

## Publications 2021

### [Exome-Wide Association Study on Alanine Aminotransferase Identifies Sequence Variants in the GPAM and APOE Associated With Fatty Liver Disease.](#)

Jamialahmadi O, Mancina RM, Ciociola E, Tavaglione F, Luukkonen PK, Baselli G, Malvestiti F, Thuillier D, Raverdy V, Männistö V, Pipitone RM, Pennisi G, Prati D, Spagnuolo R, Petta S, Pihlajamäki J, **Pattou F**, Yki-Järvinen H, Valenti L, Romeo S. *Gastroenterology*. 2021 Apr;160(5):1634-1646.e7. doi: 10.1053/j.gastro.2020.12.023. Epub 2021 Feb 6. PMID: 33347879

### [1921-2021: From insulin discovery to islet transplantation in type 1 diabetes.](#)

Chetboun M, Jannin A, Kerr-Conte J, **Pattou F**, Vantyghem MC. *Ann Endocrinol (Paris)*. 2021 Apr;82(2):74-77. doi: 10.1016/j.ando.2021.03.006. Epub 2021 Apr 8. PMID: 33839122 Review.

### [Comparison of Morbidity After Total Thyroidectomy Among Adult Patients With and Without Preoperative Hyperthyroidism.](#)

Gerard M, Hamy A, Lifante JC, **Pattou F**, Christou N, Blanchard C, Mirallié E. *JAMA Otolaryngol Head Neck Surg*. 2021 Jun 1;147(6):573-575. doi: 10.1001/jamaoto.2021.0080. PMID: 33734304 Clinical Trial.

### [Interceptive reliance as a major determinant of emotional eating in adult obesity.](#)

Willem C, Nandrino JL, Doba K, Roussel M, Triquet C, Verkindt H, **Pattou F**, Gandolphe MC. *J Health Psychol*. 2021 Oct;26(12):2118-2130. doi: 10.1177/1359105320903093. Epub 2020 Jan 31. PMID: 32003234

### [REST is a major negative regulator of endocrine differentiation during pancreas organogenesis.](#)

Rovira M, Atla G, Maestro MA, Grau V, García-Hurtado J, Maqueda M, Mosquera JL, Yamada Y, Kerr-Conte J, **Pattou F**, Ferrer J. *Genes Dev*. 2021 Sep 1;35(17-18):1229-1242. doi: 10.1101/gad.348501.121. Epub 2021 Aug 12. PMID: 34385258

### [Hepatic Molecular Signatures Highlight the Sexual Dimorphism of Nonalcoholic Steatohepatitis \(NASH\).](#)

Vandel J, Dubois-Chevalier J, Gheeraert C, Derudas B, Raverdy V, Thuillier D, Gaal L, Francque S, **Pattou F**, Staels B, Eeckhoutte J, Lefebvre P. *Hepatology*. 2021 Mar;73(3):920-936. doi: 10.1002/hep.31312. Epub 2020 Dec 18. PMID: 32394476

### [Delayed gastric emptying following distal pancreatectomy: incidence and predisposing factors.](#)

Degisors S, Caiazzo R, Dokmak S, Truant S, Aussilhou B, Eveno C, **Pattou F**, El Amrani M, Piessen G, Sauvanet A. *HPB (Oxford)*. 2021 Oct 25:S1365-182X(21)01660-9. doi: 10.1016/j.hpb.2021.09.025. Online ahead of print. PMID: 34753675

[306.2: Comparison of Incidence of Solid Cancers After Islet or Combined Kidney-Whole Pancreas Transplantation.](#)

Leguier L, Mapihan KL, Defrance F, Lemaitre M, Jannin A, Chetboun M, **Pattou F**, Vantyghem MC. *Transplantation*. 2021 Dec 1;105(12S1):S18. doi:

10.1097/01.tp.0000804376.50469.61.PMID: 34908321 No abstract available.

[The impact of COVID-19 on obesity services across Europe: A physician survey.](#)

Nather K, Bolger F, DiModica L, Fletcher-Louis M, Salvador J, **Pattou F**, Panton UH, Cancino AP. *Clin Obes*. 2021 Oct;11(5):e12474. doi: 10.1111/cob.12474. Epub 2021 Jul 13.PMID: 34254445

[NASH-related increases in plasma bile acid levels depend on insulin resistance.](#)

Grzych G, Chávez-Talavera O, Descat A, Thuillier D, Verrijken A, Kouach M, Legry V, Verkindt H, Raverdy V, Legendre B, Caiazzo R, Van Gaal L, Goossens JF, Paumelle R, Francque S, **Pattou F**, Haas JT, Tailleux A, Staels B. *JHEP Rep*. 2020 Dec 16;3(2):100222. doi: 10.1016/j.jhepr.2020.100222. eCollection 2021 Apr.PMID: 33615207

[Risk stratification of adrenal masses by \[<sup>18</sup>F\]FDG PET/CT: Changing tactics.](#)

Salgues B, Guerin C, Amodru V, **Pattou F**, Brunaud L, Lifante JC, Mirallié E, Sahakian N, Castinetti F, Loundou A, Baumstarck K, Sebag F, Taïeb D. *Clin Endocrinol (Oxf)*. 2021 Feb;94(2):133-140. doi: 10.1111/cen.14338. Epub 2020 Nov 26.PMID: 32978795

[Meta-analysis of genome-wide DNA methylation and integrative omics of age in human skeletal muscle.](#)

Voisin S, Jacques M, Landen S, Harvey NR, Haupt LM, Griffiths LR, Gancheva S, Ouni M, Jähnert M, Ashton KJ, Coffey VG, Thompson JM, Doering TM, Gabory A, Junien C, Caiazzo R, Verkindt H, Raverdy V, **Pattou F**, Froguel P, Craig JM, Blocquiaux S, Thomis M, Sharples AP, Schürmann A, Roden M, Horvath S, Eynon N. *J Cachexia Sarcopenia Muscle*. 2021 Aug;12(4):1064-1078. doi: 10.1002/jcsm.12741. Epub 2021 Jun 30.PMID: 34196129

[Peroxisomal  \$\beta\$ -oxidation acts as a sensor for intracellular fatty acids and regulates lipolysis.](#)

Ding L, Sun W, Balaz M, He A, Klug M, Wieland S, Caiazzo R, Raverdy V, **Pattou F**, Lefebvre P, Lodhi IJ, Staels B, Heim M, Wolfrum C. *Nat Metab*. 2021 Dec;3(12):1648-1661. doi: 10.1038/s42255-021-00489-2. Epub 2021 Dec 13.PMID: 34903883

[Long-Term Analgesia following a Single Application of Fentanyl Transdermal Solution in Pigs.](#)

Goutchtat R, Chetboun M, Wiart JF, Gaulier JM, **Pattou F**, Allorge D, Hubert T. *Eur Surg Res*. 2021;62(2):115-120. doi: 10.1159/000516828. Epub 2021 Jun 24.PMID: 34167112

[A tool to predict progression of non-alcoholic fatty liver disease in severely obese patients.](#)

Bauvin P, Delacôte C, Lassailly G, Ntandja Wandji LC, Gnemmi V, Dautrecque F, Louvet A, Caiazzo R, Raverdy V, Leteurtre E, **Pattou F**, Deuffic-Burban S, Mathurin P. *Liver Int.* 2021 Jan;41(1):91-100. doi: 10.1111/liv.14650.PMID: 32881244

[BMI and pneumonia outcomes in critically ill covid-19 patients: An international multicenter study.](#)

Chetboun M, Raverdy V, Labreuche J, Simonnet A, Wallet F, Caussy C, Antonelli M, Artigas A, Goma G, Meziani F, Helms J, Mylonakis E, Levy MM, Kalligeros M, Latronico N, Piva S, Cerf C, Neuville M, Klouche K, Larcher R, Tamion F, Occhiali E, Snacken M, Preiser JC, Kontar L, Riviere A, Silva S, Sarton B, Krouchi R, Dubar V, Palaiodimos L, Karamanis D, Perche J, L'Her E, Busetto L, Dicker D, Lev S, Duhamel A, Jourdain M, **Pattou F**. *Obesity (Silver Spring)*. 2021 Sep;29(9):1477-1486. doi: 10.1002/oby.23223.PMID: 33966355

[Root-cause Analysis of Mortality After Pancreatic Resection \(CARE Study\): A Multicenter Cohort Study.](#)

Beugniez C, Sauvanet A, Sulpice L, Gaujoux S, Turrini O, Truant S, Schwarz L, Piessen G, Regimbeau JM, Muscari F, Adham M, **Pattou F**, Schneider L, Clement G, Delpero JR, Pruvot FR, El Amrani M; French-ACHBT Working Group. *Ann Surg.* 2021 Nov 1;274(5):789-796. doi: 10.1097/SLA.0000000000005118.PMID: 34334643

[Anticoagulation practices in total pancreatectomy with autologous islet cell transplant patients: an international survey of clinical programs.](#)

Desai CS, Szempruch KR, Vonderau JS, Chetboun M, **Pattou F**, Coates T, De Paep DL, Hawthorne WJ, Khan KM, de Koning EJP, Naziruddin B, Posselt A, Schroppe BA, Wijkstrom M, Witkowski P, Shapiro AMJ. *Transpl Int.* 2021 Mar;34(3):593-595. doi: 10.1111/tri.13821. Epub 2021 Feb 9.PMID: 33452835 No abstract available.

[Effects of proprotein convertase subtilisin kexin type 9 modulation in human pancreatic beta cells function.](#)

Ramin-Mangata S, Thedrez A, Nativel B, Diotel N, Blanchard V, Wargny M, Aguesse A, Billon-Crossouard S, Vindis C, Le May C, Hulin P, Armanet M, Gmyr V, **Pattou F**, Croyal M, Meilhac O, Nobécourt E, Cariou B, Lambert G. *Atherosclerosis*. 2021 Jun;326:47-55. doi: 10.1016/j.atherosclerosis.2021.03.044. Epub 2021 Apr 20.PMID: 33933263

[The Map3k12 \(Dlk\)/JNK3 signaling pathway is required for pancreatic beta-cell proliferation during postnatal development.](#)

Tenenbaum M, Plaisance V, Boutry R, Pawlowski V, Jacovetti C, Sanchez-Parra C, Ezanno H, Bourry J, Beeler N, Pasquetti G, Gmyr V, Dalle S, Kerr-Conte J, **Pattou F**, Hirai SI, Regazzi R, Bonnefond A, Froguel P, Abderrahmani A. *Cell Mol Life Sci.* 2021 Jan;78(1):287-298. doi: 10.1007/s00018-020-03499-7. Epub 2020 Mar 18.PMID: 32189007

[Examination of the Igls Criteria for Defining Functional Outcomes of  \$\beta\$ -cell Replacement Therapy: IPITA Symposium Report.](#)

Landstra CP, Andres A, Chetboun M, Conte C, Kelly Y, Berney T, de Koning EJP, Piemonti L, Stock PG, **Pattou F**, Vantyghem MC, Bellin MD, Rickels MR. *J Clin*

Endocrinol Metab. 2021 Sep 27;106(10):3049-3059. doi: 10.1210/clinem/dgab386.PMID: 34061967

[Bariatric-Metabolic Surgery Utilisation in Patients With and Without Diabetes: Data from the IFSO Global Registry 2015-2018.](#)

Welbourn R, Hollyman M, Kinsman R, Dixon J, Cohen R, Morton J, Ghaferi A, Higa K, Ottosson J, **Pattou F**, Al-Sabah S, Anvari M, Himpens J, Liem R, Våge V, Walton P, Brown W, Kow L. *Obes Surg*. 2021 Jun;31(6):2391-2400. doi: 10.1007/s11695-021-05280-6. Epub 2021 Feb 27. PMID: 33638756 **Free PMC article.**

[Quantitative dual isotope <sup>123</sup>Iodine/<sup>99m</sup>Tc-MIBI scintigraphy: A new approach to rule out malignancy in thyroid nodules.](#)

Benderradji H, Beron A, Wémeau JL, Carnaille B, Delcroix L, Do Cao C, Baillet C, Huglo D, Lion G, Boury S, Cussac JF, Caiazzo R, **Pattou F**, Leteurre E, Vantyghem MC, Ladsous M. *Ann Endocrinol (Paris)*. 2021 Apr;82(2):83-91. doi: 10.1016/j.ando.2021.03.003. Epub 2021 Mar 13. PMID: 33727116

[IFN \$\gamma\$ -producing NK cells in adipose tissue are associated with hyperglycemia and insulin resistance in obese women.](#)

Mogilenko DA, Caiazzo R, L'homme L, Pineau L, Raverdy V, Noulette J, Derudas B, **Pattou F**, Staels B, Dombrowicz D. *Int J Obes (Lond)*. 2021 Jul;45(7):1607-1617. doi: 10.1038/s41366-021-00826-1. Epub 2021 May 1. PMID: 33934108

[Processes Underlying Glycemic Deterioration in Type 2 Diabetes: An IMI DIRECT Study.](#)

Bizzotto R, Jennison C, Jones AG, Kurbasic A, Tura A, Kennedy G, Bell JD, Thomas EL, Frost G, Eriksen R, Koivula RW, Brage S, Kaye J, Hattersley AT, Heggie A, McEvoy D, 't Hart LM, Beulens JW, Elders P, Musholt PB, Ridderstråle M, Hansen TH, Allin KH, Hansen T, Vestergaard H, Lundgaard AT, Thomsen HS, De Masi F, Tsigiros KD, Brunak S, Viñuela A, Mahajan A, McDonald TJ, Kokkola T, Forgie IM, Giordano GN, Pavo I, Ruetten H, Dermitzakis E, McCarthy MI, Pedersen O, Schwenk JM, Adamski J, Franks PW, Walker M, Pearson ER, Mari A; IMI DIRECT consortium. *Diabetes Care*. 2021 Feb;44(2):511-518. doi: 10.2337/dc20-1567. Epub 2020 Dec 15. PMID: 33323478

[Salvage Robotic Roux-en-Y Fistulojejunostomy for Chronic Gastro-Colic Fistula After Laparoscopic Sleeve Gastrectomy.](#)

Mancini A, Vangelder V, Caiazzo R, Marciniak C, Daoud NO, Patel N, **Pattou F**, Baud G. *Obes Surg*. 2021 Apr;31(4):1899-1900. doi: 10.1007/s11695-021-05242-y. Epub 2021 Feb 15. PMID: 33590423

[US food and drug administration \(FDA\) panel endorses islet cell treatment for type 1 diabetes: A pyrrhic victory?](#)

Piemonti L, Andres A, Casey J, de Koning E, Engelse M, Hilbrands R, Johnson P, Keymeulen B, Kerr-Conte J, Korsgren O, Lehmann R, Lundgren T, Maffi P, **Pattou F**, Saudek F, Shaw J, Scholz H, White S, Berney T. *Transpl Int*. 2021 Jul;34(7):1182-1186. doi: 10.1111/tri.13930. Epub 2021 Jun 11. PMID: 34048106

[Long-term outcomes of bariatric surgery in patients with bi-allelic mutations in the POMC, LEPR, and MC4R genes.](#)

Poitou C, Puder L, Dubern B, Krabusch P, Genser L, Wiegand S, Verkindt H, Köhn A, von Schwartzberg RJ, Flück C, **Pattou F**, Laville M, Kühnen P, Clément K. *Surg Obes Relat Dis.* 2021 Aug;17(8):1449-1456. doi: 10.1016/j.soard.2021.04.020. Epub 2021 May 8. PMID: 34083135

[Response to the Comment on "Risk Factors of Redo Surgery After Unilateral Focused Parathyroidectomy - Conclusions From a Comprehensive Nationwide Database of 13,247 Interventions Over 6 Years".](#)

Caiazzo R, Marciniak C, **Pattou F**. *Ann Surg.* 2021 Dec 1;274(6):e861-e862. doi: 10.1097/SLA.0000000000004721. PMID: 33378306 No abstract available.

[207.5: Impact of HLA Donor Specific Antibodies in the Era of Cell Therapy: Clinical Trajectories in Islet Allograft Transplantation Illustrate a Challenging Model.](#)

Maanaoui M, Chetboun M, Top I, Kerr-Conte J, Le Mapihan K, Gmyr V, Hubert T, Labalette M, Hazzan M, Vantighem MC, **Pattou F**. *Transplantation.* 2021 Dec 1;105(12S1):S5. doi: 10.1097/01.tp.0000804296.25243.a8. PMID: 34908301 No abstract available.

[Neuromedin U uses Gai2 and Gao to suppress glucose-stimulated Ca<sup>2+</sup> signaling and insulin secretion in pancreatic  \$\beta\$  cells.](#)

Zhang W, Sakoda H, Nakazato Y, Islam MN, **Pattou F**, Kerr-Conte J, Nakazato M. *PLoS One.* 2021 Apr 15;16(4):e0250232. doi: 10.1371/journal.pone.0250232. eCollection 2021. PMID: 33857254

[Pancreatic islet transplantation under the kidney capsule of mice: model of refinement for molecular and \*ex-vivo\* graft analysis.](#)

Thévenet J, Gmyr V, Delalleau N, **Pattou F**, Kerr-Conte J. *Lab Anim.* 2021 Oct;55(5):408-416. doi: 10.1177/00236772211004051. Epub 2021 Apr 8. PMID: 33832379

[Characterization of one anastomosis gastric bypass and impact of biliary and common limbs on bile acid and postprandial glucose metabolism in a minipig model.](#)

Marciniak C, Chávez-Talavera O, Caiazzo R, Hubert T, Zubiaga L, Baud G, Quenon A, Descat A, Vallez E, Goossens JF, Kouach M, Vangelder V, Gobert M, Daoudi M, Derudas B, Pigny P, Klein A, Gmyr V, Raverdy V, Lestavel S, Laferrère B, Staels B, Tailleux A, **Pattou F**. *Am J Physiol Endocrinol Metab.* 2021 Apr 1;320(4):E772-E783. doi: 10.1152/ajpendo.00356.2020. Epub 2021 Jan 25. PMID: 33491532

[Evolution of Non-alcoholic Fatty Liver Disease \(NAFLD\) Biomarkers in Response to Weight Loss 1 Year After Bariatric Surgery-a Post Hoc Analysis of the FibroTest Prospective Study.](#)

Codjia T, Rebibo L, François A, Lagnel C, Huet E, Bekri S, **Pattou F**, Régimbeau JM, Schwarz L. *Obes Surg.* 2021 Aug;31(8):3548-3556. doi: 10.1007/s11695-021-05402-0. Epub 2021 Apr 12. PMID: 33844174

[History of bariatric surgery and COVID-19 outcomes in patients with type 2 diabetes: Results from the CORONADO study.](#)

Blanchard C, Perennec T, Smati S, Tramunt B, Guyomarch B, Bigot-Corbel E, Bordier L, Borot S, Bourron O, Caussy C, Coffin-Boutreux C, Dutour A, Germain N, Gonfroy-Leymarie C, Meyer L, Prevost G, Roussel R, Seret-Bégué D, Thivolet C, Vergès B, Pichelin M, Gourdy P, Hadjadj S, Wargny M, **Pattou F**, Cariou B; CORONADO investigators. *Obesity (Silver Spring)*. 2021 Sep 29;10.1002/oby.23314. doi: 10.1002/oby.23314. Online ahead of print.PMID: 34586754

[Impact of Permanent Post-thyroidectomy Hypoparathyroidism on Self-evaluation of Quality of Life and Voice: Results From the National QoL-Hypopara Study.](#)

Frey S, Figueres L, **Pattou F**, Le Bras M, Caillard C, Mathonnet M, Hamy A, Brunaud L, Lifante JC, Trésallet C, Sebag F, Menegaux F, Blanchard C, Leroy M, Mirallié E; QoL-Hypopara Study Group. *Ann Surg*. 2021 Nov 1;274(5):851-858. doi: 10.1097/SLA.0000000000005129.PMID: 34353986

[A comparison of changes in bone turnover markers after gastric bypass and sleeve gastrectomy, and their association with markers of interest.](#)

Paccou J, Thuillier D, Courtalin M, Pigny P, Labreuche J, Cortet B, **Pattou F**. *Surg Obes Relat Dis*. 2021 Dec 8:S1550-7289(21)00573-6. doi: 10.1016/j.soard.2021.12.004. Online ahead of print.PMID: 34973928

[Loss of KDM1A in GIP-dependent primary bilateral macronodular adrenal hyperplasia with Cushing's syndrome: a multicentre, retrospective, cohort study.](#)

Chasseloup F, Bourdeau I, Tabarin A, Regazzo D, Dumontet C, Ladurelle N, Tosca L, Amazit L, Proust A, Scharfmann R, Mignot T, Fiore F, Tsagarakis S, Vassiliadi D, Maiter D, Young J, Lecoq AL, Deméocq V, Salenave S, Lefebvre H, Cloix L, Emy P, Dessaillood R, Vezzosi D, Scaroni C, Barbot M, de Herder W, **Pattou F**, Tétreault M, Corbeil G, Dupeux M, Lambert B, Tachdjian G, Guiochon-Mantel A, Beau I, Chanson P, Viengchareun S, Lacroix A, Bouligand J, Kamenický P. *Lancet Diabetes Endocrinol*. 2021 Dec;9(12):813-824. doi: 10.1016/S2213-8587(21)00236-9. Epub 2021 Oct 13.PMID: 34655521

[Pancreatoduodenectomy for Neuroendocrine Tumors in Patients with Multiple Endocrine Neoplasia Type 1: An AFCE \(Association Francophone de Chirurgie Endocrinienne\) and GTE \(Groupe d'étude des Tumeurs Endocrines\) Study.](#)

Santucci N, Gaujoux S, Binquet C, Reichling C, Lifante JC, Carnaille B, **Pattou F**, Mirallié E, Facy O, Mathonnet M, Goudet P. *World J Surg*. 2021 Jun;45(6):1794-1802. doi: 10.1007/s00268-021-06005-7. Epub 2021 Mar 1.PMID: 33649917

[Partial Versus Total Thyroidectomy: What Influences Most Surgeons' Decision? Analysis of a Nationwide Cohort of 375,810 Patients Over 10 Years.](#)

Marciniak C, Lenne X, Clément G, Bruandet A, Lifante JC, Sebag F, Mirallié E, Mathonnet M, Brunaud L, Donatini G, Trésallet C, Ménégau F, Theis D, **Pattou F**, Caiazza R; on the behalf of AFCE Study Group. *Ann Surg*. 2021 Nov 1;274(5):829-835. doi: 10.1097/SLA.0000000000005134.PMID: 34353991

[Profiles of Glucose Metabolism in Different Prediabetes Phenotypes, Classified by Fasting Glycemia, 2-Hour OGTT, Glycated Hemoglobin, and 1-Hour OGTT: An IMI DIRECT Study.](#)

Tura A, Grespan E, Göbl CS, Koivula RW, Franks PW, Pearson ER, Walker M, Forgie IM, Giordano GN, Pavo I, Ruetten H, Dermitzakis ET, McCarthy MI, Pedersen O, Schwenk JM, Adamski J, De Masi F, Tsigirios KD, Brunak S, Viñuela A, Mahajan A, McDonald TJ, Kokkola T, Vangipurapu J, Cederberg H, Laakso M, Rutters F, Elders PJM, Koopman ADM, Beulens JW, Ridderstråle M, Hansen TH, Allin KH, Hansen T, Vestergaard H, Mari A; IMI DIRECT Consortium. *Diabetes*. 2021 Sep;70(9):2092-2106. doi: 10.2337/db21-0227. Epub 2021 Jul 7. PMID: 34233929

[Limited Resection Versus Pancreaticoduodenectomy for Duodenal Gastrointestinal Stromal Tumors? Enucleation Interferes in the Debate: A European Multicenter Retrospective Cohort Study.](#)

Dubois C, Nuytens F, Behal H, Gronnier C, Manceau G, Warlaumont M, Duhamel A, Denost Q, Honoré C, Facy O, Tuech JJ, Tiberio G, Brigand C, Bail JP, Salame E, Meunier B, Lefevre JH, Mathonnet M, Idrissi MS, Renaud F, Piessen G; AFC and FREGAT Working Group. *Ann Surg Oncol*. 2021 Oct;28(11):6294-6306. doi: 10.1245/s10434-021-09862-7. Epub 2021 Apr 10. PMID: 33839975