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Improving outcomes of pancreatic surgery

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CURRICULUM VITAE

Jesse Vincent Groen was born in The Hague in The Netherlands on July 9th 1991. During high school in Deventer he was actively involved in the student parliament, working as a tutor for student in chemistry, physics, biology, mathematics and economics and he played football at the Koninklijke Utile Dulci. He started medical school at the Leiden University Medical Center (LUMC) in 2009.

During medical school, he participated in several committees at the university and the student society of Minerva. In 2011 he started working at BISLIFE, where he learned how to retrieve postmortem ocular, cardiovascular and musculoskeletal tissues for transplantation. This is when he became enthusiastic about surgery. During the surgical internship he met Dr. Sven Mieog and started to build a prospective pancreatic surgery database of the LUMC. This turned out to be the start of the PhD project that resulted in this thesis. His research allowed him to collaborate with 14 medical disciplines involved with pancreatic surgery. He tutored 10 research students and scientific internships. From 2018-2020 he was the Secretary of the multidisciplinary South West Pancreatic Cancer Care working group.

After three years of research he started working at the Department of Surgery at the Alrijne Hospital in 2020. In 2021, he started his surgical training at the Department of Surgery at the Alrijne Hospital. Jesse currently lives in Amsterdam.

PUBLICATIONS

Journal publications

1. Droogh DHM, van Dam JL, Groen JV, de Boer MGJ, van Prehn J, van Eijck CHJ, Bonsing BA, Vahrmeijer AL, Groot Koerkamp B, Mieog JSD. Prolonged antibiotics after pancreatoduodenectomy reduce abdominal infections in patients with positive bile cultures: a dual-center cohort study. *HPB (Oxford)*. 2023; In press.
2. Sissingh NJ, Groen JV, Timmerhuis HC, Besselink MG, Boekestijn B, Bollen TL, Bonsing BA, Klok FA, van Santvoort HC, Verdonk RC, van Eijck CH, van Hooft JE, Mieog JSD. Therapeutic anticoagulation for splanchnic vein thrombosis in acute pancreatitis: A national survey and case-vignette study. *World J Gastroenterol* 2023; In press
3. Michiels N, Doppenberg D, Groen JV, van Veldhuisen E, Bonsing BA, Busch OR, Crobach ASLP, van Delden OM, van Dieren S, Fariña Sarasqueta A, de Hingh IHJT, Hurks R, Nederend J, Shahbazi Feshtali S, Tank Y, Vahrmeijer A, Wasser M, Besselink MG, Mieog JSD, for the Dutch Pancreatic Cancer Group. Intraoperative ultrasound during surgical exploration in patients with pancreatic cancer and vascular involvement (ULTRAPANC): a prospective multicenter study. *Ann Surg Oncol*. 2023 Jan.
4. Suurmeijer JA, Soer EC, Dings MPG, Kim Y, Strijker M, Bonsing BA, Brosens LAA, Busch OR, Groen JV, Halfwerk JBG, Slooff RAE, van Laarhoven HWM, Molenaar IQ, Offerhaus GJA, Morreau J, van de Vijver MJ, Fariña Sarasqueta A, Verheij J, Besselink MG, Bijlsma MF, Dijk F; Dutch Pancreatic Cancer Group. Impact of classical and basal-like molecular subtypes on overall survival in resected pancreatic cancer in the SPACIOUS-2 multicentre study. *Br J Surg*. 2022 Aug 18:znac272. doi: 10.1093/bjs/znac272. Online ahead of print. PMID: 35979597.
5. Groen JV, Boon SC, Minderhoud MW, Bonsing BA, Martini CH, Putter H, Vahrmeijer AL, van Velzen M, Vuijk J, Mieog JSD, Dahan A. Sublingual Sufentanil versus Standard-of-Care (Patient-Controlled Analgesia with Epidural Ropivacaine/Sufentanil or Intravenous Morphine) for Postoperative Pain Following Pancreatoduodenectomy: A Randomized Trial. *J Pain Res*. 2022 Jun 22;15:1775-1786. doi: 10.2147/JPR.S363545. eCollection 2022. PMID: 35769693.
6. Schneider M, Labgaa I, Vrochides D, Zerbi A, Nappo G, Perinel J, Adham M, van Roessel S, Besselink M, Mieog JSD, Groen JV, Demartines N, Schäfer M, Joliat GR. External validation of three lymph node ratio-based nomograms predicting survival using an international cohort of patients with resected pancreatic head ductal adenocarcinoma. *Eur J Surg Oncol*. 2022 May 15:S0748-7983(22)00427-9. doi: 10.1016/j.ejso.2022.05.002. Online ahead of print. PMID: 35606276.
7. Lucassen CJ, Groen JV, Aziz MH, Bastiaannet E, Bonsing BA, Leistra E, Shahbazi Feshtali S, Vahrmeijer AL, Droop A, Mieog JSD. Visceral adipose tissue is a better predictor than BMI in the alternative Fistula Risk Score in patients undergoing pancreatoduodenectomy.

- HPB (Oxford). 2022 Apr 8:S1365-182X(22)00078-8. doi: 10.1016/j.hpb.2022.03.004. Online ahead of print. PMID: 35527105.
8. Groen JV, Michiels N, Mieog JSD. Author response to: Venous wedge and segment resection during pancreatoduodenectomy for pancreatic cancer: impact on short- and long-term outcomes in a nationwide cohort analysis. *Br J Surg*. 2022 Jun 14;109(7):e88. doi: 10.1093/bjs/znac060. PMID: 35416240.
 9. Groen JV, Martini CH, Mieog JSD. Correspondence to: Randomized controlled study comparing the analgesic effects of intravenous patient-controlled analgesia and patient-controlled epidural analgesia after open major surgery for pancreatobiliary cancer. *HPB (Oxford)*. 2022 Mar 1:S1365-182X(22)00072-7. doi: 10.1016/j.hpb.2022.02.012. Online ahead of print. PMID: 35304040.
 10. Aziz MH, van Dongen JC, Saida L, Suker M, van Vugt JLA, van Putten Y, Sideras K, Groen JV, Mieog JSD, Lucassen CJ, Droop A, Mauff K, Shahbazi Feshtali S, Groot Koerkamp B, Mustafa DAM, van Eijck CJ. High Systemic Immune Inflammation Index Is Associated With Low Skeletal Muscle Quantity in Resectable Pancreatic Ductal Adenocarcinoma. *Front Oncol*. 2022 Feb 28;12:827755. doi: 10.3389/fonc.2022.827755. eCollection 2022. PMID: 35296013.
 11. Sissingh NJ*, Groen JV*, Koole D, Klok FA, Boekestijn B, Bollen TL, van Santvoort HC, Verdonk RC, Bonsing BA, van Eijck CHJ, van Hooft JE, Mieog JSD; Dutch Pancreatitis Study Group. Therapeutic anticoagulation for splanchnic vein thrombosis in acute pancreatitis: A systematic review and meta-analysis. *Pancreatology*. 2022 Mar;22(2):235-243. doi: 10.1016/j.pan.2021.12.008. Epub 2021 Dec 22. PMID: 35012902.
 12. Houvast RD, Thijse K, Groen JV, Chua J, Vankemmelbeke M, Durrant LG, Mieog JSD, Bonsing BA, Vahrmeijer AL, Kuppen PJK, Crobach ASLP, Sier CFM. An Immunohistochemical Evaluation of Tumor-Associated Glycans and Mucins as Targets for Molecular Imaging of Pancreatic Ductal Adenocarcinoma. *Cancers (Basel)*. 2021 Nov 18;13(22):5777. doi: 10.3390/cancers13225777. PMID: 34830932.
 13. Groen JV, Michiels N, van Roessel S, Besselink MG, Bosscha K, Busch OR, van Dam R, van Eijck CHJ, Koerkamp BG, van der Harst E, de Hingh IH, Karsten TM, Lips DJ, de Meijer VE, Molenaar IQ, Nieuwenhuijs VB, Roos D, van Santvoort HC, Wijsman JH, Wit F, Zonderhuis BM, de Vos-Geelen J, Wasser MN, Bonsing BA, Stommel MWJ, Mieog JSD; Dutch Pancreatic Cancer Group. Venous wedge and segment resection during pancreatoduodenectomy for pancreatic cancer: impact on short- and long-term outcomes in a nationwide cohort analysis. *Br J Surg*. 2021 Dec 17;109(1):96-104. doi: 10.1093/bjs/znab345. PMID: 34791069.
 14. Joliat GR, Labgaa I, Sulzer J, Vrochides D, Alessandro Zerbi A, Nappo G, Perinel J, Adham M, van Roessel S, Besselink MG, Mieog JSD, Groen JV, Demartines N, Schäfer M. International assessment and validation of the prognostic role of lymph node ratio in patients with resected pancreatic head ductal adenocarcinoma. *HepatoBiliary Surgery and Nutrition*. 2021 July 28. doi: 10.21037/hbsn-21-99.

15. Groen JV, Smits FJ, Molenaar IQ, Bonsing BA, van Santvoort HC, Mieog JSD; Dutch Pancreatic Cancer Group. Pancreas-preserving surgical interventions during relaparotomy for pancreatic fistula after pancreatoduodenectomy. *HPB (Oxford)*. 2022 May;24(5):782-783. doi: 10.1016/j.hpb.2021.10.007. Epub 2021 Oct 23. PMID: 34740546.
16. Groen JV, van Manen L, van Roessel S, van Dam JL, Bonsing BA, Doukas M, van Eijck CHJ, Farina Sarasqueta A, Putter H, Vahrmeijer AL, Verheij J, Besselink MG, Groot Koerkamp B, Mieog JSD. Resection of the Portal-Superior Mesenteric Vein in Pancreatic Cancer: Pathological Assessment and Recurrence Patterns. *Pancreas*. 2021 Sep 1;50(8):1218-1229. doi: 10.1097/MPA.0000000000001897. PMID: 34714287.
17. Groen JV, Henrar RB, Hanna Sawires RG, AlEassa E, Martini CH, Bonsing BA, Vahrmeijer AL, Besselink MG, Pecorelli N, Hackert T, Ishizawa T, Miller T, Mungroop TH, Samra J, Sauvanet A, Adham M, Demartines N, Christophi C, Morris-Stiff G, Mieog JSD. Pain management, fluid therapy and thromboprophylaxis after pancreatoduodenectomy: a worldwide survey among surgeons. *HPB (Oxford)*. 2022 Apr;24(4):558-567. doi: 10.1016/j.hpb.2021.09.006. Epub 2021 Sep 24. PMID: 34629261.
18. Hanna Sawires RG, Groen JV, Hamming A, Tollenaar RAEM, Mesker WE, Luelmo SAC, Vahrmeijer AL, Bonsing BA, Versteeg HH, Klok FA, Mieog JSD. Incidence, timing and risk factors of venous thromboembolic events in patients with pancreatic cancer. Hanna-Sawires RG, *Thromb Res*. 2021 Aug 8;207:134-139. doi: 10.1016/j.thromres.2021.08.002. Online ahead of print. PMID: 34628229.
19. Groen JV*, Smits FJ*, Koole D, Besselink MG, Busch OR, den Dulk M, van Eijck CHJ, Groot Koerkamp B, van der Harst E, de Hingh IH, Karsten TM, de Meijer VE, Pranger BK, Molenaar IQ, Bonsing BA, van Santvoort HC, Mieog JSD; Dutch Pancreatic Cancer Group. Completion pancreatectomy or a pancreas-preserving procedure during relaparotomy for pancreatic fistula after pancreatoduodenectomy: a multicentre cohort study and meta-analysis. *Br J Surg*. 2021 Nov 11;108(11):1371-1379. doi: 10.1093/bjs/zna273. PMID: 34608941.
20. van Roessel S, Soer EC, Daamen LA, van Dalen D, Fariña Sarasqueta A, Stommel MWJ, Molenaar IQ, van Santvoort HC, van de Vlasakker VCJ, de Hingh IHJT, Groen JV, Mieog JSD, van Dam JL, van Eijck CHJ, van Tienhoven G, Klumpen HJ, Wilmink JW, Busch OR, Brosens LAA, Groot Koerkamp B, Verheij J, Besselink MG; Dutch Pancreatic Cancer Group. Preoperative misdiagnosis of pancreatic and periampullary cancer in patients undergoing pancreatoduodenectomy: A multicentre retrospective cohort study. *Eur J Surg Oncol*. 2021 Oct;47(10):2525-2532. doi: 10.1016/j.ejso.2021.03.228. Epub 2021 Mar 15. PMID: 33745791.
21. Groen JV*, Droogh DHM*, de Boer MGJ, van Asten SAV, van Prehn J, Inderson A, Vahrmeijer AL, Bonsing BA, Mieog JSD. Clinical implications of bile cultures obtained during pancreatoduodenectomy: a cohort study and meta-analysis. *HPB (Oxford)*. 2021 Jul;23(7):1123-1133. doi: 10.1016/j.hpb.2020.10.028. PMID: 33309165.

22. Pranger BK, van Dam JL, Groen JV, van Eijck CH, Koerkamp BG, Bonsing BA, Mieog JSD, Besselink MG, Busch OR, Kazemier G, de Jong KP, de Kleine RHJ, Molenaar IQ, Stommel MWJ, Gerhards MF, Coolsen MME, van Santvoort HC, van der Harst E, Klaase JM, de Meijer VE; Dutch Pancreatic Cancer Group. Pancreatic resection in the pediatric, adolescent and young adult population: nationwide analysis on complications. *HPB (Oxford)*. 2021 Aug;23(8):1175-1184. doi: 10.1016/j.hpb.2020.10.029. Epub 2020 Dec 3. PMID: 33281080.
23. Versteijne E, Suker M, Groen JV, Besselink MG, Bonsing BA, Bosscha K, Busch OR, de Hingh IHJT, de Jong KP, Molenaar IQ, van Santvoort HC, Verkooijen HM, Van Eijck CH, van Tienhoven G; Dutch Pancreatic Cancer Group. External Validity of the Multicenter Randomized PREOPANC Trial on Neoadjuvant Chemoradiotherapy in Pancreatic Cancer: Outcome of Eligible but Nonrandomized Patients. *Ann Surg*. 2022 May 1;275(5):972-978. doi: 10.1097/SLA.0000000000004364. Epub 2020 Dec 2. PMID: 33273349.
24. van Manen L, Groen JV, Putter H, Pichler M, Vahrmeijer AL, Bonsing BA, Mieog JSD. Stage-Specific Value of Carbohydrate Antigen 19-9 and Carcinoembryonic Antigen Serum Levels on Survival and Recurrence in Pancreatic Cancer: A Single Center Study and Meta-Analysis. *Cancers (Basel)*. 2020 Oct 14;12(10):2970. doi: 10.3390/cancers12102970. PMID: 33066393.
25. Groen JV, van de Velde CJH, Bastiaannet E, Mieog JSD. ASO Author Reflections: Can Utilization of Cancer Registry Data Contribute to Solving the Lack of Evidence for Older Pancreatic Cancer Patients? *Ann Surg Oncol*. 2020 Dec;27(13):5347-5348. doi: 10.1245/s10434-020-08611-6. Epub 2020 May 27. PMID: 32462526.
26. Groen JV, Stommel MWJ, Sarasqueta AF, Besselink MG, Brosens LAA, van Eijck CHJ, Molenaar IQ, Verheij J, de Vos-Geelen J, Wasser MN, Bonsing BA, Mieog JSD; Dutch Pancreatic Cancer Group. Surgical management and pathological assessment of pancreatoduodenectomy with venous resection: an international survey among surgeons and pathologists. *HPB (Oxford)*. 2021 Jan;23(1):80-89. doi: 10.1016/j.hpb.2020.04.015. Epub 2020 May 20. PMID: 32444267.
27. Groen JV, Douwes TA, van Eycken E, van der Geest LGM, Johannesen TB, Besselink MG, Koerkamp BG, Wilmink JW, Bonsing BA, Portielje JEA, van de Velde CJH, Bastiaannet E, Mieog JSD; Dutch Pancreatic Cancer Group. Treatment and Survival of Elderly Patients with Stage I-II Pancreatic Cancer: A Report of the EURECCA Pancreas Consortium. *Ann Surg Oncol*. 2020 Dec;27(13):5337-5346. doi: 10.1245/s10434-020-08539-x. Epub 2020 May 9. PMID: 32388741.
28. van Manen L*, Groen JV*, Putter H, Vahrmeijer AL, Swijnenburg RJ, Bonsing BA, Mieog JSD. Elevated CEA and CA19-9 serum levels independently predict advanced pancreatic cancer at diagnosis. *Biomarkers*. 2020 Mar;25(2):186-193. doi: 10.1080/1354750X.2020.1725786. Epub 2020 Feb 13. PMID: 32009482.
29. van Roessel S, Strijker M, Steyerberg EW, Groen JV, Mieog JS, Groot VP, He J, De Pastena M, Marchegiani G, Bassi C, Suhoor A, Jang JY, Busch OR, Halimi A, Zarantonello L, Groot Koerkamp B, Samra JS, Mittal A, Gill AJ, Bolm L, van Eijck CH, Abu Hilal M, Del Chiaro M, Keck T, Alseidi A, Wolfgang CL, Malleo G, Besselink MG.

30. International validation and update of the Amsterdam model for prediction of survival after pancreatoduodenectomy for pancreatic cancer. *Eur J Surg Oncol.* 2020 May;46(5):796-803. doi: 10.1016/j.ejso.2019.12.023. Epub 2019 Dec 28. PMID: 31924432.
31. Olthof PB, van Dam JL, Groen JV, Ophuis CO, van der Harst E, Coene PP, Bonsing BA, Mieog JSD, Hartog H, van Eijck C, Koerkamp BG, Roos D; Southwest Pancreatic Cancer Care (SWPCC). Screening for colorectal cancer after pancreatoduodenectomy for ampullary cancer. *Eur J Surg Oncol.* 2020 Apr;46(4 Pt A):534-538. doi: 10.1016/j.ejso.2019.10.013. Epub 2019 Oct 11. PMID: 31668981.
32. Groen JV*, Khawar AAJ*, Bauer PA, Bonsing BA, Martini CH, Mungroop TH, Vahrmeijer AL, Vuijk J, Dahan A, Mieog JSD. Meta-analysis of epidural analgesia in patients undergoing pancreatoduodenectomy. *BJS Open.* 2019 Apr 29;3(5):559-571. doi: 10.1002/bjs.50171. eCollection 2019 Oct. PMID: 31592509.
33. Groen JV, Tummers WS, Mieog JS, Swijnenburg RJ. Author response to: Resection margin status in pancreatic cancer surgery: is it really less important than the N status? *Br J Surg.* 2019 Oct;106(11):1559-1560. doi: 10.1002/bjs.11355. PMID: 31577053.
34. Tummers WS, Groen JV, Sibinga Mulder BG, Farina-Sarasqueta A, Morreau J, Putter H, van de Velde CJ, Vahrmeijer AL, Bonsing BA, Mieog JS, Swijnenburg RJ. Impact of resection margin status on recurrence and survival in pancreatic cancer surgery. *Br J Surg.* 2019 Jul;106(8):1055-1065. doi: 10.1002/bjs.11115. Epub 2019 Mar 18. PMID: 30883699.
35. Groen JV, Slotboom DEF, Vuyk J, Martini CH, Dahan A, Vahrmeijer AL, Bonsing BA, Mieog JSD. Epidural and Non-epidural Analgesia in Patients Undergoing Open Pancreatectomy: a Retrospective Cohort Study. *J Gastrointest Surg.* 2019 Dec;23(12):2439-2448. doi: 10.1007/s11605-019-04136-w. Epub 2019 Feb 26. PMID: 30809780.
36. Hanna-Sawires RG*, Groen JV*, Klok FA, Tollenaar RAEM, Mesker WE, Swijnenburg RJ, Vahrmeijer AL, Bonsing BA, Mieog JSD. Outcomes following pancreatic surgery using three different thromboprophylaxis regimens. *Br J Surg.* 2019 May;106(6):765-773. doi: 10.1002/bjs.11103. Epub 2019 Feb 18. PMID: 30776085.
37. Groen JV, Sibinga Mulder BG, van Eycken E, Valerianova Z, Borrás JM, van der Geest LGM, Capretti G, Schlesinger-Raab A, Primic-Zakelj M, Ryzhov A, van de Velde CJH, Bonsing BA, Bastiaannet E, Mieog JSD. Differences in Treatment and Outcome of Pancreatic Adenocarcinoma Stage I and II in the EURECCA Pancreas Consortium. *Ann Surg Oncol.* 2018 Nov;25(12):3492-3501. doi: 10.1245/s10434-018-6705-1. Epub 2018 Aug 27. PMID: 30151560.

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Book chapter publication

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