DIGESTIVE DISEASE DAYS

2025

PROGRAMMA

19 en 20 maart

Congrescentrum NH Koningshof
Veldhoven

NVGE
NEDERLANDSE VERENIGING
VOOR GASTRO-ENTEROLOGIE

DIGESTIVE DISEASE DAYS - DDD

Het programma werd samengesteld met inbreng van:

Nederlandse Vereniging voor Gastro-enterologie
Nederlandse Vereniging voor Gastrointestinale Chirurgie
Nederlandse Vereniging voor Hepatologie
Nederlandse Vereniging van Maag-Darm-Leverartsen
Nederlandse Vereniging voor Pathologie

Secties:
Sectie Gastrointestinale Endoscopie
Sectie Experimentele Gastroenterologie
Sectie Neurogastroenterologie en Motiliteit
Sectie Gastrointestinale Oncologie
Sectie Inflammatoire Darmziekten IBD
Sectie Kinder-MDL
Verpleegkundigen & Verzorgenden Nederland – MDL
PhD Netwerk

Inhoudsopgave

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Uitreiking Proefschriftprijs - Brabantzaal 10
NVGE Invited speaker Dr. S.L. Meijer- Brabantzaal 10
Abstractsessie Sectie Gastrointestinale Endoscopie - Brabantzaal 11
Symposium Mesenteriaal Ischemie – Brabantzaal 15
Symposium Sectie Oncologie i.s.m. Pathologie - Brabantzaal 16
Top abstracts NVGE 2025 – Brabantzaal 17
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Pitches NVH Young Hepatologists Awards 2025 - Baroniezaal 25
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Tijdstippen diverse ledenvergaderingen woensdag:

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Nederlandse Vereniging voor Gastroenterologie	19 maart, 12.15 uur Brabantzaal

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Tijdstip ledenvergadering donderdag

Nederlandse Vereniging van Maag-Darm-Leverartsen 20 maart, 15.15 uur Baroniezaal

Belangrijke mededeling
over de aanwezigheid van farmaceutische industrieën

Aan alle deelnemers tijdens de Digestive Disease Days op 19 en 20 maart 2025

De Nederlandse Vereniging voor Gastroenterologie kent een jarenlange samenwerking met de farmaceutische industrie. De vereniging stelt de farmaceutische industrie in de gelegenheid aanwezig te zijn bij de wetenschappelijke vergaderingen met een stand. Mede hierdoor kan de vereniging haar wetenschappelijke bijeenkomsten organiseren.

De Geneesmiddelenwet zegt dat - onder strikte voorwaarden - de farmaceutische industrie alleen reclame mag maken voor receptgeneesmiddelen voor personen die bevoegd zijn om dergelijke geneesmiddelen voor te schrijven. Alle andere personen (inclusief bijvoorbeeld verpleegkundigen, endoscopie-assistenten en biochemici) worden beschouwd als “publiek”. De farmaceutische industrie mag geen reclame maken voor receptgeneesmiddelen voor publiek.

De Nederlandse Vereniging voor Gastroenterologie is een wetenschappelijke vereniging voor personen die beroepsmatig betrokken zijn bij zorg, onderwijs en onderzoek ten behoeve van patiënten met maag-darm- en leveraandoeningen. Dat betekent dat ook personen die geen arts zijn, lid van de NVGE zijn. De aanwezigheid van artsen, niet-artsen en farmaceutische industrieën tijdens het congres kan de NVGE ongewild in aanraking brengen met de inspectie voor de gezondheidszorg, sectie reclametoezicht, en daarmee in diskrediet worden gebracht. Dat willen wij uiteraard voorkomen.

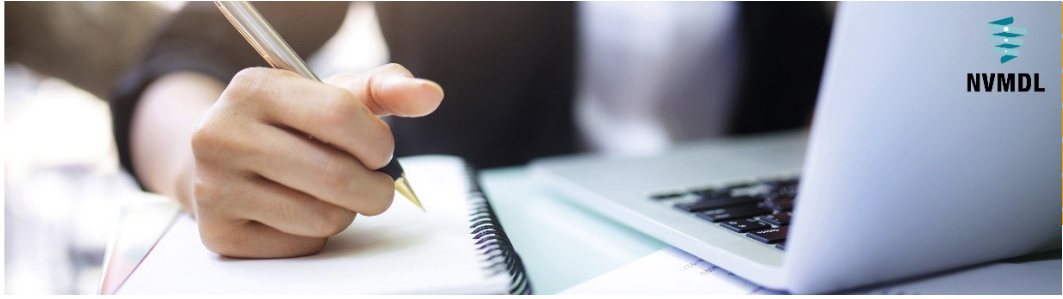
In verband met de Gedragscode Geneesmiddelenreclame van de CGR en de aan het NVGE-congres verbonden expositie van farmaceutische producten, medische instrumenten en voedingsmiddelen, zal bij uw congresregistratie via de NVGE-website worden gevraagd naar uw bevoegdheid om medicijnen voor te schrijven.

Alle congresdeelnemers dragen verplicht een congresbadge waarop behalve de naam ook beroep/ functie staat aangegeven. Farmaceutische standhouders benaderen uitsluitend congresdeelnemers die de bevoegdheid hebben om receptgeneesmiddelen voor te schrijven of ter hand te stellen. Om dit extra te verduidelijken zal wederom worden gekozen voor verschillende kleuren congresbadges.

Uit het bovenstaande volgt dat aanwezige reclame-uitingen en merkproductinformatie van farmaceutische industrieën alleen gericht zijn op personen die bevoegd zijn om de betreffende geneesmiddelen voor te schrijven. Wij maken u erop attent dat het voor niet-artsen dan ook niet is toegestaan de stands van de aanwezige farmaceutische industrieën te bezoeken.

De NVGE en farmaceutische industrie (sponsoren) vertrouwen erop u met bovenstaande voldoende te hebben geïnformeerd.

Bestuur van de NVGE



Programma MDL Update

Dinsdag 18 maart - Brabantzaal

Onderwerp:	**Voeding bij gezondheid en ziekte**
Voorzitters:	Dr. J.W. Kruimel en Dr. I.A.M. Gisbertz
10.30-11.00	Registratie, koffie
11.00-11.10	Opening door voorzitters *Pre-test vragen met behulp van Mentimeter*
11.10-12.00	Voeding bij gezondheid *Dr. A.A. van Bodegraven, MDL-arts, Zuyderland Ziekenhuis, Sittard-Geleen* *J.F. Monkelbaan, MDL-arts, UMC Utrecht, Utrecht*
12.00-12.30	Ultra-processed food (UPF) *Dr. J.W. Kruimel, MDL-arts, MUMC+, Maastricht*
12.30-13.30	**Lunch in de Limburgfoyer**
13.30-14.30	Voeding bij veranderde anatomie *Dr. D.S.V.M. Clément, MDL-arts, King's College Hospital, Londen* *Dr. D.N. Dijxhoorn, MDL-arts i.o., Radboudumc, Nijmegen* *H. Wierda, diëtist, Radboudumc, Nijmegen*
14.30-15.00	To fiber or not to fiber *Dr. M.J.E. Campmans, UD Voeding, UMC Groningen, Groningen*
15.00-15.30	**Pauze**
15.30-16.30	Overvoeding, in het bijzonder bij leverziekten *Dr. G.H. Koek, MDL-arts, MUMC+, Maastricht* *Dr. R.G.P.J. de Jong, MDL-arts, St. Anna Ziekenhuis, Geldrop* *Dr. Ö.M. Koc, MDL-arts i.o., Zuyderland Ziekenhuis, Sittard-Geleen*
16.30-17.30	De darm-brein as en het belang van voeding *Prof. dr. E. Aarts, Nutritional Neuroscience, Donders Instituut, Radboud Universiteit, Nijmegen*
17.30-17.45	Eind-test vragen met behulp van Mentimeter *Prijsuitreiking*
17.45	Afsluiting door de voorzitters Het aansluitende (vegetarisch Aziatisch) buffet vindt plaats in restaurant Binnenhof, nabij de hoofdingang.

Woensdag 19 maart - Brabantzaal

Voorzitters: A. Rezazadeh en M.C. Visschedijk

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

09.30 IBD- en non IBD colitis in de pathologie praktijk: van verslaglegging tot intercollegiaal overleg

G. Kats-Ugurlu, Patholoog, UMC Groningen
Dr. N. Knijn, Patholoog, Pathologie DNA, locatie Arnhem

10.00 Pro-en contra discussie met betrekking tot deep remission bij IBD

M. Löwenberg, MDL-arts, Amsterdam UMC
A.E. van der Meulen-de Jong, MDL-arts, LUMC, Leiden

10.20 High risk of colorectal cancer after high-grade dysplasia in inflammatory bowel disease patients

M.E.W. Derks[1], M. te Groen[1], L.A.A.P. Derikx[2], I.D. Nagtegaal[3], F. Hoentjen[2, 5], [1]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Dept. of Pathology, Radboudumc, Nijmegen, The Netherlands, [5]Dept. of Gastroenterology, University of Alberta, Edmonton, Canada

10.28 Combined clinical and histopathological risk stratification for prediction of (severe) endoscopic postoperative recurrence in patients with Crohn's disease after ileocolic resection

M.T.J. Bak[1], L. Oudijk2, A.H.A.G. Ooms[3], E.M.J. Beelen1, J.D.W. van der Bilt[4], M. Romberg-Camps[5], G. Dijkstra[6], M. Duijvestein[7], S. van der Marel[8], L.P.S. Stassen[9, 10], P.W.J. Maljaars[11], C.J. Buskens[12], J. Lange[13], G. Kats-Ugurlu[14], S.V. Jansen[15], B. Jharap[16], C.S. Horjus[17], F.D.M. van Schaik[18], R.L. West[19], K.H.N. de Boer[20], C.J. van der Woude[7], K.P. Parikh.[1], O. van Ruler[22], M. Doukas[2], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Pathology, Erasmus MC, Rotterdam, [3]Dept. of Pathology, Pathan BV, Rotterdam, [4]Dept. of Surgery, Flevoziekenhuis, Almere, [5]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Dept. of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, [6]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [7]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [8]Dept. of Gastro-enterology and Hepatology, Haaglanden MC, The Hague, [9]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [10]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [11]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [12]Dept. of Surgery, Amsterdam UMC, Amsterdam, [13]Dept. of Surgery, University Medical Centre Groningen, Groningen, [14]Dept. of Pathology, University Medical Centre Groningen, Groningen, [15]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [16]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [17]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, [18]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, [19]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [20]Dept. of Gastroenterology and

Hepatology, Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [22]Dept. of Surgery, IJsselland Ziekenhuis, Capelle aan de IJssel, The Netherlands.

10.36 The macroscopic and microscopic distribution of IBD in patients with PSC: a polytomous latent class analysis on 3177 endoscopies

D. Sneek[1], A.J. van der Meer[1], B. Mol[2], C.Y. Ponsioen[2], A. Inderson[3], R.K. Weersma[4], B. Hansen[5], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, [4]Dept. of Gastroenterology and Hepatology, University Medical Centre Groningen, [5]Dept. of Epidemiology and Biostatistics, Erasmus MC, Rotterdam, The Netherlands

10.45 Gemodereerde postersessies in de Meierij Foyer
Koffie/thee pauze in de expositiehal

Plenaire opening DDD - President Select

Woensdag 19 maart - Brabantzaal

Voorzitters: A.E. Van der Meulen en A.G.L. Bodelier

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

11.15 From Percutaneous Transhepatic Biliary Drainage to Endoscopic Ultrasound-Guided Choledochoduodenostomy: a safe alternative with fewer complications and enhanced recovery in patients with malignant distal biliary obstruction with inaccessible papilla.

A.J. van Ginkel[1], P.A. Akkermans[2], J. van der Palen[3], N.G. Venneman[1], [1]Dept. of Gastroenterology and Hepatology, [2]Dept. of Radiology, [3]Dept. of Epidemiology, Medisch Spectrum Twente, Enschede, The Netherlands.

11.23 Multicenter, randomized non-inferiority trial comparing transanal minimal invasive surgery (TAMIS) and endoscopic submocusal dissection (ESD) for resection of non-pedunculated rectal lesions.

N. Dekkers[1], D.A. Verhoeven[2], J.J. Boonstra[1], L.M.G. Moons[3], R. Hompes[4], B.A.J. Bastiaansen[5], J.B. Tuynman[4], A.D. Koch[6], B.L.A.M. Weusten[7, 8], A. Alkhalaf[9], E.J.T.H. Belt[10], W.A. Bemelman[4], E.C.J. Consten[11, 12], A.S.L.P. Crobach[13], H. Dang[2], P. Didden[3], B. Grotenhuis[14], H. Hekmat[15], E. . Hoekstra[16], W.B. Hout[17], I.L. Huibregtse[18], J. Keller[19], J. van der Kraan[2], A. Langers[2], M.E. van Leerdam[18], A.W.K.S. Marinelli[20], P.A. Neijenhuis[21], J.M.T. Omloo[22], A. Pronk[23], R. Roomer[24], M. Rodríguez-Girondo[25], R.W.M. Schauwen [26], M.P. Schwartz[27], M. Verseveld[28], W.H. De Vos tot Nederveen Cappel[9], B.J. van Wely[29], M. Westerterp[20], H.L. Van Westreenen[30], R.W.R. ten Hove[31], H.F.A. Vasen[2], P.G. Doornebosch[32], J.C.H. Hardwick[2], [1]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [2]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [3]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, [4]Dept. of Surgery, Amsterdam UMC, Amsterdam, [5]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [6]Dept. of Gastroenterology and Hepatology, Erasmus MC University Medical Center, Rotterdam, [7]Dept. of Gastroenterology and Hepatology, Sint Antonius Hospital, Nieuwegein, [8]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, [9]Dept. of Gastroenterology and Hepatology, Isala Hospital, Zwolle, [10]Dept. of Surgery, Albert Schweitzer Hospital, Dordrecht, [11]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [12]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, [13]Dept. of Pathology, Leiden University Medical Center, Leiden, [14]Dept. of Surgery, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [15]Dept. of Gastroenterology and Hepatology, IJsselland Ziekenhuis, Capelle aan de IJssel, [16]Dept. of Gastroenterology and Hepatology, Haga Hospital, Den Haag, [17]Dept. of Medical decision making, Leiden University Medical Center, Leiden, [18]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [19]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [20]Dept. of Surgery, Haaglanden MC, The Hague, [21]Dept. of Surgery, Alrijne Hospital, Leiderdorp, [22]Dept. of Surgery, Gelre Hospitals, Apeldoorn, [23]Dept. of Surgery, Diakonessenhuis, Utrecht, [24]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [25]Dept. of Biostatistics, Leiden University Medical Center, Leiden, [26]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [27]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [28]Dept. of Surgery, Franciscus Gasthuis & Vlietland, Rotterdam, [29]Dept. of Surgery, Bernhoven Hospital, Uden, [30]Dept. of Gastrointestinal Surgery, Isala, Zwolle,

[31]Dept. of Gastroenterology and Hepatology, Alrijne Hospital, Leiden, [32]Dept. of Surgery, IJsselland Ziekenhuis, Capelle aan de IJssel, The Netherlands.

11.31 The closer, the better: intratumoral delivery of a thermoresponsive gemcitabine-loaded hydrogel in preclinical pancreatic cancer models

A. Vallés Martí[1], L.J.A.C. Hawinkels[1], C. Simpson[2], P. Kinderman[1], E. de Jonge-Muller[1], A. Van der Wielen[1], Z. Li[2], T. Tomar[3], M.G.W. de Leeuw[3], H.M. Kelly[2], [1]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [2]School of Pharmacy and Biomolecular Sciences, Royal College of Surgeons, Dublin, Ierland, [3]OncoLize, Leiden, The Netherlands.

11.39 Uitreiking Gastrointestinale Proefschriftprijs inclusief voordracht prijswinnaar

11.49 Keynote: AI in de GI pathologie

Dr. S.L. Meijer, Patholoog, Amsterdam UMC, Amsterdam

12.15 Algemene Ledenvergadering NVGE Brabantzaal

12.30 Gemodereerde postersessies in de Meierij Foyer
Lunch in de expositiehal

Abstractsessie Sectie Gastrointestinale Endoscopie

Woensdag 19 maart - Brabantzaal

Voorzitters: P.J.F. de Jonge en P.J. van der Schaar

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

13.30 Acetic acid chromoendoscopy for the detection of neoplastic Barrett Esophagus: a stepped wedge cluster randomized clinical trial

I.N. Beaufort[1, 2], L.S. Boer[1,2], A.N. Milne[4], Y.A. Alderlieste[5], J.E. Baars[6], P.R. Bos[7], J.P.W. Burger[8], N.C.M. van Heel[9], M. Ledeboer[10], R.J. Lieverse[11], P.C. van de Meeberg[12], J.J. Meeuse[13], A.H.J. Naber[14], H.J.M. Pullens[15], R.C.H. Scheffer[16], M. Sikkema[17], M.F.J. Stolk[1], R.E. Verbeek[18], M.A.M.T. Verhagen[19], W. van de Vrie[20], M. Willems[21], C.H. Werkhoven[22], B.L.A.M. Weusten[1, 2], [1]Dept. of Gastroenterology and Hepatology, Sint Antonius Hospital, Nieuwegein, [2]Dept. of Gastroenterology and Hepatology, UMC Utrecht, [4]Dept. of Pathology, Sint Antonius Hospital, Nieuwegein, The Netherlands, [5]Dept. of Gastroenterology and Hepatology, Beatrix Hospital, Gorinchem, [6]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [7]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [8]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, [9]Dept. of Gastroenterology and Hepa-tology, Gelre Hospitals, Apeldoorn, [10]Dept. of Gastroenterology and Hepa-tology, Deventer Hospital, [11]Dept. of Gastroenterology and Hepa-tology, Ziekenhuisgroep Twente, Almelo, [12]Dept. of Gastroenterology and Hepatology, Slingeland Hospital, Doetinchem, [13]Dept. of Internal Medicine, Hospital Rivierenland, Tiel, [14]Dept. of Gastroenterology and Hepatology, Tergooi Hospital, Hilversum, [15]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [16]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [17]Dept. of Gastroenterology and Hepatology, Elisabeth Twee Steden Hospital, Tilburg, [18]Dept. of Gastroenterology and Hepatology, Groene Hart Hospital, Gouda, [19]Dept. of Gastroenterology and Hepato-logy, Diakonessenhuis, Utrecht, [20]Dept. of Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [21]Dept. of Gastroenterology and Hepatology, Sint Jansdal Hospital, Harderwijk, [22]Dept. Julius Center for Health Sciences and Primary Care, Julius Center, University Medical Center Utrecht, Utrecht, The Netherlands.

13.38 Textbook outcome after EUS-CDS versus ERCP for primary drainage of malignant distal biliary obstruction: a comparison of two prospective cohorts

A.M. Onnekink[1], J.A. Fritzsche[2,3,4], E. Smit[3,4,5], P. Fockens[6], A. Inderson[1], M.C.B. Wielenga[5,7], R.L.J. Wanrooij[5], J.E. van Hooft[1], R.P. Voermans[5], [1]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, [2]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [3]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, [4]Dept. of Gastroenterology and Hepatology, Cancer Center Amsterdam, [5]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [7]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism (AGEM), Amsterdam, The Netherlands.

13.46 Endoscopic Ultrasound-Directed TransGastric ERCP in patients with Roux-en-Y gastric bypass: a multicenter prospective cohort study (EDGE-pilot)

A.G. Overdevest[1, 2], S. Haal[1, 2], J.E. van Hooft[3], A. Inderson[3], S.D. Kuiken[4], W.O.A. Rohof[4], J.M. Vrolijk[5], M.C.B. Wielenga[1, 2], T. Wijnands[5], R.L.J. Wanrooij[1], R.P. Voermans[1], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism (AGEM) , [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, [4]Dept. of Gastroenterology and Hepatology, OLVG, Amsterdam, [5]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, The Netherlands.

13.54 Long-term results of lumen apposing metal stents versus double-pigtail plastic stents for infected necrotizing pancreatitis

A. Beij[1, 2, 3], L. Boxhoorn[1, 2], A.M. Onnekink[4], R.C. Verdonk[3], M.G. Besselink[5], T. Bollen[6], S.A.W. Bouwense[7], M. Kop[8], V.C. Cappendijk[9], W.L. Curvers [10], H. . van Dullemenan [11], C.H. van Eijck[12], M. Hadithi[13], W.L. Hazen[14], P. Honkoop[15], J.E. van Hooft[4], E. Kouw[16], S.D. Kuiken[17], M. Ledeboer[18], V.B. Nieuwenhuijs[19], L. Perk[20], J.W. Poley[21], R. Quispel[22], R.J.J. de Ridder[21], H.C. van Santvoort[23], M.W.J. Stommel[24], B.J. Witteman[25], N.G. Venneman[26], F.P. Vleggaar[27], R.L.J. Wanrooij[1], M.J. Bruno[28], P. Fockens[1], R.P. Voermans[1], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [4]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [5]Dept. of Surgery, Amsterdam UMC, Amsterdam, [6]Dept. of Radiology, St. Antonius Hospital, Nieuwegein, [7]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [8]Dept. of Radiology, Amsterdam UMC, Amsterdam, [9]Dept. of Radiology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [10]Dept. of Gastroenterology and Hepatology, Catharina Hospital, Eindhoven, [11]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [12]Dept. of Gastroenterology and Hepatology, Erasmus University Medical Center, Rotterdam, [13]Dept. of Gastro-enterology and Hepatology, Maasstad Hospital, Rotterdam, [14]Dept. of Gastroenterology and Hepatology, Elisabeth Twee Steden Hospital, Tilburg, [15]Dept. of Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [16]Dept. of Gastroenterology and Hepatology, Gelre Hospitals, Apeldoorn, [17]Dept. of Gastroenterology and Hepatology, OLVG, Amsterdam, [18]Dept. of Gastroenterology and Hepatology, Deventer Hospital, Deventer, [19]Dept. of Surgery, Isala, Zwolle, [20]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [21]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [22]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [23]Dept. of Surgery, St. Antonius Hospital, Nieuwegein, [24]Dept. of Surgery, Radboud UMC, Nijmegen, [25]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [26]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [27]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [28]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, The Netherlands.

14.02 Predictors for successful treatment of infected necrotizing pancreatitis with antibiotics alone: a nationwide prospective cohort

H.S. Pauw[1], H.C. Timmerhuis[1], L. Boxhoorn[2, 3], N.J. Sissingh[4], R.P. Voermans[2], M.G. Besselink[5], E. Sieswerda[6], L.A. Daamen[7], S.A.W. Bouwense[8], T. Bollen[9], J.E. van Hooft[4], F.F. van den Berg[10, 11], R.C. Verdonk[12], H.C. van Santvoort[1], [1]Dept. of Surgery, St. Antonius Hospital, Nieuwegein, [2]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [4]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [5]Dept. of Surgery, Amsterdam UMC, Amsterdam, [6]Dept. of Medical Microbiology, University Medical Centre Utrecht, Utrecht, [7]University Medical Centre Utrecht, Utrecht, [8]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [9]Dept. of Radiology, St. Antonius Hospital, Nieuwegein, [10]Dept. of Medical Microbiology, Amsterdam UMC, location University of Amsterdam, Amsterdam, [11]Dept. of Medical Microbiology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [12]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, The Netherlands.

14.10 Algorithm-based integrated care for the treatment of chronic pancreatitis: a nationwide stepped-wedge cluster randomized controlled trial

F.E.M. de Rijk[1], N.D.E. Thierens[2, 3], C.L. van Veldhuisen[4], B.A. Aman[5], M.P.G.F. Anten[6], A. Bhalla[7], P.R. Bos[8], M.A. Brink[9], W.L. Curvers [10], B.C. van Eijck[11], M. Hadithi[12], A. Inderson[13], L.M. Kager[14], Y.L. Keulemans[15], P. Koehestanie[16], S.D. Kuiken[17], A.C. Poen[18], R. Quispel[19], T.E.H. Romkens[20], J. Sint Nicolaas [21], J.W.A. Straathof [22], A.C.I.T.L. Tan[23], W.J. Thijs[24], M.M. Tielemans[16], N.G. Venneman[25], F.P. Vleggaar[26], R.P. Voermans[27], R.L.J. Wanrooij[27], T. Verlaan[8], R. Zoutendijk[3], M.G. Besselink[4], J.P.H. Drenth[28], J.E. van Hooft[13], H.C. van Santvoort[29], C.H. Werkhoven[30], P.J.F. de Jonge[31], M.J. Bruno[1], R.C. Verdonk[3], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Radboud University Medical Center, Nijmegen, [3]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [4]Dept. of Surgery, Amsterdam UMC, Amsterdam, [5]Dept. of Research & Development, St. Antonius Hospital, Nieuwegein, [6]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [7]Dept. of Gastroenterology and Hepatology, Haga Hospital, Den Haag, [8]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [9]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [10]Dept. of Gastroenterology and Hepatology, Catharina Hospital, Eindhoven, [11]Dept. of Gastroenterology and Hepatology, Spaarne Gasthuis, Hoofddorp, [12]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [13]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [14]Dept. of Gastroenterology and Hepatology, Noordwest Ziekenhuisgroep, Alkmaar, [15]Dept. of Gastroenterology and Hepatology, Zuyderland Medical Center, Geleen/Heerlen, [16]Dept. of Gastroenterology and Hepatology, Bravis Hospital , Roosendaal, [17]Dept. of Gastroenterology and Hepatology, OLVG, Amsterdam, [18]Dept. of Gastroenterology and Hepatology, Isala, Zwolle, [19]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [20]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [21]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [22]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [23]Dept. of Gastroenterology and Hepatology, Canisius Wilhelmina Hospital, Nijmegen, [24]Dept. of Gastroenterology and Hepatology, Martini Hospital, Groningen, [25]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [26]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht,

[27]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [28]Dept. of Gastroenterology and Hepatology, Amsterdam University Medical Center , Amsterdam, [29]Dept. of Surgery, St. Antonius Hospital, Nieuwegein, [30]Dept. Julius Center for Health Sciences and Primary Care, Julius Center, University Medical Center Utrecht, Utrecht, [31]Dept. of Gastroenterology and Hepatology, Erasmus MC University Medical Center, Rotterdam, The Netherlands.

14.18 Nutritional deficiencies are highly prevalent in patients with chronic pancreatitis and associated with exocrine insufficiency and alcohol use

N.D.E. Thierens[1, 2], F.E.M. de Rijk[3], S. Bai[2], C.L. van Veldhuisen[4], B.A. Aman[5], M.P.G.F. Anten[6], A. Bhalla[7], P.R. Bos[8], M.A. Brink[9], W.L. Curvers [10], B.C. van Eijck[11], M. Hadithi[12], A. Inderson[13], L.M. Kager[14], Y.L. Keulemans[15], P. Koehestanie[16], S.D. Kuiken[17], A.C. Poen[18], R. Quispel[19], T.E.H. Romkens[20], J. Sint Nicolaas [21], J.W.A. Straathof [22], A.C.I.T.L. Tan[23], W.J. Thijs[24], M.M. Tielemans[16], N.G. Venneman[25], F.P. Vleggaar[26], R.P. Voermans[27], R.L.J. Wanrooij[27], T. Verlaan[8], R. Zoutendijk[2], M.G. Besselink[4], J.E. van Hooft[13], H.C. van Santvoort[28], P.J.F. de Jonge[29], M.J. Bruno[3], J.P.H. Drenth[30], R.C. Verdonk[2], [1]Dept. of Gastroenterology and Hepatology, Radboud University Medical Center, Nijmegen, [2]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [3]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [4]Dept. of Surgery, Amsterdam UMC, Amsterdam, [5]Dept. of Research & Development, St. Antonius Hospital, Nieuwegein, [6]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [7]Dept. of Gastroenterology and Hepatology, Haga Hospital, Den Haag, [8]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [9]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [10]Dept. of Gastroenterology and Hepatology, Catharina Hospital, Eindhoven, [11]Dept. of Gastroenterology and Hepatology, Spaarne Gasthuis, Hoofddorp, [12]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [13]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [14]Dept. of Gastroenterology and Hepatology, Noordwest Ziekenhuisgroep, Alkmaar, [15]Dept. of Gastroenterology and Hepatology, Zuyderland Medical Center, Geleen/Heerlen, [16]Dept. of Gastroenterology and Hepatology, Bravis Hospital , Roosendaal, [17]Dept. of Gastroenterology and Hepatology, OLVG, Amsterdam, [18]Dept. of Gastroenterology and Hepatology, Isala, Zwolle, [19]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [20]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [21]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [22]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [23]Dept. of Gastroenterology and Hepatology, Canisius Wilhelmina Hospital, Nijmegen, [24]Dept. of Gastroenterology and Hepatology, Martini Hospital, Groningen, [25]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [26]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [27]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [28]Dept. of Surgery, St. Antonius Hospital, Nieuwegein, [29]Dept. of Gastroenterology and Hepatology, Erasmus MC University Medical Center, Rotterdam, [30]Dept. of Gastroenterology and Hepatology, Amsterdam University Medical Center , Amsterdam, The Netherlands

Symposium Mesenteriaal Ischemie

Woensdag 19 maart - Brabantzaal

Voorzitters: D. Leemreis - Van Noord en W.M.U. Grevenstein

14.30	Opening *Dr. D. Leemreis-van Noord, MDL-arts, Franciscus Gasthuis & Vlietland, voorzitter Dutch Mesenteric Ischemia Study Group (DMIS)*
14.40	Highlights revisie ESVS richtlijn 2025; chronische ischemie *Dr. J. de Bruin, Vaatchirurg, Erasmus MC, Rotterdam*
15.00	Highlights revisie ESVS richtlijn 2025; acute ischemie *Prof. dr. B. Geelkerken, Vaatchirurg, Medisch Spectrum Twente, Enschede*
15:20	Presentatie Mesenteric artery stenosis is a risk factor for anastomotic leakage in colo-rectal surgery *K. Vree Egberts, Arts-onderzoeker/nios Chirurgie, Medisch Spectrum Twente, Enschede*
15.35	Innovaties radiologie *Dr. K.J. Pieterman, Interventieradioloog, Erasmus MC, Rotterdam*
15.55	Afsluiting sessie
16.00	Gemodereerde postersessies in de Meierij Foyer Koffie-/theepauze in de expositiehal

Symposium Sectie Oncologie i.s.m. Pathologie

Woensdag 19 maart - Brabantzaal

Voorzitters: Volgt

16.30 Herkenning van de premaligne maag: atrofie en IM
Dr. J. Honing, MDL-arts, Erasmus MC, Rotterdam
Dr. L. Oudijk, Patholoog, Erasmus MC, Rotterdam

17.00 Vroeg carcinomen, herkennen en verwijderen
Prof. dr. B.L.A.M. Weusten, MDL-arts, UMC Utrecht en St. Antonius Ziekenhuis, Nieuwegein
Dr. J.E. Freund, Patholoog, UMC Utrecht

17.30 Top Abstracts in de Brabantzaal

Top Abstracts

Woensdag 19 maart - Brabantzaal

Voorzitters: A.G.L. Bodelier en W.M.U. van Grevenstein

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

17.30 Endoscopic ultrasonography-guided gastroenterostomy versus surgical gastrojejunostomy for palliation of malignant gastric outlet obstruction (ENDURO)

Y.L. van de Pavert[1], J.B. Kastelijn[1], M.G. Besselink[2], D.C. Booij[3], J.J. Boonstra[4], J. Boot[1], M.J. Bruno[3], O.R.C. Busch[5, 6], F. Daams[2], W.J.M. Derksen[7, 8], P. Fockens[9], B. Groot Koerkamp [10], J. Hagendoorn[7, 8], J.E. van Hooft[11], A. Inderson[11], W.J. Lammers[3], D. Lips[12], J.S.D. Mieog[13], I.Q. Molenaar[1, 14], A.A.F.A. Veenhof[15], N.G. Venneman[16], R.C. Verdonk[14], R.P. Voermans[9], R.L.J. Wanrooij[9], P.M.J. Welsing[17], T.R. de Wijkerslooth[18], L.M.G. Moons[19], H.C. van Santvoort[8], F.P. Vleggaar[20], [1]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, [2]Dept. of Surgery, Amsterdam UMC, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [4]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [5]Dept. of Surgery, Amsterdam UMC, location University of Amsterdam, Amsterdam, [6]Dept. of Surgery, Cancer Center Amsterdam, Amsterdam, [7]Dept. of Surgery, UMC Utrecht, Utrecht, [8]Dept. of Surgery, St. Antonius Hospital, Nieuwegein, [9]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [10]Dept. of Surgery, Erasmus MC Cancer Institute, Rotterdam , [11]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [12]Dept. of Surgery, Medisch Spectrum Twente, Enschede, [13]Dept. of Surgery, Leiden University Medical Center, Leiden, [14]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [15]Dept. of Surgery, Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital, Amsterdam, [16]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [17]Dept. of Internal Medicine, UMC Utrecht, Utrecht, [18]Dept. of Gastrointestinal Oncology, Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital, Amsterdam, [19]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, [20]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, The Netherlands

17.38 Preoperative body composition parameters are associated with postoperative complications and endoscopic postoperative recurrence in patients with Crohn's disease

M.T.J. Bak[1], K. Demers[2, 3], O. van Ruler[4], M.J. Pierik[5, 6], D.P.J. van Dijk[2], J.D.W. van der Bilt[7], M. Romberg-Camps[8], G. Dijkstra[9], M. Duijvestein[10], S. van der Marel[11], P.W.J. Maljaars[12], C.J. Buskens[13], F.C.H. Bakens[14], R. Brecheisen[2], B.C. Bongers[15], D. de Witte[16], S.V. Jansen[17], B. Jharap[18], C.S. Horjus[19], F.D.M. van Schaik[20], R.L. West[21], K.H.N. de Boer[22], B. Hansen[23], C.J. van der Woude[24], E.F.C. van Rossum[25], L.P.S. Stassen[2, 3], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [3]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Surgery, IJsselland Ziekenhuis, Capelle aan de IJssel, [5]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [6]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [7]Dept. of Surgery, Flevoziekenhuis, Almere, [8]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Zuyderland Medical Center, Sittard, [9]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [10]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [11]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [12]Dept.

of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [13]Dept. of Surgery, Amsterdam UMC, Amsterdam, [14]Dept. of Radiology and Nuclear Medicine, Maastricht University Medical Center+, Maastricht, [15]Dept. of Nutrition and movement sciences, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [16]Dept. of Radiology and Nuclear Medicine, Erasmus MC, Rotterdam, [17]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [18]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [19]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, [20]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [21]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [22]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [23]Dept. of Epidemiology and Biostatistics, Erasmus MC, Rotterdam, [24]Dept. of Gastroenterology and Hepatology, Radboud University Medical Centre, Nijmegen, [25]Dept. of Internal Medicine, Erasmus MC, Rotterdam, The Netherlands

17.46 Improvement of night time gastroesophageal reflux symptoms with sleep positional therapy using a smartwatch app

E.M. Wessels[1, 2], G.M.C. Masclee[1, 2], A.J. Bredenoord[1, 2], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, AGEM, Amsterdam, The Netherlands.

17.54 Pitch MDL Fonds: Unraveling Intestinal Senescence in Alcohol-Associated Hepatitis: From Biomarkers to Mechanism and Personalized Medicine

S. Meijnikman, MDL-arts i.o, Spaarne Gasthuis, Haarlem

17.59 Uitreiking Distinguised Hepatology Award gevolgd door voordracht prijswinnaar

18.09 Uitreiking Gastrostart subsidies

18.14 Uitreiking NVGE Researchprijs gevolgd door voordracht prijswinnaar

Symposium NVGIC - Duurzaamheid

Woensdag 19 maart - Auditorium

Voorzitters:	R. de Vos en A. de Niet
09.30	Duurzame innovatie; de groene operatie? *Prof. dr. S. Kruijff, Chirurg, UMC Groningen*
09.45	REFUSE/REDUCE in operaties *Dr. P.R. de Reuver, Chirurg, Radboudumc, Nijmegen*
10.00	Duurzame innovatie; hoe aan te pakken in een ziekenhuis? *Prof. dr. N.B. Bouvy, Chirurg, MUMC+, Maastricht*
10.15	REFUSE/REDUCE in 'follow up' *Dr. D.J. Grünhagen, Chirurg, Erasmus MC, Rotterdam,*
10.30	Initiatieven robot in kader duurzaamheidsgedachte *Dr. S.L. Jansen, Uroloog, UMC Utrecht*
10.45	Gemodereerde postersessies in de Meierij Foyer Koffie-/theepauze in de expositiehal

Woensdag 19 maart - Auditorium

Voorzitters: J. Jonker en C. Marres

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

13.30 Prevention of incisional hernias with prophylactic synthetic mesh placement during stoma reversal (PRINCE trial): a randomised controlled trial

T.A. Burghgraef[1], F.A. Amelung[1], B.A.J. Kertzman[1], W.A. Draaisma[1], E.G.G. Verdaasdonk[1], P.M. Verheijen[2], E.C.J. Consten[3, 4], [1]Dept. of Surgery, Jeroen Bosch Ziekenhuis, 's Hertogenbosch, [2]Dept. of Surgery, Meander Medical Centre, Amersfoort, [3]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [4]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, The Netherlands

13.38 Surgery for perihilar cholangiocarcinoma without preoperative biliary drainage: A retrospective multicentre propensity scores weighted analysis

J.A. Luyten[1, 2], P.B. Olthof[3, 4, 5], S.M.J. van Kuijk[6], U.P. Neumann[1, 7], B. Groot Koerkamp [3], M.J.L. Dewulf[1], S.W.M. Olde Damink [1, 2, 7], [1]Dept. of Surgery, Maastricht University Medical Centre, Maastricht, [2]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [3]Dept. of Surgery, Erasmus MC Cancer Institute, Rotterdam, [4]Dept. of Surgery, Amsterdam UMC, Amsterdam, [5]Dept. of Surgery, Dept. of Hepatobiliary, Endocrine and Transplantation Surgery, Antwerp Univ, Edegem, België, [6]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA), Maastricht University Medical Center+, Maastricht, [7]Dept. of Surgery, Dept. of General, Visceral, Vascular and Transplant Surgery, University H, Essen, Germany

13.46 Long-term outcomes of colon cancer patients with infectious tumor-related complications

E. Rademaker[1, 2], J.M. van der Woude[1, 3], H.L. Van Westreenen[1], E.C.J. Consten[4, 5], P.J. Tanis[2], [1]Dept. of Gastrointestinal Surgery, Isala, Zwolle, [2]Dept. of Gastrointestinal Surgery, Erasmus MC, Rotterdam, [3]Dept. of Gastrointestinal Surgery, Amsterdam UMC, Amsterdam, [4]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [5]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, The Netherlands

13.54 Activity tracking up to 90-days after minimally invasive and open pancreato-duodenectomy in the multicenter international randomized DIPLOMA-2 trial

C.L. Bruna[1], A.M.L.H. Emmen[1], N. de Graaf[1], M. Ramera[2], J. Van Hilst[1], B. Bjornsson[3], U. Boggi[4], O.R.C. Busch[1, 5], D.H.M. Droogh[6], G. Ferrari[7], S. Festen[8], F. Daams[9], G. Kazemier[5, 9], M. Guerra[2], I.H.J.T. de Hingh[10], T. Keck[11], B. Groot Koerkamp [12], C.A.P. Klok[1], D. Lips[13], M.D.P. Luyer[14, 15], J.S.D. Mieog[6], L. Morelli[16], I.Q. Molenaar[17, 18], M. Ali[19], C. Ferrari[20], J. Berkhof[19], P. Maisonneuve[21], M.G. Besselink[9], M. Abu Hilal[22], [1]Dept. of Surgery, Amsterdam UMC, location University of Amsterdam, Amsterdam, [2]Dept. of Surgery, Fondazione Poliambulanza Istituto Ospedaliero, Brescia, Italië, [3]Dept. of Surgery, Linköping University Hospital, Linköping, Zweden, [4]Dept. of Surgery, Universitá di Pisa, Pisa, Italië, [5]Dept. of Surgery, Cancer Center Amsterdam, Amsterdam, [6]Dept. of Surgery, Leiden University Medical Center, Leiden, [7]Dept. of Surgery, Niguarda Ca'Granda Hospital, Milan, Italië, [8]Dept. of Surgery, OLVG, Amsterdam, [9]Dept. of Surgery, Amsterdam

UMC, Amsterdam, [10]Dept. of Gastrointestinal Surgery, Catharina Ziekenhuis, Eindhoven, [11]Dept. of Surgery, UKSH campus Lübeck, Lübeck, Duitsland, [12]Dept. of Surgery, Erasmus MC Cancer Institute, Rotterdam , [13]Dept. of Surgery, Medisch Spectrum Twente, Enschede, [14]Dept. of Surgery, Catharina Hospital, Eindhoven, [15]Dept. of Surgery, Eindhoven University of Technology, Eindhoven, [16]Dept. of Surgery, University of Pisa, Pisa, Italië, [17]Dept. of Gastroenterology and Hepatology, UMC Utrecht, UTRECHT, [18]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [19]Dept. of Epidemiology, Amsterdam UMC, location Vrije Universiteit, Amsterdam, [20]Dept. of Biostatistics, Fondazione Poliambulanza Istituto Ospedaliero, Brescia, Italië, [21]Dept. of Epidemiology and Biostatistics, IEO European Institute of Oncology IRCCS, Milan, Italië, [22]Dept. of Surgery, University Hospital Southampton NHS Foundation Trust, Southampton, Verenigd Koninkrijk

14.02 Hospital variation and trends over time for completion surgery for locally resected high-risk T1 colon cancers in The Netherlands.

L.H.I. Overeem[1], F.N. Erning[2], J. Hanevelt[3], H.L. Van Westreenen[4], W.H. De Vos tot Nederveen Cappel[3], L.M.G. Moons[5], [1]Dept. of Surgery, Isala, Zwolle, [2]IKNL , Amsterdam, [3]Dept. of Gastroenterology and Hepato-logy, Isala Hospital, Zwolle, [4]Dept. of Gastrointestinal Surgery, Isala, Zwolle, [5]Dept. of Gastroenterology and Hepato-logy, UMC Utrecht, Utrecht, The Netherlands

14.10 Intentional curative treatment of locoregional recurrent colon cancer – a systematic review and meta-analysis

E. Rademaker[1, 2], A. Stapasolla Vargas Garcia[2, 3], I.H.J. Sujecki[1, 2], R.M. Brohet[4], H. Swartjes[5], J.H.W. de Wilt[5], N.F.M. Kok[6], I.H.J.T. de Hingh[7], H.L. Van Westreenen[1], E.C.J. Consten[8, 9], P.J. Tanis[2], [1]Dept. of Gastrointestinal Surgery, Isala, Zwolle, [2]Dept. of Gastrointestinal Surgery, Erasmus MC, Rotterdam, [3]Dept. of Gastrointestinal Surgery, Hospital Moinhos de Vento, Porto Alegre, Brazilië, [4]Dept. of Clinical Epidemiology, Isala, Zwolle, [5]Dept. of Gastrointestinal Surgery, Radboud UMC, Nijmegen, [6]Dept. of Gastrointestinal Surgery, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [7]Dept. of Gastrointestinal Surgery, Catharina Ziekenhuis, Eindhoven, [8]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [9]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, The Netherlands

14.18 Long-term outcomes of asymptomatic cT4 colon tumors depending on method of detection

E. Rademaker[1, 2], E.R. Luijkx[1, 2], E.C.J. Consten[3, 4], P.J. Tanis[2], H.L. Van Westreenen[1], [1]Dept. of Gastrointestinal Surgery, Isala, Zwolle, [2]Dept. of Gastrointestinal Surgery, Erasmus MC, Rotterdam, [3]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [4]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, The Netherlands

Symposium Sectie Endoscopie i.s.m. Pathologie

Woensdag 19 maart - Auditorium

Voorzitters: A.M. van Berkel en A.S.L.P. Crobach

14.30 ERCP geleide en EUS geleide PA diagnostiek
Dr. K.V. Basiliya, MDL-arts, Leids Universitair Medisch Centrum
Dr. A.S.L.P. Crobach, Patholoog, Leids Universitair Medisch Centrum

15.00 Diagnostiek van subepitheliale laesies van maag en oesofagus
Dr. L. Hol, MDL-arts, Maasstad Ziekenhuis, Rotterdam
Dr. M.F. van Velthuysen, Patholoog, Erasmus MC, Rotterdam

15.30 Indicatie en interpretatie van dunne darm biopten
Dr. P.J. Wahab, MDL-arts, Rijnstate Ziekenhuis, Arnhem
Dr. N. Knijn, Patholoog, Rijnstate Ziekenhuis, Arnhem

16.00 Gemodereerde postersessies in de Meierij Foyer
Koffie-/theepauze in de expositiehal

Symposium NVGIC - Prehabilitatie

Woensdag 19 maart - Auditorium

Voorzitters: J. Kiewiet en M. Vermaas

16.30 Winst prehabiliteren, ook van de acute uitgestelde patiënt
Dr. E.G.G. Verdaasdonk, Chirurg, Jeroen Bosch Ziekenhuis, 's Hertogenbosch

16.50 Momentum creëren voor prehabilitatie; vermijd acute resecties voor obstructie
Prof. dr. P.J. Tanis, Chirurg, Erasmus MC, Rotterdam

17.10 Mogelijkheden colonstent primaire obstructie en secundair bij complicaties
Dr. R. Hompes, Chirurg, Amsterdam UMC
Dr. D. Ramsoekh, MDL-arts, Amsterdam UMC

17.30 Voor de plenaire Top Abstracts sessie begeeft u zich naar de Brabantzaal

Symposium NVH en DBLTG i.s.m. Pathologie: Benigne levertumoren

Woensdag 19 maart - Baroniezaal

Voorzitters:	J.I. Erdmann en M.C. Burgmans
13:30	Perspectief van de radioloog *Dr. M.G.J. Thomeer, Radioloog, Erasmus MC, Rotterdam*
13.45	Perspectief van de patholoog *Prof. dr. J. Verheij, Patholoog, Amsterdam UMC* *Dr. M. Doukas, Patholoog, Erasmus MC, Rotterdam*
14.00	Perspectief van de gynaecoloog *Dr. J.W.M. A. Aarts, gynaecoloog, Amsterdam UMC*
14.15	Multidisciplinaire casusbespreking tot 15.00 uur
	Aansluitend pitches Young Hepatologist Awards

Pitches NVH Young Hepatologists Awards

Woensdag 19 maart - Baroniezaal

Voorzitters: M.J. Sonneveld

Sessie met drie klinische en drie basale pitches van 5 minuten met de beste publicaties van eigen bodem 2024 t.b.v. de Young Hepatologist Awards.

Pitches klinisch

15.00 Liver cyst penetration of antibiotics at the target site of infection: a randomized pharmacokinetic trial
L. Bernts, arts-microbioloog i.o., Radboudumc, Nijmegen

15.07 Prolonged hypothermic machine perfusion enables daytime liver transplantation - an IDEAL stage 2 prospective clinical trial
I.M.A. Brüggenwirth, UMC Groningen

15.14 MRI-serum-based score accurately identifies patients undergoing liver transplant without rejection avoiding the need for liver biopsy: A multisite European study
J.J. Schaapman, promovendus, LUMC, Leiden

Pitches basaal

15.21 Metabolic dysfunction-associated steatohepatitis reduces interferon and macrophage gene signatures in the liver of chronic hepatitis B patients. 2024
Z. Osmani, Erasmus MC, Rotterdam

15.28 Laminin 511-E8, an autoantigen in IgG4-related cholangitis, contributes to cholangiocyte protection
D.C. Trampert, promovendus, Amsterdam UMC, Amsterdam

15.35 Tumor decellularization reveals proteomic and mechanical characteristics of the extracellular matrix of primary liver cancer.
G.S. van Tienderen, PhD student, Erasmus MC, Rotterdam

15.42 Stemmen en prijsuitreiking Young Hepatologist Award basaal en klinisch

16.00 Gemodereerde postersessies in de Meierij Foyer
Koffie-/theepauze in de expositiehal

Masterclass Young Adult Care

Woensdag 19 maart - Baroniezaal

Voorzitters: J.C. Escher en A.G.L. Bodelier

Top 10 Tips voor Transitie

16.30 Transitiezorg, just do it!
Prof. dr. J.C. Escher, Kinderarts MDL, Erasmus MC - Sophia Kinderziekenhuis, Rotterdam

16.35 Casus 1: De transplantatie patiënt
J. Mantel, verpleegkundig specialist, UMC Groningen
Dr. P.F. van Rheenen, kinderarts MDL, UMC Groningen

16.47 Casus 2: De IBD patiënt
Dr. A.G.L. Bodelier, MDL-arts, Amphia Ziekenhuis, Breda
P.C.W.M. Hurkmans, verpleegkundig specialist, Amphia Ziekenhuis, Breda

16.59 Casus 3: De darmfalen patiënt
Dr. A.C.R. Simon, internist-endocrinoloog, Amsterdam UMC
Dr. M.M. Tabbers, kinderarts MDL, Emma Kinderziekenhuis/Amsterdam UMC

17.11 Casus 4: De lever patiënt
A. van Eldere, hepatoloog, Erasmus MC, Rotterdam
L. Roos, verpleegkundig specialist, Erasmus MC, Rotterdam

17.23 10 TIPS to take home
Prof. dr. J.C. Escher, Kinderarts MDL, Erasmus MC - Sophia Kinderziekenhuis, Rotterdam

17.30 Voor de plenaire Top Abstracts sessie begeeft u zich naar de Brabantzaal.

Abstractsessie NVGIC - Endoscopie - IBD

Woensdag 19 maart - Parkzaal

Voorzitters: A.C. de Vries en R.P. Voermans

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

09.30 International differences in pre-operative characteristics and postoperative management in patients with Crohn's disease following ileocolic resection: a report from the IMPACT consortium

M.T.J. Bak[1], N. Hammoudi[2], L. Maggiori[3], O. van Ruler[4], C. Hernandez-Rocha[5], A.C. de Vries[1], M.S. Silverberg[5], M. Allez[2], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Hôpital Saint-Louis - APHP, Paris, Frankrijk, [3]Dept. of Surgery, Hôpital Saint-Louis - APHP, Paris, Frankrijk, [4]Dept. of Surgery, IJsselland Ziekenhuis, Capelle aan de IJssel, [5]Dept. of Gastroenterology and Hepatology, Mount Sinai Hospital, Toronto, Canada

09.38 Predictors for maintained remission at one year following appendectomy in ulcerative colitis: a post-hoc analysis of the ACCURE trial

E. Visser[1], T.D. Pinkney[2], L. Heuthorst[1], W.A. Bemelman[1], G.R. D'Haens[3], C.J. Buskens[1], [1]Dept. of Surgery, Amsterdam UMC, Amsterdam, [2]Dept. of Surgery, University Hospitals Birmingham, Birmingham, United Kingdom, [3]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam

09.46 Long-term outcomes of synchronous versus solitary colon cancer

E. Rademaker[1, 2], B.C. Aktas[2], E.C.J. Consten[3, 4], P.J. Tanis[2], H.L. Van Westreenen[1], [1]Dept. of Gastrointestinal Surgery, Isala, Zwolle, [2]Dept. of Gastrointestinal Surgery, Erasmus MC, Rotterdam, [3]Dept. of Gastrointestinal Surgery, University Medical Centre Groningen, Groningen, [4]Dept. of Gastrointestinal Surgery, Meander Medical Centre, Amersfoort, The Netherlands

09.54 Early detection and correction of preoperative anemia in patients undergoing colorectal surgery – a prospective study

A. de Wit[1, 2], B.T. Bootsma[1, 2], D.E. Huisman[1, 2], G. Kazemier[1, 2], F. Daams[1], [1]Dept. of Surgery, Amsterdam UMC, Amsterdam, [2]Dept. of Surgery, Cancer Center Amsterdam, Amsterdam, The Netherlands

10.02 Optical diagnosis of early colorectal carcinoma: performance of a newly developed artificial intelligence algorithm vs international endoscopists

A. Thijssen[1, 2], N. Dehghani[3], R.M. Schreuder[4], J.J. Boonstra[5], E. Dekker[6], A.M.C. Bavenpronk[7], R.W.M. Schauwen [8], P.R. Bos[9], J.S. Terhaar sive Droste[10], M. Hadithi[11], W.H. De Vos tot Nederveen Cappel[12], S.C. Albers[13], Q.N.E. van Bokhorst[13], S. Balkema[14], K. Kessels[15], G. Bulte[16], J. Sint Nicolaas [17], J.W.A. Straathof [18], J.J.L. Haans[1], F.G.M. Smeets[19], P.H.N. de With[3], B. Winkens[20, 21], F. van der Sommen[22], L.M.G. Moons[23], E.J. Schoon[2, 4], [1]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [2]Dept. of Gastroenterology and Hepatology, GROW Research Institute for Oncology and Reproduction, Maastricht, [3]Dept. of Electrical Engineering, Eindhoven University of Technology, Eindhoven, [4]Dept. of Gastroenterology and Hepatology, Catharina Hospital, Eindhoven, [5]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [6]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [7]Dept. of Gastroenterology

and Hepatology, Groene Hart Hospital, Gouda, [8]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [9]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [10]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital , 's-Hertogenbosch, [11]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [12]Dept. of Gastroenterology and Hepatology, Isala Hospital, Zwolle, [13]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [14]Dept. of Gastroenterology and Hepatology, Dijklander Hospital, Purmerend, [15]Dept. of Gastroenterology and Hepatology, St. Antonius Hospital, Nieuwegein, [16]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [17]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [18]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [19]Dept. of Gastroenterology and Hepatology, St. Jans Gasthuis, Weert, [20]Dept. of Mathematics and Statistics, Department of Methodology and Statistics, Maastricht University, Maastricht, [21]Dept. of Mathematics and Statistics, CAPHRI, Maastricht University, Maastricht, [22]Dept. of Electrical Engineering, Eindhoven University of Technology, Eindhoven, [23]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, The Netherlands

10.10 Evaluating the trust in artificial intelligence by endoscopists for the optical diagnosis of colorectal carcinoma: exposing target areas for improvement of human-AI interaction

A. Thijssen[1, 2], R.M. Schreuder[3], N. Dehghani[4], E. Dekker[5], J.J. Boonstra[6], R.W.M. Schauwen [7], A.M.C. Baven-Pronk[8], J.S. Terhaar sive Droste[9], P.R. Bos[10], W.H. De Vos tot Nederveen Cappel[11], M. Hadithi[12], J.W.A. Straathof [13], G. Bulte[14], B.A.J. Bastiaansen[15], C.V. Hoge[1], L. Perk[16], J.N. Groen[17], F. ter Borg[18], M.E. van Leerdam[19], E.J.A. Rondagh[20], P.H.N. de With[4], B. Winkens[21, 22], L.M.G. Moons[23], F. van der Sommen[24], E.J. Schoon[2, 3], [1]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [2]Dept. of Gastroenterology and Hepatology, GROW Research Institute for Oncology and Reproduction, Maastricht, [3]Dept. of Gastroenterology and Hepatology, Catharina Hospital, Eindhoven, [4]Dept. of Electrical Engineering, Eindhoven University of Technology, Eindhoven, [5]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [6]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [7]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [8]Dept. of Gastroenterology and Hepatology, Groene Hart Hospital, Gouda, [9]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital , 's-Hertogenbosch, [10]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [11]Dept. of Gastroenterology and Hepatology, Isala Hospital, Zwolle, [12]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [13]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [14]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [15]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [16]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [17]Dept. of Gastroenterology and Hepatology, St Jansdal Hospital, Harderwijk, [18]Dept. of Gastroenterology and Hepatology, Deventer Ziekenhuis, Deventer, [19]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [20]Dept. of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, [21]Dept. of Mathematics and Statistics, Department of Methodology and Statistics, Maastricht University, Maastricht, [22]Dept. of Mathematics and Statistics, CAPHRI, Maastricht University, Maastricht, [23]Dept. of Gastroenterology and Hepatology, UMC Utrecht, Utrecht, [24]Dept. of Electrical Engineering, Eindhoven University of Technology, Eindhoven, The Netherlands

10.45 Gemodereerde postersessies in de Meierij Foyer
Koffie-/theepauze in de expositiehal

Abstractsessie Sectie Gastrointestinale Oncologie I

Woensdag 19 maart - Parkzaal

Voorzitters: Volgt

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

13.30 Applying the ESGE guideline risk-profiles for surveillance as outcome parameter in a FIT-based colorectal cancer screening program

E.E.C. Rijnders[1], E. Toes-Zoutendijk [2], S.Y. de Boer[3], R.W.M. Schauwen [4], M. Oudkerk Pool[5], C. Verveer[6], M.E. van Leerdam[7], E. Dekker[8], I.D. Nagtegaal[9], M.C.W. Spaander[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Public Health, Erasmus MC, Rotterdam, [3]Dept. of Gastroenterology and Hepatology, Slingeland Ziekenhuis, Doetichem, [4]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [5]Dept. of Gastroenterology and Hepatology, Wilhelmina Ziekenhuis, Assen, [6]Dept. of Gastroenterology and Hepatology, Ikazia hospital, Rotterdam, [7]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [8]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [9]Dept. of Pathology, Radboudumc, Nijmegen, The Netherlands

13.38 Incidence of cancer in patients with familial adenomatous polyposis in the Netherlands: a nationwide cohort study.

H. Bouchiba[1], A.S. Aelvoet[1], M.C.A. van Kouwen[2], B.A.J. Bastiaansen[1], T.M. Bisseling[2], A. Langers[3], P.M.M. Bossuyt[4], M.E. van Leerdam[5], E. Dekker[6], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [4]Dept. of Clinical Epidemiology, Amsterdam UMC, Amsterdam, [5]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [6]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, The Netherlands

13.46 Optimal age to stop surveillance in the older population at risk for gastric cancer

J.K.F. Pluimers[1], N. Kapteyn[1], I.L. Holster[2], L.G. Capelle[3], R.H.A. Verhoeven[4, 5, 6], I. Lansdorp-Vogelaar[7], J. Honing[1], C.M. den Hoed[1], M.C.W. Spaander[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [3]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [4]IKNL, Amsterdam, [5]Amsterdam UMC, Amsterdam, [6]Cancer Center, Amsterdam, [7]Dept. of Public Health, Erasmus MC, Rotterdam, The Netherlands

13.54 Identification of immigrant and socioeconomic groups at high risk of gastric cancer: A nationwide cohort study in The Netherlands

D.T. Mülder[1], H.J. Van de Schootbrugge - Vanderme[1], J.F. O'Mahony[1, 2], D. Sun[3], W. Han[1], R.H.A. Verhoeven[4, 5, 6], W. Van de Veerdonk[7], M.C.W. Spaander[8], [1]Dept. of Public Health, Erasmus MC, Rotterdam, [2]Dept. of Public Health, School of Economics, University College Dublin, Dublin, Ierland, [3]Dept. of Public Health, Erasmus University Medical Center, Rotterdam, [4] IKNL, Amsterdam, [5]Amsterdam UMC, Amsterdam, [6]Cancer Center, Amsterdam, [7]Thomas More University of Applied Sciences, Antwerp, België, [8]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, The Netherlands

14.02 Harms and benefits of differing pancreatic cyst surveillance guidelines: a microsimulation study

O.B. White[1], M.L.J.A. Sprij[1], I. Lansdorp-Vogelaar[1], D.L. Cahen[3], M.J. Bruno[3], G. Marchegiani[4], N. Canitano[4], D. Weinberg[5], I. de Kok[1], [1]Dept. of Public Health, Erasmus MC, Rotterdam, [3]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [4]Dept. of Gastrointestinal Surgery, Padova University Hospital, Padua, Italië, [5]Dept. of Medicine, Fox Chase Cancer Center, Philadelphia, Verenigde Staten

14.10 ATRX, DAXX, and Menin immunohistochemistry identify prognostic relevant non-functioning neuroendocrine tumors subgroups

A.V.D. Verschuur[1], J. Jairam[1], B. Eldem[1], A.D. Singhi[2], W.M. Hackeng[3], L.A.A. Brosens[4], [1]Dept. of Pathology, University Medical Centre Utrecht, [2]Dept. of Pathology, University of Pittsburgh Medical Center, Pittsburgh, Verenigde Staten, [3]Dept. of Gastroenterology and Gastrointestinal Endoscopy, University Medical Centre Utrecht, [4]Dept. of Pathology, UMC Utrecht, The Netherlands

Postersessie I

Woensdag 19 maart - Meierijfoyer

Moderator: Volgt

10.50 Surgical quality assurance in gastrointestinal surgical randomized controlled trials: a delphi consensus study

D.C. van der Aa[1], S.P.G. Henckens[1], J.B. Tuynman[1], M.G. Besselink[1], N.S. Blencowe[2], G.B. Hanna[3], H.J. Bonjer[1], M.I. van Berge Henegouwen[1], S.R. Markar[4], S.S. Gisbertz[1], [1]Dept. of Surgery, Amsterdam UMC, Amsterdam, [2]Bristol Centre for Surgical Research, Population Health Sciences, Universi, Bristol, Verenigd Koninkrijk, [3]Dept. of Surgery, Imperial College London, London, Verenigd Koninkrijk, [4]Dept. of Surgery, Nuffield, University of Oxford Hospitals, Oxford, Verenigd Koninkrijk

10.55 Evaluation of consistency between respondants from a multidisciplinary, remote, nationwide expert panel for complex acute pancreatitis

A. Nagelhout[1], L. Lambert[2], M.G. Besselink[3], S.A.W. Bouwense[4], M.W.J. Stommel[5], [1]Dept. of Surgery, Radboudumc, Nijmegen, [2]St. Antonius Hospital, Nieuwegein, [3]Dept. of Surgery, Amsterdam UMC, Amsterdam, [4]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [5]Dept. of Surgery, Radboudumc, Nijmegen, The Netherlands

11.00 Endoscopic submucosal dissection vs. endoscopic mucosal resection for barrett's esophageal neoplasia

A.D.I. Maan[1], M. Omae[2], N. Lunet[4], F. Baldaque-Silva[2,5], A.D. Koch[6], [1]Dept. of Gastroenterology and Hepatology, Erasmus University Medical Center Cancer Institute, Rotterdam, [2]Dept. of Digestive Diseases, Karolinska University Hospi-tal, Stockholm, Zweden, [4]Dept. of Public Health, Universidade do Porto, Porto, Portugal, [5]Dept. of Digestive Diseases, Advanced Endoscopy Center Carlos Moreira da Silva, Matosinhos, Portugal, [6]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, The Netherlands

11.05 Acceptability of tailored screening intervals among individuals in a risk-stratified colorectal cancer screening program

B.J. van Stigt[1], E.E.C. Rijnders[2], L. de Jonge[3], H.J. Van de Schootbrugge - Vanderme[3], M.C.W. Spaander[2], A.J. van Vuuren[4], E. Dekker[5], F.J. van Kemenade[6], I.D. Nagtegaal[7], M.E. van Leerdam[8], I. Lansdorp-Vogelaar[3], E. Toes-Zoutendijk [3], [1]Dept. of Public Health, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Dept. of Public Health, Erasmus MC, Rotterdam, [4]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [5]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [6]Dept. of Pathology, Erasmus MC, Rotterdam, [7]Dept. of Pathology, Radboudumc, Nijmegen, [8]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands

Postersessie II

Woensdag 19 maart - Meierijfoyer

Moderator: N.G.M. Rossen

12.40 A pragmatic cost-efficiency assessment of advanced systemic therapy in inflammatory bowel disease

N.W. Boone[1], C. Houwen[1], M. Romberg-Camps[2], A.A. van Bodegraven[2], [1]Pharmacology and Toxicology, Zuyderland Medical Center Department of Clinical Pharmacy and Toxicology, Sittard/Heerlen, [2]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Department of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, The Netherlands

12.45 Management of esophageal cancer with concurrent cervical node metastasis: a nationwide population-based cohort study

M.E. Sanders[1], T.J. Weijs[1], S. van der Horst[1], B. Wijnhoven[2], B. Mostert[3], G. Nieuwenhuijzen[4], N. Haj Mohammad[5], H. van Laarhoven[6], M.I. van Berge Henegouwen[7], M.D.P. Luyer[8,9], S. Mook[10], P. van der Sluis[2], R.H.A. Verhoeven[11,12,13], P.S.N. van Rossum[14], S. Lagarde[2], S.S. Gisbertz[7], J.E. Freund[15], J.P. Ruurda[16], R. Van Hilligersberg[16], [1]Dept. of Gastrointestinal Surgery, UMC Utrecht, [2]Dept. of Gastrointestinal Surgery, Erasmus MC, Rotterdam, [3]Dept. of Medical Oncology, Erasmus MC, Rotterdam, [4]Dept. of Gastrointestinal Surgery, Catharina Ziekenhuis, Eindhoven, [5]Dept. of Medical Oncology, UMC Utrecht, [6]Dept. of Medical Oncology, Amsterdam UMC, Amsterdam, [7]Dept. of Surgery, Amsterdam UMC, Amsterdam, [8]Dept. of Surgery, Catharina Hospital, Eindhoven, [9]Dept. of Surgery, Eindhoven University of Technology, Eindhoven, [10]Dept. of Radiation Oncology, UMC Utrecht, [11]IKNL, Amsterdam, [12]Amsterdam UMC, Amsterdam, [13]Cancer Center, Amsterdam, [14]Dept. of Radiation Oncology, Amsterdam UMC, Amsterdam, [15]Dept. of Pathology, UMC Utrecht, [16]Dept. of Surgery, UMC Utrecht, The Netherlands

12.50 Endoscopic drainage of potentially resectable perihilar cholangiocarcinoma using a suprapapillary plastic stent with retrieval string (CHORDA); a prospective pilot study

E. Smit[1, 2, 3], J.A. Fritzsche[2, 3, 4], P. Fockens[5], G. Kazemier[6, 7], J.I. Erdmann[7, 8, 9], C.Y. Ponsioen[10], R.L.J. Wanrooij[5], R.P. Voermans[5], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Cancer Center Amsterdam, Amsterdam, [4]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [5]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [6]Dept. of Surgery, Amsterdam UMC, Amsterdam, [7]Dept. of Surgery, Cancer Center Amsterdam, Amsterdam, [8]Dept. of Surgery, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [9]Dept. of Surgery, Amsterdam UMC, Amsterdam, [10]Dept. of Gastroenterology and Hepatology, Amsterdam University Medical Center , Amsterdam, The Netherlands

12.55 Local recurrence rates of horizontal margin-positive cases after en bloc endoscopic submucosal dissection of colorectal neoplasia: a meta-analysis

D.A. Verhoeven[1], K. Basiliya[1], J. van der Kraan[1], A. Langers[1], J. Santos-Antunes[2, 3, 4], F. Dumoulin[5], M.E. van Leerdam[6], J.C.H. Hardwick[1], J.J. Boonstra[7], H. Dang[1], [1]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [2]Dept. of Gastroenterology and Hepatology, Unidade Local de Saúde São João, Porto, Portugal, [3]Dept. of Gastroenterology and Hepatology, Faculty of Medicine of the University of Porto, Porto, Portugal, [4]Dept. of Gastroenterology and Hepatology, IPATIMUP - Institute of Molecular Pathology and Immunology of the University of , Porto, Portugal, [5]Dept. of Gastroenterology and Hepatology, Gemeinschaftskrankenhaus Bonn, Academic Teaching Hospital, University of Bonn, Bonn, Duitsland, [6]Dept. of Gastroenterology and Hepatology, Netherlands Cancer Institute/Antoni van Leeuwenhoek Hospital, Amsterdam, [7]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, The Netherlands

13.00 Decisional needs among patients and physicians in Crohn's disease: A qualitative analysis

M.J.J. Cloots[1, 2], E.M.B. Hendrix[1, 2], Y. Okegunna[3, 4], S.M.B. Mingels[3, 4], I. van de Koppel[1, 2], Z. Mujagic[1, 5], S.F.G. Jeuring[2], G. Dijkstra[6], M. Duijvestein[7], T.E.H. Romkens[8], A.L.A.J. Dekker[3, 4], M.J. Pierik[1, 5], R.R.R. Fijten[9, 10], [1]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [2]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [3]Dept. of Radiation Oncology, GROW Research Institute for Oncology and Reproduction, Maastricht, [4]Dept. of Radiation Oncology, MAASTRO Department of Radiation Oncology, MUMC+, Maastricht, [5]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [6]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [7]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [8]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [9]Dept. of Gastroenterology and Hepatology, GROW Research Institute for Oncology and Reproduction, Maastricht, [10]Dept. of Gastroenterology and Hepatology, MAASTRO Department of Radiation Oncology, MUMC+, Maastricht, The Netherlands

13.05 Adherence to a Care Pathway for Inflammatory Bowel Disease in the Southwest region of the Netherlands

E.H. Visser[1, 2], S. Allers[3], R.C.A. van Linschoten[4], A.G.L. Bodelier[5], C. Fitzpatrick[6], V. de Jong[7], H. Vermeulen[8], E. Verweij[9], S. van der Wiel[10], D. van der Horst[11], C.J. van der Woude[12], D. van Noord[1], R.L. West[1], [1]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Erasmus University Rotterdam, [4]Dept. of Family Medicine, Erasmus MC, Rotterdam, [5]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [6]Dept. of Gastroenterology and Hepatology, IJsselland Ziekenhuis, Capelle aan de IJssel, [7]Dept. of Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [8]Dept. of Gastroenterology and Hepatology, Ikazia hospital, Rotterdam, [9]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [10]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [11]Crohn & Colitis NL, Woerden, [12]Dept. of Gastroenterology and Hepatology, Radboud University Medical Centre, Nijmegen, The Netherlands

13.10 INCA trial: Incidentalomas in the adrenal gland in patients with cancer of the digestive tract.

J.R. van Doesburg[1], A.F. Engelsman[1], J.J. Reimerink[2], K. Dreijerink[3], M.I. van Berge Henegouwen[1], M.G. Besselink[1], W. Lameris[1], S.S. Gisbertz[1], F. Daams[1], [1]Dept. of Surgery, Amsterdam UMC, Amsterdam, [2]Dept. of Radiology, Amsterdam UMC, Amsterdam, [3]Dept. of Internal Medicine, Amsterdam UMC, Amsterdam, The Netherlands

Postersessie III

Woensdag 19 maart - Meierijfoyer

Moderator: Volgt

16.05 The cost-effectiveness of risk-based management of Barrett's esophagus patients using TissueCypher or p53 biomarkers: a microsimulation study

D.M.N. van den Berg[1], A.H. Omidvari[1], J.H. Rubenstein[2], J.M. Inadomi[3], L. de Jonge[1], I. Lansdorp-Vogelaar[1], [1]Dept. of Public Health, Erasmus MC, Rotterdam, [2]Dept. of Internal Medicine, University of Michigan Medical School, Ann Arbor, Verenigde Staten, [3]Dept. of Internal Medicine, University of Utah School of Medicine, Salt Lake City, Verenigde Staten

16.10 The role of primary tumor resection in patients with stage IV gastric cancer

M.W. Tops-Welten[1, 2], F.W.H. Berben[3], I.E.G. van Hellemond[4], G.J. Creemers[1], I.H.J.T. de Hingh[5], M.D.P. Luyer[6, 7], F.N. Erning[8], H. van Laarhoven[9], J.W. van Sandick[10], R.H.A. Verhoeven[8, 11, 12], G.A. Simkens[13], [1]Dept. of Medical Oncology, Catharina Hospital, Eindhoven, [2]Dept. of Medical Oncology, GROW Research Institue for Oncology and Reproduction, MUMC+, Maastricht, [3]Dept. of Internal Medicine, Viecuri, Venlo, [4]Dept. of Internal Medicine, Catharina Hospital, Eindhoven, [5]Dept. of Gastrointestinal Surgery, Catharina Ziekenhuis, Eindhoven, [6]Dept. of Surgery, Catharina Hospital, Eindhoven, [7]Dept. of Surgery, Eindhoven University of Technology, Eindhoven, [8]IKNL , Amsterdam , [9]Dept. of Medical Oncology, Amsterdam UMC, Amsterdam, [10]Dept. of Surgery, Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital, Amsterdam, [11]Amsterdam UMC, Amsterdam, [12]Cancer Center, Amsterdam, [13]Dept. of Surgery, Elisabeth Twee Steden Hospital, Tilburg, The Netherlands

16.15 Incidence and risk factors for disease progression in patients with ulcerative proctitis: a retrospective cohort study

R.J.B. Pierik[1], L.A.A.P. Derikx[1], J. Hoekstra[2], R.A.J. Post[3], R.E.A. van Dongen[2], A.C. de Vries[1], A.G.L. Bodelier[2], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [3]Dept. of Biostatistics, Erasmus MC, Rotterdam, The Netherlands

16.20 Controlling Faecal Incontinence with a novel anal device (CONFIDEnCE): A multicentre randomised controlled trial

S.L. Assmann[1, 2, 3], B. Winkens[4, 5], A. Bours[6], B. Essers[7, 8], T. Lam[9], Z. Mujagic[10, 11], S.O. Breukink[12, 13, 14], D. Keszthelyi[6], [1]Dept. of Gastroenterology, Dept. of Surgery, Maastricht University Medical Centre, Maastricht, [2]Dept. of Gastroente-rology, MUMC+, Maastricht, [3]Dept. of Gastroenterology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Mathematics and Statistics, Maastricht University, Maastricht, [5]Dept. of Mathematics and Statistics, CAPHRI, Maastricht University, Maastricht, [6]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [7]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA), Caphri, Maastricht University, Maastricht, [8]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA), Maastricht, [9]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, [10]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [11]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [12]Dept. of Surgery, Maastricht University Medical Centre, Maastricht, [13]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [14]Dept. of Surgery, GROW Research Institute for Oncology and Reproduction, Maastricht, The Netherlands

Ochtendprogramma V&VN MDL

Donderdag 20 maart - Brabantzaal

Voorzitters: M. van der Ende - van Loon

08.45	Welkom door voorzitter *M. van der Ende - van Loon, verpleegkundig specialist, Catharina Ziekenhuis, Eindhoven*
09.00	Omgang met patiënten die seksueel zijn misbruikt *B. Holtrop, masterstudent geneeskunde en ervaringsdeskundige*
10.00	Obesitas/ bariatrie/ metabole ziekte / scopiëren bij pt BMI 40 risico's hoog laag BMI *L. van Rossem, endocrinoloog/hoogleraar obesitas en stressonderzoek, Erasmus MC, Rotterdam*
	Kwaliteit projecten en abstracts verpleegkundig onderzoek: *Voorzitter: T.A. Korpershoek, verpleegkundig specialist, Albert Schweitzer Ziekenhuis, Dordrecht*
10.45	Screening en korte interventies bij overmatig alcoholgebruik *T. de Leeuw, verpleegkundige MDL, Franciscus Gasthuis, Rotterdam*
10.55	Toegankelijke voorlichting voor een colonoscopie voor patiënten met laaggeletterdheid *W. Boom-Romeijn, verpleegkundig endoscopist, Albert Schweitzer Ziekenhuis, Dordrecht*
11.05	Inzet eHealth binnen de IBD *M. Braad, IBD verpleegkundige, Flevoziekenhuis, Almere*
11.15	Buikpoli in AMC UMC *R.R. Gorter, kinderchirurg, Amsterdam UMC, Amsterdam*
11.45	Ledenvergadering *M. van der Ende - van Loon, verpleegkundig specialist, Catharina Ziekenhuis, Eindhoven*
12.00	Gemodereerde postersessies in de Meierij Foyer Lunch in de expositiehal

Abstractsessie Sectie Gastrointestinale Oncologie II

Donderdag 20 maart - Brabantzaal

Voorzitters: Volgt

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

12.45 Quantified fluorescence molecular endoscopy with first-in-human oral administration of bevacizumab-800CW and cetuximab-800CW for enhanced early detection of esophageal neoplastic lesions

L.E. van Heijst[1], Y.J. van Ginkel[2], G. Kats-Ugurlu[3], D.J. Robinson[4], D. Gorpas[5], R.Y. Gabriëls[1], W.B. Nagengast[6], [1]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [2]Dept. of Gastroenterology, University Medical Centre Groningen, Groningen, [3]Dept. of Pathology, University Medical Centre Groningen, Groningen, [4]Dept. of Otorhinolaryngology and Head and Neck Surgery, Erasmus MC, Rotterdam, [5]Helmholtz Munich, Institute of Biological and Medical Imaging, Munich, Germany, [6]Dept. of Gastroenterology and Hepatology, University Medical Centre Groningen, Groningen, The Netherlands

12.53 Optical PD-L1 imaging using ultrasound-guided quantitative fluorescence molecular endoscopy combined with durvalumab-680LT in locally advanced esophageal cancer patients.

Y.J. van Ginkel[1], A.M. van der Waaij[1], P. Volkmer[1], S. Hone Lopez[2], R. Bijlsma[3], S.J. van Asselt[3], L.A. van der Waaij[3], M.N. Lub-de Hooge[4], D.J. Robinson[5], G. Kats-Ugurlu[6], M. Di Pietro[7], W.B. Nagengast[8], [1]Dept. of Gastroenterology, University Medical Centre Groningen, Groningen, [2]Dept. of Internal Medicine , University Medical Centre Groningen, Groningen, [3]Dept. of Gastroenterology, Martini Hospital, Groningen, [4]Pharmacology and Toxicology, University Medical Centre Groningen, Groningen, [5]Dept. of Otorhinolaryngology and Head and Neck Surgery, Erasmus MC, Rotterdam, [6]Dept. of Pathology, University Medical Centre Groningen, Groningen, [7]Dept. of Gastroenterology, Cambridge University Hospitals NHS Foundation Trust, Cambridge, Verenigd Koninkrijk, [8]Dept. of Gastroenterology and Hepatology, University Medical Centre Groningen, Groningen, The Netherlands

13.01 Detecting colorectal neoplasia using specific fecal fluorogenic protease sensitive substrates: a pilot-study

R.C.M. Opperman[1, 2, 3], S. Bosch[1, 2], K. Nazmi[4], F.J. Bikker[4], H.S. Brand[4], C.R. Jimenez[5, 6], T.G.J. de Meij[7, 8], E. Dekker[9], K.H.N. de Boer[1], W.E. Kaman[4], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Cancer Center Amsterdam, Amsterdam, [4]Department of Oral Biochemistry, Academic Centre for Dentistry, Amsterdam, [5]Dept. of Medical Oncology, Cancer Center Amsterdam, [6]Dept. of Medical Oncology, Amsterdam UMC, Amsterdam, [7]Dept. of Pediatric Gastroenterology Hepatology and Nutrition, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [8]Dept. of Pediatric Gastroenterology Hepatology and Nutrition, Emma Children's Hospital, AUMC, Amsterdam, [9]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, The Netherlands

13.09 Uncertainty of restaging after neoadjuvant chemoradiotherapy for esophageal cancer

S. Gangaram Panday[1], D. In 't Veld[1], S. Lagarde[1], B. Mostert[2], C. Rosman[3], P. Coene[4], J.W. Dekker[5], H. Hartgrink[6], J. Heisterkamp[7], E. Kouwenhoven[8], G. Nieuwenhuijzen[9], J.P. Pierie[10], J. van Sandick[11], M. Sosef[12], E. van der Zaag[13], J. van Lanschot[1], B. van Wijnhoven[1], [1]Dept. of Gastrointestinal Surgery, Erasmus MC Cancer Institute, Rotterdam, [2]Dept. of Medical Oncology, Erasmus MC Cancer Institute, Rotterdam, [3]Dept. of Surgery, Radboud University Medical Centre, Nijmegen, [4]Dept. of Surgery, Maasstad Hospital, Rotterdam, [5]Dept. of Surgery, Reinier de Graaf Gasthuis, Delft, [6]Dept. of Surgery, LUMC, Leiden, [7]Dept. of Surgery, Elisabeth Tweesteden Hospital, Tilburg, [8]Dept. of Surgery, ZGT Hospital, Almelo, [9]Dept. of Surgery, Catharina Hospital, Eindhoven, [10]Dept. of Surgery, Medical Centre Leeuwarden, [11]Dept. of Surgical Oncology, The Netherlands Cancer Institute, Amsterdam, [12]Dept. of Surgery, Zuyderland Medical Centre, Heerlen, [13]Dept. of Surgery, Gelre Hospital, Apeldoorn, The Netherlands

13.17 Accuracy of predicting residual disease and disease progression during active surveillance for esophageal cancer

S. Gangaram Panday[1], D. van Klaveren[14], S. Lagarde[1], H. Lingsma[14], B. Mostert[2], C. Rosman[3], P. Coene[4], J.W. Dekker[5], H. Hartgrink[6], J. Heisterkamp[7], E. Kouwenhoven[8], G. Nieuwenhuijzen[9], J.P. Pierie[10], J. van Sandick[11], M. Sosef[12], E. van der Zaag[13], J. van Lanschot[1], B. van Wijnhoven[1], [1]Dept. of Gastrointestinal Surgery, Erasmus MC Cancer Institute, Rotterdam, [2]Dept. of Medical Oncology, Erasmus MC Cancer Institute, Rotterdam, [3]Dept. of Surgery, Radboud University Medical Centre, Nijmegen, [4]Dept. of Surgery, Maasstad Hospital, Rotterdam, [5]Dept. of Surgery, Reinier de Graaf Gasthuis, Delft, [6]Dept. of Surgery, LUMC, Leiden, [7]Dept. of Surgery, Elisabeth Tweesteden Hospital, Tilburg, [8]Dept. of Surgery, ZGT Hospital, Almelo, [9]Dept. of Surgery, Catharina Hospital, Eindhoven, [10]Dept. of Surgery, Medical Centre Leeuwarden, [11]Dept. of Surgical Oncology, The Netherlands Cancer Institute, Amsterdam, [12]Dept. of Surgery, Zuyderland Medical Centre, Heerlen, [13]Dept. of Surgery, Gelre Hospital, Apeldoorn, [14]Dept. of Public Health, Erasmus MC, Rotterdam, The Netherlands

13.25 Positive family history of esophageal adenocarcinoma or Barrett's esophagus as risk factor for neoplastic progression in patients with Barrett's esophagus

J. van Winden[1], W.E. Provoost[2], A.C. de Groen[1], P. Zellenrath[1], J. Honing[3], M.C.W. Spaander[3], [1]Dept. of Gastroenterology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC University Medical Center, Rotterdam, [3]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, The Netherlands

13.33 Optimal age to stop endoscopic surveillance of patients with barrett's esophagus

W.E. Provoost[1], P. Zellenrath[2], J.K.F. Pluimers[3], I. Lansdorp-Vogelaar[4], J. Honing[3], M.C.W. Spaander[3], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC University Medical Center, Rotterdam, [2]Dept. of Gastroenterology, Erasmus MC, Rotterdam, [3]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [4]Dept. of Public Health, Erasmus MC, Rotterdam, The Netherlands

13.45 Koffie-/theepauze in de expositiehal

Donderdag 20 maart - Brabantzaal

Voorzitters: M.M.C. Hirdes en V.E.R. Asscher

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

14.15 IBD en zwangerschap
Dr. M.C. Visschedijk, MDL-arts, UMC Groningen

14.27 Obesity is associated with inferior treatment outcomes in inflammatory bowel disease: a nationwide Dutch registry study
D. Oomkens[1], Z. Mujagic[2, 3], A.C. de Vries[4], A.E. van der Meulen[5], T. Straatmijer[6], M. Lowenberg[7], S. van der Marel[8], R.L. West[9], A.G.L. Bodelier[10], F.D.M. van Schaik[11], M.C. Visschedijk[12], M. Duijvestein[1], [1]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [2]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [3]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [5]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [6]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [7]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam, [8]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [9]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [10]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [11]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [12]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, The Netherlands

14.35 Health-related physical fitness and its association with disease- and treatment-related characteristics in patients with inflammatory bowel disease versus healthy controls
K. Demers[1, 2], N. van den Bergh[3], B.C. Bongers[4], S.M.J. van Kuijk[5], Z. Mujagic[3, 6], D.M.A.E. Jonkers[6], M.J. Pierik[3, 6], L.P.S. Stassen[1, 2], , [1]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [2]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [3]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [4]Dept. of Nutrition and movement sciences, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [5]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA), Maastricht University Medical Center+, Maastricht, [6]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, The Netherlands

14.43 The shorter the interval between preconceptional disease activity and pregnancy, the greater the risk of disease activity during pregnancy: Evidence from a large Dutch cohort
D.G. Bouwknegt[1], G. Dijkstra[1], W.A. van Dop[2], C.J. van der Woude[2], M.C. Visschedijk[1], [1]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [2]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, The Netherlands

14.51 The decrease of 6-TGN concentrations during pregnancy is not associated with an increased fecal calprotectin in female IBD patients on thiopurine-treatment

D.G. Bouwknegt[1], P. Mian[2], F. Groen[2], D. van den Berg-Zuiddam[3], A.E. van der Meulen[3], F. Crouwel[4], K.H.N. de Boer[4], D. Deben[5], D.R. Wong[5], L.J.J. Derijks[6], G. Dijkstra[1], A.R. Bourgonje[7, 8], C.J. van der Woude[9], M.C. Visschedijk[1], , [1]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [2]Dept. of Clinical Pharmacy, Department of Clinical Pharmacy and Pharmacology, UMCG, Groningen, [3]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [4]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [5]Dept. of Clinical Pharmacy and Toxicology, Zuyderland Medical Center Department of Clinical Pharmacy and Toxicology, Sittard/Heerlen, [6]Dept. of Clinical Pharmacy, Máxima Medical Center, Veldhoven, [7]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [8]Dept. of Gastroenterology and Hepatology, Icahn School of Medicine at Mount Sinai, New York, Verenigde Staten, [9]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, The Netherlands

14.59 Effect of a care pathway for inflammatory bowel disease on patient outcomes and healthcare utilization: Results of the IBD value study

E.H. Visser[1, 2], R.C.A. van Linschoten[3], A.G.L. Bodelier[4], C. Fitzpatrick[5], V. de Jong[6], H. Vermeulen[7], E. Verweij[8], S. van der Wiel[9], D. van der Horst[10], C.J. van der Woude[11], D. van Noord[1], R.L. West[1], [1]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Dept. of Family Medicine, Erasmus MC, Rotterdam, [4]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [5]Dept. of Gastroenterology and Hepatology, IJsselland Ziekenhuis, Capelle aan de IJssel, [6]Dept. of Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [7]Dept. of Gastroenterology and Hepatology, Ikazia hospital, Rotterdam, [8]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [9]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [10]Crohn & Colitis NL, Woerden, [11]Dept. of Gastroenterology and Hepatology, Radboud University Medical Centre, Nijmegen, The Netherlands

15.07 A care pathway for the treatment of IBD reduces healthcare costs and can be cost-effective: results of a multicentre cohort study IBD Value

E.H. Visser[1, 2], M.A.H. Oude Voshaar[3], R.C.A. van Linschoten[4], A.G.L. Bodelier[5], C. Fitzpatrick[6], V. de Jong[7], H. Vermeulen[8], E. Verweij[9], S. van der Wiel[10], D. van der Horst[11], C.J. van der Woude[12], R.L. West[1], D. van Noord[1], [1]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Dept. of Public Health, Erasmus MC, Rotterdam, [4]Dept. of Family Medicine, Erasmus MC, Rotterdam, [5]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [6]Dept. of Gastroenterology and Hepatology, IJsselland Ziekenhuis, Capelle aan de IJssel, [7]Dept. of Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [8]Dept. of Gastroenterology and Hepatology, Ikazia hospital, Rotterdam, [9]Dept. of Gastroenterology and Hepatology, Maasstad Hospital, Rotterdam, [10]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [11]Crohn & Colitis NL, Woerden, [12]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, The Netherlands

15.15 Voor de ledenvergadering van de NVMDL begeeft u zich naar de Baroniezaal.

Donderdag 20 maart - Auditorium

Voorzitters: R.L. Goetgebuer en A. Rezazadeh

Voordrachten in het Nederlands, 5 minuten presentatie en 3 minuten discussie

08.30 Clostridium bij IBD patienten; fecestransplantatie

Dr. J.J. Keller, MDL-arts, Haaglanden MC, Den Haag

08.57 Distinct faecal metabolic profiles associated with endoscopic remission in ulcerative colitis patients following faecal microbiota transplantation

F.H. Zwezerijnen-Jiwa[1], M. Jitsumara[2], H. Sivov[3], P. Takis[4], M. Ghiboub[5], J. Kinross[6], D. Harris[7], M. Hitchings[8], [1]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam, [2]Dept. of Surgery, Royal Bournemouth Hospital, Dorset, Verenigd Koninkrijk, [3]Imperial College London, Verenigd Koninkrijk, [4]University of Ioannina, Ioannina, Griekenland, [5]AGEM, Amsterdam, [6]Dept. of Surgery, Imperial College London, Verenigd Koninkrijk, [7]Dept. of Gastroenterology, Singleton Hospital, Swansea, Verenigd Koninkrijk, [8]Swansea University Medical School, Swansea, Verenigd Koninkrijk

09.05 Feasibility of a smart toilet seat for home monitoring of Ulcerative Colitis: a pilot study.

L.R. Hazeleger[1, 2], V. Verbiest[3], J. Hamers[3], W. Groenendaal[3, 4], E. Wentink[3], M. Duijvestein[5], [1]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [2]Dept. of Gastroenterology and Hepatology, OnePlanet Research Center, Wageningen, [3]OnePlanet Research Center, Wageningen, [4]Imec Eindhoven, [5]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, The Netherlands

09.13 Real world effectiveness and safety of filgotinib in ulcerative colitis: 1 year follow-up results of the ICC registry

M.R. Naber[1], A.E. van der Meulen[2], P.W. Voorneveld[3], A.A. van Bodegraven[4], M. Duijvestein[5], M.J. Pierik[6, 7], L.M.M. Verleye[6], A.G.L. Bodelier[8], D.G. Bouwknegt[9], M.C. Visschedijk[9], R.L. West[10], S. van der Marel[11], P.B. Mensink[12], A.C. de Vries[13], T.E.H. Romkens[14], B. Oldenburg[1], M. Lowenberg[15], F.D.M. van Schaik[1], [1]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [2]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [4]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Department of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, [5]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [6]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [7]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [8]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [9]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, [10]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [11]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [12]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [13]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [14]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [15]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam, The Netherlands

09.21 Lengthening Ustekinumab treatment intervals from every 8 to every 12 weeks in IBD patients in stable remission: preliminary results of a prospective observational cohort study

M.J.C. Devillers[1], A.B. Fons[2], R.L. West[3], S. van der Marel[4], R. Theeuwen[2], F.D.M. van Schaik[5], M. Lowenberg[6], M.C. Visschedijk[7], M.J. Pierik[8, 9], Z. Mujagic[8, 9], M. Duijvestein[10], L.A.A.P. Derikx[1], A.C. de Vries[1], A.E. van der Meulen[11], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [3]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [4]Dept. of Gastroenterology and Hepatology, Haaglanden MC, The Hague, [5]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, Utrecht, [6]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam, [7]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [8]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [9]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [10]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [11]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, The Netherlands

09.29 Dose intensification of vedolizumab is not effective in inducing endoscopic response in Crohn's disease patients with endoscopic primary non-response

L. Oldenburg[1, 2], F. Baert[3], P. Bossuyt[4], F. Hoentjen[5, 6], E. Clasquin[2], T. Molnar[7], M. Lowenberg[2], S. Vermeire[8], G. D'Haens[2], [1]Dept. of Gastroentero-logy, AGEM, Amsterdam, [2]Dept. of Gastroenterology, Amsterdam UMC, Amsterdam, [3]Dept. of Gastroenterology, AZ Delta, Roeselare, België, [4]Dept. of Gastroentero-logy, Imelda General Hospital, Bonheiden, België, [5]Dept. of Gastroenterology, Radboud UMC, Nijmegen, [6]Dept. of Gastroenterology, University of Alberta, Edmonton, Canada, [7]Dept. of Internal Medicine, University of Szeged, Szeged, Hongarije, [8]Dept. of Gastroenterology, University Hospital Leuven, Leuven, België

09.37 Long-term outcomes of extended versus conventional adalimumab dose interval for patients with Crohn's disease in stable remission: 3-year follow-up of the randomized controlled LADI trial

M.J.C. Devillers[1], L.M.A. van Lierop[2], R.C.A. van Linschoten[3], F.M. Jansen[4], N. den Broeder[5], D.J. de Jong[4], A.G.L. Bodelier[6], R.L. West[7], I.A.M. Gisbertz[8], T.E.H. Romkens[9], P.J. Boekema[10], M.W.M.D. Lutgens[11], Z. Mujagic[12, 13], F.H.J. Wolfhagen[14], K.H.N. de Boer[15], B. Oldenburg[16], A.A. van Bodegraven[17], R.C. Mallant-Hent[18], A.E. van der Meulen[19], P.C.J. ter Borg[20], H. Braat[21], J.M. Jansen[22], A.C.I.T.L. Tan[23], S.V. Jansen[24], C.J. van der Woude[25], F. Hoentjen[2, 26], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology, University of Alberta, Edmonton, Canada, [3]Dept. of Family Medicine, Erasmus MC, Rotterdam, [4]Dept. of Gastroenterology and Hepatology, Radboud UMC, Nijmegen, [5]Dept. of Rheumatology, Sint Maartenskliniek, Nijmegen, [6]Dept. of Gastroenterology and Hepatology, Amphia Hospital, Breda, [7]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [8]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [9]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital, 'S-Hertogenbosch, [10]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [11]Dept. of Gastroenterology and Hepatology, Elisabeth Twee Steden Hospital, Tilburg, [12]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [13]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [14]Dept. of

Gastroenterology and Hepatology, Albert Schweitzer Hospital, Dordrecht, [15]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [16]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, [17]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Department of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, [18]Dept. of Gastroenterology and Hepatology, Flevoziekenhuis, Almere, [19]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [20]Dept. of Gastroenterology and Hepatology, Ikazia hospital, Rotterdam, [21]Dept. of Gastroenterology and Hepatology, Medisch Spectrum Twente, Enschede, [22]Dept. of Gastroenterology and Hepatology, OLVG, Amsterdam, [23]Dept. of Gastroenterology and Hepatology, Canisius Wilhelmina Hospital, Nijmegen, [24]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [25]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [26]Dept. of Gastroenterology, Radboudumc, Nijmegen, The Netherlands

09.45 Gemodereerde postersessies in de Meierij Foyer
Koffie/thee pauze in de expositiehal

Donderdag 20 maart - Auditorium

Verschillende routes van vroege opsporing: Samen naar de beste screeningstrategie voor leverziekten en fibrose

Voorzitter: M. Croon

10.15 Een alomvattend zorgpad voor tijdige detectie van MASLD-gerelateerde fibrose, de NLA2-studie
S. Driessen, PhD student, Amsterdam UMC

10.45 TLM3-biomarkerpanel, een prognostisch panel voor vroege detectie van fibrose bij MA-SLD-ontwikkeling
Dr. L. Verschuren, onderzoeker, TNO Gezond Leven en Werken, Leiden

11.15 Extracellular vesicles: een nieuw diagnostisch middel voor MASLD?
Prof. dr. A.J. Moshage, Hoogleraar Experimentele Hepatologie en Gastro-enterologie, UMC Groningen

11.45 Einde van deze sessie

12.00 Gemodereerde postersessies in de Meierij Foyer
Lunchpauze in de expositiehal

Symposium Opleiding NOVUM 2.0

Donderdag 20 maart - Auditorium

Voorzitters:	B. Oldenburg en K.M.A.J. Tytgat
12.45	De grote veranderingen in het landelijke opleidingsplan *Prof. dr. B. Oldenburg, MDL-arts, UMC Utrecht, voorzitter Commissie NOVUM*
13.05	Regelgeving: wat moet je weten *Dr. M. Klemt-Kropp, MDL-arts, Noordwest Ziekenhuisgroep, Alkmaar*
13.25	Toepassing van NOVUM 2.0: de praktijk *Dr. K.M.A.J. Tytgat, MDL-arts, Amsterdam UMC*
13.45	Koffie/thee pauze in de expositiehal

Sectie Gastrointestinale Endoscopie - Complicatie Management

Donderdag 20 maart - Auditorium

Voorzitters: A. Inderson en R. Krol

14.15 Endoscopische behandeling van complicaties in de onderste tractus digestivus
Dr. J.J. Boonstra, MDL-arts, Leids Universitair Medisch Centrum

14.35 Endoscopische behandeling van complicaties in de bovenste tractus digestivus
Dr. K. Boonstra, MDL-arts, *Radboudumc*, *Nijmegen*

14.55 De optimale complicatiebespreking
R.J.J. de Ridder, MDL-arts, *Maastricht University Medical Center+*

15.15 Voor de ledenvergadering van de NVMDL begeeft u zich naar de Baroniezaal.

NVMDL Symposium - IJsbreker project

Donderdag 20 maart - Baroniezaal

Voorzitters: R. Verdonk

08.30	Wijziging richtlijn Barrett Oesofagus *Spreker volgt*
08.40	De IJsbreker van start *Dr. S.N. van Munster, MDL-arts i.o., St. Antonius Ziekenhuis, Nieuwegein*
09.00	Hoe gaan we verder met de resterende Barrett surveillance *Dr. L.C. Duits, MDL-arts, Amsterdam UMC, Amsterdam*
09.15	Less is more: hoe verder? *Dr. M.P. Schwartz, MDL-arts, Meander MC, Amersfoort*
09.45	Gemodereerde postersessies in de Meierij Foyer Koffie/thee pauze in de expositiehal

Sectie Experimentele Gastroenterologie i.s.m. Pathologie I

Donderdag 20 maart - Baroniezaal

Voorzitters: L.J.A.C. Hawinkels en K. Lenaerts

Voordrachten in het Engels, 8 minuten presentatie en 2 minuten discussie

10.15 Expert lecture: Computational unraveling of the intra-tumoral heterogeneity in pancreatic ductal adenocarcinoma
Y. Kim, assistant professor, Amsterdam UMC

10.45 Characterizing multicellular communities in early-stage colorectal cancer to resolve cancer onset and progression
S.W.M. Engels[1], S. Cardoso[1], M.E. Ijsselsteijn[1], A.M. Sequeira[1], B. Manzato[2], H. Dang[3], J.J. Boonstra[3], L.J.A.C. Hawinkels[3], A. Mahfouz[2, 5], N.F.C.C. de Miranda[1], J.P. Roelands[1], [1]Dept. of Pathology, Leiden University Medical Center, Leiden, [2]Dept. of Human Genetics, Leiden University Medical Center, Leiden, [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [5]Dept. of Human Genetics, Delft University of Technology, Delft, The Netherlands

10.55 Role of cancer associated fibroblasts in response to chemotherapeutic treatment in esophageal cancer
R.S. Hoorntje[1], J. Zonneveld[1], M.F. Bijlsma[2], M. Slingerland[3], L.J.A.C. Hawinkels[1], A. Vallés Martí[1], [1]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [2]Amsterdam University Medical Center , Amsterdam, [3]Dept. of Medical Oncology, Leiden University Medical Center, Leiden, The Netherlands

11.05 Mocetinostat potentiates oncolytic reovirus therapy in pancreatic cancer through modulation of cancer-associated fibroblasts (CAFs)
N. Dam[1, 2], T.J. Harryvan[3], P. Kinderman[4], B.W. van Os[5], M.L. Goossen[1, 2], E. de Jonge-Muller[4], D.J.M. van den Wollenberg[1], L.J.A.C. Hawinkels[4], V. Kemp[1], [1]Dept. of Cell and Chemical Biology, LUMC, Leiden, [2]Dept. of Cell and Chemical Biology, LUMC, Leiden, [3]Dept. of Gastroenterology and Hepatology, LUMC, Leiden, [4]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [5]Dept. of Gastroenterology, Leiden University Medical Center, Leiden, The Netherlands

11.15 The effect Smad4 mutations on the PDAC tumour microenvironment
A.S. Manelkar[1], I.J. Melchers[1], P.W. Voorneveld[1], N. van Montfoort[1], L.J.A.C. Hawinkels[1], [1]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, The Netherlands

11.25 Epithelial calprotectin contributes to refractory Crohn's disease fistula through dysregulation of epithelial wound healing responses
M.E. Wildenberg [1], M.A. Becker[1], P.J. Koelink[1], S. Ouahoud[1], J. Saris[1], D.A. Lartey[1], V. Muncan[1], W.A. Bemelman[2], G. D'Haens[3], C.J. Buskens[2], [1]Tytgat Institute for Liver and Intestinal Research, Amsterdam UMC, [2]Dept. of Surgery, Amsterdam UMC, [3]Dept. of Gastroenterology, Amsterdam UMC, The Netherlands

11.35 Pancreatic duct micro-biopsy of chronic pancreatitis patients allows growth of ductal organoids suitable for ion transport measurements

D. Angyal[1], T.A. Groeneweg[1], A. Leung[1], L. Moesker[1], M.C. Bijvelds[1], M.P. Peppelenbosch[1], M.J. Bruno[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, The Netherlands

11.45 Einde van deze sessie

12.00 Gemodereerde postersessies in de Meierij Foyer
Lunchpauze in de expositiehal

Sectie Experimentele Gastroenterologie II

Donderdag 20 maart - Baroniezaal

Voorzitter: N. van Montfoort en L.J.A.C. Hawinkels

12.45 Battle Junior Researcher award

Voordrachten in het Engels, 8 minuten presentatie en 2 minuten discussie

13.00 JAK inhibition to target fibroblasts and IBD-related fibrosis

J. Su[1], B.J. Ke[2], B.W. van Os[1], G. Zanella[2], P.W. Voorneveld[1], L.J.A.C. Hawinkels[1], G. Matteoli[2], M.C. Barnhoorn[1], [1]Dept. of Gastroenterology and Hepatology, Leiden university medical center, Leiden, [2]Dept. of Gastroenterology and Metabolism, Translational Research Center for Gastrointestinal Disorders (TARGID), Leuven, België

13.10 Ingestible technology for examining gut health

A. Even[1 2], R. Minderhoud[1 3], T. Torfs[4], F. Leonardi[1 2], A. Van Heusden[1 2], R. Sijabat[1 2], D. Firfilionis[1 2], I.D. Castro Miller[4], R. Rammouz[4], T. Teichmann[1 4], R. Van Bergen[1 2], G. Vermeeren[5], E. Capuano[1 3], R. Armstrong[1 2], K. Mathwig[1 2], S. De Vries[1 3], A. Goris[1 2], N. Van Helleputte[4], G. Hooiveld[1,3], C. Van Hoof[1,2,4], [1]OnePlanet Research Center, Wageningen, [2]Imec, Wageningen, [3]Wageningen University & Research, Wageningen, [4]Imec, Leuven, België, [5]Ghent University, Ghent, België

13.20 Profiling inflammation-associated T helper subsets in Inflammatory Bowel Disease

Q. Jiang[1], C. Lindelauf[1], L. Ouboter[2], F. Koning[1], A.E. van der Meulen[2], V. Van Unen[1], M.F. Pascutti[4], [1]Dept. of Immunology, Leiden University Medical Center, Leiden, [2]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [4]Dept. of Pediatric Gastroenterology Hepatology and Nutrition, Erasmus MC, Rotterdam, The Netherlands

13.30 Selective immune responses to Lachnospiraceae flagellins discriminate therapy-naive pediatric Crohn's disease patients with distinct host-microbial interaction

D.M.H. Barendregt[1], M.E. Joosse[1], D.H. Hulleman-van Haaften[1], L.M.M. Costes[1], R. Gacesa[2], N. Plomp[3], L.W. Duck[4], R.C.W. Klomberg[5], S.A. Vuijk[5], M. Doukas[6], J.C. Escher[5], H.J.M. Harmsen[3], C.O. Elson[4], L. de Ridder[5], J.N. Samsom[7], [1]Laboratory of Pediatrics, Erasmus MC-Sophia Children's Hospital, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [3]Dept. of Medical Microbiology and Infection Prevention, UMCG, Groningen, [4]Dept. of Medicine, div. Gastroenterology and Hepatology, UAB, Birmingham AL, Verenigde Staten, [5]Dept. of Pediatric Gastroenterology, Erasmus MC-Sophia Children's Hospital, Rotterdam, [6]Dept. of Pathology, Erasmus MC, Rotterdam, [7]Dept. of Pediatrics, Erasmus University Rotterdam, The Netherlands

13.40 Albumin as a therapeutic target for endothelial dysfunction in patients with decompensated cirrhosis.

S.E. Fischer[1], R.J. Postma[2], J.C. Kerbert[1], R. Bijkerk[2], A.J. van Zonneveld[2], M.J. Coenraad[1], [1]Dept. of Gastroenterology and Hepatology, LUMC, [2]Dept. of Internal Medicine, Leiden University Medical Center, Leiden, The Netherlands

13.50 Junior Research Award

Mini Symposium BVO Darmkanker

Donderdag 20 maart - Baroniezaal

Voorzitters: R.W.M. Schrauwen en M.C.W. Spaander

14.15 Waarom neemt de deelname aan het BVO af, en kunnen we het tij keren?
E. Toes-Zoutendijk, assistant professor, Erasmus MC, Rotterdam

14:28 Kwaliteit coloscopie: we doen het goed, maar toch zijn er nog post-coloscopie CRCs
P.H.A. Wisse, arts-onderzoeker Erasmus MC, Rotterdam / aios MDL, Zuyderland ziekenhuis, Heerlen/Sittard-Geleen
N. Roermund, arts-onderzoeker, Amsterdam UMC

14.45 Update poliepectomie-technieken: the cold revolution
U.S. Wiersma, MDL-arts, Franciscus Gasthuis & Vlietland, Rotterdam
J.J. Boonstra, MDL-arts, Leids Universitair Medisch Centrum

15.02 The bright future of CRC-screening: what is next?
Prof. dr. E. Dekker, MDL-arts, Amsterdam UMC

15.15 Voor de ledenvergadering van de NVMDL begeeft u zich naar de Baroniezaal.

Abstractsessie Sectie Neurogastroenterologie en Motiliteit

Donderdag 20 maart - Parkzaal

Voorzitters: G.M.C. Masclee en N. Warringa

Voordrachten in het Nederlands, 7 minuten presentatie en 3 minuten discussie

10.15 State-of-the-art: Neurogastroenterologie in 2025
G.M.C. Masclee, MDL-arts, Amsterdam UMC

10.45 Comparative analysis of gastric motility with Gastric Alimetry and antro-duodenal manometry
K.W.E. Sweerts[1], S. Calder[2, 3], G. O'Grady[2, 3], C. Varghese[2], P.G. Dinning[4], D.H.C.A. Bosch[5,6], Z. Mujagic[7, 8], J.M. Conchillo[5], D. Keszthelyi[5], [1]Dept. of Gastroenterology and Hepatology, GROW, MUMC+, Maastricht, [2]Dept. of Surgery, Auckland City Hospital, Auckland, New-Zealand, [3]Alimetry Ltd., Auckland, New-Zealand, [4]Dept. of Surgery and Gastroenterology, Flinders Medical Centre/ University, Adelaide, Australia, [5]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [6]Dept. of Gastroenterology and Hepatology, NUTRIM, Maastricht University, Maastricht, [7]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [8]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, The Netherlands

10.55 Interstitial cells of Cajal are depleted in gastroparetic pyloric muscular biopsies obtained during gastric per-oral endoscopic pyloromyotomy: A comparison with non-gastroparetic surgical pyloric samples
K.W.E. Sweerts[1], I. Samarska[2], N. Šefčovičová[2], J.W.A. Straathof[3], Z. Mujagic[4, 5], D. Keszthelyi[4], H.I. Grabsch[2,6], J.M. Conchillo[4], [1]Dept. of Gastroenterology and Hepatology, GROW, MUMC+, Maastricht, [2]Dept. of Pathology, GROW, MUMC+, Maastricht, [3]Dept. of Gastroenterology and Hepatology, Maxima Medical Center, Eindhoven, [4]Dept. of Gastroenterology and Hepatology, Maastricht University Medical Center+, Maastricht, [5]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [6]Dept. of Pathology, Leeds Institute of Medical Research at James's, University of Leeds, United Kingdom

11.05 Tailored treatment of functional dyspepsia with nortriptyline: a multi-center double-blind placebo-controlled trial (tender)
D.H.C.A. Bosch[1, 2], B. Beckers[2], J.T.W. Snijkers[1, 2], M.H.M.A. Bosman[1, 3], B. Winkens[4, 5], J. Muris[6], N. De Wit[7], K. Brouwers[8], K. van Hee[9], C. Clemens[10], B. Haarhuis[11], B.J. Witteman[12], A. Masclee[1], D. Keszthelyi[1], [1]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [2]Dept. of Gastroenterology and Hepatology, NUTRIM, Maastricht University, Maastricht, [3]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Mathematics and Statistics, Maastricht University, Maastricht, [5]Dept. of Mathematics and Statistics, CAPHRI, Maastricht University, Maastricht, [6]Dept. of Family Medicine, Caphri, Maastricht University, Maastricht, [7]Dept. of General practice and elderly care medicine, UMC Utrecht, [8]Pharmacology and Toxicology, University of Groningen, [9]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital , 's-Hertogenbosch, [10]Dept. of Gastroenterology and Hepatology, Alrijne Hospital, Leiden, [11]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [12]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, The Netherlands

11.15 Face-to-face versus online hypnotherapy for the treatment of Irritable Bowel Syndrome: a multicenter three-armed randomized controlled trial (FORTITUDE)

J.T.W. Snijkers[1, 2], M.H.M.A. Bosman[1, 3], B. Winkens[4, 5], B. Haarhuis[6], B.J. Witteman[7], N. Pijnenborg[8], A. de Ruiter[9], L.A. van der Waaij[10], C. Elderson[11], Y. Van Rood[12], N. De Wit[13], C. Flik[14], A. Masclee[1], D. Keszthelyi[1], [1]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [2]Dept. of Gastroenterology and Hepatology, NUTRIM, Maastricht University, Maastricht, [3]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Mathematics and Statistics, Maastricht University, Maastricht, [5]Dept. of Mathematics and Statistics, CAPHRI, Maastricht University, Maastricht, [6]Dept. of Gastroenterology and Hepatology, Bernhoven Hospital, Uden, [7]Dept. of Gastroenterology and Hepatology, Gelderse Vallei Hospital, Ede, [8]Dept. of Gastroenterology and Hepatology, Jeroen Bosch Hospital , 's-Hertogenbosch, [9]Dept. of Gastroenterology and Hepatology, Medisch centrum Leeuwarden, [10]Dept. of Gastroenterology, Martini Hospital, Groningen, [11]Erasmus University Rotterdam, [12]Dept. of Psychiatry, LUMC, Leiden, [13]Dept. of General practice and elderly care medicine, UMC Utrecht, [14]Julius Center, University Medical Center Utrecht, The Netherlands

11.25 Colonic mucosal TRPA1 expression profiles in irritable bowel syndrome and its correlation to symptom severity: an exploratory study

S.R. Groen[1, 2], D. Keszthelyi[1], Z.Z.R.M. Weerts[1], E. Wilms[1, 2], J. Huig[1, 2], P. Xu[1, 2], M. Elizalde Vitalta[1, 2], L. Vork[1, 2], D.M.A.E. Jonkers[2], Z. Helyes[3, 4], A. Masclee[1], [1]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [2]Dept. of Gastroenterology and Hepatology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [3]Pharmacology and Toxicology, University of Pécs, Pécs, Hongarije, [4]Pharmacology and Toxicology, National Laboratory for Drug Research and Development, Budapest, Hongarije

11.35 Faecal Incontinence Core Outcome Set: an international Delphi consensus exercise among patients, healthcare professionals and researchers

S.L. Assmann[1, 2, 3], D. Keszthelyi[4], M.L. Kimman[5, 6], S.O. Breukink[7, 8, 9], [1]Dept. of Gastroenterology, Department of Surgery, Maastricht University Medical Centre, Maastricht, [2]Dept. of Gastroenterology, Department of Gastroenterology and Hepatology, MUMC+, Maastricht, [3]Dept. of Gastroenterology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [4]Dept. of Gastroenterology and Hepatology, MUMC+, Maastricht, [5]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA) , KEMTA, Maastricht University Medical Centre+, Maastricht, [6]Dept. of Clinical Epidemiology and Medical Technology Assessment (KEMTA) , CAPHRI, Maastricht University, Maastricht, [7]Dept. of Surgery, Maastricht University Medical Centre, Maastricht, [8]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [9]Dept. of Surgery, GROW Research Institute for Oncology and Reproduction, Maastricht, The Netherlands

11.45 Einde van deze sessie

12.00 Gemodereerde postersessies in de Meierij Foyer
Lunchpauze in de expositiehal

Middagprogramma V&VN MDL - Endoscopie

Donderdag 20 maart - Parkzaal

Voorzitters: N. Klooster

12.45	Bloedingen in colon *Dr. J.J. Boonstra, MDL-arts, LUMC, Leiden*
13.15	ERCP/cholangioscopie *S. Bac, MDL-arts, Jeroen Bosch Ziekenhuis, Den Bosch*
13.45	Endoscopische ablatie van het duodenum bij diabetes type 2 *K. van den Hoek, arts-onderzoeker, Amsterdam UMC*
14.15	Fecestransplantatie; een update *Dr. J.J. Keller, MDL-arts, Haaglanden MC, Den Haag*

PhD Netwerk

Donderdag 20 maart - Zaal 80/81

Voorzitter:	A. Thijssen
10.15	Klaar voor je proefschriftverdediging? Van voorbereiding tot succes!
Sprekers:	Dr. R.P. Voermans (MDL-arts, Amsterdam UMC) en Dr. L. Boxhoorn (aios MDL, Amsterdam UMC)
11.45	Einde van deze sessie
12.00	Gemodereerde postersessies in de Meierij Foyer Lunchpauze in de expositiehal

V&VN MDL - i.s.m. Sectie Neurogastroenterologie en Motiliteit

Donderdag 20 maart - Zaal 80/81

Voorzitters: C.J.R. Verstraete

12.45 Brain-Gut connection
Dr. Z. Mujagic, MDL-arts, MUMC+, Maastricht

13.15 Functionele dyspepsie
Dr. D.P. Hirsch, MDL-arts, Rijnstate Ziekenhuis Rijnstate, Arnhem

13.45 Prikkelbare Darm Syndroom
Dr. D.R. de Vries, MDL-arts, UMC Utrecht

14.15 Hypnotherapie bij PDS
E. van den Berg, Medisch- en hypnotherapeut, Medisch Hypnose Centrum, Doetinchem

Postersessie IV

Donderdag 20 maart - Meierijfoyer

Moderator: R.L. Goetgebuer

09.50 Fistula-derived fibroblasts express genes associated with a dysfunctional wound healing process

B.W. van Os, J. Su, R. Bruckner, Z. Zhou, A.E. van der Meulen, L.J.A.C. Hawinkels, M.C. Barnhoorn, Dept. of Gastroenterology and Hepatology, LUMC, Leiden, The Netherlands

09.55 The immune system of patients with immune-mediated diseases perceives dysbiotic intestinal microbial species, and IgG reactivity uncovers shared and non-shared responses across diseases

D.M.H. Barendregt[1], R. Gacesa[2], N. Plomp[3], B. Calado[1], A.R. Bourgonje[2,4], J.I.P. van Heck[5], A.G. van Mourik[6], D. van der Woude[6], R.K. Weersma[2], L.A.B. Joosten[5], E. Lubberts[7], D. Rizopoulos[8], F. Chandler[9], R.S. Sikkema[9], H.J.M. Harmsen[3], L. de Ridder[10], J.N. Samsom[11], [1]Laboratory of Pediatrics, Erasmus MC-Sophia Children's Hospital, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [3]Dept. of Medical Microbiology and Infection Prevention, UMCG, Groningen, [4]Dept. of Gastroenterology and Hepatology, Icahn School of Medicine at Mount Sinai, New York, Verenigde Staten, [5]Dept. of Internal Medicine, Radboudumc, Nijmegen, [6]Dept. of Rheumatology, LUMC, Leiden, [7]Dept. of Rheumatology, Erasmus MC, Rotterdam, [8]Dept. of Biostatistics, Erasmus MC, Rotterdam, [9]Dept. of Viroscience, Erasmus MC, Rotterdam, [10]Dept. of Pediatric Gastroenterology, Erasmus MC-Sophia Children's Hospital, Rotterdam, [11]Dept. of Pediatrics, Erasmus University Rotterdam, The Netherlands

10.00 Metaproteomic Insights into the Adenoma-Carcinoma Sequence: Biological Processes and Biomarker Potential

R.C.M. Opperman[1, 2, 3], S. Bosch[1, 2], P. Henneman[4], S.R. Piersma[4, 5], A. Henneman[4, 5], T.V. Pham[4, 5], M. de Wit[6], B. Carvalho[6], J.A. Fijneman[6], G.A. Meijer[6], T.G.J. de Meij[7, 8], E. Dekker[1], C.R. Jimenez[4, 5], K.H.N. de Boer[1], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Cancer Center Amsterdam, [4]Dept. of Medical Oncology, Amsterdam UMC, Amsterdam, [5]Dept. of Medical Oncology, Cancer Center Amsterdam, [6]Dept. of Pathology, Netherlands Cancer Institute, Amsterdam, [7]Dept. of Pediatric Gastroenterology Hepatology and Nutrition, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [8]Dept. of Pediatric Gastroenterology Hepatology and Nutrition, Emma Children's Hospital, AUMC, Amsterdam, The Netherlands

10.05 Fluorescently labelled adalimumab to visualize drug targeting in Inflammatory Bowel Disease: a safety, feasibility and dose-finding study

H.K. Huizinga[1], R.J. van Dijken[1], P. Volkmer[2], N. Aledlbi[1], R.Y. Gabriëls[1], D.J. Robinson[3], D. Gorpas[4], M.C. Visschedijk[5], M.N. Lub-de Hooge[6], W.B. Nagengast[7], [1]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [2]Dept. of Gastroenterology, UMCG, Groningen, [3]Dept. of Otorhinolaryngology and Head and Neck Surgery, Erasmus MC, Rotterdam, [4]Helmholtz Munich, Institute of Biological and Medical Imaging, Munich, Germany, [5]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [6]Pharmacology and Toxicology, UMCG, Groningen, [7]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, The Netherlands

Postersessie V

Donderdag 20 maart - Meierijfoyer

Moderator: D. Keszthelyi

12.10 Impact of Intercontinental Travel on Gut Microbiota Stability and Resilience

J. Chan[1], M. Arcilla[2], P. van Genderen[3], N. van Best[1,4], J. Penders[1], on behalf of the COMBAT-consortium, [1]Institute of Nutrition and Translational Research in Metabolism (NUTRIM), Dept. of Medical Microbiology, Infectious Diseases and Infection Prevention, Maastricht University Medical Centre, Maastricht, [2]Dept. of Medical Microbiology, Haaglanden Medical Centre, Den Haag, [3]Corporate Travel Clinic Erasmus Medical Centre, Rotterdam, The Netherlands, [4]Institute of Medical Microbiology, RWTH University Hospital Aachen, RWTH University Aachen, Aachen, Germany

12.15 The social and hygiene practices of the parents during COVID-19 pandemic influence the development of the infant's gut microbiota

E. Dikareva[1], N. van Best[1, 2], M. Mommers[3], C. Driessen[1], J. Penders[1], [1]Dept. of Medical Microbiology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [2]Dept. of Medical Microbiology, RWTH Aachen University Hospital, Aachen, Germany, [3]Dept. of Epidemiology, CAPHRI, Maastricht University, Maastricht, The Netherlands

*Presentation in English

12.20 Amino acids analysis in long-term stored FFPE colorectal neoplasia tissue: potential biomarkers

R.C.M. Opperman[1, 2, 3], P.E. Bruchner[1], S. Bosch[1, 2], E. Dekker[1], K.H.N. de Boer[1], E.A. Struys[4], [1]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, Amsterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam Gastroenterology Endocrinology Metabolism, Amsterdam, [3]Dept. of Gastroenterology and Hepatology, Cancer Center Amsterdam, Amsterdam, [4]Dept of Clinical Chemistry, Amsterdam UMC, Vrije Universiteit, Amsterdam, The Netherlands

12.25 Exploring biomarkers of systemic oxidative stress and gut barrier integrity for disease activity inflammatory bowel disease: a prospective diagnostic validation study

S. Geertsema[1], H.J. Holstein[1], M.L.C. Bulthuis[2], S. de Jong[1], K.N. Faber[1], H. van Goor[2], G. Dijkstra[3], A.R. Bourgonje[1, 4], [1]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [2]Dept. of Pathology, UMCG, Groningen, [3]Dept. of Gastroenterology and Hepatology, UMCG, Groningen, [4]Dept. of Gastroenterology and Hepatology, Icahn School of Medicine at Mount Sinai, New York, Verenigde Staten

12.30 Why do babies cry? Exploring the role of the gut microbiota in infantile colic, constipation, and cramps in the KOALA Birth Cohort Study.

D. Barnett[1, 2], C. Thijs[3], M. Mommers[3], M. Endika[4], C. Klostermann[5], H. Schols[5], H. Smidt[4], A. Nauta[6], I. Arts[7], J. Penders[1], [1]Dept. of Medical Microbiology, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [2]Dept. of Medical Microbiology, Maastricht Centre for Systems Biology, Maastricht, [3]Dept. of Epidemiology, CAPHRI, Maastricht University, Maastricht, [4]WUR, Laboratory of Microbiology, Wageningen, [5]WUR, Department of Food Chemistry, Wageningen, [6]Friesland Campina, Amersfoort, [7]Maastricht Center for Systems Biology, Maastricht, The Netherlands

*Presentation in English

High risk of colorectal cancer after high-grade dysplasia in inflammatory bowel disease patients

M.E.W. Derks[1], M. te Groen[1], L.A.A.P. Derikx[2], I.D. Nagtegaal[3], F. Hoentjen[2,5], [1]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [2]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [3]Dept. of Pathology, Radboudumc, Nijmegen, The Netherlands, [5]Dept. of Gastroenterology, University of Alberta, Edmonton, Canada

Background: Colonic high-grade dysplasia (HGD) is the highest-risk precursor of colorectal cancer (CRC) in inflammatory bowel disease (IBD) patients with reported incidence rates of 1.0-3.5%. Data on metachronous CRC risk after HGD in IBD are limited and outdated. The aim of this study was to determine the long-term risk of CRC and colorectal neoplasia (including indefinite for dysplasia, low-grade dysplasia, HGD and CRC) after a first diagnosis of HGD in IBD, and to assess HGD treatment strategies.
Methods: In this nationwide retrospective cohort study, patients with both a colonic IBD and HGD diagnosis between 1991 and 2021 were extracted from the Dutch nationwide pathology databank (PALGA). The primary outcome was the cumulative incidence of metachronous CRC and colorectal neoplasia. Cox proportional hazard models were used to assess associations with metachronous CRC. Kaplan Meier curves were used to show proctocolectomy free survival per decade.
Results: CRC was diagnosed in 358 of 1,223 patients with HGD (29.3%) after a median 0.3 years (IQR 0.1-2.7). Of these, 203 patients (16.6%) were diagnosed with CRC within 6 months after the first HGD diagnosis and were considered synchronous CRC patients. Metachronous CRC was diagnosed in 155 of 1,020 patients (15.2%) after a median 4.1 years (IQR 1.3-11.0). The 1-, 5-, and 10-year cumulative incidences of metachronous CRC after HGD were 2.9%, 10.4%, and 17.2%, respectively. After a median of 2.2 years (IQR 1.0-5.7), 642 patients (62.9%) developed metachronous colorectal neoplasia (indefinite for dysplasia as highest grade: n=12 [1.9%]; low-grade dysplasia: n=243 [37.9%]; HGD: n=220 [34.3%]; CRC: n=155 [24.1%]). The 1-, 5- and 10-year cumulative incidences of metachronous colorectal neoplasia were 18.0%, 53.9% and 75.0%, respectively. Post-inflammatory polyps (aHR 1.88, 95%CI 1.33-2.65, p<0.01), strictures (aHR 1.62, 95%CI 1.02-2.58, p=0.04), invisible index HGD (aHR 2.04, 95%CI 1.24-3.35, p<0.01), academic follow-up (aHR 1.54, 95%CI 1.10-2.17, p=0.01), and endoscopic vs. surgical treatment (aHR 2.31, 95%CI 1.17-4.57, p=0.02) were associated with metachronous CRC. Proctocolectomy was performed in 209 (17.1%) patients after a median 4.7 years (IQR 1.5-9.7) after index HGD diagnosis. Proctocolectomy free survival did not differ between decades of HGD diagnosis after 8 years of follow-up (p=0.58).
Conclusion: The high cumulative incidence of synchronous and metachronous CRC after HGD underlines the high-risk profile for this subgroup of IBD patients. The possible advantages of colon sparing treatment for HGD should be balanced with the higher risk of metachronous CRC and colorectal neoplasia and resulting need for stringent endoscopic surveillance.

Combined clinical and histopathological risk stratification for prediction of (severe) endoscopic postoperative recurrence in patients with Crohn's disease after ileocolic resection

M.T.J. Bak[1], L. Oudijk2, A.H.A.G. Ooms[3], E.M.J. Beelen1, J.D.W. van der Bilt[4], M. Romberg-Camps[5], G. Dijkstra[6], M. Duijvestein[7], S. van der Marel[8], L.P.S. Stassen[9, 10], P.W.J. Maljaars[11], C.J. Buskens[12], J. Lange[13], G. Kats-Ugurlu[14], S.V. Jansen[15], B. Jharap[16], C.S. Horjus[17], F.D.M. van Schaik[18], R.L. West[19], K.H.N. de Boer[20], C.J. van der Woude[7], K.P. Parikh.[1], O. van Ruler[22], M. Doukas[2], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Pathology, Erasmus MC, Rotterdam, [3]Dept. of Pathology, Pathan BV, Rotterdam, [4]Dept. of Surgery, Flevoziekenhuis, Almere, [5]Dept. of Gastroenterology, Geriatrics, Internal and Intensive Care Medicine, Dept. of Gastroenterology and Hepatology, Zuyderland Medical Center, Sittard, [6]Dept. of Gastroenterology and Hepatology, UMCG, University of Groningen, Groningen, [7]Dept. of Gastroenterology and Hepatology, Radboudumc, Nijmegen, [8]Dept. of Gastro-enterology and Hepatology, Haaglanden MC, The Hague, [9]Dept. of Surgery, Maastricht University Medical Center+, Maastricht, [10]Dept. of Surgery, NUTRIM, Institute of Nutrition and Translational Research in Metabolism, Maastricht, [11]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, Leiden, [12]Dept. of Surgery, Amsterdam UMC, Amsterdam, [13]Dept. of Surgery, University Medical Centre Groningen, Groningen, [14]Dept. of Pathology, University Medical Centre Groningen, Groningen, [15]Dept. of Gastroenterology and Hepatology, Reinier de Graaf Gasthuis, Delft, [16]Dept. of Gastroenterology and Hepatology, Meander Medical Centre, Amersfoort, [17]Dept. of Gastroenterology and Hepatology, Rijnstate Hospital, Arnhem, [18]Dept. of Gastroenterology and Hepatology, University Medical Centre Utrecht, [19]Dept. of Gastroenterology and Hepatology, Franciscus Gasthuis & Vlietland, Rotterdam, [20]Dept. of Gastroenterology and Hepatology, Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [22]Dept. of Surgery, IJsselland Ziekenhuis, Capelle aan de IJssel, The Netherlands.

Background: The predictive value of histopathologic features of the intestinal resection specimen for the risk of Crohn's disease (CD) recurrence after ileocolic (re-)resection (ICR) remains a matter of debate. This study assessed the association of histopathological features in the resection specimen of CD patients with (severe) endoscopic postoperative recurrence (ePOR).
Methods: CD patients (≥16 years) scheduled for ICR were included from a prospective cohort study. Outcome measures were ePOR (modified Rutgeerts' score ≥i2b) and severe ePOR (≥i3) at six months postoperatively. Proposed histopathological risk factors for postoperative recurrence (active inflammation, granulomas, myenteric/submucosal plexitis, transmural inflammation) were assessed in the resection margins by expert pathologists blinded for outcomes. In addition, presence of chronic inflammatory cells, abceding inflammation, fat necrosis, fibrosis and de novo was assessed in the mesentery/mesocolon. Logistic regression was performed and ROC curves were delineated to explore the association and accuracy of histopathology with (severe) ePOR.
Results: In total, 293 patients were eligible for inclusion (female 60%, active smoking 22% and prior intestinal resection 21%). ePOR and severe ePOR was observed in 37% and 9% of patients. Only moderate to severe inflammation at the ileal resection margin (OR 2.5;95%CI 1.1-5.6) was associated with ePOR in multivariable analysis. Significant higher rates of ePOR were observed in patients with active inflammation at the ileal or colonic margin (p=0.01; p=0.03), submucosal plexitis at the ileal margin (p=0.04) and transmural inflammation (p<0.01). Transmural inflammation or submucosal plexitis at the ileal margin (p=0.02; p=0.01) and mesenteric granulomas (p<0.01) were significantly higher in patients with severe ePOR.
Area under the curve (AUC) for individual histopathological risk factors varied between 0.53-0.58 for ePOR (active inflammation at resection margins, submucosal plexitis and transmural inflammation) and 0.69-0.71 for severe ePOR (submucosal plexitis, transmural inflammation and mesenteric granulomas). Clinical risk factors alone (active smoking and postoperative prophylactic medication) had an AUC of 0.66 and 0.74 for ePOR and severe ePOR. Combined histopathological and clinical risk stratification increased the AUC up to 0.71 for ePOR and up to 0.79 for severe ePOR.
Conclusion: Only moderate to severe inflammation at the ileal margin was independently associated with ePOR. A combined approach of clinical risk stratification and assessment of histopathological features in the resection specimen provides an adequate predictive value for (severe) ePOR after ICR in patients with CD.

The macroscopic and microscopic distribution of IBD in patients with PSC: a polytomous latent class analysis on 3177 endoscopies

D. Sneek[1], A.J. van der Meer[1], B. Mol[2], C.Y. Ponsioen[2], A. Inderson[3], R.K. Weersma[4], B. Hansen[5], A.C. de Vries[1], [1]Dept. of Gastroenterology and Hepatology, Erasmus MC, Rotterdam, [2]Dept. of Gastroenterology and Hepatology, Amsterdam UMC, [3]Dept. of Gastroenterology and Hepatology, Leiden University Medical Center, [4]Dept. of Gastroenterology and Hepatology, University Medical Centre Groningen, [5]Dept. of Epidemiology and Biostatistics, Erasmus MC, Rotterdam, The Netherlands

Background: Inflammatory bowel disease (IBD) in patients with primary sclerosing cholangitis (PSC) is a distinct disease entity requiring specific management. Data on characterisation of the phenotype of PSC-IBD are limited and subclassification is lacking. Therefore, this study aims to describe the macroscopic and microscopic distribution of IBD in patients with PSC.
Methods: A retrospective analysis was conducted on data from PSC-IBD patients included in the EpiPSC2 registry, comprising patients from 46 hospitals across the Netherlands. Data on inflammation at macro- and microscopic level in the ileum and 6 colonic segments were collected on every available endoscopy. Data after (hemi)colectomy were excluded.
Polytomous latent class analysis was used to identify subgroups of IBD distribution. First, latent class models (LCM) were fitted on all endoscopic and histologic data and Akaike and Bayesian information criteria were used to determine the optimal number of classes. After random sampling with replacement the LCM with the ideal number of groups was fitted on 20 samples of one endoscopy with inflammation per subject, and the pooled class probability was calculated per subgroup.
Results: A total of 3177 endoscopies from 522 PSC-IBD patients (median of 5 [IQR 2-9] endoscopies per patient) were included. The maximum depth of insertion was the terminal ileum in 62% and caecum in 27% of endoscopies. Macroscopic inflammation was observed in 1521 (48%) endoscopies from 428 patients. Segmental colon biopsies were obtained during 650 (20%) endoscopies in 237 subjects, and ileum biopsies in 144 (22%) endoscopies in 100 subjects. Microscopic inflammation in any segment was observed in 265 (41%) endoscopies.
An LCM with four classes was the best fit to the macro- and microscopic data: no inflammation, right-sided colitis (pooled class probability 36%), left-sided colitis (30%), and pancolitis (34%). In right-sided colitis and pancolitis the probability of ileal involvement was 16% and 22%, whereas left-sided colitis most often displayed an absence of ileal involvement (probability of 4%) [fig.1]. For microscopic inflammation no pooled class probabilities could be calculated due to low sample size. In 139 (21%) endoscopies, LCM showed more extensive inflammation at microscopic assessment as compared to macroscopic assessment.
Conclusion: Macroscopic and microscopic inflammation in PSC-IBD may be classified into right sided colitis, left sided colitis, and pancolitis. The microscopic extent exceeds macroscopic inflammation in over 20% of endoscopies with segmental biopsies. Future research into the prognostic implication of this subclassification on PSC- and IBD-related outcomes is required.

From Percutaneous Transhepatic Biliary Drainage to Endoscopic Ultrasound-Guided Choledochoduodenostomy: a safe alternative with fewer complications and enhanced recovery in patients with malignant distal biliary obstruction with inaccessible papilla.

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Background: Percutaneous transhepatic biliary drainage (PTBD) is standard management in patients with malignant distal biliary obstruction (MDBO) in whom endoscopic retrograde cholangiopancreatography (ERCP) is unsuccessful. However, this technique is associated with high rates of adverse events (AEs) and endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) is proposed as an alternative technique. This study aims to compare both techniques.
Methods: This single-center retrospective cohort study assesses 70 patients with MDBO who underwent either PTBD (n = 35) or EUS-CDS (n = 35) between January 2018 and April 2024. Primary outcomes are technical and clinical success, occurrence of AEs, re-interventions and duration of hospitalization. Secondary outcomes are post-interventional pain, and time to biliary decompression without external catheters.
Results: Both groups are similar with respect to age, gender and etiology of MDBO, but common bile duct diameter is significantly smaller in the PTBD group (17±7 mm *vs* 21±6 mm, p = 0.01). Technical success is achieved in 100% within both groups, and clinical success rates are not statistically significantly different between PTBD and EUS-CDS (89% *vs* 100%, p = 0.11). Patients who underwent EUS-CDS have significantly less AEs (14% *vs* 40%, p = 0.02), less severe AEs (Clavien Dindo > 2: 6% *vs* 31%, p = 0.01), reduced number of required procedures (1 *vs* 2 [IQR: 1-2], p < 0.001), lower rate of re-interventions (6% *vs* 31%, p = 0.01), reduced duration of post-interventional hospitalization (EUS-CDS: 1 day [IQR: 1-2] *vs* PTBD: 5 days [IQR: 3-10], p < 0.001), and less post-interventional use of potent analgesics (9% *vs* 43%, p = 0.002). Sub-analysis of time to late AEs, shows shorter time to occurrence of AEs in patients who underwent PTBD (p < 0.001). Time to biliary decompression without external catheters in PTBD patients is 9 days [IQR: 7 – 19].
Conclusion: EUS-CDS is a technically and clinically successful procedure with significant reduced AEs, re-intervention rates, required number of procedures, hospitalization duration, and post-interventional pain, compared to PTBD, in patients with MDBO and failed ERCP. Therefore, in expert centers, EUS-CDS should be preferred in patients with failed ERCP in MDBO.

Multicenter, randomized non-inferiority trial comparing transanal minimal invasive surgery (TAMIS) and endoscopic submucosal dissection (ESD) for resection of non-pedunculated rectal lesions.

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Background: Transanal Minimally Invasive Surgery (TAMIS) and Endoscopic Submucosal Dissection (ESD) are minimally invasive techniques for en bloc resection of large non-pedunculated rectal lesions. While TAMIS is widely used in the Netherlands, ESD uptake has been slower. The absence of randomized trials leaves the choice of technique dependent on local expertise. This study aimed to compare TAMIS and ESD regarding effectiveness, safety, patient burden, and costs.

Methods: This multicenter randomized non-inferiority trial (NTR7281) included 198 patients with non-pedunculated rectal lesions >2 cm, located ≤15 cm from the anal verge. Patients were randomized 1:1 to TAMIS or ESD after an expert panel judged lesions suitable for inclusion. Exclusion criteria included deep-submucosal invasion on endoscopy or imaging, with endoscopy prioritized in discordant cases, prior endoscopic resection, and an unfavorable risk-benefit ratio for local treatment (e.g., poor general condition or very short life expectancy). Randomization was stratified by polyp size (20–40 mm or >40 mm) and distance from the dentate line (<10 mm, 10–99 mm, 100–150 mm). The primary endpoint was cumulative local recurrence at 12 months (non-inferiority margin: 6%). Secondary endpoints included radical (R0) resection rate, complications (AGREE classification), patient burden (COREFO, EQ-5D-5L, QLQ-CR29), and cost-effectiveness. Intention-to-treat analysis was performed.

Results: Of 198 patients randomized (98 TAMIS, 100 ESD), 6 crossed over between groups, and 1 dropped out before treatment. Mean procedure time was 108 minutes for ESD and 80 minutes for TAMIS. En bloc resection rates were 95% for ESD and 92% for TAMIS. In total, 156 benign and 41 malignant lesions (27 T1, 13 T2 and 1 T3) were resected. R0 resection rates were 83% for ESD and 70% for TAMIS (P = 0.04). At 12 months, 4 recurrences occurred: 0 (0%) in the ESD group and 4 (4.3%) in the TAMIS group, all benign, with a 4.3% difference favoring ESD (95% CI: -8.4, -0.2), confirming non-inferiority. Overall complication rates were similar (22.0% ESD vs. 20.4% TAMIS; p = 0.33). Colorectal functional outcomes showed no significant difference in overall scores, though incontinence was significantly more common in TAMIS patients up to 6 months, resolving by 12 months. Cost-effectiveness analysis is ongoing.

Conclusion: This trial is the first to show ESD is non-inferior to TAMIS for local recurrence at 12 months in en bloc resection of large non-pedunculated rectal lesions. Both techniques had similar safety profiles and colorectal functional outcomes. Cost-effectiveness analysis may help determine the preferred technique.

The closer, the better: intratumoral delivery of a thermoresponsive gemcitabine-loaded hydrogel in preclinical pancreatic cancer models

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Background: Pancreatic ductal adenocarcinoma (PDAC) is characterised by very poor 5-year survival of only 8% due to a late diagnosis and a highly desmoplastic environment, limiting therapeutic options. Current treatment options for pancreatic ductal adenocarcinoma patients are mostly restricted to chemotherapy or palliative care. These treatments have limited efficacy and are accompanied by severe side effects, strongly affecting the quality of life of PDAC patients. Recent advances in nanotechnology have optimized targeted drug delivery by improving drug retention time, intratumoral drug doses and thereby boosting treatment efficacy and potentially reducing side effects. This would enable endoscopic delivery of local depot of concentrated chemotherapy. Here we investigated the preclinical efficacy and tolerability of a novel thermosensitive hydrogel, *ChemoGell* (CG), loaded with gemcitabine in preclinical human and mouse models for PDAC.
Methods: To evaluate the efficacy of CG, *in vitro* experiments using patient-derived organoids and PDAC explants were performed. This was further explored *in vivo* by using a human patient-derived xenograft (PDX) and the syngeneic KPC3 mouse model. Two intratumoral injections with saline, CG and gemcitabine-loaded CG (CG-Gem) were performed in both PDX and KPC3 models and compared to systemic gemcitabine administration. To evaluate potential off-target effect, other vital organs and haematological toxicity related to gemcitabine were evaluated.
Results: Both CG and CG-Gem were safe and well-tolerated *in vivo*. Upon CG-Gem, both *in vitro* and *in vivo* models showed strongly increased cytotoxicity compared to unloaded CG and control groups. Remarkably, we were able to inject a much higher dose (~125x) intratumorally compared to systemic gemcitabine dose. By boosting gemcitabine cytotoxicity, locally-treated mice showed a significant improved survival. In a human PDX model, complete survival of mice (100%) was observed compared to controls groups in which all reached humane endpoint. Given the enhanced treatment efficacy, we are currently investigating the role of the tumor microenvironment, particularly looking at stromal and immune cell dynamics.
Conclusion: Our findings represents a potential strategy for integrating localized (endoscopic) and systemic treatment modalities, addressing critical challenges in hard-to-treat PDAC management, and improving patient prognosis through more effective and targeted therapeutic strategies.

Acetic acid chromoendoscopy for the detection of neoplastic Barrett Esophagus: a stepped wedge cluster randomized clinical trial

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Background: Acetic acid chromoendoscopy (AAC) is believed to be useful as a 'red flag' technique in Barrett esophagus (BE) surveillance endoscopies, thereby improving the overall neoplasia detection and the diagnostic yield of targeted biopsies. Accurate targeted neoplasia detection with AAC therefore holds the promise of abandoning random four-quadrant biopsies at 2cm intervals of the BE segment. Although some data exist on the use of AAC in expert centers, the added value in a non-dysplastic surveillance population in routine clinical practice is unclear.

Methods: A prospective stepped wedge cluster randomized trial was conducted in 18 Dutch community hospitals. BE patients undergoing surveillance endoscopies were eligible, while those with known or previously treated dysplasia were excluded. Hospitals shifted from surveillance without AAC (control) to the incorporation of AAC (intervention) in randomized order. Endoscopists were trained in the use and assessment of AAC immediately prior to its implementation. In both study groups, targeted biopsies were obtained in the presence of lesions before the acquisition of random four-quadrant biopsies. Primary endpoint was the overall neoplasia detection rate (NDR), defined as the percentage of patients with low-grade dysplasia (LGD), high-grade dysplasia (HGD) and esophageal adenocarcinoma (EAC) in targeted and random biopsies, confirmed by an experienced GI pathologist. Secondary endpoint was the NDR of targeted biopsies.

Results: We included 2,267 patients between July 2020 and November 2023. A total of 1,438 patients (63%) were allocated to surveillance without AAC and 829 patients (37%) with AAC. In patients allocated to AAC, AAC was applied in 679 patients (82%). Overall, 163 patients (7.2%) were diagnosed with neoplasia; LGD in 111 patients (4.9%), HGD in 30 patients (1.3%), and EAC in 22 patients (1.0%). The use of AAC did not result in a significantly higher overall NDR (7.4% with AAC versus 7.1% without AAC; OR 0.97; 95% CI 0.65-1.44; adjusted for calendar time and BE length). Visible lesions were detected in 95 patients (14.0%) receiving AAC versus 101 patients (6.4%) in the control group ($p<0.001$), yet the targeted NDR was not significantly higher (2.1% versus 1.8%; OR 1.05; 95% CI 0.49-2.24). Neoplasia was detected through random four-quadrant biopsies in the majority of patients, in 78% of patients who received AAC and 72% of patients not receiving AAC.

Conclusion: The use of AAC does not improve the overall or targeted NDR rate in BE patients undergoing endoscopic surveillance in routine clinical practice. Surveillance with AAC-guided targeted biopsies cannot replace the random biopsy protocol.

Textbook outcome after EUS-CDS versus ERCP for primary drainage of malignant distal biliary obstruction: a comparison of two prospective cohorts

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Background: Endoscopic retrograde cholangiopancreatography (ERCP) with stent placement is widely used for treating distal malignant biliary obstruction (MBO), but carries a significant risk of post-procedural pancreatitis, reported as high as 21%. EUS-guided choledochoduodenostomy (EUS-CDS) is increasingly used as a promising alternative, but comparative studies are still scarce.
Methods: This single-center study included patients with distal MBO who underwent technically successful (1) EUS-CDS with a lumen apposing metal stent (LAMS) plus additional coaxial stent or (2) ERCP with fully covered self-expandable metal stent (FCSEMS) as part of the prospective SCORPION studies and SPHINX trial, respectively.[1,4] The primary endpoint was textbook outcome, defined as the absence of related adverse events (AEs), reinterventions, or hospital readmissions within 30 days of the procedure. Secondary endpoints included individual components of the primary outcome, mortality, time to initiation of treatment, and textbook outcome at 90 days.
Results: A total of 147 patients were enrolled for EUS-CDS (n=41) or ERCP (n=106). Coaxial stents used in the EUS-CDS group were FCSEMS (n=20) or double pigtail plastic stents (n=21). Textbook outcome was achieved in 36 patients (88%) in the EUS-CDS group and in 73 patients (69%) in the ERCP group at 30 days (RR 1.28, 95% CI 1.07-1.51). EUS-CDS led to fewer procedure- or stent-related AEs (RR 0.39, 95% CI 0.16-0.93) compared with ERCP, particularly post-procedure pancreatitis (0% vs. 22%). Other AEs, including perforation (3% vs. 0%), bleeding (0% vs. 0%), cholangitis (2% vs. 5%), and cholecystitis (5% vs. 5%) were similar between groups. Hospital readmission rate was lower in the EUS-CDS group (7% vs. 31%, RR 0.24, 95% CI 0.08-0.73), as was the length of hospital stay (median of 0.4 days [IQR 8-25] vs. 1.9 days [IQR 14-24], P=0.02). Mortality (7% vs. 6%), need for reinterventions (10% vs. 7%), and time to treatment initiation (median 19 days [IQR 8-25] vs. 18 days [IQR14-24]) did not differ. At 90 days, EUS-CDS maintained a trend towards higher textbook outcome rates (83% vs. 68%, RR 1.22, 95% CI 1.00-1.48).
Conclusion: EUS-CDS with LAMS plus additional coaxial stent was superior to ERCP with FCSEMS in achieving textbook outcome at 30 days post-procedure. This was due to fewer procedure- or stent-related AEs, particularly post-procedure pancreatitis, resulting in fewer hospital readmissions and shorter hospital stay. Therefore, when expertise is available, EUS-CDS with coaxial stent placement could be considered as primary biliary drainage technique in patients with distal MBO. However, multicenter randomized controlled trials are needed to confirm these results.

Endoscopic Ultrasound-Directed TransGastric ERCP in patients with Roux-en-Y gastric bypass: a multicenter prospective cohort study (EDGE-pilot)

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Background: Endoscopic retrograde cholangiopancreatography (ERCP) is increasingly indicated in patients who underwent Roux-en-Y gastric bypass surgery (RYGB). However, due to the altered anatomy, it is challenging to gain pancreatobiliary access in patients after RYGB. Several strategies are available, but all have their disadvantages. Laparoscopy-assisted ERCP, the current golden standard, has higher success rates but comes with logistical challenges of intraoperative ERCP, risks of surgery and high costs. Endoscopic ultrasound directed ERCP (EDGE) is a relatively new technique which exist of creation of a gastro-gastrostomy using a lumen apposing metal stent (LAMS) between the gastric pouch and the excluded stomach, facilitating subsequent ERCPs. Although EDGE gained popularity over the last few years, prospective studies are lacking. The aim of this study is to provide evidence for the efficacy and safety, including closure of the fistula, of EDGE in patients with an indication for ERCP after RYGB.
Methods: This multicenter prospective cohort study included all consecutive patients scheduled for elective ERCP after RYGB. Patients were excluded if they required a laparoscopic cholecystectomy. EDGE was performed as a 2-step procedure. The primary endpoint was technical success. Secondary endpoints were technical success of each step, fistula closure, procedure-related AEs and total procedure time.
Results: Between Jan 2021 and Aug 2024, 27 patients (23 female [85.2%], median age 58 years [IQR 45 - 64] were included in 4 Dutch hospitals. Median follow-up was 140 days [IQR 61 – 206]. Mean BMI was 28.59 (SD 5.02). Indications for EDGE were choledocholithiasis (n = 23), (presumed) malignant biliary obstruction (n = 3) and iatrogenic bile injury (n = 1). EDGE step 1 was successful in all patients. Technical success for ERCP through LAMS (step 2) was achieved in 27/28 patients (96%). In one patient no ERCP was performed and a PTC-drain was placed. Median LAMS indwelling time was 15 days [IQR 11 – 25 days]. Procedure-related AEs occurred in 5 patients (18.5%). Two AEs were EDGE-related (7.4%): one patient suffered a duodenal wall perforation after scope intubation and stent dislodgment occurred in one patient with successful endoscopic re-intervention. The other three AEs were ERCP-related: one post-procedural bleeding, one CBD perforation, and one post-ERCP pancreatitis. Eight patients were lost to follow-up. In all remaining patients (19/19), there was endoscopic or radiological evidence of a closed fistula.
Conclusion: This prospective study shows that EDGE is a feasible procedure with high technical success, and with a 100% fistula closure rate. However, EDGE-related AEs occurred in 7.4%.

Long-term results of lumen apposing metal stents versus double-pigtail plastic stents for infected necrotizing pancreatitis

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Background: In our recent multicentre prospective study (AXIOMA), the effectiveness of lumen-apposing metal stents (LAMS) for endoscopic transluminal drainage of infected necrosis was comparable to double-pigtail plastic stents. This study aimed to evaluate the long-term outcomes (>6 months) of these stents.
Methods: Patients with infected necrotizing pancreatitis were enrolled in two prospective studies and treated with endoscopic transluminal drainage with LAMS (n=52) or double-pigtail plastic stents (n=48). Both study protocols, including in- and exclusion criteria, were identical except for the type of stent. The primary endpoint was the need for additional endoscopic, percutaneous or surgical drainage procedures due to (recurrence of) symptomatic or infected (peri-)pancreatic collections. Secondary endpoints included major complications, mortality, number of readmissions and interventions, length of hospital stay, pancreatic function and quality of life.
Results: The median follow-up period was 4 years. By the end of this period, 77 of 100 (77%) patients were still alive. Among the patients treated with LAMS, 9 (17%) were lost to follow-up after the initial 6-month study. An additional percutaneous, endoscopic or surgical drainage or necrosectomy procedure was needed in 37 patients (77%) in the plastic stent group and 40 patients (77%) in the LAMS group (RR 1.002 95% CI 0.809-1.242). The median number of interventions for infected necrosis did not differ during overall follow-up (2 [IQR, 1–5] vs 2 [IQR, 1.5–7.5], respectively, P = 0.66). Overall, there was no significant difference in mortality rates (12 patients (25%) vs. 11 (21%) respectively; RR 1.18 95% CI 0.576–2.42), and there was no difference in new mortality after the initial follow-up of 6 months (3 patients (8%) vs. 6 (13%) respectively; RR 0.603 95% CI 0.16–2.254). No deaths during long-term follow-up were related to pancreatitis. The plastic stents group and LAMS group had a similar rate of pancreatitis-related readmissions (2 [IQR, 0–2] vs 1 [IQR, 0–3], P = 0.67) and associated length of hospital stay (9 [IQR, 0–20.75] vs 6 [IQR, 0–19.75, P = 0.58).
Conclusion: During long-term follow-up of the AXIOMA study participants, no differences were observed between double-pigtails plastic stents and LAMS in mortality, major complications, readmissions or the need for additional drainage or necrosectomy. These long-term results align with our prior findings, suggesting comparable clinical outcomes and adverse event rates for both stent types in the endoscopic step-up approach for infected necrotizing pancreatitis.

Predictors for successful treatment of infected necrotizing pancreatitis with antibiotics alone: a nationwide prospective cohort

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Background: Infected pancreatic necrosis (IPN) is a severe complication of acute pancreatitis with mortality rates ranging from 15-35%. Recent studies have shown that, in some patients, invasive procedures can be avoided and conservative treatment with antibiotics alone can be successful. Our aim was to identify predictors for successful treatment with antibiotics alone in patients with infected necrotizing pancreatitis.

Methods: We performed a post-hoc analysis of a prospective cohort of 305 patients from 22 Dutch hospitals, included between 2010 and 2019, who received antibiotics for highly suspected or proven IPN. The primary outcome was successful treatment with antibiotics alone (i.e. survival without the need for radiological, endoscopic of surgical intervention) within 6 months of discharge. Computed-tomography images around the start of antibiotic treatment were reviewed to classify parenchymal necrosis patterns. Predictors were selected based on baseline differences, theoretical grounds, and clinical expertise. Predictors associated with successful treatment with antibiotics alone ($p<0.10$) were included in multivariable logistic regression analysis. A final model with only statistically significant variables ($p<0.05$) was created using backward-stepwise selection. Based on the final model a nomogram was designed.

Results: In total, 88 of 305 (29%) patients with IPN were successfully treated with antibiotics alone. Antibiotics were started at a median of 17 days (IQR19) after admission and 61 patients (20%) exhibited organ failure at start of antibiotics. 207 patients (68%) had parenchymal necrosis and it was classified according to the following patterns: 7 right-sided (3%), 15 left-sided (7%), 97 subtotal (47%), 38 central (18%) and 50 diffuse (24%). The final model included presence of organ failure at the start of antibiotics (aOR 0.46, 95%CI 0.22–0.99, $p=0.046$), presence of central necrosis (aOR 0.11, 95%CI 0.05–0.23, $p<0.001$) and presence of subtotal necrosis (aOR 0.12, 95%CI 0.03–0.36, $p<0.001$). The area under the curve was 0.75 (95%CI 0.69–0.80). A prognostic nomogram yielded success probabilities of antibiotic treatment ranging from 5% when organ failure and central necrosis were present, to 47% when no predictors were present.

Conclusion: In patients with infected necrotizing pancreatitis, presence of organ failure at the start of antibiotics, presence of central necrosis and presence of subtotal necrosis are negative predictors for successful treatment with antibiotics alone. Our clinical prediction model and nomogram have high potential for counseling and to guide clinical decision making when treating patients with infected necrotizing pancreatitis.

Algorithm-based integrated care for the treatment of chronic pancreatitis: a nationwide stepped-wedge cluster randomized controlled trial

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Background: Chronic pancreatitis (CP) significantly impairs patients' quality of life (QoL), primarily due to abdominal pain and exocrine pancreatic insufficiency. The management of CP is challenging and lacks guidelines adherence, emphasizing the need for quality improvement initiatives. This study aimed to improve the implementation of evidence-based practices and assess their impact on QoL and pain severity. Therefore, an evidence-based management (EBM) algorithm was developed targeting key aspects of CP management: exocrine pancreatic and endocrine insufficiency, nutritional status and bone health, pain management and lifestyle modifications.

Methods: A nationwide stepped-wedge cluster randomized controlled trial was performed across 26 centers in six health regions, comparing current practice to EBM algorithm-guided management. Patients were recruited during the current practice phase and followed longitudinally. Co-primary endpoints were pain severity (Izbicki Pain Score) and QoL (PANQOLI score), with a predefined clinically relevant effect size of 10%. Analyses were according to intention-to-treat. Subanalyses were performed for patients with a known disease duration of ≤ 3 years, based on the hypothesis that the effect of the intervention may depend on the time since diagnosis. Secondary outcomes included process measures and several clinical outcomes. Total study duration was 35 months.

Results: A total of 418 patients were included, of whom 126 had a disease duration ≤ 3 years. Compliance to EMB components improved substantially during the intervention. Overall, EBM algorithm care led to a statistically significant reduction in Izbicki Pain Score (estimate: -1.71, 97.5% CI: -3.02 – -0.41, P < 0.00), however, the 10% clinically relevant threshold was not achieved. No significant change in PANQOLI score (estimate: 0.03, 97.5% CI: -0.2 – 0.08, p = 0.19) was observed. In patients with a disease duration ≤3 years, no significant effects on either outcome were observed (Izbicki Pain Score: estimate: -0.37, 9.5% CI: -2.90 – 2.16, P = 0.74, PANQOLI score: estimate: -0.01, 97.5% CI: -0.10 – 0.07, P = 0.78). Median protocol adherence in patients who completed the follow-up period was 68.8% (range 56.1 – 83.5). Stratified analyses by baseline values and adherence did not yield clinically relevant improvements.
Conclusion: This first large prospective trial of a bundled intervention in CP showed no superiority of the EBM algorithm over current practice in improving QoL or pain severity in CP. These findings highlight the complexity of CP management.

Nutritional deficiencies are highly prevalent in patients with chronic pancreatitis and associated with exocrine insufficiency and alcohol use

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Background: In patients with chronic pancreatitis (CP), pancreatic exocrine insufficiency (PEI) and poor nutritional intake may lead to nutritional deficiencies. According to guidelines, fat-soluble vitamins, minerals and albumin should be regularly monitored to avoid long-term complications, however adherence to this recommendation is suboptimal. The aim of the study is to evaluate the prevalence of nutritional deficiencies in patients with CP and to identify predictors for the occurrence of nutritional deficiencies.

Methods: We analyzed data from the COMBO-trial, a prospective nationwide stepped-wedged cluster randomized trial, to evaluate the effect of an evidence-based management algorithm for the management of CP. This analysis included patients from 20 participating Dutch hospitals. Measurements of fat-soluble vitamins, minerals, and albumin conducted in the outpatient clinic during the 35-month study period were included. The Pancreatic Exocrine Insufficiency Questionnaire (PEI-Q), designed to evaluate the severity and impact of PEI symptoms, was administered at four distinct time points throughout the study. Follow-up for individual patients was discontinued early if they were discharged from care or developed a severe chronic illness likely to affect their nutritional status. Multivariate logistic regression analysis was performed for the presence of ≥ 2 deficiencies adjusted for the number of measurements conducted. Predictors included patient and disease characteristics at baseline and the mean score of the PEI-Q during follow-up.

Results: In total 329 patients were included in this study. Nutritional deficiencies were present in 165 patients (50.2%) of which 61 (18.5%) had more than one deficiency. The prevalence of deficiencies included vitamin A in 13/144 patients (9.0%), vitamin D in 93/239 (38.8%), vitamin E in 11/144 (7.6%), vitamin K in 40/68 (58.8%), iron in 35/110 (31.8%), calcium in 19/181 (10.5%), magnesium in 22/106 (20.6%) zinc in 7/51 (13.7%), selenium in 3/30 (10.0%), and albumin in 35/230 (15.3%). Predictive values for ≥ 2 deficiencies were the presence of PEI (OR 2.43, 1.08 – 5.88), higher PEI-Q score (OR 2.56, 1.53 – 4.40) and daily alcohol consumption (OR 2.90, 1.12 – 7.23). Age, disease duration, current smoking and pancreatic surgery were not associated with the presence of ≥ 2 deficiencies. Conclusion: Nutritional deficiencies can be found in approximately half of the patients with CP. Predictors for the presence of more than one nutritional deficiency include PEI, the severity and impact of PEI as assessed using the PEI-Q, and daily alcohol consumption.

Endoscopic ultrasonography-guided gastroenterostomy versus surgical gastrojejunostomy for palliation of malignant gastric outlet obstruction (ENDURO)

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Background: Gastric outlet obstruction is a common manifestation of advanced gastric, duodenal, and periampullary malignancies in a palliative setting, severely affecting quality of life. Currently, there is no comparative prospective data that focused on whether endoscopic ultrasonography-guided gastroenterostomy (EUS-GE) is a more effective alternative to standard surgical gastrojejunostomy (SGJ) in the palliative treatment of this disease.

Methods: We performed a multicenter, randomized controlled trial involving palliative patients with a malignant obstruction localized between the pylorus and the distal duodenum, randomizing them 1:1 to either EUS-GE or SGJ. The first co-primary superiority end point was time to solid oral intake. The second co-primary non-inferiority end point was persistent or recurrent obstructive symptoms for which a reintervention was required within six months. The predefined non-inferiority margin was 20%.

Results: From February 2022 to February 2024, 98 patients were included in 12 participating hospitals, of whom 48 were assigned to EUS-GE and 50 were assigned to SGJ. Median age was 69 versus 70 years and the most prevalent etiology was pancreatic cancer in 58% versus 50% in the EUS-GE group and SGJ group, respectively. Median follow-up time was 91 days in the EUS-GE group and 74 days in the SGJ group. Median time to oral intake was significantly shorter in the EUS-GE group compared to the SGJ group: 1 day versus 3 days (hazard ratio, 2.21, 95% CI, 1.43 to 3.42, $P < 0.001$). In the per protocol analysis, 3 of 43 patients (7%) in the EUS-GE group and 5 of 45 patients (11%) in the SGJ group underwent reinterventions for persistent or recurrent obstructive symptoms (risk difference, 4.4% in favor of EUS-GE, upper limit of 90% CI, 5.6%). Clinical success, defined as the ability to tolerate solid oral intake, was higher in the EUS-GE group (96% vs. 80%, relative risk, 1.20, 95% CI, 1.03 to 1.39). Median length of hospital stay was shorter in the EUS-GE group (1 day vs. 4 days, multiplicative difference, 0.46, 95% CI, 0.20 to 0.78). Serious adverse events, defined as Clavien-Dindo ≥ 3B, were observed in 8% of patients in the EUS-GE group and in 12% of patients in the SGJ group (relative risk, 0.69, 95% CI, 0.21 to 2.31). Thirty-day mortality was 13% in the EUS-GE group and 26% in the SGJ group (relative risk, 0.48, 95% CI, 0.20 to 1.14).

Conclusion: This trial showed that EUS-GE, compared to SGJ, is superior in terms of time to solid oral intake and non-inferior with regards to reinterventions for persistent or recurrent obstructive symptoms. Based on these results, EUS-GE should be the preferred palliative treatment for malignant gastric outlet obstruction.

Preoperative body composition parameters are associated with postoperative complications and endoscopic postoperative recurrence in patients with Crohn's disease

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Background: Alterations in body composition are common among patients with Crohn's disease (CD) and may represent a modifiable risk factor for dismal postoperative outcomes. This study aimed to investigate the association of preoperative body composition with postoperative complications and endoscopic postoperative recurrence (ePOR) in CD patients following ileocolic (re-)resection (ICR).

Methods: CD patients (≥16 years) scheduled for ICR with a preoperative CT or MRI scan (<12 months prior to ICR) were identified from an ongoing prospective, multicenter cohort study. Cross-sectional area normalized for body height (*i.e.* index) and lipid content (*i.e.* radiation attenuation on CT and signal intensity on MRI) of sketelal muscle (SM), subcutaneous adipose (SAT), and visceral adipose tissue (VAT) were analyzed at L3 level. Cut-offs were based on sex-specific tertiles. The primary outcome was postoperative complications (Clavien-Dindo grade I-IV) within 30 days. Secondary outcomes were moderate-to-severe complications (Clavien-Dindo grade ≥II), infectious complications (intra- or extra-abdominal), and ePOR (modified Rutgeerts' score ≥i2b) at six months postoperatively. Multivariable logistic regression was performed to assess the association of preoperative body composition with study outcomes. Results:In total, 227 patients were included. Median interval from preoperative imaging to ICR was 2.3 months (IQR 1.1–4.6). High lipid content of SM (*i.e.* myosteatosis) was a risk factor for postoperative complications (aOR 2.51; 95%CI 1.21–5.22), moderate-to-severe complications (aOR 2.34; 95%CI 1.13–4.85), and infectious complications (aOR 2.20; 95%CI 1.01–4.80). Low VAT-index was protective against postoperative complications (aOR 0.17; 95%CI 0.05–0.58). Low lipid content of VAT (aOR 3.98; 95%CI 1.15–13.78) and a high SAT-index (aOR 3.38; 95%CI 1.12–10.15) were associated with infectious complications. High SM-index was associated with ePOR (aOR 2.51; 95%CI 1.09–5.77). Preoperative body mass index (BMI) showed no association with study outcomes in uni- and multivariable analyses. Conclusion: Preoperative myosteatosis on abdominal imaging is consistently associated with postoperative complications in patients with CD following ICR. Low VAT-index protects against postoperative complications, while low lipid content of VAT and a high SAT-index are risk factors for postoperative infectious complications. Surprisingly, high SM increases the risk of ePOR. Future research should identify strategies for preoperative improvement of body composition, rather than relying solely on BMI, and investigate if these improvements correlate with better postoperative outcomes.

Improvement of nighttime gastroesophageal reflux symptoms with sleep positional therapy using a smartwatch app

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Background: Nighttime reflux symptoms affect sleep quality and daytime functioning. It has previously been shown that supine gastroesophageal reflux occurs more often in right lateral decubitus position. The aim of this study is therefore to investigate if sleep positional therapy, using a smartwatch app, can reduce nighttime gastroesophageal reflux symptoms by training patients to avoid sleeping in right lateral decubitus position.
Methods: Patients with nighttime gastroesophageal reflux symptoms were included. Patients were instructed to wear a smartwatch (Apple, California, USA) with a smartwatch app (LEFT, Side Sleep technology, Amsterdam, the Netherlands) that is designed to gently vibrate when the subject is lying in right lateral decubitus position, prompting patients to change their sleep position. The smartwatch app was used during a two-week treatment period. Symptoms and sleep position were measured at baseline, during and after the treatment period. The primary outcome was change in total nocturnal gastroesophageal reflux symptoms measured by the Nocturnal Gastroesophageal Reflux Disease Symptom Severity and Impact Questionnaire (N-GSSIQ). Secondary outcomes included change in sleep position, change in overall gastroesophageal reflux symptoms measured by Reflux Disease Questionnaire (RDQ), sleep quality assessed by Pittsburg Sleep Quality Index (PSQI) and the short version of Functional Outcomes of Sleep Questionnaire (FOSQ-10), and overall treatment success (defined as a reduction in total N-GSSIQ score of at least 50%).
Results: In total 18 patients with nighttime gastroesophageal reflux symptoms were included (mean age 51 years; 66.7% female). Mean GerdQ score was 11.8 at baseline. After sleep positional therapy nighttime gastroesophageal reflux symptoms (N-GSSIQ score) reduced significantly (39.3 to 24.1; p=0.003). After sleep positional therapy patients were sleeping less in right lateral decubitus position (31.2% vs. 6.9%; p=0.003) and more in left lateral decubitus position compared to baseline (39.0% before vs. 61.1% after; p=0.003). No change was seen in other sleep positions after sleep positional therapy. Overall reflux symptoms measured by RDQ improved from 2.2 to 1.3 (p=0.008). Patients reported more reflux-free nights and less nights with poor sleep quality after sleep positional therapy. No significant difference was seen in sleep quality measured by PSQI and FOSQ-10. No adverse events occurred.
Conclusion: Sleep positional therapy by the LEFT smartwatch app stimulates patients to avoid sleeping in right decubitus position, thereby alleviating nighttime gastroesophageal reflux symptoms and improving the number of reflux-free nights.

Prevention of incisional hernias with prophylactic synthetic mesh placement during stoma reversal (PRINCE trial): a randomised controlled trial

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Background: Stoma reversal is often regarded as a minor procedure. However, several studies show that approximately one-third of the patients develop an incisional hernia at the previous stoma site. The aim of this study is to investigate whether prophylactic synthetic mesh placement during stoma closure reduces the rate of stoma site incisional hernia after one year, without increasing (infectious) complication rate.
Methods: A randomized controlled trial was conducted in two large teaching hospitals in the Netherlands. Patients that underwent elective ileo- or colostomy reversal were randomly assigned 1:1 to either conventional stoma closure, versus stoma closure with preventive retromuscular synthetic mesh placement. Patients were blinded to treatment allocation. The primary outcome was radiological incisional hernia development after one year. Secondary outcomes were 30-day morbidity and quality of life after one year. A power size of 40 patients per group was calculated. The study is registered at the Overview of Medical Research in the Netherlands (OMON) (NL-OMON27268)
Results: In total 88 patients were randomised to either conventional stoma closure (n=44) or synthetic mesh-reinforced stoma closure (n=44). In both groups, 4 patients were lost to follow up. In three patients, retromuscular mesh placement was not possible. No significant differences were found in baseline characteristics. After a median follow-up of 13 months (i.q.r. 12-15), incisional hernia rate was 17.9% (N=7) in the conventional group versus 0.0% (N=0) in the mesh group (p=0.016, RR 0.18 (95% CI 0.09-0.35). The rate of wound infections was 7.5% (n=3) in the conventional group, versus 12.5% (n=5) in the mesh group (p=0.71). After one year the control group was associated with a higher pain score (VAS) (20 versus 9, p=0.04) lower general quality of life (EQ5D) at 9 months postoperative (73 versus 82, p=0.03), and lower hernia related quality of life (HerQLes) at 12 months postoperative (75 versus 88, p=0.049).
Conclusion: This is the first randomized controlled trial showing that prophylactic placement of a retromuscular synthetic mesh results in a decrease of incisional hernia rate at one year postoperative. In addition, this does not result in a higher rate of postoperative complications or wound infections. Finally, a preventive mesh is associated with a higher hernia related quality of life and less pain at 12 months follow up. Therefore, prophylactic mesh placement should be considered in patients undergoing a stoma reversal.

Surgery for perihilar cholangiocarcinoma without preoperative biliary drainage: A retrospective multicentre propensity scores weighted analysis

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Background: Controversy exists on the optimal strategy for preoperative biliary drainage (BD) for resectable perihilar cholangiocarcinoma (pCCA). BD is often performed in cases of high bilirubin levels, declining performance status, and prior to liver hypertrophy-inducing procedures. However, BD often leads to cholangitis, which increases perioperative morbidity and mortality and contributes to a higher risk of post-hepatectomy liver failure (PHLF), the leading cause of postoperative death. A few retrospective studies have revealed no substantial improvement in post-surgical outcomes among drained patients. These findings question the assumption that routine BD is an essential preoperative step. This retrospective cohort study aims to evaluate the effect of preoperative BD on postoperative mortality and morbidity in pCCA patients.

Methods: In this retrospective observational cohort study, resected patients with histologically confirmed pCCA from the pCCA Collaboration Group database across 27 Western hepato-biliary centres (2000–2022) were included. To correct for substantial differences between drained and undrained patients, propensity score weighting (PSW) was applied. A propensity score-weighted regression (PSWR) was used to compare outcomes between drained and undrained patients. For statistically significant outcomes after PSWR, a multivariable analysis was performed to further isolate the effect of BD, accounting for residual differences.

Results: Overall, 2067 patients were included, of whom 350 (16.93%) did not undergo BD. Before PSW, undrained patients had fewer Bismuth III-IV cases (78.9% vs. 84.3%), lower median bilirubin levels (12.0µmol/L vs. 85.5µmol/L), and underwent more left hepatectomies (42.9% vs. 26.4%). After PSWR, the drained group had a higher likelihood of 90-day mortality (OR: 1.46, 95% CI: 0.92–2.34, p=0.11), but this was not significant. No differences were observed for postoperative bleeding (p=0.07) or bile leakage (p=0.13). However, drained patients had a higher likelihood of major postoperative complications (OR: 1.43, 95% CI: 1.04-1.95, p=0.027) and PHLF (OR: 2.12, 95% CI: 1.25-3.58, p=0.005). After multivariable analysis, only PHLF remained significant (OR: 1.90, 95% CI: 1.09-3.31, p=0.024).

Conclusion: In this retrospective PSW analysis, preoperative BD was associated with a significantly higher incidence of PHLF in patients with resectable pCCA. Additionally, there was a trend towards higher 90-day mortality in drained patients, though this was not statistically significant. These findings underscore the potential benefit of avoiding preoperative drainage unless strictly necessary.

Long-term outcomes of colon cancer patients with infectious tumor-related complications

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Background: Infectious tumor-related complications occur in 2–10% of patients with colon cancer and lead to poorer short-term outcomes. However, little is known about the long-term consequences of these complications. This study aimed to analyze locoregional recurrence rate (LRR) and overall survival (OS) for patients with peritumoral abscess, local tumor perforation or proximal perforation.
Methods: This retrospective, cross-sectional, population-based cohort study included 49 hospitals. All patients who underwent primary colon cancer resection in 2014 or 2015 were included. Long-term outcomes were analyzed in stage 1–3 patients who had a curative resection. Locoregional recurrence was defined as any recurrence in the abdominal cavity, including anastomotic, tumor bed, abdominal wall, mesocolic lymph node, and peritoneal recurrences.
Results: A total of 9,557 patients were included. Among these, 243 patients (2.5%) had a peritumoral abscess, 134 patients (1.4%) had local tumor perforation, and 86 patients (0.9%) had a proximal perforation. A peritumoral abscess was mainly observed in the sigmoid (44.1%). Local tumor perforation was commonly associated with purulent peritonitis (106/134, 79.1%) and located in the sigmoid as well (47.2%). A proximal perforation was accompanied with a purulent peritonitis in 56/86 (65%) of the patients, but in 30/86 (35%) of the patients with fecal peritonitis. Proximal perforations were frequently located in the cecum.
LRR varied significantly among the different groups: 5-year LRR was 8.4% in the group without infectious complications, 26.7% in the peritumoral abscess group, 24.5% in the local tumor perforation group, and 34.8% in the proximal perforation group (log-rank p<0.001). Multivariable Cox-regression analysis to study LRR showed peri-tumoral abscesses are an independent predictor HR 1.49 (95%CI 1.03-2.15). However, the other infectious complications were not (tumor site perforation HR 1.20 (0.66-2.17), proximal perforation HR 1.23 (0.69-2.18)).
Five-year OS was 76.3% for patients without infectious complications, 69.1% for those with a peritumoral abscess, 53.7% for those with local tumor perforation, and 42.7% for those with a proximal perforation (log-rank p<0.001). Infectious complications were not an independent predictor for overall survival (peritumoral abscess HR 0.872 (95%CI 0.678-1.12), tumor site perforation HR 1.07 (95%CI 0.78-1.47), proximal perforation HR 1.37 (95%CI 0.99-1.90)).
Conclusion: This study demonstrates that infectious complications are uncommon, they have a negative impact on both OS and LRS. Only peritumoral abscesses independently predict reduced LRS. Infectious complications do not independently predict overall survival.

Activity tracking up to 90-days after minimally invasive and open pancreatoduodenectomy in the multi-center international randomized DIPLOMA-2 trial

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Background: Minimally invasive pancreatoduodenectomy (MIPD) aims to decrease surgical trauma and improve postoperative recovery compared to open pancreatoduodenectomy (OPD). However, previous research only investigated recovery during hospital stay and not thereafter. The DIPLOMA-2 trial measured recovery up to 90 days using wearable fitness trackers.
Methods: The DIPLOMA-2 international, multicenter, non-inferiority trial randomized patients requiring pancreatoduodenectomy for primary resectable neoplasms to MIPD or OPD (2:1 ratio). Patients were blinded for surgical procedure up to postoperative day 5. Patients wore a wearable fitness tracker (Fitbit Inspire 2™) from 2 weeks before surgery until 90 days after, which monitored postoperative activity through step count, active minutes, and heart rate variability. Endpoints were postoperative activity of MIPD versus OPD in the first 90 days post-surgery, and absolute difference in activity on day 30 post-surgery.
Results: From 236 of 288 patients (82%, 155 MIPD; 81 OPD) sufficient Fitbit activity tracker data were available. Patients after MIPD had a significantly higher step count between day 16-39, and more active minutes between day 14-37. Heart rate variability was better after MIPD from day 30 onward. On postoperative day 30, patients after MIPD averaged 659 more steps (95% CI, 79-1240; P=0.026), 22 more active minutes (3-40; P=0.028), and 4 milliseconds better heart rate variability, compared to the OPD group (0–9; P=0.046).
Conclusion: In patients undergoing pancreatoduodenectomy for resectable pancreatic and periampullary neoplasm, MIPD resulted in higher short-term postoperative activity levels and less physiological stress, compared to OPD.

Hospital variation and trends over time for completion surgery for locally resected high-risk T1 colon cancers in The Netherlands.

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Background: Current guidelines recommend completion surgery (CS) after local resection (LR) of high-risk T1 colon cancers (CC) to minimize the risk of cancer recurrence and lymph node metastases. CS has a risk of morbidity (20-30%) and mortality (2-3%). Currently, weighing the risks of CS against adverse oncological outcomes is matter of debate. The aim of this study was to evaluate the rate of CS following LR for high-risk T1 CC at a national level and to assess the variation in CS between hospitals.
Methods: This nationwide, retrospective cohort study used data extracted from the Netherlands Comprehensive Cancer Organisation (IKNL) in the Netherlands Cancer Registry (NCR) and the Dutch Municipal Administrative Database. The population consisted of patients aged ≥18years with a high-risk T1 adenocarcinoma of the colon between 01-01-2020 and 31-12-2022 who underwent LR as primary treatment. High-risk T1 CC was defined as the presence of at least one risk factor: irradical resection and/or ≥1 histopathological risk factor for lymphnode metastases, i.e. lymphangio invasion, intermediate/high-grade tumor budding and poor cell differentiation. Hospitals were classified into low, intermediate or high attitude to CS based on case-mix adjusted odds ratio for CS.
Results: 1541 patients with a high-risk T1 CC from 75 hospitals were included. CS was performed in 42.2% of the patients in 2020, 40.5% in 2021, and 38.7% in 2022. Patients receiving CS were younger (67.8 vs. 69.8 years, p-value <0.001) and were more frequently ASA III-IV (24.8% vs. 19.5%, p-value <0.001). In case of either irradical resection or one histopathological factor, 23.7% received CS, compared to 53.8% and 59.3% in respectively two, or three or more risk factors (p-value <0.001). If resection margin was not taken into account, CS was most frequently performed in case of LVI and poor cell differentiation compared to other combinations of histopathological risk factors (p-value = 0.023). The crude interhospital variation ranged from 6.3% to 75.0%, and four hospitals showed a significant higher or lower risk of CS (p-value = 0.013). No difference was shown in overall survival (OS) between hospitals according to their attitude to CS (log-rank test p=0.689).
Conclusion: The proportion of CS for locally resected high-risk T1 CC decreased during the study period from 42.2% to 38.7%. CS was more frequently performed in patients with ≥two risk factors. Only four hospitals showed significant practice variation in performing CS. There was no significant difference in OS for patients between hospitals regarding their attitude to CS.

Intentional curative treatment of locoregional recurrent colon cancer – a systematic review and meta-analysis

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Background: Locoregional recurrence of colon cancer (LRCC) might still be amenable to curative intent treatment with good oncological outcomes, but little is known about patient selection, treatment strategy and corresponding long-term outcomes. The objective of this study was to review the literature on intentional curative treatment of LRCC and related long-term outcomes.
Methods: MEDLINE, Embase, Web of Science Core Collection, Cochrane Central Register of Controlled Trials and Google Scholar were searched for publications in any language from 2010 to August 27 2024. Studies were eligible if describing treatment of uni- or multifocal LRCC without peritoneal spread to another abdominal region after curatively resected colon cancer, with reporting on survival. Study selection was conducted by two reviewers through a consensus-based process. Random effects meta-analysis of cohorts was performed. Main outcome was overall survival, which was formulated before data collection.
Results: Out of 2843 identified studies, 54 were selected, consisting of 2 consecutive cohorts, 10 selected cohorts and 42 case studies. The latter were pooled into a case series. In the consecutive series, treatment intention was curative in 22% and 81% cases, with an R0-resection rate of 75% and 50%, and median overall survival of 13 and 29 months, respectively. From all 12 cohorts, 495/635 (78%) curatively treated patients (56% males) with LRCC were included with time to LRCC ranging from 15-42 months. Neoadjuvant chemotherapy was administered in 6-100% and resection was multivisceral in 40-67%. Adjuvant chemotherapy was provided in 17-88% of the cases. Survival time was heterogeneously reported, limiting possibilities for pooled analysis. Pooled 5-year overall survival of two studies was 81% (95% CI 0.67-0.96). Within the pooled case series of 46 unique cases, 83% underwent R0-resection and 5-year overall survival (OS) was 86%.
Conclusion: Literature regarding treatment and outcomes of LRCC is scarce with limited interpretability and generalizability. Curatively intended treatment in published cases result in high survival rates that do not correspond to consecutive and selected cohorts, suggesting publication bias. There is an urgent need for well conducted consecutive cohort studies.

Long-term outcomes of asymptomatic cT4 colon tumors depending on method of detection

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Background: T4 tumors invade adjacent organs and are considered complex due to the extensive nature of surgery and poorer outcomes. Clinical (c)T4 tumors can be identified radiologically (radT4) and surgically (chiT4), while true infiltration (pT4) is found by a pathologist. Although pT4 tumors negatively impact treatment and prognosis, the influence of cT4 tumors remains uncertain. This study examined the effect of asymptomatic cT4 tumors on locoregional recurrence rate (LRR) and overall survival (OS).
Methods: Patients who underwent a colonic tumor resection in 2014-2015 were eligible for this nationwide, cross-sectional, population-based cohort study. Patients with infectious tumor complications or signs of obstruction were excluded at baseline. Long-term outcomes were analyzed using Cox regression in stage 1-3 colon cancer patients. Locoregional recurrence was defined as any recurrence in the abdominal cavity, including anastomotic, tumor bed, abdominal wall, mesocolic lymph node, and peritoneal recurrences.
Results: A total of 8,709 patients were included, with a median follow-up of 59.7 months (IQR 26.7–67.6). Of these, 415 (4.8%) had radT4 tumors, and 591 (6.8%) had chiT4 tumors. A subset of 286 (3.3%) patients had both radT4 and chiT4 tumors (rad+chiT4). Overall, 376/720 (52.2%) of cT4 patients had a pT4 tumor in the resected specimen, compared to 8.3% among non-cT4 patients. In the selected cohort (n=7,694), 5-year cumulative incidence of locoregional recurrent colon cancer was 7.4% for patients without cT4 tumors, 10.1% in radT4, 19.9% in chiT4, and 19.1% in rad+chiT4 (Peto-Peto p<0.001). For 5-year OS, survival rates were 77.1%, 73.5%, 63.9%, and 71.4% respectively (Peto-Peto p<0.001).
An asymptomatic cT4 tumor was not an independent predictor of reduced LRR (multivariable chiT4 HR 1.36 (95%CI 0.94-1.95), radT4 HR 0.75 (95%CI 0.37-1.51), chi+radT4 HR 1.16 (95%CI 0.78-1.74)). Despite rad+chiT4 significantly impeded overall survival (multivariable HR 0.64 (95%CI 0.50-0.82)), other forms of cT4-tumors did not (radT4 HR 0.76 (95%CI 0.53-1.08), chiT4 HR 0.89 (95%CI 0.72-1.11)).
Conclusion: Only 52.2% of asymptomatic cT4 tumors were pT4 tumors. cT4 tumors are associated higher LRR, but are not an independent predictor. Additionally, cT4 tumors have a worse OS. Only chi+radT4 tumors independently affect OS loss.

International differences in pre-operative characteristics and postoperative management in patients with Crohn's disease following ileocolic resection: a report from the IMPACT consortium

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Background: Intestinal surgery is a key treatment for Crohn's disease (CD). Large cohort data on perioperative management are vital to improve postoperative outcomes. This study aimed to assess and compare preoperative characteristics and postoperative management across three large prospective cohort studies of CD patients following ileocolic resection (ICR).
Methods: The IMPACT consortium (International Multidisciplinary Research Collaboration on Postoperative IBD) is an intercontinental initiative focused on postoperative inflammatory bowel disease research. Prospective data were used from three ongoing cohort studies with a comparable set-up and data collection, including CD patients who underwent ICR between December 2009 and September 2024, originating from the Netherlands (NL), North-America (Canada [CAN] and the United States of America [USA]) and France (FR). Pre-operative characteristics, clinical risk profiles for post-operative recurrence (POR), use of postoperative prophylactic medication and performance of endoscopic evaluation were compared between the involved countries.
Results: 1,601 patients with CD following ICR were included (455 NL, 149 CAN, 307 USA, 690 FR)(48.3% male; median age at surgery 33.7 years [IQR 25.8-46.6]). Active smoking rates were higher in Europe (NL: 26.2%; FR: 32.8%) compared with North America (CAN: 13.2%; USA: 8.2%). Prior small bowel resections were more common in the North American cohort (CAN: 29.5%; USA: 27.0%) compared with Europe (NL: 20.0%; FR: 17.0%). Preoperative biological exposure was lower in Canada (55.7%) and the USA (56.0%) compared with the Netherlands (69.2%) and France (75.5%). A higher proportion of Dutch patients had non-complicated CD (Montreal B1) at surgery (18.4%) compared to other countries (CAN: 1.4%; USA: 2.3%; FR: 4.5%). Overall, 72.7% were considered high-risk for POR, with the lowest rates in the Dutch cohort (62.2%) compared to the other countries (CAN: 73.8%; USA: 77.9%; FR: 77.1%).
Postoperative prophylactic medication was initiated in 42.2% of patients, with higher rates in the USA (45.9%) and France (51.0%) compared with the Netherlands (28.5%) and Canada (34.9%). An endoscopic evaluation within one year postoperatively was performed in 89.0% of patients, with higher rates (>85%) in the Netherlands, Canada, and France, compared with the USA (66.9%).
Conclusion: This first study of the IMPACT consortium revealed notable differences in preoperative characteristics, risk profiles for postoperative recurrence, use of prophylactic medication, and postoperative endoscopic evaluation across Europe and North America. Further analyses will include the assessment of rates and factors associated with endoscopic recurrence.

Predictors for maintained remission at one year following appendectomy in ulcerative colitis: a post-hoc analysis of the ACCURE trial

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Background: The ACCURE trial, a randomised controlled trial, demonstrated that appendectomy reduces clinical relapses within one year in patients with ulcerative colitis (UC) in clinical remission without advanced therapies compared to standard medical therapy. We aimed to evaluate predictive baseline characteristics for maintained remission following appendectomy in the ACCURE cohort.
Methods: In this post-hoc analysis, appendectomy patients from the ACCURE trial were included. Patients without endoscopic follow-up or diagnosed with Crohn's disease were excluded. Maintained remission was defined as the absence of clinical relapse (according to predefined study criteria), with endoscopic confirmation (Mayo subscore ≤1) at one year. Logistic regression was performed to identify baseline characteristics associated with maintained remission at one year, reported as odds ratios (ORs) and 95% confidence intervals (CIs). Associations were also compared to the control group (non-appendectomy patients) to assess differences in baseline predictors for maintained remission between treatment groups and the relative impact of appendectomy on remission.
Results: Of 82 included appendectomy patients, 51 (62.2%) maintained clinical remission up to one year. Several numerical trends were observed: patients who maintained remission were younger (40±11 vs 46±14 years), had less previous exacerbations (median 3.5 [IQR, 1.8-5.0] vs 6 [IQR, 4-10]), shorter disease duration (4.7 [IQR, 1.4-12.1] vs 5.5 [2.6-13.2] years), more often proctitis (39.2% vs 32.3%), endoscopic Mayo score of 0 at baseline (52.9% vs 29.0%), and less immunomodulators therapy (3.9% vs 12.9%) when compared to patients who failed maintaining remission. Age (per 10-years: OR 0.68, 95% CI 0.47-0.98, p=0.04) was associated with reduced odds of maintained remission. This association contrasted significantly with the control group, where older age was associated with greater odds of maintained remission (age per 10-years: OR 1.61, 95% CI 1.10-2.36), indicating an inverse relationship between age and remission outcomes across treatment groups.
Conclusion: In this post-hoc ACCURE analysis, younger age was significantly associated with higher odds of maintained remission up to one year following appendectomy in UC, contrasting with older age predicting better remission outcomes in the control group. Interestingly, these results align with previous epidemiological studies suggesting appendectomy as a protective factor for the development of UC in younger individuals. Age may therefore serve as an predictor for maintained remission, offering a potential basis for refining patient selection criteria for appendectomy in UC management.

Long-term outcomes of synchronous versus solitary colon cancer

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Background: Synchronous colon cancer (sCC) is defined as two or more primary colon malignancies diagnosed simultaneously or within six months of initial presentation. Resections for sCC are associated with increased postoperative morbidity as compared to solitary colon cancer. However, contradictory findings regarding the impact on long-term outcomes have been reported, and most series combine colon and rectal cancer, despite these are distinct entities.
This study evaluated the characteristics and impact of sCC on locoregional recurrence including peritoneal metastases, and survival.
Methods: This population-based, cross-sectional retrospective cohort study was performed in 49 hospitals in the Netherlands. Patients with a curatively intended oncological resection for stage I-III colon cancer, between January 2014 and December 2015 were included. sCC was classified based on left- or right-sided dominance. This dominance was determined by pathological and clinical characteristics. Comparative analyses between sCC and solitary cancers were performed. Multivariable Cox-regression analyses was used to determine prognostic factors for long-term outcomes.
Results: A total of 8192 patients with stage I-III colon cancer were included. Of these, 278 patients (3.4%) had sCC: 162 patients (58.3%) had a right-dominant tumor and 116 patients (41.7%) had a left-dominant tumor. Median follow up time was 57.5 months (IQR 21.7-63.6). The median OS after primary resection for all stage I-III patients was 51.5 months (95%CI 51.2 – 51.9).
There were no statistically significant differences in 5-year overall survival (OS) (74.0% vs 70.7%), disease-free survival (DFS) (71.7% vs 68.7%) and locoregional recurrence rate (LRR) (7.8% vs 9.1%) for solitary versus sCC, nor for right-dominant versus left-dominant sCC. Independent tumor-related risk factors for 5-year OS included: right-sided colon cancer (HR 1.392; 95%CI 1.228-1.577) and microscopic positive resection margins (HR 1.681; CI 1.268 - 2.229). Synchronous colon cancer was no independent risk factor for 5-year OS (multivariable HR1.18; 95%CI 0.94-1.48), DFS (multivariable HR 1.11; 95%CI 0.89-1.39) or LRR (multivariable HR 1.15; 95%CI 0.745-1.76).
Conclusion: This study demonstrated no significant differences for 5-year OS, DFS and LRR for stage I-III solitary colon cancer versus sCC.

Early detection and correction of preoperative anemia in patients undergoing colorectal surgery – a prospective study

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Background: Preoperative anemia is an important target in preventing colorectal anastomotic leakage (CAL). However, it is not consistently detected and corrected in patients undergoing colorectal surgery. This study aimed to evaluate the impact of early detection and correction of preoperative anemia on perioperative outcomes and CAL.
Methods: This was a prospective sub-analysis of the DoubleCheck study, an international open-labelled trial which implemented an enhanced care bundle to prevent CAL after elective colorectal surgeries. It introduced interventions for early detection and correction of preoperative anemia. Primary outcome was the incidence of preoperative anemia and the effect of early correction. Secondary outcomes included the impact on CAL, postoperative course, and mortality.
Results: The study included 899 patients across eight European hospitals (September 2021 - December 2023). Preoperative anemia was identified in 35.0% (n = 315) of participants, with 77.4% (n = 192) receiving iron therapy. Hemoglobin levels decreased in 4.2% (n = 13), remained stable in 45.8% (n = 143), and increased in 50.0% (n = 156) ($p < 0.001$). Perioperative hyperglycemia was more common among anemic patients (7.8% vs. 16.4%, $p < 0.001$). CAL occurred in 6.1% (n = 53) of the patients. Anemia correction and changes in hemoglobin levels after iron treatment were not significantly associated with CAL, other complications, or mortality.
Conclusion: The study demonstrated that anemia indicates overall poor physiological fitness rather than being an isolated risk factor. Early detection and correction of preoperative anemia is achievable and improves quality of care for elective colorectal surgery patients.

Optical diagnosis of early colorectal carcinoma: performance of a newly developed artificial intelligence algorithm vs international endoscopists

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Background: Colorectal carcinomas (CRCs) are more often diagnosed at early stages, enabling local resection. We have developed the first European artificial intelligence (AI) algorithm aiming to improve the suboptimal optical diagnosis of early CRC by endoscopists. In this study, we aimed to compare diagnosis by AI to optical diagnosis by endoscopists and determine which endoscopist characteristics are associated with higher diagnostic accuracy.

Methods: We collected a large training dataset of endoscopic images and videos of colorectal lesions (≥10 mm or <10 mm but with a suspicion of CRC) in nine Dutch hospitals. A test set of 50 videos, each containing both white light and narrow band imaging, was selected from data collected in four different hospitals for external testing. Endoscopists diagnosed the 50 test set videos in an online module. Primary outcomes were the diagnostic performance of AI and endoscopists to predict the presence of CRC. Endoscopist characteristics including years of endoscopy experience, participation in the OPTICAL training, and CRC screening program certification were collected and tested for association with diagnostic accuracy.

Results: Since September 2024, 50 international endoscopists participated. AI and the endoscopists reached a mean sensitivity of 80.0% (95%CI 44.2-96.5) and 85.8% (95%CI 83.7-87.9%), specificity of 80.0% (95%CI 58.7-92.4) and 64.5% (95%CI 61.1-67.8%), negative predictive value (NPV) of 90.9% (95%CI 69.4-98.4) and 92.1% (95%CI 91.1-93.1%), positive predictive value (PPV) of 61.5% (95%CI 32.3-84.9) and 50.5 (95%CI 48.2-52.9%), and diagnostic accuracy of 80.0% (95%CI 62.5-90.9) and 70.6% (95%CI 68.4-72.8%), respectively. Years of endoscopy experience (mean 8.6) showed a very weak correlation with diagnostic accuracy (Pearson correlation 0.114, p=0.431). Mean diagnostic accuracy was significantly lower for endoscopists that did not receive OPTICAL training (n=32/50) than for endoscopists who did (68.9% [95%CI 66.3-71.6] vs 73.5% [95%CI 69.6-77.4], p=0.045), and for non-CRC-screening certified endoscopists (n=24/50) vs CRC-screening certified endoscopists (68.2% [95%CI 65.1-71.3] vs 72.7% [95%CI 69.6-75.8], p=0.038).

Conclusion: AI outperformed a group of 50 endoscopists regarding diagnostic accuracy, specificity, and PPV for optical diagnosis of early CRC. Sensitivity and NPV are similar and relatively high. These results indicate that AI could potentially improve optical diagnosis of colorectal lesions ≥10 mm or with a suspicion of CRC, particularly for non-expert endoscopists. Future research should focus on prospective validation of this AI algorithm in clinical practice including evaluation of the joint performance of AI and endoscopists.

Evaluating the trust in artificial intelligence by endoscopists for the optical diagnosis of colorectal carcinoma: exposing target areas for improvement of human-AI interaction

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Background: Applying artificial intelligence (AI) in gastrointestinal (GI) endoscopy could improve optical diagnosis but is not widely used in clinical practice yet, presumably caused by lacking trust in AI. In this study, we aim to evaluate the interaction between AI and endoscopists in optical diagnosis of colorectal carcinoma (CRC) and expose target areas for improvement of human-AI interaction.

Methods: Endoscopists were invited to diagnose 50 videos of colorectal lesions online. The endoscopist's optical diagnosis level was evaluated in a pretest of 15 cases. The next 35 cases (including 10 CRCs) contained an AI diagnosis after the endoscopists' initial diagnosis, enabling changing of the diagnosis. The AI diagnoses were simulated and set to 90% sensitivity and 70% specificity with histology as gold standard. Overtrust is defined as changing a correct initial diagnosis while AI provides an incorrect diagnosis, undertrust as retaining an incorrect initial diagnosis while AI provides a correct diagnosis. Appropriate trust is defined as correctly changing or retaining an initial diagnosis after AI. The association between over- and undertrust and pretest diagnostic accuracy, primary expertise, and annual T1 CRC exposure were determined.

Results: Since September 2024, 68 international endoscopists participated and provided 2380 optical diagnoses. The endoscopists reached a diagnostic accuracy of 71.1%, increasing to 73.4% after AI. Appropriate trust was seen in 14.3% of all diagnoses. In 70.0% of the diagnoses, the endoscopist and AI agreed on an incorrect (11.0%) or correct (59.0%) diagnosis. Overtrust was observed in 4.8% and undertrust in 10.6% of all diagnoses. Diagnostic accuracy in the pretest was negatively correlated with over- and undertrust percentages (Spearman correlation -0.293, p=0.015 and -0.299, p=0.013). Endoscopists with a primary expertise other than lower GI oncology (n=39) showed significantly higher mean overtrust (6.0%, 95% CI 4.8-7.2, p=0.004) than endoscopists with this primary expertise (n=29) (3.3%, 95% CI 1.8-4.6), as did endoscopists who see <10 T1 CRCs per year (n=32) (6.9%, 95% CI 5.6-8.2) vs those who see ≥10 T1 CRCs (n=36) (3.0%, 95% CI 1.9-4.1, p<0.001).

Conclusion: Both appropriate and over- or undertrust are observed in endoscopists using AI for optical diagnosis of CRC. Endoscopists with lower levels of diagnostic accuracy show higher percentages of over- and undertrust in AI. Overtrust is higher in endoscopists with another primary expertise than lower GI oncology or low T1 CRC exposure. Therefore, human-AI interaction could especially be improved in non-CRC experts. Future research should focus on ways to improve human-AI interaction in this target group.

Applying the ESGE guideline risk-profiles for surveillance as outcome parameter in a FIT-based colorectal cancer screening program

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Background: The European Society of Gastrointestinal Endoscopy (ESGE) suggests using risk profiles to determine colonoscopy surveillance after polypectomy. This new strategy will be applied within the Dutch colorectal cancer (CRC) screening program. The screening program also monitors the FIT's positive predictive value (PPV) based on the outcome of advanced neoplasia. Changing the definition from advanced neoplasia to high-risk profile, alters the definition of relevant lesion, which changes the PPV. Therefore, we aim to assess the impact of using ESGE risk profiles as an outcome parameter in the Dutch CRC screening program on PPV and surveillance.

Methods: We analysed persons with a positive FIT (≥ 47 µg Hb/g feces) undergoing colonoscopy in the screening program from 2019-2022. The PPV is calculated by dividing relevant lesions by all colonoscopies performed. Relevant lesions were defined in three ways; i) advanced neoplasia, ii) CRC and high-risk polyps (high-risk adenoma and high-risk serrated polyps) and iii) CRC and high-risk profile (high-risk polyps and ≥ 5 adenomas). Significant differences were assessed by a X^2 test.

Surveillance was categorized according to the old and new surveillance guideline, based on endoscopy and pathology reports. The old guideline used a point system based on endoscopic and histological features, with the score determining surveillance at 3–5 years or a return to screening in 10 years. The new guideline defines a high-risk profile as high-risk adenoma, high-risk serrated polyp, or ≥ 5 adenomas, all requiring 3-year surveillance.

Results: 218,109 persons with a positive FIT underwent colonoscopy. The PPV significantly increased from 32.7% for advanced neoplasia to 34.4% for CRC and high-risk polyps. The highest PPV of 36.8% was noted for CRC and high-risk profiles.

Based on the old guideline, 51.2% of the persons would require surveillance (16.0% 3 year surveillance and 35.2% 5 year surveillance) compared to 32.2% in the new guideline (all requiring 3 year surveillance). The increase in the 3 year interval, from 16.0% to 32.2%, results from 723 persons initially assigned to a 10-year screening interval and 34,451 persons assigned to a 5-year surveillance interval. In contrast, 32 persons had initially a 3-year interval but shifted to a 10-year screening interval.

Conclusion: Applying the new ESGE surveillance guideline risk profiles in FIT-based CRC screening program will increase the PPV of FIT. High-risk profiles will have the most impact on PPV, which is the result of considering ≥ 5 adenomas as a relevant lesion. Using high-risk profiles will reduce overall colonoscopy surveillance by 18.9%, although the 3 year surveillance interval will be doubled.

Incidence of cancer in patients with familial adenomatous polyposis in the Netherlands: a nationwide cohort study.

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Background: Patients with familial adenomatous polyposis (FAP) have a germline pathogenic variant in the *APC* gene resulting in increased risk of several cancer types. Historically, colorectal cancer (CRC) and duodenal cancer were the most common gastrointestinal cancers in FAP. However, advances in prophylactic surgery and endoscopic surveillance may prevent these cancers in most patients. In contrast, recent studies report an increasing incidence of gastric cancer in FAP. Most common extra-intestinal cancers include thyroid cancer and hepatoblastomas in infants. This study aims to evaluate the risks of different types of cancer in patients with FAP over time.

Methods: In this nationwide cohort study, patients with FAP were identified in the Dutch Hereditary Cancer Registry and cross-referenced with pathology reports from the Dutch Pathology Registry. Patients were included if they had a known pathogenic variant in *APC* and/or more than 100 colorectal adenomas. Kaplan-Meier analyses were performed to assess the cumulative proportions of all types of cancer developing throughout the study period of 50 years (1975-2024). To evaluate trends across various cancer types, five-year cancer incidence rates were calculated. To compare incidence rates of gastric cancer in FAP patients with those in the general population, the standardized incidence ratio (SIR) was estimated.

Results: In total 1235 patients (48% female) were included in this study. Of those, 400 developed a total of 474 cancers. CRC was detected in 199 patients (16.1%), followed by duodenal cancer in 34 (2.8%) and gastric cancer in 28 patients (2.3%). The cumulative proportions of CRC, duodenal cancer, and gastric cancer by age 50 were 10%, 1.2%, and 1.3%, respectively. CRC was the most common gastrointestinal cancer in FAP until 2020 (Figure 1), after which gastric cancer became the most commonly diagnosed gastrointestinal cancer. SIR analysis for gastric cancer showed a ratio of 11.98 (95% CI: 7.96–17.31) compared to the general population, with an incidence rate of 0.85 per 1,000 person-years. The most common extra-intestinal cancer was breast cancer in 26 patients (2.1%), followed by lung cancer in 19 (1.5%) and thyroid cancer in 18 patients (1.5%).

Conclusion: While the incidence of CRC in FAP patients has decreased over the years, the incidence of gastric cancer has increased, with an overall SIR of 11.98 compared to the general population. These findings highlight the need for improved endoscopic surveillance to prevent gastric cancer.

Optimal age to stop surveillance in the older population at risk for gastric cancer

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Background: In the Netherlands, patients with gastric premalignant lesions (GPL) are under endoscopic surveillance to detect gastric cancer (GC) at an early stage. However, no consensus exists until which age the yield of surveillance is sufficient to warrant surveillance endoscopies in a growing fragile population. Therefore, the aim of this study is to compare the age-specific incidence rates of GC in the surveillance population with the standard Dutch population and propose an optimal age to end gastric cancer surveillance.
Methods: The ongoing Progression and Regression of Precancerous Gastric Lesions (PROREGAL) study consists of GPL patients under surveillance according to the MAPSII guidelines. All newly diagnosed GCs between 2009-2023 were identified by reviewing medical records and linkage to the Netherlands Cancer Registry (NCR). The cumulative incidence of GC over a 10-year follow-up period was calculated using a cumulative incidence model. The standard incidence rate (SIR) was calculated by dividing the number of observed cases of high-grade dysplasia (HGD) and gastric cancers by the number of expected cases based on the general population. Incidence rates (IR), stratified by age at diagnosis and stage, were compared with the general population.
Results: A total of 373 patients were included, 1.6% progressed towards HGD/GC (2 HGD, 6 GC) in 1509.4 person-years of follow-up. After 10 years of follow-up, the cumulative incidence of GC was 2.2%. The overall SIR was 37.4 (CI -23.9 – 73.7). In the surveillance population the incidence rate (IR) per 1000 person years (py) for GC decreased with age, with an IR of 13.65 (45.3%) in age group 30-44; 5.52 (18.3%) in 45-59; 7.26 (24.1%) in 60-74 and 3.72 (12.3%) in patients over 75 years of age. The majority of these GCs were detected in early stages, with an IR per 1000 py of 1.59 (25.0%) in stage 0, 3.18 (50.0%) in stage I, 0.80 (12.5%) in stage II, 0.80 (12.5%) in stage III, and 0 (0%) in stage IV. In contrast, the IR per 100000 py in the general population were in stage 0 0.15 (2.2%); stage I 0.85 (12.2%); stage II 1.08 (15.5%); stage III 1.11 (16.0%) and stage IV 2.99 (43.0%) and unknown stage 0.77 (11.1%).
Conclusion: The age of diagnosis of GC shows a declining trend in the surveillance cohort, especially in those patients over 75. Therefore, we propose to end gastric cancer surveillance in patients over 75 years of age. Despite the low cumulative incidence, the high SIR and detection of GC at more favorable stage indicates that surveillance may still be warranted in high-risk GPL patients.

Identification of immigrant and socioeconomic groups at high risk of gastric cancer: a nationwide cohort study in The Netherlands

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Background: While *Helicobacter pylori (H. pylori)* test-and-treat is recommended by the EU in countries with a high-risk of gastric cancer (GC), the disease is often neglected in countries with a lower incidence such as the Netherlands. Although general population interventions may not be desirable in low-risk countries, identification of high-risk groups could facilitate targeted interventions. Our aim was to identify such high-risk groups in the Netherlands, based on individual-level population data on migration history and socioeconomic status (SES).
Methods: In this nationwide cohort study, patient data from the Netherlands cancer registry were linked to demographic data of Statistics Netherlands in the period 2010-2022. GC incidence rates in the 14 largest immigrant populations were compared to those born in the Netherlands. Odds ratios were computed per birthplace and controlled for age, sex and SES. Additionally, we investigated GC risk among second-generation immigrants and by SES.
Results: Some immigrant populations demonstrated a significantly higher GC risk compared to the general population. Specifically, the age-standardized incidence rate (ASR) per 100,000 demonstrated elevated risk in foreign-born, first-generation immigrants from Afghanistan (ASR: 21.0), Turkey (ASR: 20.1), Bosnia-Herzegovina (19.5) and China (ASR: 17.2), compared to the population born in the Netherlands (ASR 8.4). Low SES also increased the odds of developing GC. However, even after controlling for SES, immigrant groups remained twice as likely to develop GC, with a risk up to three times higher for non-cardia GC. Second-generation immigrants did not have a significantly higher risk of developing GC.
Conclusion: First-generation immigrants remain at elevated risk for GC despite migration to a low-risk country, likely due to infection with *H. pylori*. The incidence rates in these groups surpass those seen in the highest-risk European countries such as Estonia (ASR: 13.1) and Portugal (ASR: 12.8), where *H. pylori* test-and-treat is recommended by the EU. Primary care physicians and gastroenterologists should be cognizant of these high-risk groups to enable the early detection of cancer within these populations. In particular, the potential benefits of targeted *H. pylori* and endoscopic screening in immigrant populations should be explored in clinical and modelling studies. Implementing such targeted interventions could help improve health outcomes for vulnerable populations and thereby reduce health disparities.

Harms and benefits of differing pancreatic cyst surveillance guidelines: a microsimulation study.

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Background: International pancreatic cyst surveillance strategies vary in their recommended frequency and cessation criteria. However, there is insufficient evidence to determine which guideline is most beneficial. This modelling study evaluated the harms-benefits ratios of three common cyst surveillance guidelines: the less intensive 2015 American Gastroenterological Association (AGA) guidelines, the 2023 International evidence-based Kyoto guidelines and its preceding version, the 2017 Fukuoka guidelines.
Methods: We adapted an established microsimulation model (MISCAN-Pancreas) to simulate a cohort of patients undergoing surveillance for mucinous cysts. The cohort was simulated under each guideline and compared to a no-surveillance scenario to evaluate respective harms and benefits. Primary comparison metrics included reductions in pancreatic cancer (PC) mortality, the number of patients needed to survey (NNS) to prevent one PC-related death, and the number of patients needed to treat (NNT) to prevent one PC-related death. We varied a number of assumptions, including the maximum age of surveillance, surgical mortality, and misdiagnosis as sensitivity analyses.
Results: The Kyoto guidelines resulted in 3.0% fewer PC-related deaths but at the expense of disproportionately more imaging appointments (+36.8%) and surgeries (+19.7%) compared to the AGA guidelines. Compared to the Kyoto guideline, the AGA guidelines had a lower NNS (AGA: 258 vs. Kyoto: 324) and NNT (AGA: 7.37 vs. Kyoto: 8.21). Compared to the AGA and Kyoto guidelines, the Fukuoka guidelines led to a significant increase in NNS (+203.1% and 141.4%, respectively) and NNT (+31.2% and +17.8%, respectively) with a slight reduction in PC-related deaths (-3.9% and -0.9%, respectively). The NNS and NNT for all guidelines decreased significantly when surveillance was discontinued in older patients.
Conclusion: The AGA guidelines provide the most favorable harm-benefits ratio of the three guidelines compared, suggesting that less intensive surveillance may be more appropriate. We also conclude that continued surveillance of all cysts that have been stable for over 5 years (as recommended by the Fukuoka guidelines) results in a significant increase in harms without substantially reducing PC-related mortality. Further research is required to refine surveillance criteria, particularly for older patients and those with stable cysts.

ATRX, DAXX, and Menin immunohistochemistry identify prognostic relevant non-functioning neuroendocrine tumors subgroups

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Background: Non-functioning pancreatic neuroendocrine tumors (NF-pNETs) are rare tumors with a variable prognosis. Recent studies have identified prognostic subgroups based on *ATRX*, *DAXX* and *MEN1* mutations along with chromosomal aneuploidies.
This study aims to classify prognostic groups using immunohistochemical expression of proteins ATRX, DAXX, and Menin, representing the ATRX, DAXX, and MEN1 genes.
Methods: Primary sporadic non-functional grade 1 and grade 2 pNETs without synchronous metastases were retrospectively retrieved from local pathology archives and analyzed using tissue microarrays. Immunohistochemical staining for ATRX, DAXX, and Menin was performed, and pNETs were classified into three groups: Group NF-pNET1 (ATRX/DAXX loss), Group NF-pNET2 (Menin loss without ATRX/DAXX loss), and Group NF-pNET3 (no ATRX/DAXX or Menin loss). Survival analysis was conducted to evaluate the prognostic significance of these subgroups.
Results: A total of 109 patients with grade 1 (62%) and 2 (38%) NF-pNETs were included. Mean tumor size was 33 mm (range 0.6 – 18), with a mean follow-up of 34 months (range 0.4–68); positive lymph nodes were present in 25% and metachronous metastases occurred in 17%. Of 100 cases assigned to a subgroup, no metastases occurred in Group NF-pNET2 (0/22), while metastases occurred in 10.5% (5/52) of Group NF-pNET3 and 63.2% (12/26) of Group NF-pNET1. Kaplan-Meier metastasis-free survival analysis showed significantly better outcomes for Group NF-pNET2 compared to Group NF-pNET1 and Group NF-pNET3 ($p < 0.001$).
Conclusion: Classification based on ATRX, DAXX, and Menin expression identifies NF-pNET patients at low metastatic risk. Low-risk patients may benefit from a less intensive follow-up protocol.

Surgical quality assurance in gastrointestinal surgical randomized controlled trials: a delphi consensus study

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Background: The lack of consensus-based standards for Surgical Quality Assurance (SQA) affects both the internal and external validity of gastrointestinal (GI) surgical randomized controlled trials (RCTs). SQA, which aims to standardize interventions, is increasingly used as a gatekeeper for trial entry and for monitoring surgical performance within RCTs. However, the key methods for effective SQA remain unclear. We used the Delphi consensus method to develop a universal checklist of essential SQA elements for future GI surgical RCTs.
Methods: Forty-four international experts, including clinicians and trial methodologists, were invited in a three-round Delphi consensus process. A total of 24 statements were included in the first round of the survey. Each item on the checklist was evaluated using the 5-point Likert scale (1-5, strongly unimportant to very important). The checklist was divided into three categories: credentialing, standardization of surgical techniques, and monitoring of surgical performances. All surveys were administered using Qualtrics (Provo, USA), and survey links were distributed via email.
Results: Forty experts (91% response rate) from 15 countries responded. After three rounds consensus was reached on 12 key items. The final SQA checklist covered topics including a minimum annual case volume per center, a minimum surgeon case volume (overall and annually), standardized reporting guidelines, pretrial education (written materials and videos), standardization of surgical approach, standardized extent of lymphadenectomy, proctoring surgeons (without and with limited experience), periodic pathological assessment, and performance monitoring through Case Report Forms or patient file data.
Conclusion: A consensus among international experts identified 12 key elements for credentialing, standardization of surgical techniques, and monitoring of surgical performance in GI surgical RCTs. These standardized SQA measures are expected to be widely utilized to enhance the quality of surgical trials and improve both their internal and external validity of upcoming study results.

Evaluation of consistency between respondants from a multidisciplinary, remote, nationwide expert panel for complex acute pancreatitis

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Background: The clinical decision-making process in patients with severe acute pancreatitis can be highly challenging, particularly in cases with infected (peri)pancreatic necrosis and/or other pancreatitis related complications. The Dutch Pancreatitis Study Group (DPSG) launched the nationwide, remote, acute pancreatitis online expert panel in 2005, to support physicians in the treatment of acute pancreatitis. A previous evaluation demonstrated that the expert panel effectively provided advice for the management of acute pancreatitis. However, the availability of multiple new, complex treatment options has potentially obscured the clarity of the advice over time. This study aims to evaluate the consistency of advice provided by the experts participating in the nationwide Expert Panel, which is composed of specialists across various disciplines.
Methods: We conducted a post-hoc analysis of all consultations from the Dutch acute pancreatitis expert panel. This study included all patients from 58 hospitals with acute pancreatitis evaluated by the expert panel between 2019 and 2024. An advice was considered consistent in case of agreement among 70 percent or more of the experts.
Results: In total, 455 cases, representing 402 unique patients, were included in this study. The panel was consulted at a median of 25 days (IQR25) after diagnosis, with 84 patients (18%) having already undergone an invasive intervention for their necrotizing pancreatitis at the time of consultation. Across all cases presented to the panel, the most common inquiry was whether additional drainage was required (39%). A total of 26 experts from 3 different specialties (e.g. surgery, gastroenterology, radiology) have participated in the panel over the years. The mean number of experts responding per case was 5 (±2). In most cases, there was agreement among 70 percent or more on whether or not an invasive intervention was required. However, consistency on immediate versus delayed drainage was not reached in some cases, with substantial variability over the years (e.g. 80% in 2019 versus 67% in 2024; p=0.08). Additionally, there was an increase in the number of cases with a complete 50/50 split in expert opinion, rising from 5% in 2019 to 16% in 2024 (p=0.04).
Conclusion: Acute pancreatitis expert panel advices had a high degree of consistency among experts regarding the necessity of invasive intervention. However, variability persisted in decisions regarding immediate versus delayed drainage. Over time, divergent opinions increased, with a rise in cases showing an even split among experts. These findings indicate ongoing challenges in aligning expert perspectives for optimal patient management.

Endoscopic Submucosal Dissection vs. Endoscopic Mucosal Resection for Barrett's Esophageal Neoplasia

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Background: Endoscopic Mucosal Resection (EMR) and Endoscopic Submucosal Dissection (ESD) are the primary resection techniques used in the treatment of Barrett's esophagus neoplasia (BEN). Previous studies comparing EMR and ESD for BEN were often underpowered or biased by non-comparable cohorts, as ESD was typically chosen for more advanced lesions. This study aims to compare treatment outcomes for the resection of BEN between two independent, high-volume centers: one that primarily performs EMR versus another that primarily performs ESD, irrespective of initial histology.
Methods: This retrospective cohort study included all patients with BEN resected with ESD or EMR between 2013 and 2023 in two European centers. The primary endpoints were the rates of local recurrence, synchronous and metachronous lesions after resection and pre-ablation, along with survival and the need for step-up therapy after initial resection. The secondary endpoints were the rate of en bloc, R0 and curative resection and adverse events.
Results: A total of 132 and 151 patients without prior BE treatment underwent either ESD or EMR, respectively. Histopathology revealed no dysplasia/LGD/HGD/adenocarcinoma in 0/12.9/56.1/31.1 % in ESD cases and 0.7/20.1/60.4/18.8 % in EMR cases (p = 0.039). There were no significant differences between groups regarding gender, age, or the length of Barrett's esophagus. For primary endpoints, ESD showed significantly lower local recurrence rates (3.0% vs 9.9%; p=0.021). In the ESD group, all recurrences were successfully managed with one re-ESD, achieving R0 resection. In the EMR group, local recurrences were treated endoscopically. There was no significant difference regarding synchronous and metachronous lesions (6.1% vs 2.0%, p=0.077; 6.1% vs 2.6%; p=0.155), respectively. Procedure- or cancer-related mortality did not differ between groups (2.3 vs 2.0 %; p=0.843). For secondary endpoints, ESD was significantly associated with frequency of en bloc (100.0% vs 23.2%). Among these, R0 (87.7% vs. 97.1%) and curative resection (74.6% vs. 88.2%) were not significantly different. Adverse events, including bleeding (4.6% vs 4.6%), perforation (1.5% vs 2.0%), and postoperative stricture (8.1% vs 10.1%) were not significantly different between ESD and EMR, respectively.
Conclusion: In this study, ESD leads to a significantly lower local recurrence rate compared to EMR, with no significant differences in adverse events. All local recurrences in both groups were managed endoscopically.

Acceptability of tailored screening intervals among individuals in a risk-stratified colorectal cancer screening program

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Background: Risk stratification based on prior fecal Hemoglobin (f-Hb) concentrations offers potential to enhance the effectiveness of fecal immunochemical test (FIT)-based colorectal cancer (CRC) screening programs. The acceptability of risk-stratified CRC screening, crucial for successful implementation, has not been evaluated in a real-world setting.
Methods: We conducted five semi-structured focus groups within the PERFECT-FIT study, a risk-stratified CRC screening trial in the Netherlands (NCT05423886). Participants included 13 low-risk individuals assigned a prolonged (three-year) screening interval and 11 high-risk individuals assigned a shortened (one-year) screening interval based on their prior f-Hb concentration. Additionally, four individual interviews were conducted with individuals who had withdrawn from the trial after being assigned a three-year interval. Transcripts were thematically analyzed using ATLAS.ti 9.
Results: Three main themes emerged regarding risk-stratified screening: 1) preference for more frequent screening, 2) acceptability of assigned intervals, and 3) fairness of nationwide implementation. Risk-stratified intervals were generally considered logical and fair. However, individuals clearly preferred shortened intervals over prolonged intervals, driven by the potential earlier detection of abnormalities. Accordingly, individuals assigned a one-year interval were content with additional screening. Those assigned a three-year interval were mainly accepting of their interval as well, feeling reassured by their favorable FIT-result. Withdrawals expressed concerns about the safety of a 3-year interval, but indicated they would accept prolonged intervals if scientifically proven and implemented nationwide.
Conclusion: Despite a clear preference for shortened over prolonged screening intervals, our findings indicate strong acceptability of tailored screening intervals among individuals involved in risk-stratified CRC screening, supporting the successful implementation of such programs nationwide.

A pragmatic cost-efficiency assessment of advanced systemic therapy in inflammatory bowel disease

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Background: The use of advanced systemic therapies in inflammatory bowel disease transformed the clinical management offering improvement in symptom control, disease progression, and quality of life. However, the high cost of these therapies is raising concerns about cost-effectiveness and financial sustainability in healthcare systems. In this study we evaluated a pragmatic model of cost-efficiency after Tumor-Necrosis-Factor-Alpha inhibitor (TNFi) failure in Crohn's disease (CD) and ulcerative colitis patients (UC).
Methods: Patients from Zuyderland Medical Center, a large IBD-center in the Netherlands, that failed on treatment with Tumor-Necrosis-Factor-Alpha inhibitor (TNFi) were followed one year on drug persistence of second-line adalimumab (ADA), infliximab iv/sc (IFX), ustekinumab (UST), vedolizumab iv/sc (VEDO) or filgotinib (FILGO) in the period between 01-2015 until 06-2024. Drug persistence was a proxy for treatment success representing a positive general physician's assessment and clinically demonstrated patients' acceptance of treatment. Cost-efficiency of drug treatment was calculated by dividing total net costs of pharmacy dispensed drug, including drug costs of non-responder patients, divided by the total number of responder patients every 3 months for one year. The drug Return On Investment (dROI) was defined as the total net drug cost in the population of treatment expressed per responder patient after one year. The addition of total drug costs to the dimension of drug persistence delivers the dROI as a tool to assess cost-effectiveness driven by disease control.
Results: The one-year drug persistence in CD-patients expressed as % in number of patients was ADA 67% (n=100), IFXsc 100% (n=2), UST 72% (n=53), VEDsc 88% (n=8), IFXiv 62% (n=39) and VEDOiv 59% (n=22). The calculated one-year net drug cost-efficiency according to dROI was; Eur 2.448, Eur 4.098, Eur 6.223, Eur 21.210, Eur 5.080, Eur 28.888 for ADA, IFXsc, UST, VEDsc, IFXiv and VEDOiv, respectively. In UC-patients the one-year persistence per drug (%, number of patients) was; ADA 49% (n=49), UST 75% (n=4), VEDsc 93% (n=14), IFXiv 50% (n=16), VEDOiv 52% (n=48) and FILGO 65% (n=23). The dROI cost-efficiency amounted Eur 2.909, Eur 5.935, Eur 21.384, Eur 7.005, Eur 33.339 and Eur 6.856 for ADA, UST, VEDsc, IFXiv and VEDOiv, and filgotinib, respectively.
Conclusion: DROI supports the tailoring of treatment to patient-specific needs. Extensive costs variation exists between second line treatment following anti-TNF failure, challenging clinicians, healthcare insurers and policymakers to reflect on treatment outcome and economic sustainability of personalized medicine when choosing second line treatment in IBD-patients.

Management of esophageal cancer with concurrent cervical node metastasis: a nationwide population-based cohort study

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Background: In the West, the standard treatment of locally advanced, resectable esophageal cancer without metastasis is neoadjuvant chemo(radio)therapy followed by esophagectomy. There is a small subset of patients that present with concurrent cervical lymph node metastasis (LNM). Historically this was seen as distant metastasis and surgical intervention has usually not been an option for these patients. The contemporary TNM classification now categorizes these lymph node stations as locoregional disease. Our current study aims to describe current treatment paradigms in the Netherlands for patients presenting with esophageal cancer and concurrent cervical LNM.
Methods: This population-based cohort study utilized data from the Netherlands Cancer Registry (NCR), encompassing patients with locally advanced thoracic esophageal or gastroesophageal junction cancer and concurrent cervical lymph node metastasis. Treatment modalities were categorized into either: neoadjuvant therapy followed by surgery (Neo + S), definitive chemoradiotherapy (dCRT), chemotherapy with or without radiotherapy < 30 Gray (CT), radiotherapy (RT), and best supportive care (BSC). Overall survival (OS) was assessed using the Kaplan-Meier method and compared via the log-rank test. Hazard rates were computed using Cox proportional hazards regression, with adjustment for confounding achieved through inverse probability of treatment weighting (IPTW).
Results: Between 2015-2021, a cohort of 412 patients was identified from the NCR database. Median survival durations were observed as follows: 24.2 months for Neo + S, 18.0 months for dCRT, 14.5 months for CT, 7.0 months for RT, and 3.2 months for BSC. A comparison between the Neo + S group and dCRT demonstrated a significant improvement in survival (p=0.02). Further subdivision of the surgical group into neoadjuvant chemoradiotherapy or chemotherapy did not reveal a significant difference in survival (p=0.6). Cox proportional hazards regression showed that Neo +S group had a 52% lower risk of death compared to the dCRT cohort. Utilizing inverse probability of treatment weighting (IPTW) to adjust for confounding factors, Neo + S maintained its survival advantage.
Conclusion: The retrospective cohort findings suggest that neoadjuvant therapy followed by surgery may represent the optimal approach for managing resectable esophageal cancer patients with cervical LNMs. The results emphasize the importance of considering surgery as a viable option for these patients. These limitations underscore the critical need for a prospective study, prompting the launch of the propensity score matched cohort NODE-II trial.

Endoscopic drainage of potentially resectable perihilar cholangiocarcinoma using a suprapapillary plastic stent with retrieval string (CHORDA); a prospective pilot study

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Background: For patients with potentially resectable perihilar cholangiocarcinoma (pCCA), biliary drainage of the future liver remnant is recommended. The standard approach involves the endoscopic placement of a transpapillary plastic stent, which allows for easy removal if re-intervention becomes necessary. However, bridging the papilla may lead to an increased risk of complications such as ascending cholangitis (37%). To mitigate these risks while maintaining ease of removal, a suprapapillary stent equipped with a retrieval string could offer a potential solution. This study evaluated the safety and feasibility of endobiliary drainage using a suprapapillary plastic stent with a retrieval string in patients with potentially resectable pCCA.

Methods: This prospective single-center pilot study included patients with pCCA eligible for major liver resection. Patients were excluded in case of incomplete recovery from side effects of prior biliary drainage procedures and a distance of ≤2 cm between the stricture and sphincter. Procedure was performed using a modified plastic biliary stent with a retrieval string attached to the distal side hole (7, 8.5 or 10Fr). Primary outcome was safety, defined as number of severe drainage related complications between inclusion and surgery or decision not to proceed for resection. Secondary endpoints included technical and clinical success rates, defined as successful placement of the stent and a ≥20% reduction in bilirubin levels at day 7.

Results: Between March 2023 - August 2024, 22 patients (14 male [64%], median age 69 years [IQR 63 - 77]) were included. Two patients (9%) presented with a Bismuth classification type I, six (27%) type II, nine (41%) type IIIa, two (9%) type IIIb and three (14%) type IV. Suprapapillary stent placement was successful in all cases. Six patients (27%) had one or more severe drainage related adverse events. Two patients (9%) developed cholangitis originating from undrained segments and two (9%) had stent dysfunction without cholangitis. Three patients (14%) developed post-ERCP pancreatitis. Clinical success was achieved in 19 patients (86%). Six patients (27%) required one or more re-intervention due to stent dysfunction or therapeutic failure of the procedure. Twelve patients (55%) proceeded to surgery. In eight patients surgery was cancelled due to locally advanced or metastatic disease, one patient opted out, and one deceased prior to resection due to a severe pancreatitis.

Conclusion: This study shows that endoscopic drainage using a plastic stent with retrieval string is safe and feasible in patients with pCCA. Although the approach shows considerable promise, larger comparative studies are needed to confirm its effectiveness.

Local recurrence rates of horizontal margin-positive cases after en bloc endoscopic submucosal dissection of colorectal neoplasia: a meta-analysis

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Background: Endoscopic Submucosal Dissection (ESD) enables en bloc resection of large colorectal neoplasms, but the recurrence risk with positive or indeterminate horizontal margins (HM1/x) remains debated. This meta-analysis evaluated the local recurrence rate following en bloc ESD with HM1/x margins.
Methods: A systematic search of PubMed, EMBASE, Web of Science, and Cochrane Library through June 2024 identified studies reporting local recurrence after colorectal en bloc ESD with HM1/x margins. Cases with R1/x vertical margins or histological high-risk features were excluded. Cumulative incidences and odds ratios (ORs) were pooled using mixed-effects logistic regression.
Results: Twelve studies with 455 HM1/x cases (299 benign, 12 invasive, 144 unknown) were included. The pooled recurrence rate was 4.5% (21/455; 95%-CI, 2.7%-7.4%). Median time to recurrence was 14 months (range: 6-71). Histological details were available for 17 recurrences (3 invasive, 14 benign). Two invasive recurrences originated from invasive lesions; the third from a high-grade dysplasia (HGD) lesion. Treatment of recurrence was reported for 11 cases, with 8 undergoing endoscopic resection (all benign) and 3 surgery (1 benign IBD-related lesion, 2 invasive). The recurrence risk was significantly higher for HM1/x margins compared to HM0 cases (5/1655 vs. 15/403; OR 8.04; 95%-CI, 2.77-23.30). The pooled cumulative odds ratio for local recurrence in HM1/x (7/332) versus HM0 (3/1158) non-invasive lesions was 6.62 (95%-CI, 1.56-28.01; I^2 = 0.0%). In invasive lesions, 2/68 HM0 cases and 3/12 HM1/x cases experienced local recurrence.
Conclusion: En bloc ESD with HM1/x margins is associated with a significantly higher risk of local recurrence compared to R0 resection. However, the absolute risk remains low and most recurrences are benign. As invasive recurrences seem to originate from initially invasive or HGD lesions, surveillance should be prioritized for HM1/x cases with these characteristics, rather than all HM1/x cases.

Decisional needs among patients and physicians in Crohn's disease: A qualitative analysis

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Background: Shared decision-making (SDM) is a collaborative process between patients and healthcare professionals (HCPs) that is essential to align treatment choices with patient values. The increasing variety of treatment options for Crohn's Disease (CD) challenges the assessment and communication of risks and benefits for both patients and HCPs. Patient decision aids (PDAs) have been shown to be effective in enhancing patient-centered care across various decision-making contexts. This study aims to identify the informational needs of both patients and HCPs to develop an effective PDA for CD.
Methods: Qualitative semi-structured interviews were conducted with 7 CD patient representatives and 5 HCPs. Purposive sampling was used for recruitment of respondents. An empirical phenomenological approach was taken in the interviews to describe similarities and differences of experiences, needs, and preferences of CD patients and HCPs. Interviews were conducted face-to-face or digitally, audio recorded, and transcribed verbatim. Transcripts were thematically analysed through consecutive open, axial, and selective coding.
Results: Preliminary results showed most patients were not actively involved but rather advised in their treatment decisions. Physicians typically preferred a particular treatment but regularly offered patients choices between similar medication options if they wanted more involvement. The primary concerns for patients were the reduction of medication related physical, mental, and social complaints that they often experienced from side effects, form of administration, and fear of surgery. This was reflected in the patients' need for general disease information, treatment pros and cons, and patient experience stories. Physicians acknowledge that patients wish to be well-informed and believe they provide adequate information. However, many patients express feeling under-informed and frequently look for additional resources. Both groups find the idea of a PDA offering general and personalised information at varying stages in the treatment journey appealing, though physicians caution that personalised content may not be suitable for all patients.
Conclusion: This study highlights a barrier between the approach taken by physicians and patients' desire for information and involvement in treatment. Providing a reliable and accessible source of information at key decision moments throughout the patient journey could help resolve this barrier. A well-designed PDA for CD patients with reliable information could empower them with confidence and support SDM. However, careful implementation is necessary to accommodate diverse patient needs and preferences.

Adherence to a Care Pathway for Inflammatory Bowel Disease in the Southwest region of the Netherlands

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Background: In the southwest of the Netherlands, there is a close collaboration between hospitals to improve care for inflammatory bowel disease (IBD). This collaboration aims to deliver high quality and uniform care across the region. To achieve this, a care pathway (CP) was developed and implemented for treating IBD with biologics and small new molecules. The CP consists of subsets that address initiation and switching of therapy, frequency and type of follow-up. This study aims to assess adherence to the CP and determine barriers and facilitators of the development and implementation.
Methods: A mixed-methods study was conducted using quantitative data to evaluate the adherence to the CP per subset. Quantitative data was retrospectively collected from electronic medical records (EMR) from December 2020 until March 2023. Surveys and semi-structured interviews were used to identify barriers and facilitators, using the Extended Normalization Theory. Surveys were sent to healthcare providers (HCPs) and interviews were conducted with gastroenterologists, IBD-nurses, healthcare assistants and IT-personnel.
Results: Adherence to the CP regarding the registration of discussed treatment options was 50%. Weight measurements ranged from 12% to 25% across different CP subsets. Smoking status and medication side effects were documented in respectively 30% and 33% of patients. Validated questionnaires were rarely used to record disease activity, with adherence rates between 6% and 20%. Only 25% of patients who started or switched biologics were screened for HIV, tuberculosis and hepatitis B and C. Outpatient visits were scheduled according to the CP in 67% to 75% across subsets. Blood tests were ordered as per CP, or an exemption was registered in 25% to 42%. Microbiology tests were ordered as advised in 52% of patients experiencing a flare. Of the 85 surveys distributed 42 were completed and 11 interviews were conducted. Facilitators of the CP were improving collaboration between HCPs, the potential to standardise IBD care, and that the CP is user-friendly. Barriers included the complexity of the implementation of the CP in EMR, the difficulty for HCPs to change their current routine, and the heterogeneity of IBD.
Conclusion: A CP for the treatment of IBD with biologics and small new molecules has been implemented to improve patient care, however, adherence appears to be challenging. Despite the barriers, the CP is well designed and offers sufficient flexibility to personalise care where necessary. A possible reason for the adherence results may be the limited registration in EMR by HCPs. This could be improved by audit and feedback sessions, to communicate current adherence and improve adoptation.

INCA trial: Incidentalomas in the adrenal gland in patients with cancer of the digestive tract.

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Background: Adrenal incidentalomas are regularly found during the diagnostic work-up of various types of cancer of the digestive tract and often lead to discussion in multidisciplinary team meetings, as it is important to do an endocrinological workup without losing critical time in the oncological workup. The aim of this study is to analyze the endocrinological and the oncological implication of adrenal incidentalomas found in patients with cancer of the digestive tract and to validate the new protocol for the management of these adrenal incidentalomas.
Methods: This prospective cohort study included all patients diagnosed with Esophageal, Gastric, Colorectal, Hepato, Pancreato or Biliary cancer referred to or diagnosed in the Amsterdam UMC between May 1st 2023 and May 1st 2024. The new protocol for the management of adrenal incidentalomas was created in accordance with the department of endocrinology VUmc and the ECE/ENSAT guidelines. Primary outcomes were protocol adherence, etiology and incidence of adrenal incidentalomas.
Results: This study included a total of 1197 patients, with a mean age of 68 years. Patients were predominantly male (59.1%). A total of 91 (7.6%) patients had an adrenal incidentaloma, most were found on the left side (53.8%) and the median size was 15.0 (IQR:11.0-18.8). According to protocol, 11 incidentalomas were not further analyzed due to size <1cm. Of the remaining 80 patients, 43 underwent unenhanced CT. On unenhanced CT, 34 incidentalomas measured a value <10 Hounsfield Units and nine a value of >10 Hounsfield Units. For these nine patients metanefrines were determined, of which 3 were mildly elevated for which an endocrinologist was consulted.
Conclusion: For all patients in this cohort, a pheochromocytoma was safely ruled out using the new protocol before conducting a biopsy when deemed clinically relevant for the oncological workup. In this cohort, no pheochromocytoma was found.

The cost-effectiveness of risk-based management of Barrett's esophagus patients using TissueCypher or p53 biomarkers: a microsimulation study

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Background: Tailoring surveillance for Barrett's Esophagus (BE) patients based on their risk of progression can improve the balance of benefits and harms of surveillance. This study aimed to assess the cost-effectiveness of using TissueCypher and p53 biomarkers to risk-stratify surveillance in BE patients with low-grade dysplasia (LGD) or non-dysplastic BE (NDBE).
Methods: Risk of progression to high-grade dysplasia (HGD) or esophageal adenocarcinoma (EAC) was estimated using data from the SURF trial for each TissueCypher risk class and from the PROBAR study for each p53 risk class. These estimates were incorporated into the Microsimulation Screening Analysis – Esophagus (MISCAN-ESO) model, used to simulate a cohort of Dutch patients born in 1950 who underwent endoscopy and were diagnosed with NDBE or LGD at age 60. Different management strategies (surveillance at 1- to 10-year intervals or endoscopic eradication therapy (EET)) were assessed for each risk class, and incremental cost-effectiveness analysis was conducted to identify the optimal strategy, using a willingness-to-pay threshold (WTP) of €50,000 per QALY gained. Population-level outcomes of risk-stratified surveillance based on TissueCypher or p53 were calculated by weighing the risk-class-specific outcomes by the prevalence of each risk class. Outcomes included the number of EAC cases and deaths, QALYs, surveillance endoscopies, EETs, and costs, all of which were compared against Dutch surveillance guidelines (5-yearly for short-segment NDBE, 3-yearly for long-segment NDBE, and yearly for LGD) to determine cost-effectiveness.
Results: The optimal strategy, based on TissueCypher or p53, sex, and pathology, ranged from no surveillance for people with NDBE plus low-risk TissueCypher or normal p53 to EET for men with LGD plus high-risk Tissuecypher or aberrant p53. At the population level, applying the optimal strategies based on TissueCypher did not improve effectiveness and was more costly than the Dutch guidelines. Risk-based surveillance using p53 led to more EAC diagnoses and deaths compared to the Dutch guidelines but was considerably cheaper. At the WTP threshold of €50,000 per QALY gained, risk-based surveillance using p53 was the optimal strategy, reducing QALYs gained by less than 30% and cost by more than 70% compared to the Dutch guideline.
Conclusion: Risk-based BE surveillance using TissueCypher is not cost-effective. However, surveillance based on p53 reduces both the costs and burden of BE surveillance by half compared to the current Dutch guideline, while retaining over 70% of its effectiveness, making it the most cost-effective option for managing patients with NDBE or LGD.

The role of primary tumor resection in patients with stage IV gastric cancer

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Background: The role of primary tumor resection (PTR) for stage IV gastric cancer patients is under debate. Hence, PTR is still performed in certain cases with unclear clinical benefit. The aim of this study is to provide insight in the patient population undergoing PTR and to identify specific patient and tumor characteristics where PTR may be of added value.
Methods: All Dutch adult patients who received any tumor directed treatment for metastatic gastric adenocarcinoma between 2010 and 2021 were selected from the Netherlands Cancer Registry (NCR). Patients were excluded if they only received best supportive care, underwent emergency resection, or cytoreduction and HIPEC. Patients were categorized into a PTR and a non-PTR group. Median overall survival (mOS) was compared between both groups. Propensity score matching and multivariable Cox regression analyses were performed in order to reduce selection bias as much as possible. Matching was performed on the following variables: age, sex, WHO performance status, comorbidities, the presence of metastases at either a single site (solitary metastases) or multiple sites, and whether or not systemic therapy was admitted.
Results: A total of 4599 patients were included, of whom 555 (12%) underwent PTR and 4044 (88%) did not undergo PTR. Peritoneal metastases, primary tumor location in the distal stomach, and only one metastatic site were significantly more common in the PTR group. The mOS was 15.0 months (95% CI 13.1-16.9) in the PTR group compared to 8.4 months (95% CI 7.3-9.6) in non-PTR group (P<0.001). Multivariable analyses showed that PTR was associated with improved mOS (aHR 0.46; 95% CI 0.41-0.53; P<0.001). If PTR was combined with systemic therapy, mOS was 17.6 months (95% CI 14.1-21.2; P<0.001).
Conclusion: In a highly selected group of patients with stage IV gastric cancer, PTR appears to be associated with better survival.

Incidence and risk factors for disease progression in patients with ulcerative proctitis: a retrospective cohort study

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Background: Ulcerative proctitis (UP) is associated with disabling symptoms including diarrhea, hematochezia and bowel urgency. Adequate therapy is crucial for symptom control and may reduce the risk of proximal disease extension. Although prior studies have explored risk factors for disease progression, they are limited by small sample sizes and have conflicting results. Therefore, the aim of this study was (1) to assess the incidence and (2) to identify risk factors for disease progression in newly diagnosed UP patients.
Methods: All patients diagnosed with UP (inflammation ≤15 cm beyond the anal verge) between January 2000 and January 2024 in one large, non-academic hospital were included in this retrospective cohort study. Data were collected from diagnosis to the end of follow-up. Disease progression was defined as UP (Montreal E1) endoscopically progressing to left-sided (E2) or pancolitis (E3). The Fine & Gray (F&G) regression model was used to identify risk factors for disease progression. 1-, 5- and 10-year progression rates were extracted, adjusted for the competing event of prolonged remission.
Results: In total, 265 UP patients were included; 158 (60%) were female and median age at diagnosis was 40 years. 189 patients (71%) reached clinical remission with topical and/or oral 5-aminosalicylates (5-ASA) and/or topical steroids; 133 (50%) required only topical and/or oral 5-ASA. During a median follow-up of 5.4 years (IQR 2.0-10.8), disease progression occurred in 54 patients (20%), of whom 38 (14%) progressed to E2 and 16 (6.0%) to E3. Median time to progression was 45 months (IQR 18-104). The cumulative incidence of disease progression was 3.2% (95% CI 2.9-3.5%) at 1 year, 15.4% (95% CI 14.3-16.5%) at 5 years and 23.2% (95% CI 21.1-25.4%) at 10 years after diagnosis and would have been overestimated with a traditional survival analysis. F&G analyses demonstrated that age <18 years at diagnosis (HR 3.29, [95% CI 1.44–7.52], p=0.005) and steroid-free remission at 3 months (HR 0.46, [95% CI 0.23–0.91], p=0.025) were significant predictors for disease progression.
Conclusion: In this large cohort of newly diagnosed UP patients, the 10-year cumulative incidence of disease progression was 23.2%. Although most patients responded well to conventional treatment, 29% required immunosuppressants and/or advanced therapies. Steroid-free remission at 3 months and age <18 at diagnosis were significant predictors for disease progression. Awareness of these predictors could help identify high-risk patients who may benefit from tailored monitoring strategies, as well as low-risk patients that may be suitable for referral back to primary care.

Controlling Faecal Incontinence with a novel anal device (CONFIDEnCE): A multicentre randomised controlled trial

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Background: Faecal incontinence (FI) affects around 8% of community-dwelling adults and can significantly impact physical and psychological well-being. Conservative treatments (e.g. anti-diarrheals) often offer insufficient symptom control. Surgical options carry higher risks, greater costs, and variable success rates. A novel anal insert was investigated as a minimally invasive alternative to prevent stool leakage. This randomized controlled trial (RCT) aimed to assess the clinical efficacy of this insert compared to care as usual in an ambulatory setting in adult patients with FI.
Methods: We performed a multicenter, open-label RCT (Controlling Faecal incontinence with a novel anal device [CONFIDEnCE]) in two hospitals in the Netherlands. Participants aged 16-90, with FI were randomized to receive the anal insert or standard treatment (care as usual) for 8 weeks. We defined the primary outcome as a ≥3 point reduction in severity of FI (St. Mark's incontinence score). Secondary outcomes included frequency of FI episodes, quality of life (QoL), anxiety, depression and overall well-being. Participants filled out daily digital diaries and weekly questionnaires.
Results: Between May 2021 and March 2024, 73 participants were recruited (83% female, mean age 66), and 72 randomized (35 anal insert, 37 control group). Intention-to-treat (ITT) analyses included 35 and 37 participants, per-protocol (PP) analyses included 25 and 34 participants in the anal insert and control group, respectively. The primary outcome, a ≥3 reduction in FI severity, did not significantly differ between groups (p=0.25). However, a significant reduction in FI episodes was observed in the intervention group compared to controls (difference in means treatment period: -3.09 episodes per week, 95% CI: -4.39 to -1.75, $p < 0.001$, difference in means follow-up period: -2.97 episodes per week, 95% CI: -4.91 to -1.03, $p = 0.003$). When comparing treatment period to baseline, significantly more participants in the treatment group had a ≥50% reduction in FI episodes (15/27 participants, 55.6%) compared to controls (4/35 participants, 11.4%, $p<0.001$). Significant improvements in FI-specific coping and depression scores were seen in the treatment group compared to the control group.
Conclusion: The anal insert did not significantly reduce overall FI severity, it did effectively decrease the frequency of FI episodes and improved certain aspects of QoL, and should therefore be considered as a treatment option for FI.

Quantified fluorescence molecular endoscopy with first-in-human oral administration of bevacizumab-800CW and cetuximab-800CW for enhanced early detection of esophageal neoplastic lesions

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Background: Patients with Barrett's esophagus (BE) face an increased risk of developing esophageal adenocarcinoma (EAC). However, 24% of lesions is missed by surveillance endoscopy. Quantitative fluorescence molecular endoscopy (qFME) with topical fluorescent tracers enabled the BE endoscopist to detect 27%-42% more dysplastic lesions and 89%-115% more than the non-BE expert. In this study, oral administration of bevacizumab-800CW and cetuximab-800CW was evaluated to improve lesion detection and shorten the procedure time.
Methods: Until now, nineteen BE patients scheduled for a diagnostic and subsequent therapeutic endoscopy were included. During the dose-finding phase, 4.5 mg and 9.0 mg of the fluorescent tracers bevacizumab-800CW and cetuximab-800CW were evaluated separately. The optimal dose was determined afterwards. Patients ingested the tracer in two 15 mL sips while in an upright position, ten minutes prior to qFME. The endoscopic procedure consists of *in vivo* fluorescence signal visualization and quantification by multi-diameter single fiber reflectance / single fiber fluorescence (MDSFR/SFF) mucosal spectroscopy measurements. Additionally, biopsies are collected from non-dysplastic tissue and (suspected) dysplastic tissue for histopathological analysis.
Results: Oral administration of both tracers was well tolerated, with no (severe) adverse events reported. All high-grade dysplastic (HGD) and EAC lesions were detected using standard endoscopy and qFME, which showed higher *in vivo* fluorescence signals in HGD/EAC lesions compared to non-dysplastic BE. The median target-to-background ratio (TBR) for bevacizumab-800CW at 4.5 mg was 2.500 [2.135–3.315], comparable to the 9.0 mg dose (2.640 [1.880–4.595]; p=0.879). Similarly, cetuximab-800CW TBRs did not differ significantly between doses (4.5 mg: 3.140 [2.360–3.780], 9.0 mg: 2.840 [2.520–3.160]; p=0.857). MDSFR/SFF showed a higher fluorescence intensity for HGD/EAC lesions versus non-dysplastic BE: 0.031 $Q^{f}_{a,x}$ [0.030–0.032] vs. 0.0153 $Q^{f}_{a,x}$ [0.0136–0.0155] for bevacizumab-800CW 4.5 mg (p=0.001) and 0.035 $Q^{f}_{a,x}$ [0.032–0.041] vs. 0.012 $Q^{f}_{a,x}$ [0.012–0.013] for 9.0 mg (p=0.036). In a smaller cetuximab-800CW cohort, a similar trend was observed at 4.5 mg (p=0.057) and 9.0 mg (p=0.667).
Conclusion: Preliminary results indicate that qFME with oral bevacizumab-800CW and cetuximab-800CW is feasible, reduces procedural time while maintaining lesion detection, with an optimal dose of 4.5 mg for both tracers. Enrollment continues with five patients to assess lesion detection and further signal improvement with dual-tracer administration. Afterwards five BE patients without dysplasia will be included as control group to test tracer specificity.

Optical PD-L1 imaging using ultrasound-guided quantitative fluorescence molecular endoscopy combined with durvalumab-680LT in locally advanced esophageal cancer patients.

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Background: Locally advanced esophageal cancer (EC) is treated with neoadjuvant chemo(radio)therapy (nCRT) and surgery, but only 16-43% achieve a complete response. Immune checkpoint inhibitors (ICIs) targeting PD-1/PD-L1 offer potential improvements, yet patient selection is difficult. PD-L1's predictive value in biopsies is inconsistent due to tumor heterogeneity, and nCRT's effect on ICI response is unclear. This study assesses the safety and feasibility of ultrasound-guided quantitative fluorescence molecular endoscopy (US-qFME) with durvalumab-680LT to visualize PD-L1 pre- and post-nCRT in EC patients.

Methods: A durvalumab-680LT dose-optimization was performed in which twenty EC patients scheduled for nCRT were included in either 0 mg, 4.5 mg, 15 mg or 25 mg cohort. US-qFME procedures were performed both before and after nCRT, consisting of *in vivo* fluorescence signal visualization, quantification by mucosal and ultrasound-guided spectroscopy measurements of healthy esophageal tissue, tumor and/or lymph nodes, and collection of biopsies. Subsequently, ex vivo analyses were performed for quantification of fluorescence signals, correlation to histology and visualization of tissue durvalumab-680LT tissue distribution and target cells.

Results: Fluorescence signals were generally higher in tumor tissue compared to healthy tissue across the 4.5 mg, 15 mg, and 25 mg dose groups, though there was considerable variability within the tumor tissue, with some patients showing signal intensities similar to healthy tissue. Specifically, the median (IQR) fluorescence signals were: 4.5 mg: 0.020 $Q\mu^{f}_{a,x}$ [0.012–0.020], 15 mg: 0.024 $Q\mu^{f}_{a,x}$ [0.012–0.035], and 25 mg: 0.052 $Q\mu^{f}_{a,x}$ [0.040–0.053]. Signals in the control cohort were negligibly low, with a median (IQR) of 0.001 $Q\mu^{f}_{a,x}$ [0.0005–0.002]. A comparison of pre- and post-nCRT signals showed lower and less heterogeneously distributed signals post-treatment. Additionally, fluorescence microscopy in mucosal biopsies from the 15 mg and 25 mg cohorts detected durvalumab-680LT binding, with fluorescence signals observed irrespective of PD-L1 expression. No adverse events were reported.

Conclusion: This study shows a broad range of durvalumab-680LT signals in tumor tissue across patients, with preliminary fluorescence microscopy data indicating durvalumab binding independent of PD-L1 expression. The combination of US-qFME and durvalumab-680LT is safe and enables visualization and quantification of durvalumab-680LT at both macroscopic and microscopic levels. This novel method holds promise for improving immune checkpoint inhibitor (ICI) patient selection in the future, potentially leading to enhanced treatment outcomes for esophageal cancer patients.

Detecting colorectal neoplasia using specific fecal fluorogenic protease sensitive substrates: a pilot-study

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Background: Identification and removal of advanced adenomas (AA) reduces colorectal cancer (CRC) incidence and potentially mortality. In Europe, CRC screening often uses fecal immunochemical testing (FIT) to select high-risk individuals for colonoscopy, despite its low sensitivity for AA and relatively high false-positivity rate. Previous studies have linked proteases to CRC development through their ability to facilitate angiogenesis and immunoregulation. This study aims to identify colorectal neoplasia-associated proteases and their substrates as a potential non-invasive screening test.

Methods: Eighteen fluorogenic substrates were designed based on literature. Proteolytic degradation of these substrates was measured in fecal samples of patients with CRC (n=12), AA (n=9), non-advanced adenomas (n=10) and controls (n=14). Substrate degradation was correlated to a matched human proteome dataset and underlying proteases were identified based on their recognition patterns. Experiments with protease inhibitors and ZnCl2 were performed to further characterise the involved proteases.

Results: In total, 7 of the 18 substrates tested showed a significant decreased proteolytic degradation in feces from patients with any colorectal neoplasia compared to the control group. Correlations with human proteases were observed, however, based on cleavage patterns no specific proteases were identified. The L-aspartic acid–L-glutamic acid substrate (ED) showed significant decreased degradation in AA and CRC patients. ED degradation significantly decreased with the addition of $ZnCl_2$ and the cysteine protease inhibitor NEM.

Conclusion: We successfully developed colorectal neoplasia specific fluorogenic substrates, highlighting the ED substrate as a potential substrate for the detection of AA and CRC. Although the responsible proteases require further identification, our findings suggest an association with calcium-dependent cysteine proteases. Further studies are needed to validate the use of this specific FRET-peptide substrate as novel non-invasive diagnostic biomarker test for colorectal neoplasia.

Uncertainty of restaging after neoadjuvant chemoradiotherapy for esophageal cancer

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Background: The Surgery As Needed for Oesophageal cancer (SANO) trial showed that 35% of patients with resectable, locally advanced esophageal carcinoma had a clinical complete response after neoadjuvant chemoradiotherapy (nCRT) and were eligible for active surveillance. However, the optimal approach for patients with uncertain tumor response at restaging after nCRT has not yet been established. This study investigated the pathological outcomes of these patients.
Methods: Patients from the SANO cohort with a non-passable stenosis, high-grade dysplasia (HGD) or clinical suspicion of residual tumor without (cyto-)histological proof during clinical response evaluations at 6 and12 weeks after nCRT were included. The primary outcome was the pathological complete response (pCR) rate after resection.
Results: A total of 111 (14%) of 776 patients in the SANO trial had uncertain tumor response: 58 non-passable stenosis, 32 HGD and 21 clinical suspicion of residual tumor. The overall pCR rate was 22% among 94 patients who underwent an esophagectomy, 29% (15/49) in the non-passable stenosis group, 12% (3/27) in the HGD group, and 17% (3/18) in the clinical suspicion group. Patients with squamous cell carcinoma and a non-passable stenosis had the highest PCR rate at 40% (12/30). Median overall survival and median disease-free survival were respectively 45 months (95% CI: 34-NR) and 43 months (95% CI: 25-NR).
Conclusion: Patients with squamous cell carcinoma and a non-passable stenosis during endoscopic surveillance have a high pCR rate, suggesting that esophagectomy could be avoided for a substantial number of these patients. For other groups, surgery should remain standard of care as pCR rates were low. The likelihood of achieving pCR should be considered during shared decision-making after restaging in patients with an uncertain tumor response.

Accuracy of predicting residual disease and disease progression during active surveillance for esophageal cancer

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Background: In patients with esophageal cancer and a clinical complete response (CCR) after neoadjuvant chemoradiotherapy (nCRT) active surveillance is non-inferior to standard surgery. However, two-thirds of patients have residual disease detected 12 weeks after nCRT and proceed to surgery. In addition, of the patients with CCR 12 weeks after nCRT, nearly half will develop locoregional regrowth at a later time point. We aim to identify predictive factors for achieving (persistent) CCR to improve selection of patients for active surveillance.
Methods: Patients who underwent nCRT for esophageal cancer were included from the Surgery As Needed for Oesophageal cancer (SANO)-trial database. Outcome was CCR at 12 weeks after nCRT (start of active surveillance) and analyzed with logistic regression. Age, sex, WHO performance status, completion of chemotherapy, clinical T-category, clinical N-category, histology, differentiation grade, tumor location and tumor length were potential predictors. In the subset of patients with CCR at 12 weeks in active surveillance, we used cause-specific proportional hazards regression to model associations of the same predictors with persistent CCR (no locoregional regrowth, distant dissemination or death) during a minimum follow-up of two years. Discriminative ability of the models was quantified using the concordance statistic (c-statistic), with bootstrap validation to correct for optimism.
Results: A total of 750 patients were included and 274 patients (37%) had a CCR at 12 weeks. Clinical N-category was significantly associated with CCR at 12 weeks (cN2-3 versus cN0: OR 0.57, 95%CI 0.37-0.88, P<0.01) resulting in a c-statistic of 0.56. A total of 198 patients underwent active surveillance. After a median follow-up of 34 months (IQR:30-40), 29% had a persistent CCR. Tumor histology (squamous cell carcinoma versus adenocarcinoma: HR for non-sustained CCR 0.58, 95%CI 0.34-0.97, P=0.04) and clinical N-category (cN2-3 versus cN0: HR for non-sustained CCR 2.08, 95%CI 1.25-3.48, P<0.01) were significantly associated with a persistent CCR resulting in a c-statistic of 0.58.
Conclusion: Standard clinical and tumor parameters are weak predictors of clinical response and the persistence thereof after nCRT. New predictive parameters and better diagnostic tests should be explored to improve patient selection for active surveillance and personalize active surveillance strategies in patients with esophageal cancer.

Positive family history of esophageal adenocarcinoma or Barrett's esophagus as risk factor for neoplastic progression in patients with Barrett's esophagus

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Background: Barrett's Esophagus (BE) is the only established precursor for esophageal adenocarcinoma (EAC). To enable early detection of neoplasia, BE patients undergo regular endoscopic surveillance. However, this approach places a burden on both patients and the healthcare system. While a positive family history of BE or EAC in first-degree relatives is an established risk factor for developing BE, its impact on neoplastic progression towards high-grade dysplasia (HGD) and EAC remains unclear. This study aims to clarify whether family history influences the risk of progression to HGD or EAC in BE patients, potentially enhancing risk stratification.
Methods: In this cohort study, we analyzed data from the PROBAR cohort, this multicenter prospective study recruits BE patients with a segment length ≥2cm under surveillance. A positive family history was defined as the presence of at least one first-degree relative with BE or EAC. The primary outcome was neoplastic progression defined as HGD and EAC. Cox regression analysis was used to determine neoplastic progression risk.
Results: A total of 1242 patients (median age 61.2; 73% male) were included for analysis and 162 (13%) had a first degree relative with BE or EAC. During a median follow-up of 8.2 (IQR 5.7-12.7) years, 101 (8%) patients progressed to HGD/EAC. There was no significant difference in total neoplastic progression rates between those with a positive family history (11%) and those without (7%, p=0.10). Time to neoplastic progression was not significantly different for patients with a positive family history versus a negative family history (8.2 vs 4.7 years, p=0.058). In a multivariate cox regression analysis male sex (HR 2.06, CI 1.08-3.92), BE segment length (HR 1.10, CI 1.03-1.18), current smoking (HR 2.54, CI 1.36-4.76), and confirmed LGD (HR 2.83, CI 1.77-4.54) were all risk factors significantly associated with neoplastic progression during follow-up. There was no relation between the presence of at least one first-degree relative with BE or EAC and neoplastic progression (HR 1.58, CI 0.93-2.69). These results did not differ when including second-degree family members (HR 0.79, CI 0.47-1.33), or when analyzing progression to any type of dysplasia (HR 1.57, CI 0.96-2.57).
Conclusion: Family history of BE or EAC in first-degree relatives does not significantly increase the risk of neoplastic progression to HGD or EAC in BE patients. This implies that patients with a positive family history are unlikely to benefit from more intensive surveillance strategies. However, as this is the first study to evaluate family history as a risk factor for neoplastic progression, these findings should be validated in a larger cohort.

Optimal age to stop endoscopic surveillance of patients with barrett's esophagus

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Background: Patients with Barrett's Esophagus (BE) undergo regular endoscopic surveillance to timely intervene in the development of esophageal adenocarcinoma (EAC). These surveillance programs cause a burden on this population with growing frailty. Current guidelines recommend to stop surveillance at the age of 75 years, however, clinicial studies to support this are lacking. This study aims to determine the optimal age to discontinue surveillance, by analyzing Standardized Incidence Ratio's (SIR) and age-specific incidence rates of EAC in BE patients under surveillance.
Methods: We analyzed data from a multicenter prospective cohort consisting of BE patients with a BE segment length of ≥2cm who were under active surveillance in The Netherlands between 2004-2023. Included patients were linked with the Netherlands Cancer Registry (NCR) to optimize data completeness. The cumulative incidence of EAC was calculated , and standard incidence rates (SIR) were calculated as the ratio of observed versus expected EAC cases.
Results: A total of 1.242 BE patients (median age at index 61.2 years; 73% male) were included for analysis. A total of 32 EAC cases were identified (6 cases in the age group 45-59; 20 between 60-74; and 6 in the age group over 75). Median age at the end of surveillance was 74 years (IQR 66–80). Median age at EAC diagnosis was 68 years (62–73). In 2014, after 10 years of follow-up, the cumulative EAC incidence was 4.5%. The overall SIR was 8.12 (CI 5.55–11.17). The SIR in patients <75 years was 10.20 (CI 6,66–14,47), and >75 years 4.32 (CI 1,58–8,39). The person years per age group per year, were 2720 years for the group between 45-59 years of age, 5810 for 60-74 years, and 2580 for >75 years. In our surveillance cohort, the IR per 1000 person years (py) peaked between 60-74 years of age, with 2.21 (27.7%) in age group 45-59; 3.44 (43.2%) in 60-74; and 2.32 (29.2%) in patients >75 years of age. To provide context, in the general Dutch population, the distribution of EAC cases is 12% in patients aged 45–59, 48% in those aged 60–74, and 39% in patients over 75.
Conclusion: These results support the guideline recommendations to discontinue surveillance in BE patients >75 years old, as the SIR notably decreases in patients above this age. Moreover, the age at EAC diagnosis in our surveillance cohort shows a downward trend, with the highest incidence observed in patients aged 60-74 years. This aligns with trends observed in the general Dutch population, where the proportion of EAC cases decreases from 48% in patients aged 60–74 to 39% in those over 75. However, the SIR in older BE patients is still elevated, underscoring the need for future studies to validate our findings.

Obesity is associated with inferior treatment outcomes in inflammatory bowel disease: a nationwide Dutch registry study

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Background: The impact of overweight and obesity on treatment outcomes in inflammatory bowel disease (IBD) remains unclear, as current literature is inconclusive and often restricted to selected patient populations. We examined the effect of Body Mass Index (BMI) on response to treatment in patients with IBD starting various treatments.

Methods: Patients ≥ 16 years old with IBD, a documented baseline BMI, and starting thiopurines and allopurinol, intravenous (iv) vedolizumab, subcutaneous (sc) vedolizumab, ustekinumab, ozanimod, filgotinib, or tofacitinib were selected from the Dutch Initiative on Crohn and Colitis (ICC) registry. Underweight patients (BMI < 18.5 mg/kg^2) were excluded. The primary outcome was steroid-free clinical remission (i.e. Simple Clinical Colitis Activity Index (SCCAI) ≤ 2 for ulcerative colitis (UC) and IBD-unclassified (IBD-U), and Harvey Bradshaw Index (HBI) < 5 for Crohn's disease (CD)) at week 12 and 24. Outcomes were compared between normal weight (BMI 18.5-25 kg/m^2), overweight (BMI 25-30 kg/m^2) and obese (BMI ≥ 30 kg/m^2) patients using binary logistic regression analyses.

Results: A total of 1066 IBD patients (616 CD, 432 UC, and 18 IBD-U) were included: 619 had normal weight, 303 were overweight, and 144 were obese. At week 12, overweight patients were more frequently in steroid-free clinical remission (49.8%, OR = 1.452, 95% CI: 1.082-1.947, p = 0.013) compared to normal weight patients. Multivariable regression adjusting for age, smoking, prior vedolizumab use, and baseline corticosteroids confirmed higher odds of steroid-free clinical remission in overweight patients (OR = 1.369, 95% CI: 1.010-1.856, p = 0.043). At week 24, obese patients were less frequently in steroid-free remission (35.3%, OR = 0.578, 95% CI: 0.380-0.879, p = 0.010), with multivariable analysis also indicating lower odds of steroid-free clinical remission in obese patients (OR = 0.537, 95% CI: 0.346-0.832, p = 0.005). A logistic mixed-effects model demonstrated a different course of steroid-free clinical remission rates over time from baseline to week 24 between the BMI groups, which is shown in Figure 1, with a near-significant overall interaction effect (p = 0.061).

Conclusion: Obesity was associated with lower steroid-free clinical remission at week 24. Surprisingly, at week 12, overweight was associated with a higher rate of steroid-free clinical remission. However, despite this apparent faster treatment response, this advantage disappeared at 24 weeks.

Health-related physical fitness and its association with disease- and treatment-related characteristics in patients with inflammatory bowel disease versus healthy controls

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Background: Inflammatory Bowel Disease (IBD) may negatively impact health-related physical fitness (body composition, cardiorespiratory fitness, muscular strength, muscular endurance, and flexibility) due to sedentary behavior and disease-specific effects. Limited data on health-related physical fitness in IBD hinders the development of targeted physical exercise training interventions to improve disease outcomes and well-being. This study aimed to compare health-related physical fitness between IBD patients and age- and sex-matched healthy controls and to assess associations with disease- and treatment-related characteristics in IBD.
Methods: This cross-sectional study included 105 IBD patients (in remission or mild-to-moderate clinical disease activity) and 102 age- and sex-matched healthy controls. Participants performed validated tests for health-related physical fitness, including four-site skinfold thickness for body fat percentage, the steep ramp test for cardiorespiratory fitness and muscular strength, the 60-second sit-to-stand test and hand-held dynamometry for muscular strength, isokinetic dynamometry for muscular endurance, and the sit-and-reach test for flexibility. Fatigue (Checklist Individual Strength) and self-reported physical activity (International Physical Activity Questionnaire Short Form) were also assessed. Clinical data were collected, including body mass index, comorbidities, disease duration, disease activity, extra-intestinal manifestations, medication use, and prior intestinal resections.
Results: Patients with IBD had a higher body fat percentage (29.5% vs. 26.9%, p=0.012), lower steep ramp test performance (WRpeak 4.2 W/kg vs. 4.8 W/kg, p<0.001), fewer sit-to-stand repetitions (42 vs. 47, p=0.002), and reduced hand-held dynamometry hamstring strength (3.0 N/kg vs. 3.2 N/kg, p=0.011), as compared to healthy controls. Differences persisted after adjusting for age, sex, Charlson comorbidity index, smoking, and educational level. Multivariable linear regression analyses showed associations for increased body fat and reduced cardiorespiratory fitness and muscular strength with older age, female sex, higher body mass index (BMI), fatigue, arthritis, and a higher number of biologicals. No differences were found in muscular endurance or flexibility.
Conclusion: Patients with IBD have higher body fat and reduced cardiorespiratory fitness and muscular strength compared to healthy controls. Especially, patients with a higher age, female sex, higher BMI, fatigue, arthritis, or multiple biologicals used are at risk for such impairments and may benefit from physical exercise interventions to improve health-related physical fitness and potentially enhance disease outcomes.

The shorter the interval between preconceptional disease activity and pregnancy, the greater the risk of disease activity during pregnancy: Evidence from a large Dutch cohort

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Background: Inflammatory bowel disease (IBD) often coincides with pregnancy. It is well known that disease activity during pregnancy is associated with a higher incidence of adverse pregnancy outcomes. Previous studies have identified disease activity at conception as an important risk factor for activity later on during pregnancy. We aimed to explore other potential risk factors for activity during pregnancy in women who were in remission at conception and report on pregnancy outcomes in a tertiary cohort in the Netherlands.

Methods: For this multicenter, retrospective cohort study, all adult female IBD-patients who had been pregnant during treatment in any of the three participating Dutch university medical centers between 2017 and 2022 were included. Data on patient- and disease characteristics, lab values, medication usage and pregnancy outcomes was extracted from the electronic patient records. Univariate and multivariate binary linear regressions were performed to investigate the relationship between having activity during pregnancy – defined as a fecal calprotectin of ≥200µg/L or the prescription of corticosteroids – and plausible risk factors including biological use, phenotype, disease duration, previous surgery, smoking, BMI, gravidity, and use of IVF. Finally, we evaluate the relationship between activity during pregnancy and pre-conceptional flares, divided over three time intervals: twelve to six months, six to three months, and less than three months prior to conception.

Results: In total, 432 women were included (61.6% Crohn's disease, 35.6% ulcerative colitis), who together had been pregnant 716 times. In this cohort, 16.3% of pregnancies was lost before the 16th week. The adverse outcomes for the remaining pregnancies included the following: 10.8% low birthweight, 12.2% premature, 11.7% small for gestational age. Out of the pregnancies carried beyond 16 weeks, a flare occurred in 27.6% of cases. Preconceptional flares were significantly associated with a flare during pregnancy if they occurred within three months prior to conception (OR 9.8, 95%CI 3.8-25.1, p<0.001), but not if they occurred six to three months prior (OR 3.7, 95%CI 1.0-14.1, p=0.058) or twelve to six months prior (OR 2.0, 95%CI 0.7-5.7, p=0.184). In multivariate analysis, increasing disease duration was associated with a lower risk of activity during pregnancy (OR 0.9, 95%CI 0.9-1.0, p=0.047). No further significant correlations were found.

Conclusion: With a shorter interval between a flare and conception, the risk of relapse during pregnancy increases. Further analyses based on remission rather than activity could show the ideal period of time a woman should be free of activity before attempting to conceive.

The decrease of 6-TGN concentrations during pregnancy is not associated with an increased fecal calprotectin in female IBD patients on thiopurine-treatment

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Background: Thiopurines, such as azathioprine (AZA), mercaptopurine (MP) and thioguanine (TG), are commonly used to maintain disease remission in inflammatory bowel disease (IBD). AZA and MP are metabolized to form the active 6-thioguanine nucleotides (6-TGN) and the 6-methylmercaptopurine ribonucleotides (6-MMPR), associated with intolerable adverse drug reactions. Previous studies report a shift in thiopurine metabolism during pregnancy, characterized by a decrease in 6-TGN and an increase in 6-MMPR levels. The influence of these changes on clinical outcomes remains unclear. This study aims to explore the association of changes in 6-TGN and 6-MMPR levels during pregnancy with disease activity and toxicity markers in women with IBD.

Methods: A retrospective cohort study was conducted recruiting patients with IBD from six Dutch medical centers. Adult women who were pregnant between 2017 and 2022, using thiopurines for IBD, and with at least one thiopurine metabolite measurement during pregnancy were included. Linear mixed effects models assessed 6-TGN and 6-MMPR levels during pregnancy (categorized to half trimesters) and within 6 months postpartum, compared to preconceptional levels, adjusting for dosage and repeated measurements. The influence of percentual changes in 6-TGN and 6-MMPR on disease activity (calprotectin >250µg/g), hepatotoxicity (alanine aminotransferase (ALT) >2xULN) and myelotoxicity (leukocytes <4.0x10^9/L) were analyzed, adjusting for dosage and trimester.

Results: A total of 87 women with 100 pregnancies were included, of whom 64.4% were diagnosed with Crohn's disease and 32.2% with ulcerative colitis. An adverse pregnancy outcome occurred in 13 pregnancies (13%). Subtherapeutic levels of 6-TGN were measured in 32 pregnancies (32%). There were no instances of leukopenia; transient hepatotoxicity occurred thrice (3%). There was active disease in 30 pregnancies, corresponding to 37 metabolite measurements. Analysis showed a significant reduction in 6-TGN levels in the second trimester, with non-significant increases in 6-MMPR. Though disease activity coincided with subtherapeutic 6-TGN-levels 21 times (56.8%), the reduction in 6-TGN was not associated with changes in calprotectin (Estimated marginal mean difference (EMM) =5.435, p=0.104), ALT (EMM=-0.025, p=0.858) or leukocytes (EMM=0.068, p=0.536).

Conclusion: Our study results indicate that despite that 6-TGN levels decrease and 6-MMPR may increase during pregnancy, these fluctuations do not seem to associate with markers of disease activity, hepatotoxicity and myelotoxicity. Larger, prospective studies are needed to evaluate the postulated need for thiopurine monitoring in the third trimester.

Effect of a care pathway for inflammatory bowel disease on patient outcomes and healthcare utilization: Results of the IBD value study

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Background: Eight hospitals in the southwest of the Netherlands collaborate to improve care for patients with inflammatory bowel disease (IBD). This collaboration aims to deliver high quality and uniform care across the region. To achieve this, a care pathway (CP) was developed and implemented for the management of IBD with biologicals or small new molecules. The CP is a decision-support tool that provides guidelines for medication prescribing, procedures, treatment adjustments, and recommendations for follow-up. The aim of this study is to evaluate the effect of a CP on patient outcomes and healthcare utilization.

Methods: We designed a longitudinal multicentre non-randomised cohort study with a baseline observation period (December 2020 – December 2021) and a follow-up period (March 2022 – March 2023), in which adult patients with IBD treated with biologics or small new molecules were included. Outcomes were collected according to the International Consortium for Health Outcomes Measurement (ICHOM) standard set from electronic medical records or through validated questionnaires. Effect of the CP on these outcomes were analysed with case-mix adjusted (generalized) linear mixed models.

Results: A total of 1,173 patients participated in the study, with the majority being female (55%) and a median age of 45 years (IQR 33-58). Most patients had Crohn's disease (64%). The CP was associated with a 0.22 point increase on the IBD-control-8 score (β=0.22, p=0.28), and an increase on the probability of achieving endoscopic/radiologic (β=0.14, p=0.29), biochemical (β=0.18, p=0.22) and patient-reported remission (β=0.19, p=0.21). Probability of clinician-reported remission decreased slightly (β=-0.09, p=0.59). Emergency room visits (β=-0.36, p=0.13), hospital admissions (β=-0.41, p=0.10), and length of stay (β=-0.09, p=0.56) reduced, although these associations were not significant. The CP had no effect on quality of life (β=0.00, p=0.83), anaemia probability (β=-0.01, p=0.95) or on nutritional status (β=-0.01, p=0.34). There was a slight increase in the chance of having an active fistula (β=0.37, p=0.21).

Conclusion: A CP for the management of IBD with biologicals and small new molecules has clinically significant potential to reduce healthcare utilization, while improving patient-reported disease control, and disease remission. These results emphasize the potential of a CP to improve care for complex diseases, such as IBD. However, the adherence to the CP and whether these results lead to a reduction in healthcare costs should be further investigated.

A care pathway for the treatment of IBD reduces healthcare costs and can be cost-effective: results of a multicentre cohort study IBD Value

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Background: Eight hospitals in the Southwest of the Netherlands collaborate to improve inflammatory bowel disease (IBD) care. To achieve this, a care pathway (CP) was developed and implemented for treating IBD with biologics and small new molecules. This CP addresses initiation, switching and discontinuation of therapy, as well as diagnostic testing and treatment follow-up. This study aims to estimate the effect of the CP on costs and quality of life, and to evaluate whether the use of the CP is cost-effective.

Methods: A cost-effectiveness analysis of a CP with a societal perspective was conducted. Adult patients with an IBD diagnosis for at least 3 months using biologics or small new molecules were eligible for inclusion. The CP was implemented in six of the eight participating hospitals, the other two hospitals were used as controls. Costs were assessed at baseline (December 2020 – December 2021) and after implementing the CP (March 2022 – March 2023). Quality-adjusted life years (QALYs) were derived from the EQ-5D-5L. A difference-in-differences (DiD) analysis was used to estimate casual effects of the CP, controlling for pre-existing differences between hospitals and general time trends. For the cost-effectiveness analysis, the incremental cost-effectiveness ratio (ICER) was calculated with the cumulative incremental costs and mean incremental QALYs from the DiD analysis.

Results: A total of 1,173 patients were included. At baseline, patients in intervention (N=841) and control hospitals (N=332) had comparable characteristics in terms of age, sex, diagnosis and comorbidities. Total costs per patient per year was €23,172 (SD €11,690) in the intervention hospitals, and €20,116 (SD €10,412) in control hospitals during the baseline period. After the implementation of the CP costs decreased to €19,430 (SD €14,524) in the intervention hospitals. This reduction was not observed in control hospitals (€19,791, SD€10,003). The DiD-analysis showed cost savings of €1,932 (SD €1,033), primarily driven by reduced hospital costs (-€1,107; 95%CI: -€2,130 to -€109). Quality of life did not change (QALY difference: 0.01; 95%CI: -0.02 to 0.04). The ICER was located in the southeast quadrant of the cost-effectiveness plane, and the probability of the net monetary benefit exceeding €0 was high.

Conclusion: The implementation of a CP for the treatment of IBD with biologics and small new molecules is cost-effective, and very likely a dominant strategy compared to standard care. It reduces healthcare costs while maintaining quality of life. Therefore, adoption of this CP in standard IBD care should be considered.

Distinct faecal metabolic profiles associated with endoscopic remission in ulcerative colitis patients following faecal microbiota transplantation

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Background: While FMT has shown promise in inducing remission in ulcerative colitis (UC) patients, there are still high rates of non-response. Identifying patterns associated with treatment response may help optimize FMT and improve the management of UC patients by identifying FMT's underlying mechanisms. This study aimed to examine the faecal metabolic profile of UC patients post-FMT to identify key metabolites and metabolic pathways linked to treatment response.
Methods: Faecal samples were collected from 18 treatment-naïve UC patients recruited from a single-centre, single-blinded randomised controlled trial (ISRCTN58082603). All patients received antibiotics and bowel lavage before randomisation into three groups: (1) a single FMT enema (n=7), (2) five consecutive FMT enemas over five days (n=7), and (3) a control group receiving only antibiotics and bowel lavage (n=4). Samples were collected at baseline (week 0) and at weeks 1, 4, 8, and 12 post-treatment. Treatment response was defined as endoscopic remission or a drop of ≥2 points in the partial Mayo score. Faecal samples were analysed using ^{1}H-NMR spectroscopy. Univariate statistics analysis was performed on processed spectral data using Metaboanalyst 5.0.
Results: Among 18 patients (median age 42, range 18-70; 7 (39%) male), 3 of 14 in the FMT groups and 2 in the control group achieved endoscopic remission. Faecal metabolic profiles were available for 58 samples at week (W) 0, W4, W8 and W12, showing a total of 23 targeted metabolites. Although no individual metabolites were significantly changed across groups and all timepoints, pathway-specific analysis revealed distinct metabolic shifts in responders post-FMT. Responders showed a reduction in purine metabolism and alanine synthesis, whereas non-responders' metabolic profile remained comparable to baseline (W0), suggesting these pathways may play a role in remission induction. Disturbances in purine metabolism have been linked to inflammatory conditions, including inflammatory bowel disease (IBD) and bacterial purine metabolism is a target of thiopurine drugs commonly used in IBD therapy
Conclusion: Alterations in purine and alanine metabolism are associated with clinical response in UC patients following FMT, underscoring their potential role in mediating treatment effects. Ongoing analysis, including taxonomic profiling, aims to further explore the relationship between these pathways and the gut microbiome may provide insights into the underlying mechanisms driving FMT-induced remission.

Feasibility of a smart toilet seat for home monitoring of Ulcerative Colitis: a pilot study.

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Background: Passive remote monitoring of physiological parameters could provide objective data on IBD activity and facilitate the development of algorithms for early flare detection. Recently, the smart toilet seat was developed, a novel device which noninvasively measures several physiological parameters during a toilet visit. In this study, we aimed to evaluate the feasibility of using the smart toilet seat for home monitoring for ulcerative colitis (UC).
Methods: We installed the smart toilet seat in the homes of eight patients with active UC starting new treatment for a period of eight weeks. Patients were instructed to use the smart toilet seat as they would use their regular toilet, and indicate their toilet visit and stool consistency using remote control buttons. Measurements included number and type of toilet visits, toilet visit duration and heart rate. Disease activity was measured weekly using self-reported Simple Clinical Colitis Activity Index (SCCAI).
Results: Eight patients with active UC were included. We recorded 1431 toilet visits with the smart toilet seat, of which 326 were defaecation visits. Median duration of all visits and defaecation visits was respectively 1.8 and 4.2 minutes. Between week 1 and week 8, a median change of -6 (range -19, 4) in weekly bowel frequency was measured by the smart toilet seat, and median change in SCCAI was -2 (range -4.5, -0.5) (R^2 = 0.75). All participants indicated they would use the smart toilet seat in the future if it would give their gastroenterologist or general physician more insight into their disease.
Conclusion: It was feasible to use smart toilet seat at home in patients with UC. Future research is aimed to identify relevant parameters measured by the smart toilet seat that are related to the development of IBD flares, which could serve as basis for predictive models.

Real world effectiveness and safety of filgotinib in ulcerative colitis: 1 year follow-up results of the ICC registry

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Background: Filgotinib is a preferential JAK1-inhibitor approved for the treatment of ulcerative colitis (UC). The ICC registry was developed to evaluate the effectiveness and safety of advanced therapies in inflammatory bowel disease (IBD). Here, we report the one-year follow-up results of filgotinib in patients with UC.

Methods: Fourteen hospitals prospectively enrolled UC patients initiating filgotinib in the Dutch ICC registry. Treatment persistence was assessed by Kaplan-Meier survival analysis. Clinical remission (i.e. Simple Clinical Colitis Activity Index [SCCAI] ≤ 2) and corticosteroid-free clinical remission rates were assessed at 12, 24 and 52 weeks for all patients who were not in remission at baseline, based on SCCAI score, faecal calprotectin and/or endoscopy. Patients lost to follow up were considered as treatment failure. Reasons for treatment discontinuation and adverse events were recorded.

Results: Eighty-three UC patients (47% females) were enrolled between January 2022 and October 2023. Mean age and disease duration at baseline were 41 [sd ± 16] and 12 years [sd ± 9], respectively. A total of 49 (59%) patients had used up to two advanced therapies and 34 (41%) patients had used three or more. At baseline, 75 patients (90%) had active disease of whom 24 (32%) used oral corticosteroids. After one year of follow-up, 58.8% of patients still used filgotinib (Figure 1). At week 12, 24 and 52, corticosteroid-free clinical remission rates were 57.1%, 32.7% and 34.6% respectively (Figure 2). Reasons for treatment discontinuation were primary non-response (n=17), secondary loss of response (n=13), side effects (n=3) or other reasons (n=4). Fifty-seven adverse events were recorded (19 infections). Ten infections required treatment with antibiotics or antiviral therapy, none of them led to hospitalization or therapy discontinuation. No thromboembolic events were reported.

Conclusion: The results of this real world study show that, even in a therapy-refractory UC population with an average disease duration of 12 years, more than half of the patients still used filgotinib and one third of patients was in corticosteroid-free clinical remission after one year of follow-up. No new safety signals were found.

Lengthening Ustekinumab treatment intervals from every 8 to every 12 weeks in IBD patients in stable remission: preliminary results of a prospective observational cohort study

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Background: Ustekinumab (UST) is registered as maintenance therapy for patients with inflammatory bowel disease (IBD) in an 8- (Q8W) or 12-weekly interval (Q12W). Although Q12W might be associated with less side effects and reduced treatment costs, the majority of IBD patients are on Q8W as maintenance therapy. This study compares the UST drug-survival between IBD patients in stable remission who lengthen the UST interval from 8 to 12 weeks versus those who continue on 8 weeks.
Methods: Adult IBD patients who lengthened the UST interval from Q8W to Q12W were included in the prospective nationwide Initiative on Crohn and Colitis (ICC) Registry between July 2022 and May 2024. Patients were screened on clinical and biochemical remission (HBI≤ 4 or SCCAI≤ 2 and CRP≤ 10 Mg/L and FC≤ 250 µg/g) and had to be on a stable Q8W interval for at least six months. The interval was lengthened at the discretion of the treating physician. The control group consisted of patients previously included in the ICC registry (March 2016 - July 2022) who were in clinical and biochemical remission on Q8W at least one year after initiating UST. Inverse Probability of Treatment Weighting was used to adjust for confounding and selection bias. A drug event was defined as escalation of UST interval, IV reinduction or UST stop. Primary outcome was 24 and 52-week cumulative drug survival (4 weeks range).
Results: In total, 105 Q12W patients and 88 Q8W controls were included. Currently, 74 Q12W patients completed the follow-up period of 52 weeks. The cumulative drug survival at 24 and 52 weeks was comparable between the Q12W and control group (87.6% vs 90.9% and 64.0% vs 77.3% (p= 0.078), respectively). In the weighted analyses, 52 week drug survival was statistically different (Q12W 63.5% vs control 79.7%; p=0.04). In CD patients, the 52 week drug survival was slightly better than in the total cohort (Q12W 67.8% vs control 77.2%; p=0.32). Out of 34 drug events in the Q12W group, 1 patient stopped UST because of a malignancy (classified as not-drug related), 1 switched to vedolizumab due to an allergic reaction, 2 switched to ozanimod due to loss of response and 30 intensified their UST interval (1 to Q10W, 25 to Q8W, 3 to Q6W and 1 to Q4W). In the Q12W group, 8 patients (7.6%) started oral steroids, all in combination with an UST intensification, compared to 10 (11.4%) in the control group (p = 0.459), where 5 patients initiated steroids without an UST intensification.
Conclusion: Lengthening the UST interval from every 8 to every 12 weeks is safe and effective in about two thirds of IBD patients in stable remission. Future studies should focus on identifying patients who will benefit the most from lengthening the UST interval.

Dose intensification of vedolizumab is not effective in inducing endoscopic response in Crohn's disease patients with endoscopic primary non-response

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Background: Dose intensification of anti-α4β7 integrin vedolizumab (VDZ) in Crohn's Disease (CD) patients with secondary loss of response has been reported to be effective. However, data on effectiveness of this intervention in primary non-responders is often inconsistent and retrospectively collected.[1] Our aim was to investigate the effect of vedolizumab dose intensification in endoscopic non-responders after 26 weeks of standard dosing on both clinical and endoscopic remission at week 52.
Methods: In the LOVE-CD trial, early and late CD patients with moderate-severe disease activity (Crohn's Disease Activity Index (CDAI) 220-450) and presence of ulcers at baseline endoscopy were treated with VDZ for 52 weeks.[2] Early CD was defined as diagnosis <24 months and late CD as diagnosis >24 months and previous exposure to anti-TNF. All patients received standard doses of vedolizumab (300 mg at week 0,2 and 6 and further every 8 weeks with an additional dose at week 10 in case of clinical non-response) and underwent an endoscopy at week 0, 26 and 52. Corticosteroids were mandatorily tapered and had to be discontinued by week 26. Halfway the trial, after 130 patients (50%) had been included, the study protocol was amended by introducing dose intensification from 300 mg IV every 8 weeks to every 4 week in patients without endoscopic response (DSES-CD drop <50%) at week 26. The primary outcome was deep remission, defined as clinical (CDAI ≤150) and endoscopic remission (SES-CD ≤3) at week 52.
Results: In LOVE-CD, eighty-two patients (31.5%) were endoscopic non-responders at week 26 (44 prior to and 38 after the dose intensification amendment). Four patients in the dose intensification group were excluded from analysis due to missing week 52 endoscopy data. Apart from previous biological exposure (90.0% vs 73.5% in the dose intensification and standard dosing group, resp.), baseline characteristics were similar between the dose intensification and continued standard dosing groups (median SES-CD at baseline 11 (IQR 7-17) vs 13 (IQR 8-18) resp.). At week 52, the dose-intensified group had significantly higher VDZ serum concentrations at trough (mean 46.4 vs 16.3 ug/ml, p<0.001). However, there was no significant difference in endoscopic remission, clinical remission and deep remission rates at week 52 between the two groups. No significant differences in severe adverse events were observed between both groups (9.7% vs 13.6%, p=0.344).
Conclusion: In the LOVE-CD trial, dose intensification of vedolizumab in endoscopic non-responders with Crohn's Disease after 6 months of standard dosing was not effective.

Long-term outcomes of extended versus conventional adalimumab dose interval for patients with Crohn's disease in stable remission: 3-year follow-up of the randomized controlled LADI trial

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Background: In the randomized controlled LADI trial, a subset of patients with Crohn's disease (CD) maintained clinical remission following extension of the adalimumab dose interval. The aim of this study was to assess long-term clinical outcomes for trial participants who extended the adalimumab interval to 3 or 4 weeks compared to conventional dosing.

Methods: At baseline, we enrolled CD patients in biochemical and corticosteroid-free clinical remission (CFCR) on adalimumab 40 mg/2 weeks. The intervention group started on a 3-week interval and increased to 4 weeks at week 24, if in clinical and biochemical remission. Controls remained on adalimumab 40 mg/2 weeks. Data >48 weeks was collected between 2017 and 2023. The primary endpoint of the current study was the proportion of patients in CFCR (HBI ≤4 or remission per physician global assessment) at year 3 while maintaining the assigned baseline adalimumab interval (intervention: 40 mg/3-4 weeks, control: 40 mg/2 weeks). Secondary endpoints included biochemical remission (CRP <10 mg/L and/or FCP <250 µg/g), proportion of patients who discontinued adalimumab for stable remission, and adverse events (AEs). Patients without sufficient long-term data were excluded.

Results: Data was extracted for 143/174 initially randomized subjects (intervention: 95; control: 48). In the intervention group, 30/95 (31.6%) patients maintained de-escalation at 3 years (7 on a 3-week interval, 23 on a 4-week interval) while 4 patients stopped for stable remission. The primary endpoint was achieved in 28/95 (29.5%) at year 3, and 23/95 (24.2%) were in biochemical remission. Twenty-eight patients re-escalated to 40 mg/2 weeks, 24/28 were in CFCR at year 3. In the control group, 30/48 (62.5%) patients maintained the 2-week interval after 3 years with 27/48 (56.3%) in CFCR, and 20/48 (41.7%) in biochemical remission.

In addition to 4 subjects in each group that stopped adalimumab for stable remission, another 19 patients (13.3%) discontinued adalimumab by year 3 (intervention: n=17/95 (17.9%); control: n=2/48 (4.2%)). Discontinuation reasons were loss of response (n=9, 50.0% (8 in intervention group)), AEs (n=5, 27.8%), adalimumab antibodies (n=4, 22.2%, 3 in intervention group), and 1 missing. Twenty-three AEs occurred during long-term follow-up (intervention: 15; control: 8), including 10 infection-related AEs and 5 skin-related AEs.
Conclusion: Long-term follow-up showed that one-third of patients in the intervention group was in remission after continued de-escalation of adalimumab therapy at year 3, while another 25% recaptured remission after dose re-escalation. In the control group, over half of patients maintained remission on adalimumab every 2 weeks.

Characterizing multicellular communities in early-stage colorectal cancer to resolve cancer onset and progression

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Background: Population-based screening programs for colorectal cancer (CRC) have reduced the number of advanced CRC cases diagnosed while increasing the detection of pathological stage T1 (pT1) CRCs. For these early lesions, endoscopic resection is the preferred treatment due to its lower risk of complications and better outcomes compared to surgery. However, not all resections are curative: some patients require additional surgery to prevent lymph node or distance metastasis. The clinical challenge at the moment is the lack of accurate predictors for metastasis. This highlights the urgent need to better understand the biology of early-stage CRC and the mechanisms driving disease progression.
In recent years, technologies have evolved rapidly, allowing the multiplexed quantification of gene expression while preserving spatial context. This enables the identification of the multicellular interactions and biological processes at the basis of tumorigenesis.
Methods: Here, we applied spatial transcriptomics to pT1 CRC samples to elucidate the multicellular biology that is at the basis of cancer onset and progression. Using the Xenium platform (10x Genomics), we performed spatial transcriptomics profiling on six early-stage pT1 CRC samples, all of which were resected *en bloc* by endoscopic submucosal dissection. We employed a custom-designed probe set and analysis pipeline to distinguish various immune cell populations and their functional states within the CRC tumor microenvironment.
Results: We discovered that the tumor microenvironment of early-stage CRC is composed of various multicellular neighborhoods, including patches of $SPP1^{+}$ macrophages, tertiary lymphoid structures, and so-called “inflammatory hubs”. Inflammatory hubs were exclusively found at the luminal margin of the tumor and involve the active recruitment of neutrophils to the lumen by local fibroblasts that highly produce *CXCR1*/*CXCR2* ligands, including *CXCL1*, *CXCL5*, and *CXCL6*. These hubs originated in regions of the tissue containing dysplastic cells and evolved further in areas of high-grade dysplasia and cancer, suggesting a link between fibroblast-neutrophil interactions and malignant transformation.
Conclusion: Distinct multicellular communities emerge during CRC tumorigenesis, with specific cell-to-cell interactions linked to malignant transformation. These findings highlight the value of spatial transcriptomics in advancing our understanding of early-stage CRC biology and its potential to uncover novel biomarkers for predicting risk of metastasis, as well as informing strategies for CRC prevention.

Role of cancer associated fibroblasts in response to chemotherapeutic treatment in esophageal cancer

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Background: Esophageal adenocarcinoma (EAC) is a highly aggressive cancer with a poor prognosis due to late-stage detection and resistance to therapy. Cancer-associated fibroblasts (CAFs) within the tumor microenvironment (TME) play a critical role in drug resistance in solid tumors, including EAC. However, the exact mechanisms by which CAFs promote EAC tumorigenesis and therapeutic resistance remain unclear. Patient-derived organoids (PDOs) have shown promise in assessing patient-specific drug responses but have typically ignored the stromal component's impact on drug sensitivity. Given the growing evidence on the role of CAFs in modulating resistance to therapy in solid tumors, this project aims to investigate the interdependence between fibroblasts and tumor cells in EAC and the effect of chemotherapy on these cell types.
Methods: To representatively study tumorigenesis and test therapeutic strategies, this study aimed to develop clinically-relevant *minitumors* by incorporating both primary EAC organoids and patient-derived fibroblasts CAFs. Then, we examined the impact of the fibroblastic compartment on sensitivity to chemotherapeutic agents used in clinical practice i.e. carboplatin, paclitaxel using imaging techniques and viability assays.
Results: We successfully established *minitumor* models that strongly resemble the primary tumor tissue based on immunohistology and immunofluorescence markers. By exploring the CAF: organoid ratio and defining optimal media conditions, we developed an optimal timeline for chemotherapeutic compound testing. Remarkably, following chemotherapy, fibroblast viability was not inhibited. In particular, upon high carboplatin doses, fibroblast ATP-based viability was slightly increased compared to the untreated control. Correspondingly, chemotherapy resistance was increased in PDOs when co-cultured with CAFs, as we observed increased cell viability in all EAC PDO-fibroblast co-culture treatment groups compared to the PDO mono-cultures.
Conclusion: Overall, these results highlight the potential of our optimized co-culture protocol for studying tumor-stromal interactions *in vitro* and assessing personalized drug response in the future based on profiling potential CAF biomarkers in EAC patients.

Mocetinostat potentiates oncolytic reovirus therapy in pancreatic cancer through modulation of cancer-associated fibroblasts (CAFs)

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Background: Pancreatic ductal adenocarcinomas (PDAC) display an abundance of cancer-associated fibroblasts (CAFs), which negatively affect prognosis and therapy response. We have previously shown that oncolytic reovirus can target these CAFs, in addition to its known lytic action in tumor cells and immunostimulatory effects. As a result, they could use CAFs as a conduit for viral spread and simultaneously disrupt the desmoplastic barrier around tumors, accelerating the influx of other therapeutics and immune cells. We have shown that the susceptibility of CAFs to targeting by reovirus correlates with the cell surface expression levels of the reovirus entry receptor junction adhesion molecule A (JAM-A). While most pancreatic CAFs do not or hardly express JAM-A, it can be induced by silencing the gene Zeb1. Zeb1 expression can be targeted using the clinically applied HDAC inhibitor Mocetinostat. Additionally, Mocetinostat is known to induce anti-tumor immunity, which can synergize with reovirus-induced anti-tumor immune responses. Therefore, we explored this dual treatment option using *in vitro* and *in vivo* models of PDAC.
Methods: Patient-derived PDAC CAFs, tumor cells and co-culture models were treated with Mocetinostat followed by reovirus infection. Cell viability assays were performed to detect virus-induced cytotoxicity, and histologic analyses as well as flow cytometry were used to detect viral presence in the tumor cells and CAFs. Furthermore, the expression levels of JAM-A on tumor cells and CAFs, as well as immunostimulatory properties of Mocetinostat and reovirus were determined in the KPC3 syngeneic mouse model for PDAC using flow cytometry.
Results: Treating various patient-derived PDAC CAFs with different concentrations of Mocetinostat resulted in a dose-dependent increase in JAM-A expression. Furthermore, Mocetinostat and reovirus synergistically induced cell death in PDAC CAFs. Ongoing experiments in co-culture models will further validate the synergistic effects of this combination treatment in the presence of tumor cells. In vivo, the combination of Mocetinostat and reovirus is well-tolerated and shows a trend to decrease tumor volume. Flow cytometry data shows that both reovirus alone and the combination treatment increase anti-tumor immune responses. Further ex vivo analysis will reveal the full CAF- and immune-modulating effects of combining Mocetinostat with reovirus.
Conclusion: Combination treatment of Mocetinostat and reovirus increases CAF targeting, and is expected to increase overall viral spread and immunogenicity within tumors. Altogether, we identified a novel therapeutic strategy to increase reovirus therapy efficacy in stroma-rich and immune cold tumors like PDAC.

The effect Smad4 mutations on the PDAC tumour microenvironment

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Background: Cancer associated fibroblasts (CAFs) play a key role on prognosis and therapeutic response in pancreatic ductal adenocarcinoma (PDAC) by influencing the tumor microenvironment (TME) While initially thought to be a homogenous population, various distinct CAF subsets have shown to impact disease etiology and therapeutic responses. Central to influencing these CAF subset differentiation is the pleiotropic transforming growth factor (TGFβ) family of cytokines. The canonical TGFβ pathway is regulated by the transcription factor SMAD4, which is mutated in 55% of PDAC cases. Due to the high abundance of CAFs and high TGFβ signaling in activity PDAC, we hypothesize that SMAD4 mutations might drive CAF subset differentiation in PDAC.

Methods: We generated a lentiviral stable knock-in of SMAD4 in the homozygous SMAD4 deficient cell line BxPC3 (*BxPC3^{SMAD4+}, BxPC3^{puro}*) and a CRISPR-lentiV2 knockout in SMAD4 wild type Panc1 (*Panc1^{SMAD4-}, Panc1^{puro}*). Pancreatic stellate cell (PSC) line hPS1 and 5 primary patient-derived CAFs, were exposed to conditioned media (CM) from the SMAD4 proficient or deleted tumor cells to assess the differential effect of their secretomes on deriving CAF subset populations. Analysis was carried out using a qPCR panel for fibroblast subpopulations. ELISA was performed to evaluate changes in the CAF secretome.

Results: Exposure of hPS1 with PDAC CM induced polarization into different subsets, characterized by expression of PDPN, PAI-1, αSMA, POSTN, IL6, CXCL12, HLA-DRA and CD74. CM from *BxPC3^{SMAD4+}* induced a strong and stable IL-6 mRNA expression compared to SMAD4 deficient *BxPC3^{puro}*. Notably, we observed no discernable significant changes in αSMA, POSTN and HLA-DRA expressing populations or changes in secreted TGFβ. This was further confirmed in multiple primary patient derived fibroblasts. Surprisingly, deletion of SMAD4 in proficient *Panc1^{puro}* did not revert this phenotype, indicating 2 independent mechanisms at play. ELISA analysis confirmed upregulation of IL6 in the conditioned medium and phenotypic changes in CAF cultures.

Conclusion: Our results illustrate that tumor genetics might play an important role in shaping the TME of PDAC. We observe that modulation of SMAD4 in PDAC tumor cells has a pleiotropic effect on the expression of inflammatory cytokine IL6. Serum IL6 levels are a prognostic marker on PDAC disease severity, leading to increased pro-tumorigenic inflammation and liver metastasis. It is also known to play a role in exclusion of TME lymphocytes. Further investigations into functional effects on stromal and immune populations could lead to better stratification for effective stromal and tumor targeted therapies.

Epithelial calprotectin contributes to refractory Crohn's disease fistula through dysregulation of epithelial wound healing responses

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Background: Refractory perianal fistula in Crohn's disease (CD) still present an unmet clinical need with a high disease burden. Despite increasing interest, pathophysiology leading to the refractory phenotype remains unclear, with only epithelial-to-mesenchymal-transitioning (EMT) commonly mentioned as a contributing factor. Using a systematic approach comparing therapy refractory CD fistula, therapy responsive non-IBD fistula and normal rectum, we aimed to differentiate between general healing responses and dysregulation thereof in refractory CD fistula.
Methods: Total RNASeq (n=51), single cell RNASeq (n=62) and spatial transcriptomic (n=8) analysis were performed on the internal opening and tract of CD and idiopathic fistula. Results were validated using immunohistochemistry. Functional studies were performed in human organoid cultures and intestinal cell lines.
Results: In the fistula tracts we identified development of a squamous type of epithelium characterized by expression of *WFDC2, keratin 5 and keratin 13*. Although some EMT markers were expressed in the squamous epithelium or its intermediates, no activation of a complete EMT program was detected in any of the tissue types, regardless of the underlying diagnosis. Upstream analysis indicated TNFa, IL6 and TGFb as inducers of WFDC2+ epithelium, and human adult colon organoids stimulated with these cytokines (but not TGFb alone) indeed showed a transciptional profile similar to the fistula epithelium confirming redifferentiation potential. While WFDC2+ epithelium did occur in CD fistula, abundance was strongly decreased compared to non-IBD fistula. In addition, those WFDC2+ cells present had a more pro-inflammatory profile and were morphologically disorganized. Surprisingly, pseudotime analysis indicated epithelial calprotectin (S100A8/9) as a key factor in the aberrant development of WFDC2+ tissue in CD. Normal intestinal epithelium does not express calprotectin, but a mix of cytokines present in fistula induced clear intracellular expression of S100A8/9 in both epithelial cell lines and colon organoids. In CD fistula, calprotectin expression was particularly intranuclear, suggesting a transcriptional role. CHIP analysis indeed showed binding of calprotectin to various inflammatory genes and knockdown of calprotectin abrogated expression of these genes indicating a crucial regulatory role.
Conclusion: This data identifies redifferentiation of rectal mucosa to a squamous phenotype as a normal damage response during fistula formation. However, in CD patients, transcriptional effects of calprotectin derail this process, resulting in disorganized inflammatory tissue not amenable for surgical closure and contributing to refractory disease.

Pancreatic duct micro-biopsy of chronic pancreatitis patients allows growth of ductal organoids suitable for ion transport measurements

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Background: Loss of electrolyte and fluid secretion by pancreatic ductal epithelial cells is thought to play an important role in the etiology of pancreatitis. In particular, dysfunction of the cystic fibrosis transmembrane conductance regulator (CFTR) anion channel has been associated with both genetic and acquired forms of pancreatitis. Access to pancreatic tissue of pancreatitis patients is limited, and few options are available to model pancreatitis *ex vivo*. Endoscopic advances could aid development of novel human models of pancreatitis, to investigate ductal ion transport and the potential beneficial effects of CFTR modulators.
Methods: Calcifying chronic pancreatitis patients undergoing ERCP for electrohydraulic lithotripsy were included. Micro-biopsies of the main pancreatic duct were obtained using the SpyGlass™ DS Direct Visualization System and processed for organoid establishment. Gene expression and protein localization were evaluated by RT-qPCR and immunofluorescent staining, respectively. Epithelial ion and fluid transport, and the beneficial effects of CFTR modulators, were assessed by short circuit current measurements and forskolin induced swelling assay.
Results: Organoids were established from micro-biopsies in 2 out of 5 patients sampled. Isolated cells formed spheroids when cultured in an extracellular matrix and cultures could be expanded and subcultured >10 passages. Organoids contained ductal, epithelial markers (KRT19, KRT7, SOX9, HNF-1β, ECAD), and showed polarized localization of the tight junction protein ZO-1 and of CFTR. Cells expressed ion transporters involved in bicarbonate secretion, including *CFTR*, *PAT1* (*SLC26A6*) and *NBCe1* (*SLC4A4*). cAMP and calcium-dependent anion secretion could be stimulated across epithelial monolayers. In the one patient examined so far, treatment with CFTR modulators, i.e. the potentiator ivacaftor (IVA) and the correctors elexacaftor (ELX) and tezacaftor (TEZ), enhanced fluid transport.
Conclusion: Pancreatic duct micro-biopsy of chronic pancreatitis patients allows growth of ductal organoids that recapitulate the ion transport properties of pancreatic ductal cells. We propose that these organoids are a relevant model not only to study pancreatic ductal electrolyte and fluid secretion and its role in chronic pancreatitis, but also to explore for precision medicine in chronic pancreatitis patients. Future device developments enabling to take bigger intraductal biopsies are likely to further facilitate access to this unique material.

JAK inhibition to target fibroblasts and IBD-related fibrosis

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Background: Intestinal fibrosis is a common complication of inflammatory bowel disease (IBD). Uncontrolled accumulation of extracellular matrix deposited by fibroblasts is thought to be the underlying cause of fibrogenesis. Janus kinases (JAK) inhibitors are a relatively novel therapeutic strategy in IBD which show a robust anti-inflammatory effect. We hypothesize that JAK-inhibitors might not only play a role in IBD by reducing inflammation, but also offer a potential to treat intestinal fibrosis. In this study we explored the effects of JAK inhibition on intestinal fibroblasts *in vitro* and *in vivo*.

Methods: *In vitro* studies were performed with human CCD-18Co and primary colonic fibroblasts. Levels of activated JAKs and STATs were detected by western blot after cytokine stimulation and were inhibited using tofacitinib (10uM) or upadacitinib (10uM). For the T cell transfer colitis model, Rag-/- mice (n=5-12 mice/group) were used. After engraftment of donor T cells, the severity of colitis was evaluated with the mouse endoscopy score (MEICS) and mice were treated with upadacitinib (20mg/kg, 4x/week intraperitoneal injection). Intestinal fibroblast subsets were analyzed using anti-CD90, anti-αSMA, anti-podoplanin, anti-FAP, anti-PDGFR-α and -β by flow cytometry. Sirius red staining was performed to measure collagen deposition. Activated JAKs and downstream STATs expression were detected by immunofluorescent staining.

Results: Re-analysis of our previously published single-cell RNA sequencing data from fibrostenotic tissue of Crohn's disease patients identified that a pathogenic subset of activated FAP^+ fibroblasts was driven by STAT3 activation. Inflammatory cytokines activated the JAK-STAT pathway in human fibroblasts and both upadacitinib and tofacitinib strongly inhibited pJAK1, pJAK2, pSTAT1 and pSTAT3 in a concentration dependent manner. Mice treated with upadacitinib showed a significantly lower MEICS compared to controls (2.4 vs 5.3). Interestingly, specific intestinal fibroblast subsets, e.g. $CD90^+PDGFR\text{-}\beta^+$ fibroblasts were less abundant upon JAK-inhibition. pSTAT3 expression in the colon seemed to change after JAK inhibition. Furthermore, upadacitinib restored the amount and distribution of collagen in the colon.

Conclusion: Our study is the first to describe that the JAK-STAT pathway can be activated in intestinal fibroblasts and JAK-inhibitors including upadacitinib/ tofacitinib suppress this pathway *in vitro.* Furthermore, human data show the JAK-STAT pathway activation in FAP^+ fibroblasts and in mice, JAK inhibition has an effect on fibroblasts subsets and collagen deposition. This shows the potential of JAK-inhibitors to target more than immune cells.

Ingestible technology for examining gut health

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Background: The human gastrointestinal (GI) tract is difficult to examine due to its length and complex structure. Existing diagnostic methods are either invasive, like endoscopy, or only reflect a part of the GI tract, as with fecal tests. While endoscopic capsules offer a visual inspection of the whole GI tract, they still require uncomfortable bowel preparation with laxatives and dietary restrictions. Innovative ingestible technologies have the potential to revolutionize gut research and diagnosis and monitoring of GI diseases and disorders.
Methods: We have developed a highly miniaturized ultra-low power ingestible sensor, capable of measuring temperature, pH, and redox balance data along the GI tract. Redox balance is essential for gut health, regulating the intestinal barrier and interactions among the host, immune system, and microbiota, with disruptions contributing to oxidative stress in conditions like IBD and gastrointestinal cancers. Data from the ingestible device is transmitted wirelessly to a wearable receiver. In vitro and in vivo preclinical models were used to validate the sensors. A first-in-human study was performed in 15 healthy volunteers.
Results: The GISMO system's first-in-human trial showed it to be safe, easy to use, and effective in providing high-resolution, real-time data on gut redox balance from the stomach to the colon.
Conclusion: This innovative, non-invasive technology could revolutionize diagnosis and monitoring of gastrointestinal diseases like inflammatory bowel disease by enabling objective measurements without uncomfortable procedures.

Profiling inflammation-associated T helper subsets in Inflammatory Bowel Disease

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Background: Microbiota-specific $CD4^+$ T cells are believed to be major drivers of inflammation in Inflammatory Bowel Disease (IBD). In previous projects we have identified several $CD4^+$ T cell subsets enriched in the inflamed mucosa from naïve patients, especially a colon-specific increase of HLA-$DR^+CD38^+CD4^+$ memory T cells. However, the functional properties remained to be elucidated. We therefore aimed to characterize $CD4^+$ helper T cell lineage-specifying transcription factor (TF) expression and cytokine profiles in mucosa and circulation from IBD patients.
Methods: We collected intestinal samples and peripheral blood from patients and controls without an inflammatory disease undergoing diagnostic ileocolonoscopy, and subsequently employed 5-laser spectral flow cytometry to analyse single-cell data.
Results: For phenotypic characterization, a 37-antibody panel including TF and chemokine receptors was applied to 70 intestinal samples from 16 Crohn's Disease and 12 Ulcerative Colitis patients including 22 non-inflamed, 22 inflamed samples and 16 samples in remission, as well as 10 control samples. Unbiased tSNE-based analysis revealed an increase of $Foxp3^+$ Treg cells in inflamed mucosa. Particularly, in Ki-67^+RORγt^+ cells, we identified a cluster co-expressing Foxp3 and Helios, and a cluster expressed T-bet were enriched in inflamed colonic biopsies. As described before, two clusters of activated RORγt^+HLA-DR^+CD38^+ T cell subset, one $CD103^+$ and another $CD103^-$, were increased in frequency in inflamed biopsies. Both clusters expressed CTLA-4, CD39 and Ki-67. In contrast, the frequencies of RORγt^+ NKT-like cells ($CD161^+CD69^+CD103^-$) were decreased in inflamed tissues.
Next, we measured cytokine production in $CD4^+$ T intestinal cells upon anti-CD3/CD28 stimulation of 4 non-inflamed and 5 inflamed samples from patients, and 8 non-inflamed samples from controls. Frequencies of multifunctional $CD103^+$ and $CD103^-$ $CD154^+$ cells simultaneously producing IFNγ, TNFα and IL-2 were decreased in inflamed biopsies, with most cells expressing $CD161^+CD39^-CD27^-$.
Conclusion: In conclusion, we observed that a Th17/Treg and a Th17/Th1 subset were increased in inflamed biopsies, which we hypothesize to represent a transformation of Th17 to Treg or Th1. In addition, the HLA-DR^+CD38^+ subset displaying a Th17 profile was proliferating in inflamed mucosa, indicative of an active role in the disease pathogenesis. Simultaneously, Tregs were upregulated while $CD4^+$ T cells produced less cytokines in inflamed mucosa, potentially indicating that Treg cells suppress the pro-inflammatory $CD4^+$ T cell response in IBD patients. Thus, our results provide new clues about the functional contribution of $CD4^+$ T cells to inflammation in IBD.

Selective immune responses to Lachnospiraceae flagellins discriminate therapy-naive pediatric Crohn's disease patients with distinct host-microbial interaction

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Background: Pathogenic CD4$^+$ T-cell responses to commensal microbial antigens drive intestinal inflammation in Crohn's disease (CD). Both hypo- or hyperactive anti-microbial innate immunity could underlie these aberrant T-cell responses. CD patients have increased IgG and T cell responses against commensal *Lachnospiraceae*-derived flagellins, which associate with complicated disease. We investigated whether CD patients with high anti-*Lachnospiraceae* flagellin responses at diagnosis have underlying innate hypo- or hyperresponsiveness and high IgG responses to other dysbiotic commensals.
Methods: Plasma IgG reactivity to 19 recombinant flagellins from *Lachnospiraceae* species colonizing mouse and human gut, was measured in therapy-naïve pediatric CD patients (n=49) and controls (n=29). In addition, we measured plasma IgG responses to 1 recombinant flagellin and 71 microbial lysates of dysbiotic commensal species in therapy-naive pediatric CD patients (n=103) and controls (n=61). IgG responses were related to immunological and clinicopathological parameters.
Results: CD patients had significantly higher IgG responses to 12/19 *Lachnospiraceae*-derived flagellins compared to controls. Multi-reactivity to more than 10 flagellins was common in CD (41%) and associated with increased circulating flagellin-specific memory CD4$^+$ T-cell frequencies. Multi-reactivity, and even single-reactivity to recombinant flagellin, correlated with reduced immune cell infiltration and epithelial damage, and fewer calprotectin-positive neutrophils in colonic lesional tissue, based on histological severity scoring and immune histochemistry, respectively. As these data may argue that high anti-flagellin IgG reactivity relates to innate hyporesponsiveness, we next assessed whether patients had a generalized high IgG response to lysates of dysbiotic intestinal bacteria. Hierarchical clustering identified subgroups of CD patients with different patterns of significantly increased anti-commensal IgG responses. Patients with high anti-*Lachnospiraceae* flagellin IgG also had high IgG responses against lysate of *Roseburia inulinivorans*, a *Lachnospiraceae* species. Of these anti-flagellin high responders, two-thirds responded to many commensals while one-third did not, arguing against a generalized high anti-commensal IgG response.
Conclusion: In sum, high IgG responses to *Lachnospiraceae*-derived flagellins identify a subgroup of pediatric therapy-naive CD patients with features of innate hyporesponsiveness. These patients do not have uniformly high IgG responses to other dysbiotic commensals, arguing that disturbed host-microbiota responses in CD are highly personalized and do not stem from an overall failure in microbiota-host crosstalk.

Albumin as a therapeutic target for endothelial dysfunction in patients with decompensated cirrhosis.

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Background: Endothelial cell (EC) dysfunction is a critical driver of disease progression in patients with liver cirrhosis, contributing to acute decompensation (AD) and acute-on-chronic liver failure (ACLF). The administration of human albumin in cirrhotic patients with hypoalbuminemia has been shown to improve EC function. However, the direct effects of albumin on ECs in cirrhosis are unknown. Furthermore, it is unknown which patient category might benefit from albumin treatment. This study investigates *ex vivo* the impact of human albumin administration on ECs exposed to plasma derived from patients with different stages of cirrhosis, in order to explore the mechanisms underlying its protective effects and therapeutic response.
Methods: A high-throughput *in vitro* EC model was used to observe EC responses to patient-derived plasma with or without albumin administration. Cultured human umbilical vein ECs were exposed to plasma from patients with decompensated cirrhosis (DC) and hypoalbuminemia (serum albumin < 30g/L, n=20), patients with compensated cirrhosis (CC, serum albumin >30 g/L, n=20), or healthy controls (HC, n=20). Albumin was administered to DC and HC plasma samples, aiming at physiological levels (~40 g/L) in patients with DC and supraphysiological levels in HC. The modulatory effects of albumin on EC activation were tested for well-described circulating factors involved in EC dysfunction (lipopolysaccharide (LPS), TNFα and bilirubin). Multiple cellular components were investigated using high-content imaging and multivariate analysis.
Results: Factor analysis identified mitochondrial morphology as a key feature responsible for the discrimination between patients with DC from those with CC and HC. Multivariate analysis revealed that albumin administration shifted EC morphology in DC plasma toward a healthier phenotype, resembling the plasma of patients with CC and HC. No significant shifts in morphology were observed upon titration of albumin to EC's stimulated by LPS, TNFα or bilirubin.
Conclusion: Plasma from patients with decompensated cirrhosis and hypoalbuminemia induces important morphological changes to ECs, of which changes in mitochondrial morphology are most discriminative. Albumin administration reduces EC activation and dysfunction induced by plasma from DC patients and hypoalbuminemia. These data underline the crucial role of albumin in EC function and point towards a potential therapeutic role of albumin in reducing vascular dysregulation and liver disease progression. Further research is required to explore the potential of this assay in predicting therapeutic responses to albumin.

Comparative analysis of gastric motility with Gastric Alimetry and antro-duodenal manometry

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Background: Chronic gastrointestinal (GI) symptoms are prevalent worldwide, and limited diagnostic and treatment approaches are available. Antro-duodenal manometry (ADM) is currently used to evaluate gastric and duodenal motility. However, it is not widely available and infrequently used due to its invasiveness and complex analysis. Gastric Alimetry® (GA) is a new non-invasive test for the evaluation of gastric function that combines body surface gastric mapping (BSGM) with validated symptom profiling. This study compared gastric motility measurements between GA and ADM.
Methods: Patients referred to Maastricht University Medical Centre for GI motility evaluation and undergoing ADM between 2023 to 2024 were included. GA (Alimetry, New Zealand) recordings were performed simultaneously to ADM, which comprises a high-resolution array (66 electrodes), wearable reader, and validated symptom-logging app. Measurements included a 30-minute fasting period, a standardized meal, and a 4-hour postprandial phase. Reference intervals for BSGM metrics, including Principal Gastric Frequency, were compared to equivalent ADM parameters both in distal antrum (3 cm above pylorus) and in proximal antrum (6 cm above distal antrum). Manometry data were analyzed with MMS Database Software (Laborie version 10.1 MMS, Enschede, the Netherlands) to calculate the manometric event rate, and with WrinkleScope software (Version 0.5.0) to assess spectral frequencies.
Results: Thirty-five patients were included (29 women, median age 46.0 (29.0) years; BMI 23.2 (6.1) kg/m²). The median ADM contraction rate in distal antrum as measured with the Laborie system was 1.33 (1.27) contractions per minute (cpm) versus a frequency of 2.83 (0.37) cpm with WrinkleScope software. The Principal Gastric frequency via GA was 3.04 (0.33) cpm.
Distal antral ADM contraction rates were significantly different from spectral frequencies on GA ($P < 0.05$). In contrast, WrinkleScope analysis showed that ADM contraction rates, both in distal and proximal antrum, were similar compared to GA frequencies ($P = 0.83$ and $P = 0.57$, respectively).
Conclusion: Current clinical methods for calculating antral motility on ADM (event rate counts) differ significantly from true frequencies calculated using spectral analysis techniques. When spectral analysis is applied, ADM data is concordant with non-invasive Gastric Alimetry. Further work is needed to optimize clinical methods for a more robust assessment of antral motility.

Interstitial cells of Cajal are depleted in gastroparetic pyloric muscular biopsies obtained during gastric per-oral endoscopic pyloromyotomy: A comparison with non-gastroparetic surgical pyloric samples

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Background: Gastroparesis (GP) is a gastrointestinal (GI) motility disorder characterized by delayed gastric emptying and upper GI symptoms without evidence for mechanical obstruction. Although its pathophysiology remains unclear, pyloric dysfunction is considered a significant factor. Given the variable outcomes of pyloric-targeted therapies, histopathological analysis of pyloric biopsies may offer insights into GP mechanisms. This study compared the histopathology of pyloric biopsies from GP patients undergoing gastric per-oral endoscopic pyloromyotomy (G-POEM) with full-thickness stomach samples from non-GP patients who had surgery for different indications.
Methods: Two patient cohorts were included: (1) patients with refractory GP who underwent G-POEM (2018-2021), and (2) a non-GP group with pyloric, antral, and corpus surgical samples (2022-2024). Hematoxylin and eosin-stained sections were analyzed microscopically to assess the presence of mucosa, submucosa, muscularis propria and inflammation, necrosis or ischemia. CD117 immunohistochemistry was used to evaluate the number of interstitial cells of Cajal (ICCs) in the muscularis propria by manual counting of CD117 positive cells. The mean CD117 positive cell count across 5 high power fields (HPFs) was used for analysis.
Results: Pyloric biopsies from 30 refractory GP patients (27 women, median age 55.5 years) were included, categorized as idiopathic (n=17), diabetic (n=10), and post-surgical (n=3). The control group included 18 patients (10 women, median age 68.5 years) with pyloric (n=12), antral (n=4), and corpus (n=5) surgical samples obtained for malignant (72%) or benign (28%) indications. Biopsies included submucosa and muscularis propria, while the surgical samples contained the whole gastric wall. ICC counts in surgical samples were similar across pyloric (19.6 cells/HPF), antral (24.2 cells/HPF) and corpus (16.2 cells/HPF) samples ($P > 0.05$). ICC counts were lower in pyloric biopsies than in surgical pyloric samples (1.6 vs 19.6 cells/HPF, $P = < 0.001$), showing ICC depletion in 28 (93%) GP patients compared to none in the control group (cut-off: 10 cells/HPF). Within the GP group, the ICC count was similar between G-POEM responders and non-responders ($P = 0.739$) and between diabetic and non-diabetic subtypes ($P = 0.580$).
Conclusion: Pyloric biopsies from GP patients obtained during G-POEM are suitable for evaluating ICC counts in the muscularis propria. GP patients showed a significant reduction in ICC counts in pyloric biopsies, regardless of the underlying GP etiology. These findings offer opportunities for further research into the pathophysiological mechanisms of GP.

Tailored treatment of functional dyspepsia with nortriptyline: a multi-center double-blind placebo-controlled trial (tender)

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Background: Tricyclic antidepressants (TCAs) are used in the treatment of functional dyspepsia (FD), but high-quality controlled trials are lacking. We studied the efficacy of nortriptyline (escalating dose regimen of 10, 25 and 50mg) vs placebo in patients with FD following a genotype-guided pre-selection based on cytochrome P450 2D6 (CYP2D6), the primary enzyme responsible for nortriptyline metabolism.
Methods: We performed a double-blind, placebo-controlled trial of patients with FD (Rome IV criteria) recruited from 11 hospitals in the Netherlands. Slow, intermediate or ultrarapid CYP2D6 metabolisers were excluded. Following a 2-week run-in period, in which baseline symptom severity was determined, patients were randomized 1:1 into nortriptyline or placebo for a 12-week treatment period. Nortriptyline serum levels were measured in the second week of treatment. The primary endpoint was response in overall FD symptoms, defined as a decrease of ≥30% from baseline in weekly average composite score of epigastric pain, burning, early satiation, and postprandial fullness in 50% of the last 10 weeks of treatment. Secondary endpoints included adverse events, among others. At the end of treatment, patients were asked which treatment they believe to have received.
Results: 96 patients were included, of whom 69 patients were randomized and included in the ITT analysis (mean age, 40 years; female, 73%). Placebo treatment resulted in higher response compared to nortriptyline, albeit not statistically significant (58 vs 45%, p=0.06). There was no significant difference in number of adverse events (nortriptyline vs placebo: 3.1 vs 2.3, p=0.346). Nortriptyline serum levels were significantly higher in responders compared to non-responders (14.2±3.8 vs 10.5±6.8 µg/L, p=0.002). The belief of receiving nortriptyline resulted in higher response rate compared to the belief of receiving placebo (77 vs 64%, p=0.007), regardless of the actual allocation status. Similarly, more adverse events were observed in the patients believing to have received nortriptyline compared to those believing to have received placebo (3.4 vs 1.4, p=0.002). No significant differences were found in the secondary endpoints.
Conclusion: Nortriptyline was not more effective than placebo in reducing FD symptoms in patients preselected based on CYP2D6 genotype. The positive relation between serum concentration and response suggests a biological effect of nortriptyline. However, effects related to expectancy appear stronger, as the belief of receiving nortriptyline significantly increased response rate and number of adverse events. These results necessitate further research into placebo/nocebo effects in clinical management of FD.

Face-to-face versus online hypnotherapy for the treatment of Irritable Bowel Syndrome: a multicenter three-armed randomized controlled trial (FORTITUDE)

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Background: Hypnotherapy is an evidence-based psychological therapy recommended in international guidelines for the management of Irritable Bowel Syndrome (IBS). However, therapist-led sessions are costly and hampered by limited availability of certified hypnotherapists. Therefore, we studied the non-inferiority of online hypnotherapy compared to face-to-face (f-t-f) therapist delivered hypnotherapy.
Methods: This multicenter, three-armed randomized controlled trial (RCT) recruited Rome IV IBS patients from 7 Dutch hospitals (2019-2024). Patients were randomized 1:1:1 to f-t-f hypnotherapy (bi-weekly sessions), online hypnotherapy (smartphone application), or online psychoeducation (control group, web application) for a 12-week treatment period, followed by 4-week follow-up. The primary endpoint was abdominal pain response (per FDA definition, i.e., a ≥30% reduction from baseline in weekly average of worst daily abdominal pain in at least 2 out of 4 weeks follow-up). The non-inferiority margin was defined as 10%. Secondary endpoints included ≥50 points IBS-SSS score reduction, adherence to therapy, response rates in relation to treatment preference, and treatment effect on comorbid psychological symptoms (i.e., PHQ-9 and GAD-7).
Results: A total of 230 patients (mean age 38.2±13.8 years, 70.4% female) were randomized. FDA abdominal pain response rates were 48% for f-t-f hypnotherapy, 33% for online hypnotherapy, and 22% for psychoeducation. Online hypnotherapy was not non-inferior to f-t-f hypnotherapy (-15%, 95% CI [-0.29, 0.01]). F-t-f hypnotherapy was superior to psychoeducation (OR 5.57, 95% CI [2.13, 14.5], p<0.001). IBS-SSS response rates directly after the treatment period were 69% (f-t-f) versus 67% versus 46%, respectively, with both hypnotherapy groups superior to psychoeducation at week 12 (p<0.001). Therapy preference, 75% for f-t-f hypnotherapy, 22% for online hypnotherapy, and 3% for psychoeducation, did not significantly affect response rates. There were no significant treatment effects on comorbid psychological symptoms between groups. Self-reported adherence to therapy was highest for f-t-f hypnotherapy (86%), followed by psychoeducation (67%) and online hypnotherapy (63%).
Conclusion: This multicenter RCT showed that online hypnotherapy did not reach non-inferiority to f-t-f hypnotherapy in reducing abdominal pain (FDA definition). However, substantial online hypnotherapy response rates for both FDA and IBS-SSS responder endpoints highlight its potential as a broad applicability and potential cost-effective alternative. Long-term follow-up results (6 months and 1 year) and cost-effectiveness analysis of our study will follow.

Colonic mucosal TRPA1 expression profiles in irritable bowel syndrome and its correlation to symptom severity: an exploratory study

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Background: Visceral hypersensitivity is a hallmark of irritable bowel syndrome (IBS). Transient receptor potential (TRP) channels are known as molecules involved in the pathogenesis of visceral hypersensitivity. A putative role for the Transient Receptor Potential Ankyrin 1 (TRPA1) channel in colonic nociceptor activation and mechanosensitation has been shown in animal studies. The main objective of this study was to determine TRPA1 mRNA expression in the colonic mucosa and ascertain its correlation with symptom-severity in IBS patients. Second, difference in TRPA1 mRNA expression between IBS patients and healthy controls along with regional differences in TRPA1 mRNA expression was analyzed.
Methods: IBS patients (Rome III) and healthy controls were included. Sigmoid biopsies were obtained in all subjects. Additional biopsies of the proximal colon were obtained in 24/30 IBS patients. TRPA1 mRNA levels were measured in duplicate by quantitative reverse-transcriptase–polymerase-chain-reaction (Biorad), using primers from Biolegio and normalized to GAPDH. Levels of mRNA were expressed as relative mRNA values using the $-2^{\Delta Ct}$ method. A multivariate regression was utilized to compare mRNA-expression between IBS patients vs healthy controls. Symptoms in IBS patients were assessed using the Gastrointestinal Symptom Rating Scale (GSRS).
Results: 30 IBS patients (median age 39.0 yrs, 80% female) and 23 healthy controls (median age 22.7 yrs, 43.5% female) were included. Relative TRPA1 mRNA expression in the sigmoid was significantly higher in IBS patients compared to healthy controls ($P<0.001$), independent of age and gender. There was no significant difference in relative TRPA1 mRNA expression between IBS subtypes ($P>0.05$). Within IBS patients expression of TRPA1 mRNA of sigmoid-biopsies was significantly higher compared to biopsies of the proximal colon ($p<0.001$). No significant correlation between TRPA1 expression in sigmoid or proximal colon in GSRS scales ($n=27$) was found.
Conclusion: In IBS patients relative TRPA1 mRNA expression in colonic biopsies is significantly elevated compared to healthy controls. Furthermore, relative TRPA1 mRNA expression is higher in sigmoid colonic biopsies than in proximal colonic biopsies of IBS patients. These findings suggest a potential for the TRPA1 pathway as a target for IBS treatment in the future. However, no correlation between TRPA1 mRNA expression and symptom severity was found. Therefore, further research towards the clinical relevance of the increased TRPA1 mRNA-expression in IBS-patients along with its location-specific expression is warranted.

Faecal Incontinence Core Outcome Set: an international Delphi consensus exercise among patients, healthcare professionals and researchers

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Background: Faecal Incontinence (FI) is a debilitating anorectal disorder that can severely impact a person's quality of life (QoL). The variability in reported outcomes in studies on treatments for FI complicates the synthesis of evidence, thereby weakening treatment recommendations. Furthermore, the emphasis on clinical parameters often neglects outcomes that are crucial to patients' daily lives. With this study, we aim to develop a Core Outcome Set (COS), a minimum set of outcomes that should be measured in future studies evaluating the effectiveness of a treatment in adult patients with FI.
Methods: Following guidelines from the Core Outcome Measures in Effectiveness Trials (COMET) initiative, this study proceeded through three steps: (1) identifying outcomes that define treatment success via patient interviews and a systematic literature review; (2) prioritizing outcomes through Delphi surveys involving patients, healthcare professionals and researchers; (3) finalizing the COS through a consensus meeting with relevant stakeholders.
Results: The first Delphi survey round included 109 participants (73 healthcare professionals/researchers, 36 patients) who ranked the importance of 57 outcomes using a 9-point Likert scale. After two rounds, 24 outcomes were voted out, while the 33 remaining outcomes were discussed during a consensus meeting to finalize the COS. This COS encompasses 13 outcomes, seven 'QoL' related outcomes: 'QoL', 'Influence on daily activities', 'Social functioning', 'Treatment satisfaction', 'Enjoyment in life' 'Embarrassment' and 'Peace of mind' and six 'Clinical' related outcomes: 'Severity of FI', 'FI episodes', 'Urgency', 'Stool consistency', 'Adverse events' and 'Adherence to therapy'.
Conclusion: This study establishes 'what' outcomes should be included in a COS for use in FI research. By incorporating diverse stakeholder perspectives, ensuring patient involvement throughout the whole project and fostering international collaboration, the COS aims to enhance research quality, facilitate meta-analyses, and improve clinical decision-making. Future research is needed to identify the appropriate measurement instruments for each outcome and to establish appropriate timing for their assessment, which will further refine outcome definitions before implementing the COS in FI research. Once these aspects are clarified, efforts can then focus on the COS's widespread adoption in FI research.

Fistula-derived fibroblasts express genes associated with a dysfunctional wound healing process

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Background: Approximately a third of patients with Crohn's Disease will develop perianal fistulas. Perianal fistulas greatly impact the quality of life by causing pain, discharge and faecal incontinence. Current drug treatments in combination with surgery are not very effective in curing fistulas, and only a low number of patients with complex fistulas reach complete remission. One of the main reasons for the lack of treatment options is our limited understanding of the formation of these fistulas. In this study we investigated the role of fibroblasts in the formation of perianal fistulas by evaluating their expression profiles compared to healthy colonic fibroblasts.
Methods: To gain more insight into the characteristics of fistula fibroblasts, fibroblasts were isolated from fistula scrapings derived during drainage surgery from both CD (n = 8) and non-CD patients (n = 6) and from healthy colon tissue of non-IBD patients (n = 18). After expanding the fibroblasts *in vitro*, they were subjected to mRNA sequencing. After sequence alignment, gene set enrichment and pathway activation analysis was performed. Differentially regulated processes were further investigated *in vitro* to confirm these results.
Results: Remarkably, fibroblasts isolated from CD and non-CD fistulas share a similar transcriptional profile, with only 25 differentially expressed genes (DEGs) found between them. Comparing fistula derived fibroblasts with healthy colon fibroblasts revealed 3606 DEGs. Pathway analysis revealed increased extracellular matrix remodelling and proliferation but reduced inflammation in fistula fibroblasts compared to healthy colon. Strikingly, although collagen type 1 production was increased, myofibroblast-associated genes such as *ACTA2*, *LRRC17*, *LRRC32*, *NKX2-3* and *RSPO3* were decreased in fistula fibroblasts. We confirmed these observations *in vitro*.
Conclusion: Currently, CD and non-CD fistulas are treated differently. Whereas surgical removal is the main treatment for non-CD fistulas, CD fistulas are primarily treated with the combination of surgery and medication targeting inflammation. However, our results suggest that at least the fibroblasts isolated these fistulas are very much similar on a transcriptional level. We found these fibroblasts display a signature that seems to point at aberrant wound-healing. Further research in 3D co-cultures, comparing the role of fistula and healthy fibroblasts, will elucidate the role of these cells in the formation of fistulas.

The immune system of patients with immune-mediated diseases perceives dysbiotic intestinal microbial species, and IgG reactivity uncovers shared and non-shared responses across diseases

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Background: Immune-mediated diseases (IMIDs), like Crohn's disease (CD), ulcerative colitis (UC), psoriatic arthritis (PsA) and type I diabetes (T1D), have common features, including intestinal microbial dysbiosis. However, it is unclear whether dysbiosis contributes to IMID pathogenesis and whether the host immune system perceives dysbiotic species. In CD, high IgG and T-cell responses to *Lachnospiraceae*-derived flagellins associate with complex disease, while *Lachnospiraceae* fecal abundance is decreased, suggesting that individual variation in the host-microbial mutualism is important. We studied IgG responses to dysbiotic microbial species across IMIDs, and assessed whether changes in IgG responses are homogeneous within each IMID and shared among IMIDs.
Methods: Using shotgun metagenomic sequencing of feces from 6 IMID cohorts (n=5650), dysbiosis was extrapolated to species level. Plasma IgG responses to lysates of 71 dysbiotic species was measured in adult CD (aCD, n=50), adult UC (aUC, n=50), PsA (n=100), rheumatoid arthritis (RA, n=74), T1D (n=75), healthy controls (aHC, n=97), pediatric CD (pCD, *n*=103), pediatric UC (pUC, n=48), pediatric HC (pHC, n=58), pediatric celiac disease (CeD, n=103) and no-CeD HC (n=68). We performed multiple ordinal regression analysis corrected for age, sex and multiple testing.
Results: Anti-microbial IgG responses compared to HC were increased in aCD (2/71); pCD (46/71); PsA (3/71); RA (1/71); decreased in T1D (10/71) and pUC (1/71), and not changed in CeD and aUC. Shared increased responses occurred to: *Klebsiella oxytoca* and *Roseburia inulinivorans* in aCD and pCD, *Streptococcus parasanguinis* and *Streptococcus vestibularis* in PsA and pCD, and *Acidaminococcus intestini* in the arthritic diseases PsA and RA. As changes were heterogeneous within each IMID, hierarchical clustering of anti-microbial responses across adult IMIDs was performed. Clusters had a mix of IMIDs, revealing shared response patterns across IMIDs. Although aCD and aUC patients had disease-specific responses, their overall anti-microbial response pattern was similar to other IMIDs. In contrast, pCD patients were clearly distinct from pUC and pHC, with high number of significantly increased anti-microbial IgG responses and separate hierarchical clustering, demonstrating overall increased anti-microbial responses in pCD versus aCD. Interestingly, clustering grouped pCD patients with similar clinicopathological parameters, arguing that anti-microbial IgG response patterns may relate to disease pathogenesis.
Conclusion: We show that the immune system perceives dysbiotic commensals and uncover shared and non-shared anti-microbial IgG responses among adult and pediatric IBD and other IMID patients.

Metaproteomic Insights into the Adenoma-Carcinoma Sequence: Biological Processes and Biomarker Potential

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Background: Colorectal cancer (CRC) generally develops from precancerous adenomatous lesions through a sequence of carcinogenic molecular alterations. The composition of the gut microbiota and the fecal proteome is known to differ between individuals with advanced adenomas (AA) and CRC compared to controls, suggesting a potential role in the biology of the adenoma-carcinoma sequence and opportunities for biomarker discovery. This study aims to assess the potential of bacterial proteins as non-invasive biomarkers and to identify bacterial-derived biological processes associated with the adenoma-carcinoma sequence.
Methods: Two fecal sample series from a colonoscopy-controlled population were analyzed: series 1 (CRC: 12, AA: 10, controls: 20) and series 2 (CRC: 79, AA: 40, controls: 129). Liquid chromatography-tandem mass spectrometry, was used to identify and quantify proteins with unique peptides in the fecal samples. Overlapping differential proteins ($p<0.05$) of the two series were used to establish biomarker panels through logistic regression and leave-on-out cross validation. In addition bacterial proteins were annotated with Gene Ontology (GO) terms related to their biological processes, followed by GO-term enrichment analyses. Significant proteins were mapped to their corresponding bacteria using the NIH Human Microbiome Project to identify genera influencing the enriched biological processes.
Results: The combination of human and bacterial proteins, as well as human proteins alone, achieved AUCs of 0.89 and 0.83 for CRC and AA detection in series 1 and 2, respectively, outperforming bacterial proteins alone. Furthermore, we observed a significantly upregulated histidine catabolism in AA patients, primarily driven by *Bacteroides*, along with five other processes (adjusted p-value <0.2). In CRC patients, 9 processes were downregulated and 2 upregulated (adjusted p-value <0.2). Leucine metabolism was downregulated in CRC, linked to *Coprococcus* and *Faecalibacterium*. Additionally, S-adenosylmethionine (SAM) metabolism, with potential tumor-suppressive effects, was significantly decreased in series 1, influenced by *Prevotella* and *Bacteroides*.
Conclusion: This study shows that metaproteomic analysis, with functional and taxonomic annotation, reveals biological processes and associated bacteria involved in the adenoma-carcinoma sequence. Our findings suggest that alterations in these biological processes may occur later in the adenoma-carcinoma sequence. However, incorporating bacterial proteins as biomarkers does not enhance the detection of AA and CRC compared to human proteins alone.

Fluorescently labelled adalimumab to visualize drug targeting in Inflammatory Bowel Disease: a safety, feasibility and dose-finding study

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Background: Treatment of inflammatory bowel disease (IBD) with biologicals, such as adalimumab, is hampered by high non-response rates and lack of reliable response prediction tools. Therefore, patients are potentially exposed to ineffective treatment and side effects, while clinical deterioration continues. Moreover, it is unclear whether the drug reaches its target site in adequate concentrations to achieve treatment response. We aim to visualize adalimumab distribution and detect adalimumab target cells using quantified fluorescence molecular endoscopy (qFME).
Methods: Adalimumab was labelled with IRDye 680LT under cGMP conditions, resulting in a fluorescent tracer suitable for human use. This tracer is used in an ongoing, non-randomized, non-blinded, prospective feasibility study. A total of 21 IBD patients scheduled for an endoscopy will be included. Up until now, eight patients received adalimumab-680LT (4.5 mg: n=3, 15 mg: n=3, 25 mg: n=2), and three patients were included as a control. Two to four days after tracer administration, qFME was performed to gather *in vivo* fluorescence data of inflamed and non-inflamed tissue. Fluorescent signals were quantified by multi-diameter single fibre reflectance/single fibre fluorescence (MDSFR/SFF) spectroscopy. Furthermore, biopsies were taken from inflamed and non-inflamed mucosa for *ex vivo* analysis.
Results: To date, 11 patients were included. Tracer administration was well tolerated and no adverse events occurred in any dose group. Real-time *in vivo* macroscopic imaging showed clear uptake of adalimumab-680LT in inflamed tissue compared to non-inflamed tissue. Spectroscopy revealed a dose-dependent increase in fluorescent signal for adalimumab-680LT in inflamed tissue, with a significant difference between 4.5 and 15 mg (0.016 [0.011-0.021] vs 0.033 [0.021-0.043] (p=0.036)). The difference between inflamed and non-inflamed tissue is most noticeable in the 25 mg group. *Ex vivo* Mean Fluorescent Intensity (MFI) quantification of all biopsies showed a significant increase of fluorescent signal in the 15 and 25 mg dose groups compared to control in inflamed tissue (65.0 [54.0-75.7] vs 32.4 [27.1-38.2] (p=0.0040), and 62.1 [44.1-82.8] vs 32.4 [27.1-38.2] (p=0.0286), respectively).
Conclusion: Preliminary results show adalimumab-680LT is safe for visualizing adalimumab distribution. Doses of at least 15 mg are sufficient for visualization and quantification of fluorescent signal *in vivo.* Furthermore, higher MFI's and spectroscopy results were measured in inflamed tissue compared to healthy tissue, indicating targeting of the tracer to inflamed tissue. Future *ex vivo* experiments are ongoing to visualize adalimumab target cells.

Impact of Intercontinental Travel on Gut Microbiota Stability and Resilience

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Background: As global travel becomes increasingly accessible, individuals frequently visit diverse environments and expose themselves to environmental, dietary, and lifestyle factors. These exposures have the potential to influence the composition and function of the gut microbiota, which is increasingly being recognized as a critical regulator of host health. Studies investigating the impact of travel on the gut microbiota are limited. This gap in knowledge underscores the need for studies exploring how travel affects the gut microbiota and, by extension, human health.
Methods: We analysed faecal samples from cohorts of intercontinental travellers before, during, and after their journeys to investigate whether and how travel alters the composition of the gut microbiota. Our study included 637 travellers who donated faecal samples and filled in questionnaires prior to their travel, immediately post-travel and 1-month post-travel. Additionally, 11 travellers in a separate cohort provided daily self-collected samples throughout their journeys to investigate potential daily fluctuations in the gut microbiota. All samples were profiled by 16S rRNA gene amplicon sequencing to examine the microbial diversity, composition and community structure.
Results: The microbial richness and diversity in post-travel samples were significantly decreased compared to the pre-travel samples but demonstrated resilience, as shown by a restoration at 1 month post-upon return. Principal components analysis (PCA) and differential abundance analysis identified a shift in microbiota community structure between pre- and post-travel samples. Antibiotics use and stomach-related health issues were major contributors to gut microbiota perturbations. The daily measured cohort samples displayed stable diversity throughout travel in contrast to inter-and intraindividual variation in microbial community composition.
Conclusion: Notable changes in microbiota profiles of travellers were identified, emphasizing the dynamic response of the gut microbiome to intercontinental travel stressors.

The social and hygiene practices of the parents during COVID-19 pandemic influence the development of the infant's gut microbiota

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Background: The infant gut microbiota (GM) has a lifelong impact on health. The roles of genetics, prenatal factors, and environmental influences in shaping the trajectory of microbiota maturation have been well-studied. The COVID-19 pandemic presented a unique opportunity to investigate how changes in behavior: social interactions, protective measures, and hygiene practices affect the GM. To explore these effects, we developed a specific index to assess their influence.
Methods: We collected fecal samples and questionnaire data from 139 infants as part of the longitudinal Birth Cohort Study, which explores microbiota development over the first 14 months of life. We used PERMANOVA to identify factors influencing infant GM development and conducted differential abundance analysis based on linear regression to examine the abundance of bacterial species. To investigate whether the behavior was associated with the microbiota, we used the constructed index to correlate it with the species abundance.
Results: We found that samples collected at the same age differed in microbiota composition depending on whether they were collected before or after the onset of the pandemic (PERMANOVA, 6 months, p-value: 0.022, R^2: 0.017). Several bacterial species showed differences in abundance in samples collected during the pandemic. Alpha diversity was significantly lower at 9 months of age in pre pandemic samples. The index revealed that limited adherence to infection prevention and control measures was associated with lower abundances of *Gordonibacter pamelaeae*.
Conclusion: This study highlights the pandemic's impact on infant GM, with differences in profiles observed before and after its onset. These changes can be attributed to behavioral shifts, such as social distancing and hygiene practices, which may alter specific bacterial strains. Our findings emphasize the importance of considering how large-scale public health interventions, like those implemented during the pandemic, might unintentionally influence early-life GM development, potentially leading to downstream effects on health.

Amino acids analysis in long-term stored FFPE colorectal neoplasia tissue: potential biomarkers

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Background: With growing evidence that metabolic processes contribute to cancer development, the study of disease-associated metabolites has expanded. Fecal amino acids have shown potential as biomarkers for colorectal neoplasia, and their presence in tissue may provide valuable insights into the carcinoma development. While fresh frozen tissue is preferred for analysis, it is limited to research settings, whereas formalin-fixed paraffin-embedded (FFPE) tissue is more readily available from pathology biobanks. This study aims to measure amino acids in minimal amounts of FFPE tissue using LC-MS/MS and assess differences across stages of the adenoma-carcinoma sequence.
Methods: FFPE tissue samples collected between February 2016 and November 2019 were used, including 12 small adenomas (0.5-0.9cm, without high-grade dysplasia or villous histology), 12 advanced adenomas (AA) (≥1cm, with or without villous histology or high-grade dysplasia), and 5 colorectal adenocarcinoma tissue blocks. A pathologist performed histopathologic evaluation to identify dysplastic and normal areas in each block. Biopsies (2x5 mm) of dysplastic tissue were used for amino acid analysis. Samples were deparaffinized using xylene. A total of 20 amino acids, selected from previous studies, were measured using stable-isotope dilution LC-MS/MS.
Results: Fourteen of the 20 targeted amino acids were detected in all tissue samples. No significant differences in amino acid concentrations were observed between advanced and small adenomas. However, a significantly increased concentration of proline was detected in CRC compared to AA tissue (FC 2.33, $p = 0.04$) and CRC compared to SA tissue (FC 2.42, $p = 0.02$). Glycine showed a decreasing trend along the adenoma-carcinoma sequence, however this was not statistically significant. The amino acids that were targeted but not detected in all samples were: α-aminoadipic acid, leucine, tyrosine, tryptophan, isoleucine and histidine.
Conclusion: Our findings demonstrate that FFPE tissue is a suitable matrix for amino acid research, providing a foundation for future studies. We observed changes in amino acid concentrations along the adenoma-carcinoma sequence, notably an increase in proline in CRC compared to AA and SA tissue. These findings align with previous research suggesting that proline metabolism contributes to colorectal neoplasia by influencing tumor growth and cell survival[1]. Future studies should focus on optimizing sample preparation and the LC-MS/MS workflow to enable reliable detection of the six undetected amino acids and explore the feasibility of measuring additional metabolites.

Exploring biomarkers of systemic oxidative stress and gut barrier integrity for disease activity inflammatory bowel disease: a prospective diagnostic validation study

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Background: Gut barrier dysfunction and oxidative stress are key contributors to the development and progression of inflammatory bowel diseases (IBD). Despite their recognized importance, blood-based biomarkers representing both mechanisms yet remain underexplored in relation to IBD disease activity. This study aimed to assess the utility of selected biomarkers of oxidative stress and gut barrier integrity in reflecting clinical, biochemical, and endoscopic disease activity in patients with IBD.
Methods: This prospective diagnostic trial included 102 patients with IBD (40 Crohn's disease [CD] and 62 ulcerative colitis [UC]) at the time of endoscopic evaluation. Serum samples were collected and used for measuring circulating biomarkers of oxidative stress (cysteine , homocysteine, thioredoxin-1 [Trx1], glutathione, and free thiols) and gut barrier integrity (soluble CD14 [sCD14] and lipopolysaccharide-binding protein [LBP]). Endoscopic disease activity was assessed with the Mayo endoscopic subscore for UC and the Simple Endoscopic Score for CD (SES-CD). Clinical disease activity was assessed using the Harvey-Bradshaw Index for CD and Simple Clinical Colitis Activity Index for UC. Biochemical disease activity was determined by measuring C-reactive protein (CRP) and fecal calprotectin (fCal) levels. General linear models were applied to associate biomarker levels to disease activity outcomes while adjusting for relevant covariates.
Results: Among oxidative stress biomarkers, (Trx1) showed a moderate association with biochemical (CRP<5 mg/L vs CRP>5 mg/L; 215.9 vs 108.3 ng/mL, $p<0.05$) and endoscopic disease activity (156.4 vs 102.6 ng/mL, $p<0.12$); however, these findings did not all reach statistical significance. Gut barrier biomarkers demonstrated stronger relevance: LBP and sCD14 were positively correlated with biochemical disease activity (fCal: LBP; r=0.62. sCD14; r=0.60, $p<0.05$), while LBP was positively associated with endoscopic disease activity (r=0.43; endoscopic severe disease vs. endoscopic remission: 12.3 vs 7.9 µg/mL, both $p<0.05$. These associations became stronger after adjustment for relevant confounders including age, sex, BMI and smoking status (LBP: 21.0 vs 9.8 µg/mL. sCD14; 1819 vs 1516 ng/mL, $p<0.05$).
Conclusion: Among oxidative stress biomarkers, only Trx1 showed a moderate but non-significant association with biochemical and endoscopic disease activity. In contrast, LBP strongly associated with endoscopic disease activity, highlighting the biomarker potential of gut barrier dysfunction in IBD. These findings warrant further investigation, including validation in independent cohorts and study of longitudinal trajectories, to sustain its potential clinical utility.

Why do babies cry? Exploring the role of the gut microbiota in infantile colic, constipation, and cramps in the KOALA Birth Cohort Study.

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Background: Gastrointestinal symptoms are common during infancy, including infantile colic. Colic can be loosely defined as prolonged and recurrent crying without obvious cause. The cause indeed remains unclear despite much research. Results on infant nutrition are inconclusive, but prior work has linked maternal mental health to infant crying. Recently, several small studies have described associations between gut microbiota and colic. We used a larger cohort to examine the role of the microbiota in infant gastrointestinal health, while also accounting for other biopsychosocial factors.
Methods: Using fecal 16S rRNA gene amplicon sequencing data from 1,012 infants in the KOALA birth cohort, we examined associations between the 1-month gut microbiota and parent-reported functional gastrointestinal symptoms throughout infancy, including colic, constipation, and cramps. These analyses were adjusted for biopsychosocial factors that were associated with symptoms in a broader analysis involving 2,665 participants. In 257 infants, we also explored associations between breastmilk human milk oligosaccharides (HMOs) and gastrointestinal symptoms.
Results: Higher relative abundance of *Staphylococcus* at one month was associated with less constipation in the first three months of life. Conversely, *Ruminococcus gnavus group* abundance was associated with more colicky symptoms, particularly between four and seven months. Breastmilk concentrations of the HMOs LNH and LNnH were associated with less constipation in the first three months.
Conclusion: Our results support the conclusion that gut microbiota are relevant in infantile colic and constipation, but more work is needed to elucidate the underlying mechanisms. Future studies must also consider maternal mental health, given its consistent correlations with reported infant gastrointestinal health.