

Publications Philippe Beaune 2010-2019

Hepatic Intra-arterial Delivery of a "Trojan-horses" Gene Therapy: A Pilot Study on Rabbit VX2 Hepatic Tumor Model. Pellerin O, Amara I, Sapoval M, Méachi T, Déan C, Beaune P, de Waziers I. *Cardiovasc Intervent Radiol*. 2018 Jan;41(1):153-162. doi: 10.1007/s00270-017-1833-8. Epub 2017 Oct 31.

Interindividual variability in dabigatran and rivaroxaban exposure: contribution of ABCB1 genetic polymorphisms and interaction with clarithromycin. Gouin-Thibault I, Delavenne X, Blanchard A, Siguret V, Salem JE, Narjoz C, Gaussem P, Beaune P, Funck-Brentano C, Azizi M, Mismetti P, Lorient MA. *J Thromb Haemost*. 2017 Feb;15(2):273-283. doi: 10.1111/jth.13577. Epub 2017 Feb 6.

Predictive Modeling of Tacrolimus Dose Requirement Based on High-Throughput Genetic Screening. Damon C, Luck M, Toullec L, Etienne I, Buchler M, Hurault de Ligny B, Choukroun G, Thierry A, Vigneau C, Moulin B, Heng AE, Subra JF, Legendre C, Monnot A, Yartseva A, Bateson M, Laurent-Puig P, Anglicheau D, Beaune P, Lorient MA, Thervet E, Pallet N. *Am J Transplant*. 2017 Apr;17(4):1008-1019. doi: 10.1111/ajt.14040. Epub 2016 Oct 7.

Engineered mesenchymal stem cells as vectors in a suicide gene therapy against preclinical murine models for solid tumors. Amara I, Pramila E, Senamaud-Beaufort C, Devillers A, Macedo R, Lescaille G, Seguin J, Tartour E, Lemoine FM, Beaune P, de Waziers I. *J Control Release*. 2016 Oct 10;239:82-91. doi: 10.1016/j.jconrel.2016.08.019. Epub 2016 Aug 23.

Long-Term Clinical Impact of Adaptation of Initial Tacrolimus Dosing to CYP3A5 Genotype. Pallet N, Etienne I, Buchler M, Bailly E, Hurault de Ligny B, Choukroun G, Colosio C, Thierry A, Vigneau C, Moulin B, Le Meur Y, Heng AE, Legendre C, Beaune P, Lorient MA, Thervet E. *Am J Transplant*. 2016 Sep;16(9):2670-5. doi: 10.1111/ajt.13788. Epub 2016 Apr 8.

A Lack of Significant Effect of POR*28 Allelic Variant on Tacrolimus Exposure in Kidney Transplant Recipients. Jannot AS, Vuillemin X, Etienne I, Buchler M, Hurault de Ligny B, Choukroun G, Colosio C, Thierry A, Vigneau C, Moulin B, Rerolle JP, Heng AE, Subra JF, Legendre C, Beaune P, Lorient MA, Thervet E, Pallet N. *Ther Drug Monit*. 2016 Apr;38(2):223-9. doi: 10.1097/FTD.0000000000000267.

A Novel Extrinsic Pathway for the Unfolded Protein Response in the Kidney. Mami I, Tavernier Q, Bouvier N, Aboukamis R, Desbuissons G, Rabant M, Poindessous V, Laurent-Puig P, Beaune P, Tharaux PL, Thervet E, Chevet E, Anglicheau D, Pallet N. *J Am Soc Nephrol*. 2016 Sep;27(9):2670-83. doi: 10.1681/ASN.2015060703. Epub 2016 Jan 28.

A double amino-acid change in the HLA-A peptide-binding groove is associated with response to psychotropic treatment in patients with schizophrenia. Le Clerc S, Taing L, Fond G, Meary A, Llorca PM, Blanc O, Beaune P, Rajagopal K, Jamain S, Tamouza R, Zagury JF, Leboyer M. *Transl Psychiatry*. 2015 Jul 28;5:e608. doi: 10.1038/tp.2015.97.

Angiogenin Mediates Cell-Autonomous Translational Control under Endoplasmic Reticulum Stress and Attenuates Kidney Injury. Mami I, Bouvier N, El Karoui K, Gallazzini M, Rabant M, Laurent-Puig P, Li S, Tharaux PL, Beaune P, Thervet E, Chevet E, Hu GF, Pallet N. *J Am Soc Nephrol*. 2016 Mar;27(3):863-76. doi: 10.1681/ASN.2015020196. Epub 2015 Jul 20.

Gene expression profiling of cytochromes P450, ABC transporters and their principal transcription factors in the amygdala and prefrontal cortex of alcoholics, smokers and drug-free controls by qRT-PCR. Toselli F, de Waziers I, Dutheil M, Vincent M, Wilce PA, Dodd PR, Beaune P, Lorient MA, Gillam EM. *Xenobiotica*. 2015;45(12):1129-37. doi: 10.3109/00498254.2015.1040102. Epub 2015 Jun 22.

Molecular insight into thiopurine resistance: transcriptomic signature in lymphoblastoid cell lines. Chouchana L, Fernández-Ramos AA, Dumont F, Marchetti C, Ceballos-Picot I, Beaune P, Gurwitz D, Lorient MA. *Genome Med.* 2015 Apr 18;7(1):37. doi: 10.1186/s13073-015-0150-6. eCollection 2015.

Expression in yeast, new substrates, and construction of a first 3D model of human orphan cytochrome P450 2U1: Interpretation of substrate hydroxylation regioselectivity from docking studies. Ducassou L, Jonasson G, Dhers L, Pietrancosta N, Ramassamy B, Xu-Li Y, Lorient MA, Beaune P, Bertho G, Lombard M, Mansuy D, André F, Boucher JL. *Biochim Biophys Acta.* 2015 Jul;1850(7):1426-37. doi: 10.1016/j.bbagen.2015.03.014. Epub 2015 Apr 7.

Rituximab or azathioprine maintenance in ANCA-associated vasculitis. Chouchana L, Beaune P, Lorient MA. *N Engl J Med.* 2015 Jan 22;372(4):386. doi: 10.1056/NEJMc1414728. No abstract available.

Kidney transplant recipients carrying the CYP3A4*22 allelic variant have reduced tacrolimus clearance and often reach supratherapeutic tacrolimus concentrations. Pallet N, Jannot AS, El Bahri M, Etienne I, Buchler M, de Ligny BH, Choukroun G, Colosio C, Thierry A, Vigneau C, Moulin B, Le Meur Y, Heng AE, Subra JF, Legendre C, Beaune P, Alberti C, Lorient MA, Thervet E. *Am J Transplant.* 2015 Mar;15(3):800-5. doi: 10.1111/ajt.13059. Epub 2015 Jan 14.

An acenocoumarol dosing algorithm exploiting clinical and genetic factors in South Indian (Dravidian) population. Krishna Kumar D, Shewade DG, Lorient MA, Beaune P, Sai Chandran BV, Balachander J, Adithan C. *Eur J Clin Pharmacol.* 2015 Feb;71(2):173-81. doi: 10.1007/s00228-014-1791-x. Epub 2014 Dec 19.

[Development of a laboratory test on dried blood spots for facilitating early diagnosis of alpha-1-antitrypsin deficiency]. Balduyck M, Chapuis Cellier C, Roche D, Odou MF, Joly P, Madelain V, Vergne A, Nouadje G, Lafitte JJ, Porchet N, Beaune P, Zerimech F. *Ann Biol Clin (Paris).* 2014 Nov-Dec;72(6):689-704. doi: 10.1684/abc.2014.1004. French.

Safety and pharmacokinetics of the CIME combination of drugs and their metabolites after a single oral dosing in healthy volunteers. Lenuzza N, Duval X, Nicolas G, Thévenot E, Job S, Videau O, Narjoz C, Lorient MA, Beaune P, Becquemont L, Mentré F, Funck-Brentano C, Alavoine L, Arnaud P, Delaforge M, Bénech H. *Eur J Drug Metab Pharmacokinet.* 2016 Apr;41(2):125-38. doi: 10.1007/s13318-014-0239-0. Epub 2014 Dec 3.

Mesenchymal stem cells as cellular vehicles for prodrug gene therapy against tumors. Amara I, Touati W, Beaune P, de Waziers I. *Biochimie.* 2014 Oct;105:4-11. doi: 10.1016/j.biochi.2014.06.016. Epub 2014 Jun 27. Review.

Optimization and validation of a label-free MRM method for the quantification of cytochrome P450 isoforms in biological samples. Al Ali A, Touboul D, Le Caër JP, Schmitz-Afonso I, Flinois JP, Marchetti C, De Waziers I, Brunelle A, Laprévote O, **Beaune P.** *Anal Bioanal Chem.* 2014 Aug;406(20):4861-74. doi: 10.1007/s00216-014-7928-z. Epub 2014 Jun 22.

Interindividual variability in TPMT enzyme activity: 10 years of experience with thiopurine pharmacogenetics and therapeutic drug monitoring. Chouchana L, Narjoz C, Roche D, Golmard JL, Pineau B, Chatellier G, Beaune P, Lorient MA. *Pharmacogenomics.* 2014 Apr;15(6):745-57. doi: 10.2217/pgs.14.32.

Important role of CYP2J2 in protein kinase inhibitor degradation: a possible role in intratumor drug disposition and resistance. Narjoz C, Favre A, McMullen J, Kiehl P, Montemurro M, Figg WD, Beaune P, de Waziers I, Rochat B. *PLoS One.* 2014 May 12;9(5):e95532. doi: 10.1371/journal.pone.0095532. eCollection 2014.

The urinary metabolome of chronic kidney disease. Pallet N, Thervet E, Beaune P, Karras A, Bertho G. *Kidney Int.* 2014 May;85(5):1239-40. doi: 10.1038/ki.2014.34. No abstract available.

A suicide gene therapy combining the improvement of cyclophosphamide tumor cytotoxicity and the development of an anti-tumor immune response. Touati W, Tran T, Seguin J, Diry M, Flinois JP, Baillou C, Lescaillie G, Andre F, Tartour E, Lemoine FM, Beaune P, de Waziers I. *Curr Gene Ther.* 2014;14(3):236-46.

Urinary metabolic fingerprint of acute intermittent porphyria analyzed by (1)H NMR spectroscopy. Carichon M, Pallet N,

Schmitt C, Lefebvre T, Gouya L, Talbi N, Deybach JC, Beaune P, Vasos P, Puy H, Bertho G. Anal Chem. 2014 Feb 18;86(4):2166-74. doi: 10.1021/ac403837r. Epub 2014 Jan 30.

Urinary retinol binding protein is a marker of the extent of interstitial kidney fibrosis. Pallet N, Chauvet S, Chassé JF, Vincent M, Avillach P, Levi C, Meas-Yedid V, Olivo-Marin JC, Nga-Matsogo D, Beaune P, Thervet E, Karras A. PLoS One. 2014 Jan 8;9(1):e84708. doi: 10.1371/journal.pone.0084708. eCollection 2014.

Phenome-wide association studies on a quantitative trait: application to TPMT enzyme activity and thiopurine therapy in pharmacogenomics. Neuraz A, Chouchana L, Malamut G, Le Beller C, Roche D, Beaune P, Degoulet P, Burgun A, Lorient MA, Avillach P. PLoS Comput Biol. 2013;9(12):e1003405. doi: 10.1371/journal.pcbi.1003405. Epub 2013 Dec 26.

Effect of CYP2C9, VKORC1, CYP4F2 and GGCX genetic variants on warfarin maintenance dose and explicating a new pharmacogenetic algorithm in South Indian population. Krishna Kumar D, Shewade DG, Lorient MA, Beaune P, Balachander J, Sai Chandran BV, Adithan C. Eur J Clin Pharmacol. 2014 Jan;70(1):47-56. doi: 10.1007/s00228-013-1581-x. Epub 2013 Sep 10.

Poor response to thiopurine in inflammatory bowel disease: how to overcome therapeutic resistance? Chouchana L, Roche D, Jian R, Beaune P, Lorient MA. Clin Chem. 2013 Jul;59(7):1023-6. doi: 10.1373/clinchem.2012.195750. No abstract available.

Tryptophan depletion and the kinase GCN2 mediate IFN--induced autophagy. Fougeray S, Mami I, Bertho G, Beaune P, Thervet E, Pallet N. J Immunol. 2012 Sep 15;189(6):2954-64. doi: 10.4049/jimmunol.1201214. Epub 2012 Aug 15.

Association between Parkinson's disease and the HLA-DRB1 locus. Ahmed I, Tamouza R, Delord M, Krishnamoorthy R, Tzourio C, Mulot C, Nacfer M, Lambert JC, Beaune P, Laurent-Puig P, Lorient MA, Charron D, Elbaz A. Mov Disord. 2012 Aug;27(9):1104-10. doi: 10.1002/mds.25035. Epub 2012 Jul 13.

La médecine personnalisée : comment passer du concept à l'intégration dans un plan de développement clinique en vue d'une AMM ? Becquemont L, Bordet R, Cellier D; les participants à la table ronde N°3 de Giens XXVII. Therapie. 2012 Jul-Aug;67(4):339-48. doi: 10.2515/therapie/2012050. French. No abstract available.

Validation of an ultra-high performance liquid chromatography tandem mass spectrometric method for quantifying uracil and 5,6-dihydrouracil in human plasma. Coudoré F, Roche D, Lefeuvre S, Fausot D, Billaud EM, Lorient MA, **Beaune P**. J Chromatogr Sci. 2012 Nov-Dec;50(10):877-84. doi: 10.1093/chromsci/bms085. Epub 2012 Jun 11.

Influence of genetics and non-genetic factors on acenocoumarol maintenance dose requirement in Moroccan patients. Smires FZ, Moreau C, Habbal R, Siguret V, Fadili S, Golmard JL, Assaidi A, Beaune P, Lorient MA, Nadifi S. J Clin Pharm Ther. 2012 Oct;37(5):594-8. doi: 10.1111/j.1365-2710.2012.01340.x. Epub 2012 Apr 8.

The unfolded protein response regulates an angiogenic response by the kidney epithelium during ischemic stress. Bouvier N, Fougeray S, Beaune P, Thervet E, Pallet N. J Biol Chem. 2012 Apr 27;287(18):14557-68. doi: 10.1074/jbc.M112.340570. Epub 2012 Mar 8.

The dynamin chemical inhibitor dynasore impairs cholesterol trafficking and sterol-sensitive genes transcription in human HeLa cells and macrophages. Girard E, Paul JL, Fournier N, Beaune P, Johannes L, Lamaze C, Védie B. PLoS One. 2011;6(12):e29042. doi: 10.1371/journal.pone.0029042. Epub 2011 Dec 19.

Vitamin K antagonists in children with heart disease: height and VKORC1 genotype are the main determinants of the warfarin dose requirement. Moreau C, Bajolle F, Siguret V, Lasne D, Golmard JL, Elie C, Beaune P, Cheurfi R, Bonnet D, Lorient MA. Blood. 2012 Jan 19;119(3):861-7. doi: 10.1182/blood-2011-07-365502. Epub 2011 Nov 30.

Review article: the benefits of pharmacogenetics for improving thiopurine therapy in inflammatory bowel disease. Chouchana L, Narjoz C, Beaune P, Lorient MA, Roblin X. Aliment Pharmacol Ther. 2012 Jan;35(1):15-36. doi: 10.1111/j.1365-2036.2011.04905.x. Epub 2011 Nov 2. Review.

Combined transcriptomic-(1)H NMR metabonomic study reveals that monoethylhexyl phthalate stimulates adipogenesis and glyceroneogenesis in human adipocytes. Ellero-Simatos S, Claus SP, Benelli C, Forest C, Letourneur F, Cagnard N, Beaune PH, de Waziers I. *J Proteome Res.* 2011 Dec 2;10(12):5493-502. doi: 10.1021/pr200765v. Epub 2011 Nov 9.

Metabolic stress promotes renal tubular inflammation by triggering the unfolded protein response. Fougeray S, Bouvier N, Beaune P, Legendre C, Anglicheau D, Thervet E, Pallet N. *Cell Death Dis.* 2011 Apr 14;2:e143. doi: 10.1038/cddis.2011.26.

Effect of cytochrome P450 2C19 genotype on voriconazole exposure in cystic fibrosis lung transplant patients. Berge M, Guillemain R, Trégouët DA, Amrein C, Boussaud V, Chevalier P, Lillo-Lelouet A, Le Beller C, Laurent-Puig P, Beaune PH, Billaud EM, Lorient MA. *Eur J Clin Pharmacol.* 2011 Mar;67(3):253-60. doi: 10.1007/s00228-010-0914-2. Epub 2010 Oct 31.

ABC transporters and cytochromes P450 in the human central nervous system: influence on brain pharmacokinetics and contribution to neurodegenerative disorders. Dutheil F, Jacob A, Dauchy S, Beaune P, Scherrmann JM, Declèves X, Lorient MA. *Expert Opin Drug Metab Toxicol.* 2010 Oct;6(10):1161-74. doi: 10.1517/17425255.2010.510832. Review.

Biochemical and analytical development of the CIME cocktail for drug fate assessment in humans. Videau O, Delaforge M, Levi M, Thévenot E, Gal O, Becquemont L, Beaune P, Bénech H. *Rapid Commun Mass Spectrom.* 2010 Aug 30;24(16):2407-19. doi: 10.1002/rcm.4641.

[Could idiosyncratic thinking fit with << omics >>?]. Narjoz C, Beaune P, de Waziers I. *Med Sci (Paris).* 2010 Jun-Jul;26(6-7):641-6. doi: 10.1051/medsci/2010266-7641. Review. French.

Interaction between ABCB1 and professional exposure to organochlorine insecticides in Parkinson disease. Dutheil F, Beaune P, Tzourio C, Lorient MA, Elbaz A. *Arch Neurol.* 2010 Jun;67(6):739-45. doi: 10.1001/archneurol.2010.101.

Tissue accumulation of lanthanum as compared to aluminum in rats with chronic renal failure--possible harmful effects after long-term exposure. Nikolov IG, Joki N, Vicca S, Patey N, Auchère D, Benchitrit J, Flinois JP, Zioli M, Beaune P, Drüeke TB, Lacour B. *Nephron Exp Nephrol.* 2010;115(4):e112-21. doi: 10.1159/000313492. Epub 2010 Apr 28.

[Involvement of endoplasmic reticulum stress in solid organ transplantation]. Pallet N, Bouvier N, Beaune P, Legendre C, Anglicheau D, Thervet E. *Med Sci (Paris).* 2010 Apr;26(4):397-403. doi: 10.1051/medsci/2010264397. Review. French.

Optimization of initial tacrolimus dose using pharmacogenetic testing. Thervet E, Lorient MA, Barbier S, Buchler M, Ficheux M, Choukroun G, Toupance O, Touchard G, Alberti C, Le Pogamp P, Moulin B, Le Meur Y, Heng AE, Subra JF, Beaune P, Legendre C. *Clin Pharmacol Ther.* 2010 Jun;87(6):721-6. doi: 10.1038/clpt.2010.17. Epub 2010 Apr 14.

Pharmacogenetic assessment of toxicity and outcome in patients with metastatic colorectal cancer treated with LV5FU2, FOLFOX, and FOLFIRI: FFCD 2000-05. Boige V, Mendiboure J, Pignon JP, Lorient MA, Castaing M, Barrois M, Malka D, Trégouët DA, Bouché O, Le Corre D, Miran I, Mulot C, Ducreux M, Beaune P, Laurent-Puig P. *J Clin Oncol.* 2010 May 20;28(15):2556-64. doi: 10.1200/JCO.2009.25.2106. Epub 2010 Apr 12.

Xenobiotic-metabolizing cytochromes p450 in human white adipose tissue: expression and induction. Ellero S, Chakhtoura G, Barreau C, Langouët S, Benelli C, Penicaud L, Beaune P, de Waziers I. *Drug Metab Dispos.* 2010 Apr;38(4):679-86. doi: 10.1124/dmd.109.029249. Epub 2009 Dec 24.

Impact of android overweight or obesity and insulin resistance on basal and postprandial SR-BI and ABCA1-mediated serum cholesterol efflux capacities. Attia N, Fournier N, Védie B, Cambillau M, Beaune P, Ziegler O, Grynberg A, Paul JL, Guerci B. *Atherosclerosis.* 2010 Apr;209(2):422-9. doi: 10.1016/j.atherosclerosis.2009.09.025. Epub 2009 Sep 25.

Genetic factors (VKORC1, CYP2C9, EPHX1, and CYP4F2) are predictor variables for warfarin response in very elderly, frail inpatients. Pautas E, Moreau C, Gouin-Thibault I, Golmard JL, Mahé I, Legendre C, Taillandier-Hériché E, Durand-Gasselin B, Houllier AM, Verrier P, Beaune P, Lorient MA, Siguret V. *Clin Pharmacol Ther.* 2010 Jan;87(1):57-64. doi: 10.1038/clpt.2009.178. Epub 2009 Sep 30.

Antiapoptotic properties of recombinant human erythropoietin protects against tubular cyclosporine toxicity. Pallet N, Bouvier N, Legendre C, Beaune P, Thervet E, Choukroun G, Martinez F. *Pharmacol Res.* 2010 Jan;61(1):71-5. doi: 10.1016/j.phrs.2009.08.010. Epub 2009 Sep 18.