab*. 2003;23:1362-70.
39. Berthezene Y, **Wiart M**, Corot C, Violas X, Canet E. CT pulmonary angiography and perfusion: an experimental study using blood pool and nonspecific contrast agent. *Acad Radiol* 2002 Aug;9 Suppl 2:S359-60.
40. **Wiart M**, Corot C, Berthezene Y, Violas X, Canet E. Ct pulmonary angiography with a macromolecular contrast medium: a comparative study versus iobitridol in rabbits. *Invest Radiol* 2001 Sep;36(9):547-553.

41. **Wiart M**, Rognin N, Baskurt A, Nighoghossian N, Froment JC, Berthezène Y. Perfusion-based segmentation of the human brain using similarity mapping. *Magn Reson Med* 2001;45(2):261-268.
42. Nighoghossian N, Hermier M, Berthezène Y, **Wiart M**, Derex L, Honnorat MD, Trouillas P, Turjman F, Froment JC. Early diagnosis of hemorrhagic transformation. Diffusion / perfusion weighted MRI versus CT-scans. *Cerebrovasc Dis* 2001;11(3):151-156.
43. **Wiart M**, Berthezène Y, Adeleine P, Baskurt A, Feugier P, Trouillas P, Froment JC, Nighoghossian N. Vasodilatory response of border zones to Acetazolamide before and after endarterectomy: an echo planar imaging-dynamic susceptibility contrast enhanced MRI study in patients with high-grade unilateral internal carotid artery stenosis. *Stroke* 2000;31(7):1561-1565.
44. Viallon M, Berthezène Y, Décorps M, **Wiart M**, Callot V, Bourgeois M, Humblot H, Briguet A, Crémillieux Y. Laser-polarized ^3He as a probe for dynamic regional measurements of lung perfusion and ventilation using magnetic resonance. *Magn Reson Med* 2000;44(1):1-4.
45. Berthezène Y, Croisille P, **Wiart M**, Howarth N, Houzard C, Faure O, Douek Ph, Amiel M, Revel D. Prospective comparaison of MR lung perfusion and lung scintigraphy. *J Magn Reson Imaging* 1999;9(1):61-68.
46. Nighoghossian N, Berthezène Y, Adeleine P, **Wiart M**, Damien J, Derex L, Itti R, Froment JC, Trouillas P. Effects of subcortical cerebrovascular lesions on cortical hemodynamic parameters assessed by perfusion Magnetic Resonance Imaging. *Cerebrovasc Dis* 1999;9:136-141.

Book Chapters

F. Chauveau, M. Marinescu, T. H. Cho, M. Wiart, Y. Berthezène, and N. Nighoghossian, "MRI assessment of post-ischemic neuroinflammation and neuroprotection in ischemic stroke models and prediction of stroke severity in patients", *Neuroimaging - Methods*, 2012

Communications

1. A. Chabrol, H. Rositi, M. Marinescu, M. Langer, C. Olivier, F. Peyrin, C. Frindel, M. Wiart, and Y. Berthezène, "Synchrotron radiation micro-CT imaging of the mouse brain", *7th European Congress of Radiology (ECR)*, Vienna, Austria, 03/2013
2. A. Durand, F. Chauveau, L. Lhermitte, T. H. Cho, Y. Berthezène, N. Nighoghossian, and **M. Wiart**, Acute MRI characterization of *in situ* thromboembolic stroke in mice, *World Molecular Imaging Congress*, San Diego, California, USA, 7-10 septembre 2011.
3. M. Marinescu, A. Durand, A. Riou, F. Chauveau, N. Nighoghossian, **M. Wiart**, and Y. Berthezène, Monitoring minocycline therapy in stroke-induced mice using MRI coupled with intravenous USPIO administration, *World Molecular Imaging Congress*, San Diego, California, USA, 7-10 septembre 2011
4. A. Riou, F. Chauveau, T. H. Cho, M. Marinescu, S. Nataf, C. Rémy, E. Barbier, N. Nighoghossian, **M. Wiart**, and Y. Berthezène, Treatment with bone marrow-derived alternatively activated (M2) macrophages after transient ischemia: A USPIO-Enhanced longitudinal MRI study in rats, *World Molecular Imaging Congress*, San Diego, California, USA, 7-10 septembre 2011.
5. F. Chauveau, T. H. Cho, M. Perez, M. Guichardant, A. Riou, P. Aguettaz, M. Picq, M. Lagarde, Y. Berthezène, N. Nighoghossian, and **M. Wiart**. MRI evaluation of the neuroprotective effect of a brain-targeting form of docosahexaenoic acid after stroke, *International Stroke Conference*, Los Angeles, California, USA, pp. e216, Février 2011.

6. M. Marinescu, A. Maraloiu, M. Hillenkamp, A. Tamion, A. Hillion, V. Dupuis, Y. Berthezène, **M. Wiart**, and M. G. Blanchin, Biotransformation study of iron oxide contrast agents used for MRI of inflammation, *Transalp'Nano*, Como, Italy, Juin 2010.
7. Riou A, Chauveau F, Cho TH, Marinescu M, Nataf S, Berthezène Y, Nighoghossian N, **Wiart M.** MRI monitoring of intra-arterial delivery of bone marrow-derived macrophages after transient ischemia. *World Molecular Imaging Congress – Kyoto*, Japan, 8-10 septembre 2010.
8. Cho TH, Chauveau F, Riou A, Langlois JB, Berthezène Y, Nighoghossian N, **Wiart M.** Multiparametric MRI at the acute stage of ischemic stroke: improved subject selection for preclinical trials of neuroprotective drugs. *World Molecular Imaging Congress – Kyoto*, Japan, 8-10 septembre 2010.
9. Chauveau F, Cho TH, Riou A, Aguettaz P, Picq M, Lagarde M, Berthezène Y, Nighoghossian N, **Wiart M.** MRI evaluation of the neuroprotective effect of a brain-targeting form of docosahexaenoic acid after stroke. *World Molecular Imaging Congress – Kyoto*, Japan, 8-10 septembre 2010.
10. Brisset JC, Sigovan M, Chauveau F, Riou A, Nighoghossian N, Berthezène Y, **Wiart M.** Relaxometry vs artifact volume for estimating the number of iron-labeled macrophages: in vivo testing in the mouse brain. In *International Society for Magnetic Resonance in Medicine*, Stockholm, Sweden, 1-7 may 2010.
11. Riou A, Chauveau F, Cho TH, Marinescu M, Nataf S, Berthezène Y, Nighoghossian N, **Wiart M.** MRI study of intra-arterial bone marrow-derived macrophage administration after acute focal ischemic stroke in rats. In *5th European Molecular Imaging Meeting*, Warsaw, Poland, 26-29 may 2010.
12. Chauveau F, Cho TH, Riou A, Aguettaz P, Picq M, Lagarde M, Berthezène Y, Nighoghossian N, **Wiart M.** MRI evaluation of the neuroprotective effect of docosahexanoic acid after stroke. *26nd Annual Meeting of the European Society for Magnetic Resonance in Medicine and Biology – Antalya* (Turkey), 1-3 octobre 2009.
13. Chauveau F, Cho TH, Riou A, Aguettaz P, Picq M, Lagarde M, Berthezène Y, Nighoghossian N, **Wiart M.** MRI evaluation of the neuroprotective effect of docosahexaenoic acid after stroke. *World Molecular Imaging Congress – Montreal*, Canada, 23-26 septembre 2009.
14. Brisset JC, Desestret V, Marcellino S, Devillard E, Chauveau F, F. Lagarde F, Nataf S, Nighoghossian N, Berthezene Y, **Wiart M.** In vivo assessment of the number of iron-labeled cells using T2 quantification. 17th annual meeting of the International Society for Magnetic Resonance in Medecine – Honolulu (Hawaii, USA), 18-24 avril 2009.
15. Desestret V, Brisset JC, Devillard E, Moucharrafie S, Nataf S, Honnorat J, Nighoghossian N, Berthezene Y, **Wiart M.** Early stage investigations of USPIO-induced signal changes after focal cerebral ischemia in mice. 16th annual meeting of the International Society for Magnetic Resonance in Medecine – Toronto (Canada), 3-9 mai 2008.
16. Brisset JC, Desestret V, Marcellino S, Devillard E, Lagarde F, Nataf S, Nighoghossian N, Berthezene Y, **Wiart M.** T1 and T2 quantification of free USPIO and USPIO-labeled macrophages at 4.7T and 7T. 16th annual meeting of the International Society for Magnetic Resonance in Medecine – Toronto (Canada), 3-9 mai 2008
17. Desestret V, Brisset JC, Devillard E, Moucharrafie S, Nataf S, Honnorat J, Nighoghossian N, Berthezene Y, **Wiart M.** Interprétation des changements précoce de signal en IRM après injection d'USPIO dans un modèle murin d'ischémie cérébrale. 12^{ème} congrès du GRAMM, Lyon (France), 26-28 mars 2008.

- 18.Brisset JC, Desestret V, Devillard E, Moucharrafie S, Nataf S, Honnorat J, Nighoghossian N, Berthezene Y, **Wiart M.** Quantification T1 et T2 des USPIO libres et macrophages marqués en IRM à 4,7T et 7T. 12^{ème} congrès du GRAMM, Lyon (France), 26-28 mars 2008.
- 19.**Wiart M**, Davoust N, Pialat JB, Berthezene Y, Nighoghossian N. Magnetic resonance imaging (MRI) of inflammation in stroke. Conf Proc IEEE Eng Med Biol Soc. 2007;1:4316-9
- 20.Davoust N, Pialat JB, Moucharaffie S, Cho TH, Mutin M, Langlois JB, Beuf O, Honnorat J, Nighoghossian N, Berthezene Y, **Wiart M.** MR-tracking of in vivo magnetically labeled macrophages detects remote inflammation in focal ischemia of the mouse brain. Journal of neuroimmunology 2006 ;178 :250.
- 21.**Wiart M**, Curiel L, Gelet A, Lyonnet D, Chapelon JY, Rouviere O. Influence of prostate perfusion on high-intensity focused ultrasound cancer ablation: a first-pass MRI study. 14th annual meeting of the International Society for Magnetic Resonance in Medicine – Seattle (USA), May 6-12, 2006.
- 22.Pialat JB, **Wiart M**, Cho TH, Moucharaffie S, Langlois JB, Beuf O, Nighoghossian N, Berthezene Y. USPIO-enhanced MRI at 7T in a mouse model of focal cerebral ischemia. 14th annual meeting of the International Society for Magnetic Resonance in Medicine – Seattle (Washington, USA), May 6-12, 2006.
- 23.**Wiart M**, Cho TH, Pialat JB, Moucharaffie S, Langlois JB, Beuf O, Nighoghossian N, Berthezene Y. Magnetic resonance imaging of cerebral ischemia with ultrasmall superparamagnetic particles of iron oxide in mice. Contrast Med. Mol. Imaging (2006);1:55.
- 24.**Wiart M**, Pialat JB, Cho TH, Beuf O, Langlois JB, Joye E, Desvergne B, Nighoghossian N, Berthezene Y. Neuroprotective effects of PPAR-alpha demonstrated in vivo by high-resolution MRI in ischemic stroke. 22nd Annual Meeting of the European Society for Magnetic Resonance in Medicine and Biology, Sept 15-18 – Basel (Schwitzerland), Sept 15-18, 2005(331).
- 25.Neyran B, Carme S, **Wiart M**, Robini M, and Canet-Soulas E. Mapping myocardial perfusion with an intravascular MR contrast agent, a robust estimation by a spatially constrained approach. Computers in Cardiology, Lyon (France), Sept 25-28, 2005.
- 26.**Wiart M**, Carme S, Larsson H, Neyran B, Canet-Soulas E. Effects of water exchange on MR quantification of regional myocardial blood flow using an intravascular T1 contrast agent.12th annual meeting of the International Society for Magnetic Resonance in Medicine – Kyoto (Japan), May 15-21, 2004.
- 27.**Wiart M**, Pialat JB, Bagnis S, Nighoghossian N, Berthezène Y. Cerebral blood flow quantification using dynamic contrast-enhanced MRI: simple, practical way to assess an arterial input function. International Symposium on Modelling of Blood Flows – Lausanne (Switzerland), October 1-3, 2003
- 28.Hermier M, Nighoghossian N, Adeleine P, Derex L, **Wiart M**, Berthezène Y, Pialat JB, Cotton F, Trouillas P, Froment JC. Les veines transcérébrales hypointenses en T2*: un marqueur du risque de transformation hémorragique des accidents ischémiques aigus traités thrombolyse intraveineuse. Journées Françaises de Radiologie, Paris (France), October 25-29, 2003.
- 29.**Wiart M**, Fournier L, Novikov V, Shames D, Fu YJ, Roberts T, Shalinsky D, Brasch R. Magnetic resonance imaging detects early changes in tumor microvascular permeability after treatment with the matrix metalloprotease inhibitor Prinomastat. 10th annual meeting of the International Society for Magnetic Resonance in Medicine – Honolulu (USA), May 18-27, 2002.
- 30.Li KL, Novikov V, Spilker M, Fournier L, **Wiart M**, Fu YJ, Roberts T, Brasch R. Pixel-by-pixel kinetic analysis of dynamic macromolecular contrast medium-enhanced MRI: noise

- reduction using a flexible gray level model. 10th annual meeting of the International Society for Magnetic Resonance in Medecine – Honolulu (USA) May 18-27, 2002.
31. Berthezène Y, **Wiart M**, Corot C, Violas X, Canet E. CT pulmonary angiography and perfusion. An experimental study using blood pool and non specific contrast agent. Contrast Media Research 2001 – Capri (Italy) October 14-18, 2001.
32. **Wiart M**, Berthezène Y, Adeleine P, Baskurt A, Feugier P, Trouillas P, Froment JC, Nighoghossian N. Cerebral vasodilatory response assessment before and after carotid endarterectomy. 8th annual meeting of the International Society for Magnetic Resonance in Medecine – Denver (USA) April 3-7, 2000.
33. Viallon M, Berthezène Y, Décorps M, **Wiart M**, Callot V, Bourgeois M, Humblot H, Briguet A, Crémillieux Y. Laser-polarized ³He as a probe for dynamic regional measurements of lung perfusion and ventilation using magnetic resonance. 8th annual meeting of the International Society for Magnetic Resonance in Medecine – Denver (USA) April 3-7, 2000.
34. Nighoghossian N, **Wiart M**, Berthezène Y, Adeleine P, Derex X, Honnorat J, Froment JC, Trouillas P. Borderzones vasodilatory response before and after endarterectomy. 9th European stroke conference – Vienna (Autriche), March 2000.
35. **Wiart M**, Rognin N, Baskurt A, Nighoghossian N, Froment JC, Berthezène Y. Cartographies de similarité : une méthode simple pour cartographier la perfusion cérébrale Journées Françaises de Radiologie – Paris, October 25-29, 1999 (1215).
36. **Wiart M**, Rognin N, Baskurt A, Nighoghossian N, Froment JC, Berthezène Y. Similarity mapping : applications in dynamic MRI of the human brain. 15th annual meeting of the European Society for Magnetic Resonance in Medecine and Biology – Geneva (Schwitzerland), September 17-20, 1998 (169).
37. Berthezène Y, Croisille P, **Wiart M**, Howarth N, Houzard P, Douek P, Amiel M, Revel D. Prospective comparison of MR lung perfusion and scintigraphy. 15th annual meeting of the European Society for Magnetic Resonance in Medecine and Biology – Geneva (Switzerland), September 17-20, 1998.

Letter to the Editor

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1. **Wiart M**, Davoust N, Desestret V, Nighoghossian N, Berthezène Y. Response to Letter by Bendszus et al: Iron-enhanced MRI in ischemic stroke: intravascular trapping vs cellular imaging. *Stroke*, 2007;38:13.

Invited conferences

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1. **Wiart M**. The innate immune system in ischemic stroke: from physiopathology to imaging. In *Colloque de la société Cerveau et Maladies Cérébrovasculaires*, Paris (France), March 16th, 2017.
2. **Wiart M**, Nighoghossian N. Molecular and cellular imaging of neuroinflammation. In *Neuroscience In Intensive Care (NICIS) meeting*, Paris (France), June 16-17th, 2016.
3. **Wiart M**. Inflammation & macrophages: from physiopathology to imaging. In *Journées scientifiques de l'université de Nantes, IRON LabEX meeting*, June 10th, 2016.
4. **Wiart M**. 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), September 18-21th, 2012.
5. **Wiart M**, Cho TH. The value of MRI in evaluation of therapeutic strategies of ischemic stroke. In *European Summer School of Experimental models of brain diseases: stroke, glioma and multiple sclerosis*, Caen (France), April 5-6th, 2012.
6. **Wiart M**, Nighoghossian, N. Imaging inflammation in stroke using MRI. In *British Pharmaceutical Society*, Edinburgh, United Kingdom, April 8-10th 2009.

7. **Wiart M.** Iron oxide contrast agents. In *International Society for Magnetic Resonance in Medicine*, Honolulu, Hawaii, USA, April18-24th 2009.
8. **Wiart M**, Cho TH, et Nighoghossian N. *Apport de l'IRM multimodale pour le diagnostic des AVC*. Journées Francaises de Radiologie (JFR), Paris (France), 24-27 octobre 2008.
9. **Wiart M.** *Magnetic resonance imaging (MRI) using cell labeling in small animal models*. 29th annual meeting of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB), Valencia (Espagne), 2-4 octobre 2008.
10. **Wiart M.** *Magnetic resonance imaging (MRI) of inflammation in stroke*. 29th annual international conference of the IEEE Engineering in Medicine and Biology Society (IEEE-EMBS), Lyon (France), 23-26 août 2007.