

De wind in de zeilen van de gastro-enterologie



1983



2018

1983 : Start als staflid gastroenterologie



- Ulcus : H2 antagonist : Cimetidine (Tagamet) - recidiverend
- Lever = biopsie +/- laparoscopie
- Hepatitis nonA-nonB : chronisch – ongeneeslijk
- Darmkanker : chirurgie en oral 5-FU
- Andere GI tumoren : chirurgie of niets
- IBD : corticoiden en salazopyrine
- Endoscopie : fiber- endoscoop

1983



1962 Eerste semiregiede fiberendoscopie UZGent
1971 Eerste flexibele fiberendoscopie

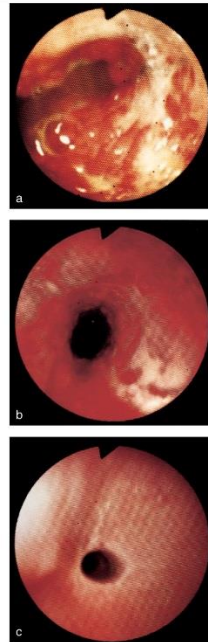


FIGURE 1. Endoscopische bevindingen in de oesofagus en de maag na ingestie van caustische vloeistoffen: (a) ernstige ulceratie van de maag, zoals bij patiënt A; (b) ernstige ulceratie van de slokdarm, zoals bij patiënt B; (c) caustische strictuur van de slokdarm, zoals bij patiënt B. De zwarte puntjes in de beelden zijn ontbrekende lichtpunten van gebroken fibervezels.



Therapeutische endoscopie :

- Poliepectomie met lusbiopsietang
- Behandeling van bloedende ulcera
- Scleroseren van bloedende varices
- ERCP + papillotomie/steenextractie/plastiek stent

1983 - 2018

- Ulcus : PPI – H Pylori – zeldzame ziekte
- Lever : CT/NMR +/- biopsie
- Hepatitis C : Epclusa : te genezen ziekte
- Levertransplantatie : 1991 - nu > 1000 LTx
- Darmkanker : genezing of chronische ziekte
- Andere GI tumoren : chirurgie en (radio)chemo
- **IBD**
- **Endoscopie**

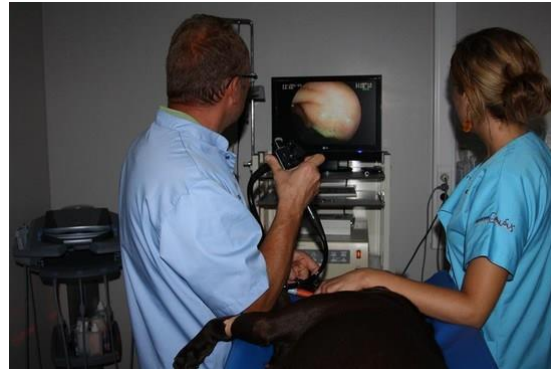


Evolutie in endoscopen

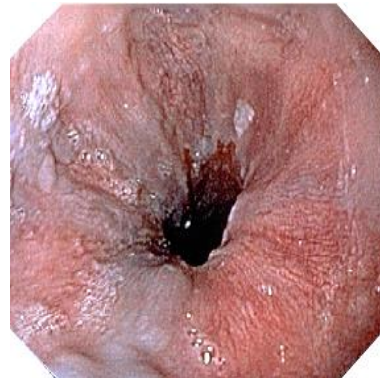


Cholangioscopie : SpyGlass

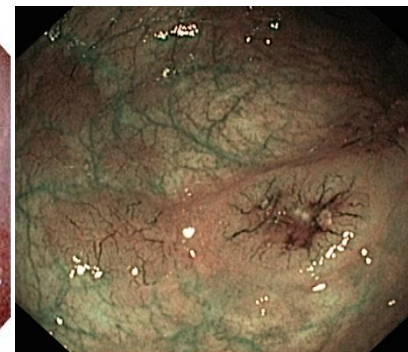
2016



1983



Hoog resolutie endoscopen



NBI/i-SCAN



Echoendoscopie
1992 (2002)



Capsule endoscopie
2007

Evolutie in resectie poliepen en tumoren



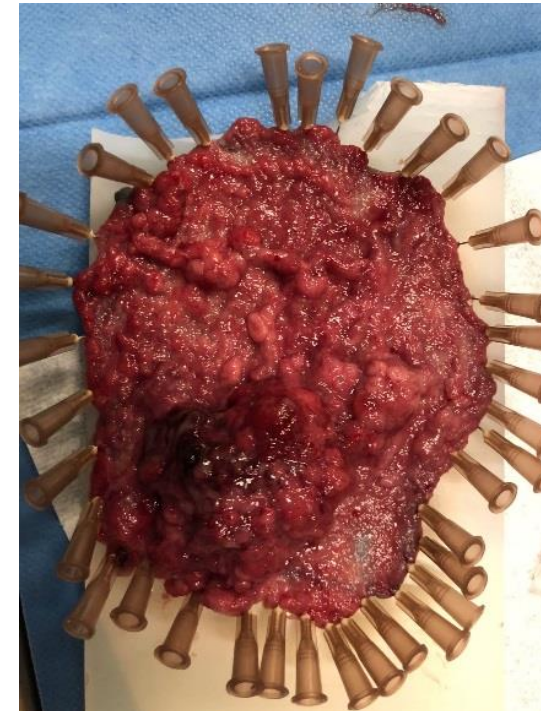
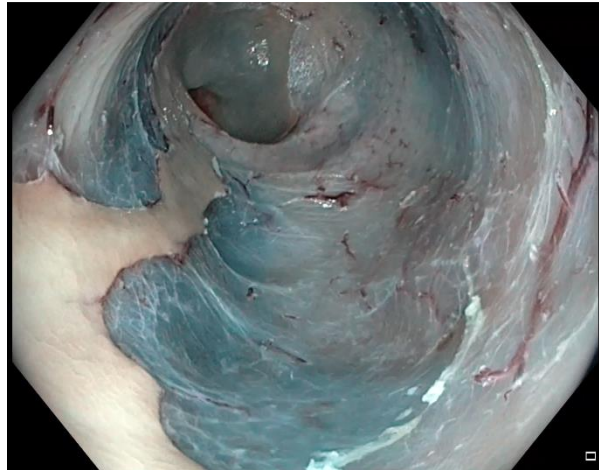
Polieplus



Submucosale dissectiemateriaal (2011)



Piecemeal resectie poliep quasi circulaire > 10 cm



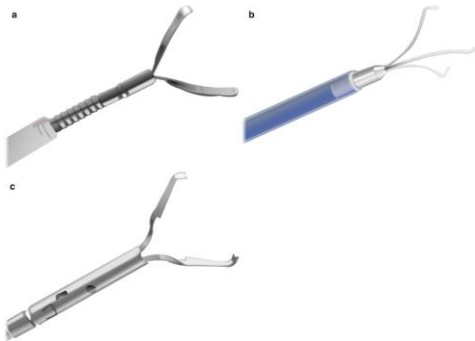
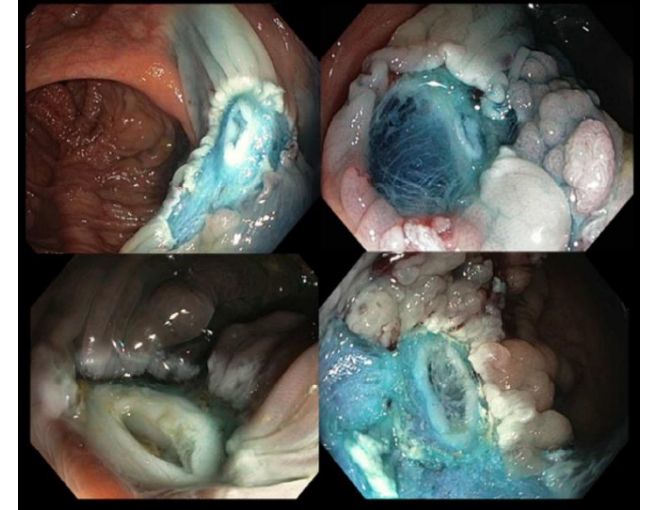
T1 tumor
12 cm diameter

2018

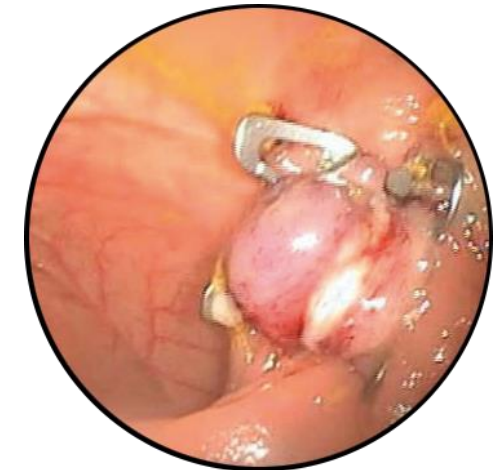
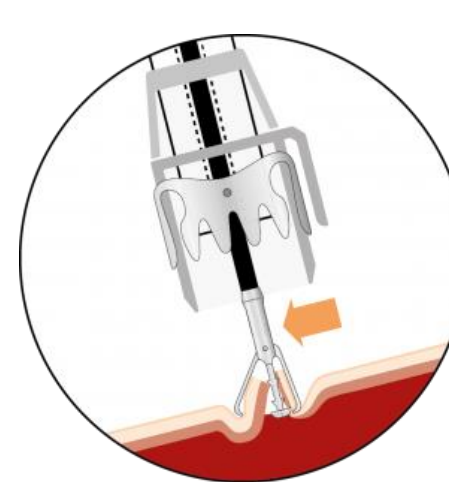
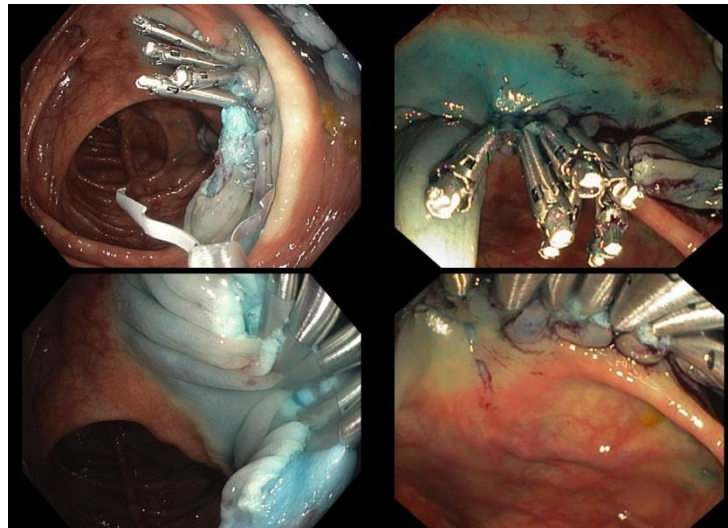
Evolutie in interventionele endoscopie

DANKZIJ

Steeds betere behandeling bloeding
Mogelijkheid tot endoscopische sluiting perforaties



EndoClip

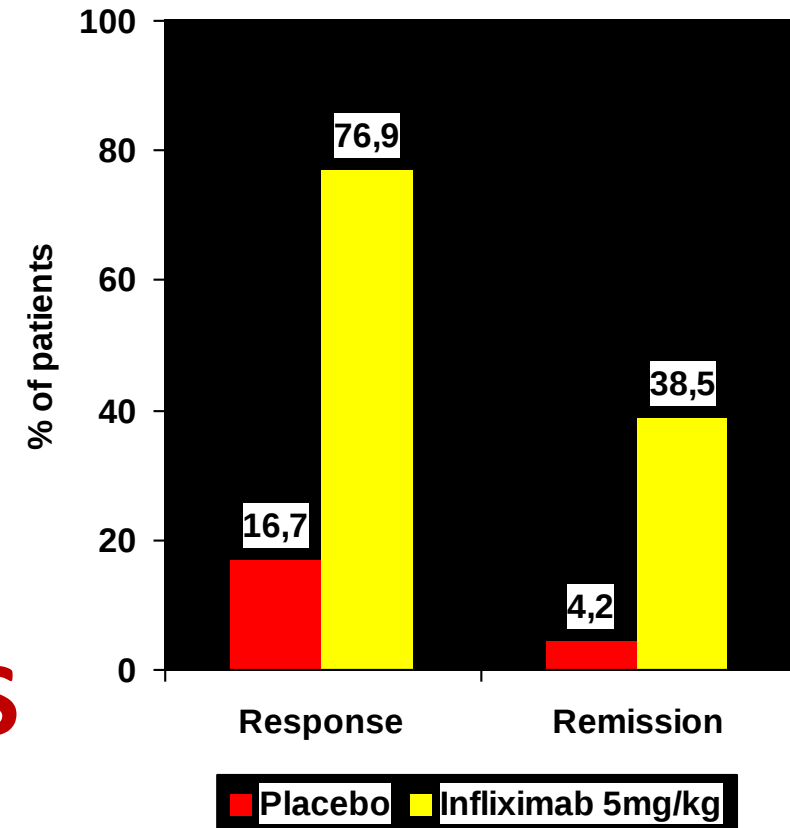


OTSC clip

Behandeling inflammatoire darmziekten

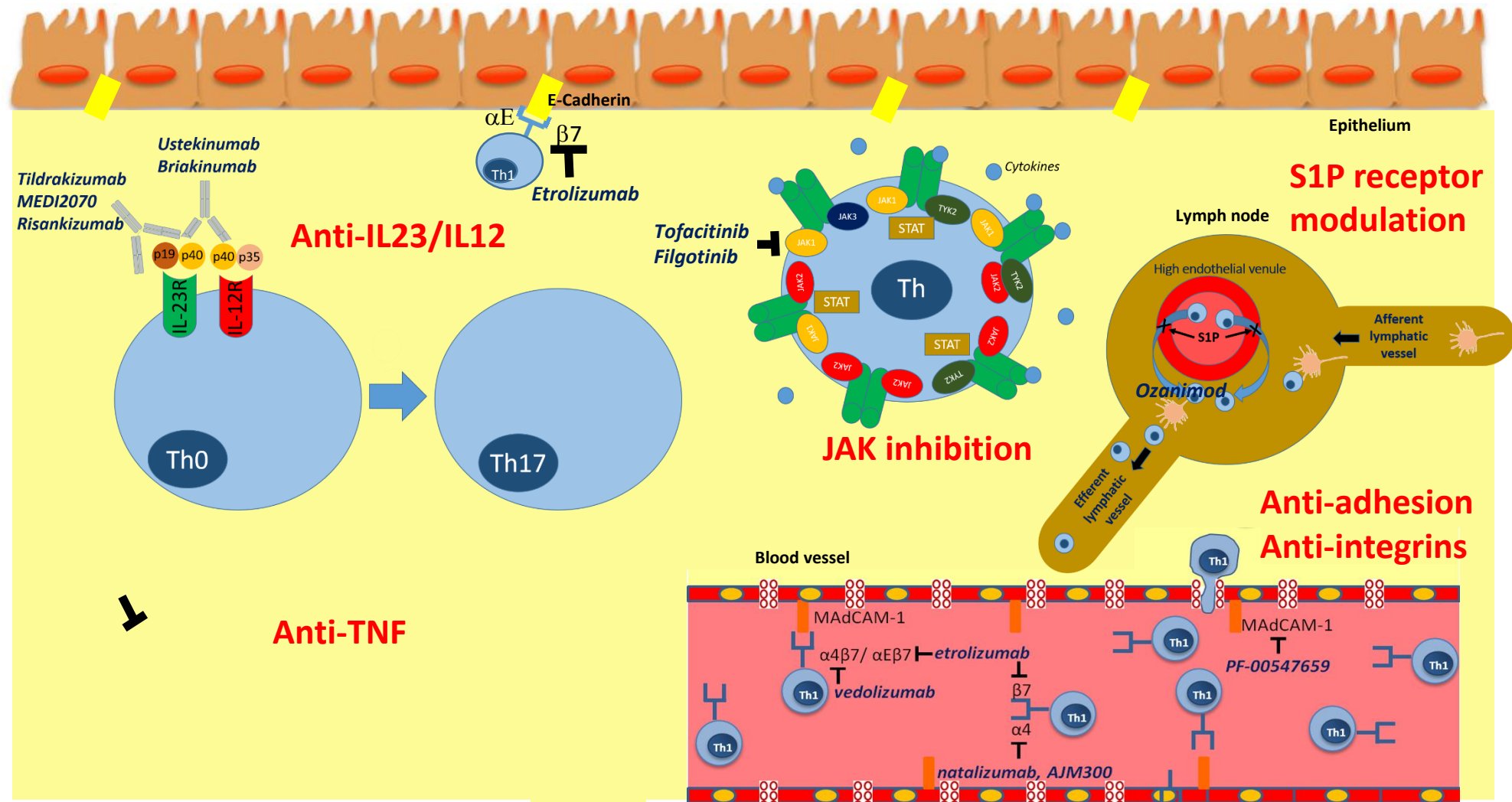


BIOLOGICALS



Targan et al N Engl J Med 1997

Biologicals voor IBD 2018





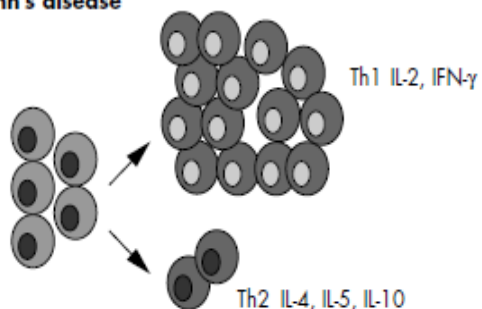
Oorzaak IBD : Immunome (einde '80)

1985

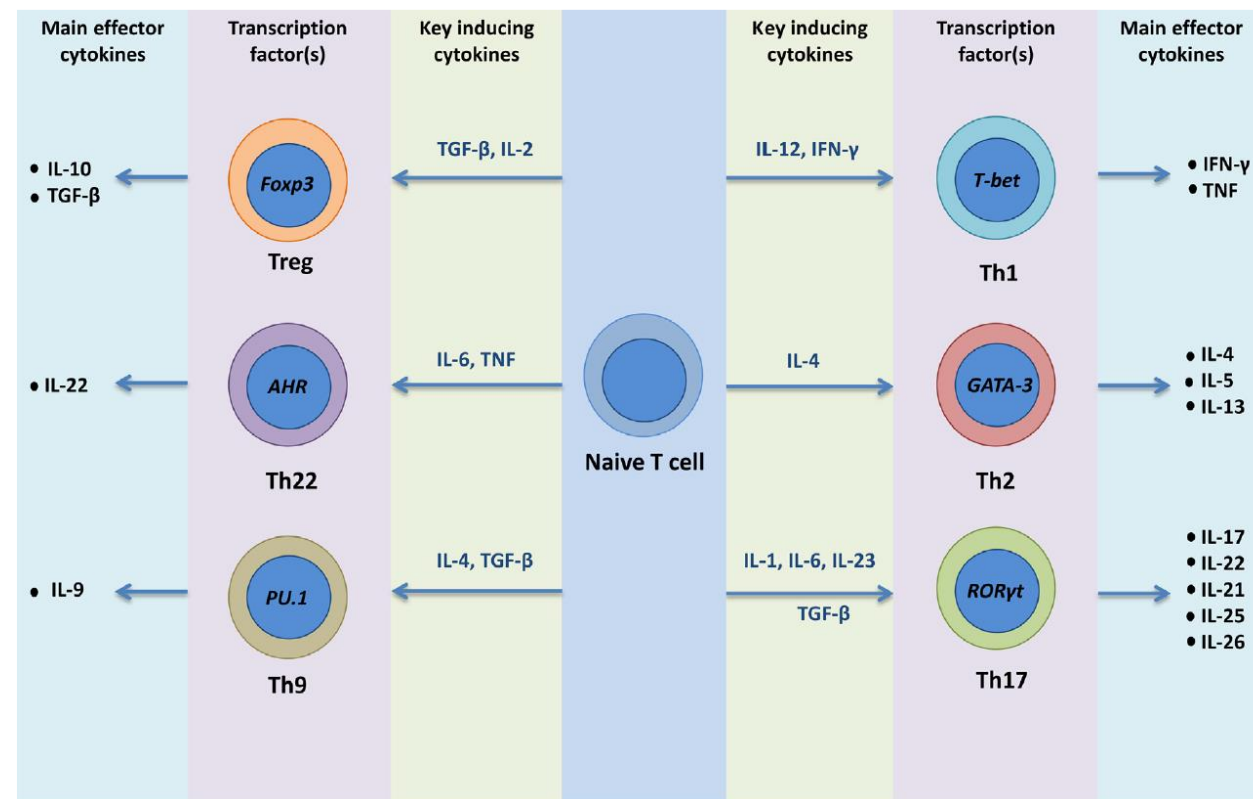
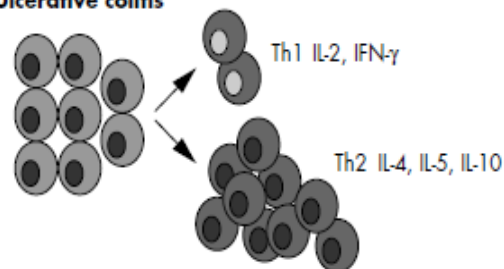
2017

Th1/Th2

Crohn's disease



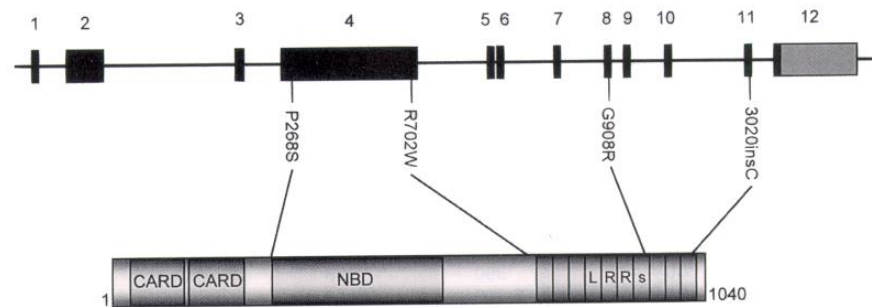
Ulcerative colitis



Oorzaak IBD : Genome (begin 2000)

2001

Crohn : 3 SNP's in NOD2 gen



Caspase recruitment Domain

Role in NFkB activation
Role in apoptosis

Nucleotide binding Domain

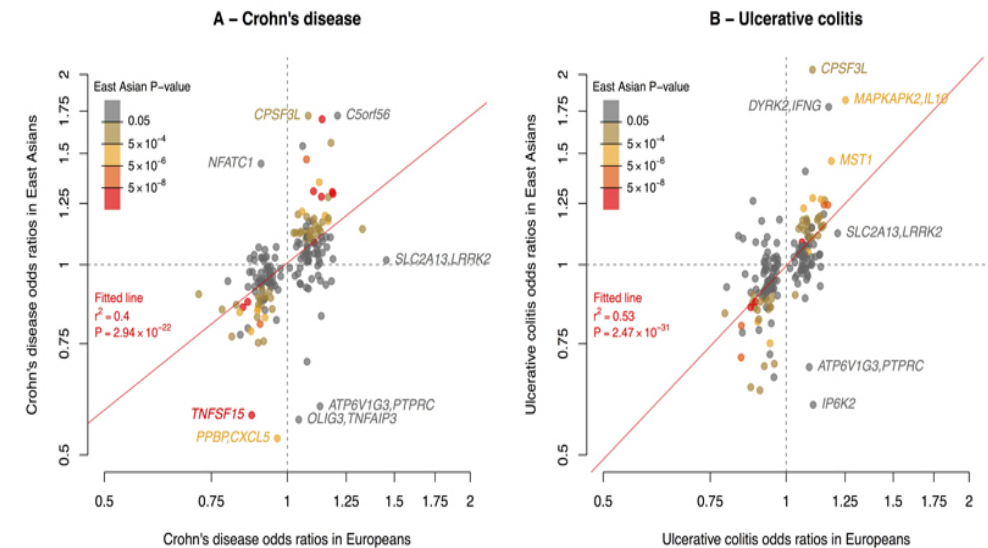
Essential for oligomerisation
and signal transduction (activation)

Leucine-rich-domain

Used for bacterial
muramyl dipeptide (deel PGN)
Recognition

2017

IBD : 242 genetische loci



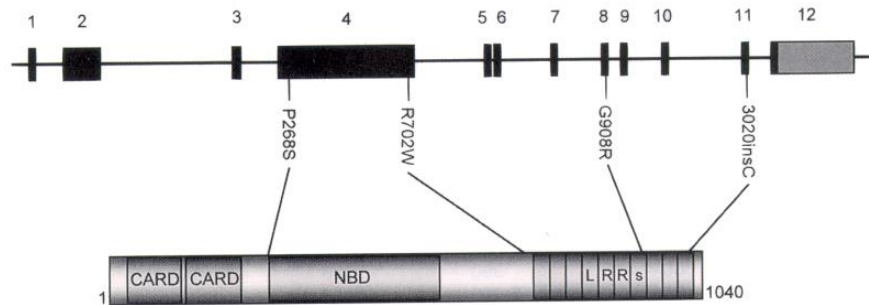
Causale rol ?

Liu et al 2015

Oorzaak IBD : Microbiome (actueel)

2001

SNP's in I gen : NOD2



Caspase recruitment
Domain

Role in NFkB activation
Role in apoptosis

Nucleotide binding Domain

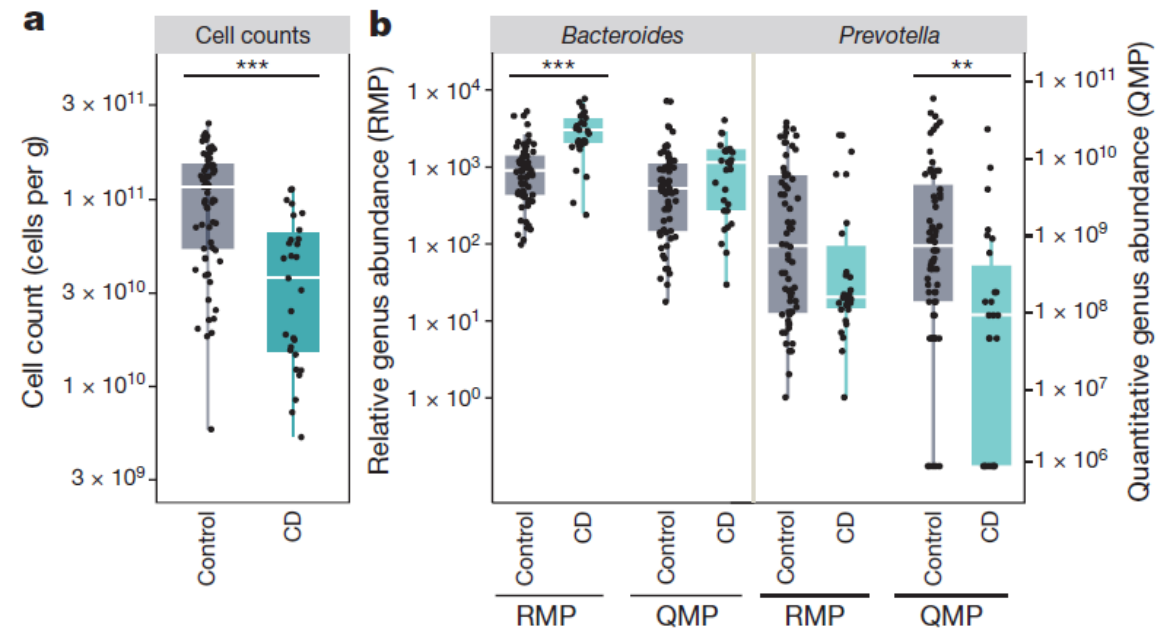
Essential for oligomerisation
and signal transduction (activation)

Leucine-rich-domain

Used for bacterial
muramyl dipeptide (deel PGN)
Recognition

2017

Dysbiose in IBD : lagere verscheidenheid en
verlaagde prevalentie van bep stammen



Oorzaak IBD : exposome (toekomst ?)

1983

Infectie :
Mycobacterium paratuberculosis
Mazelen (vaccinatie)

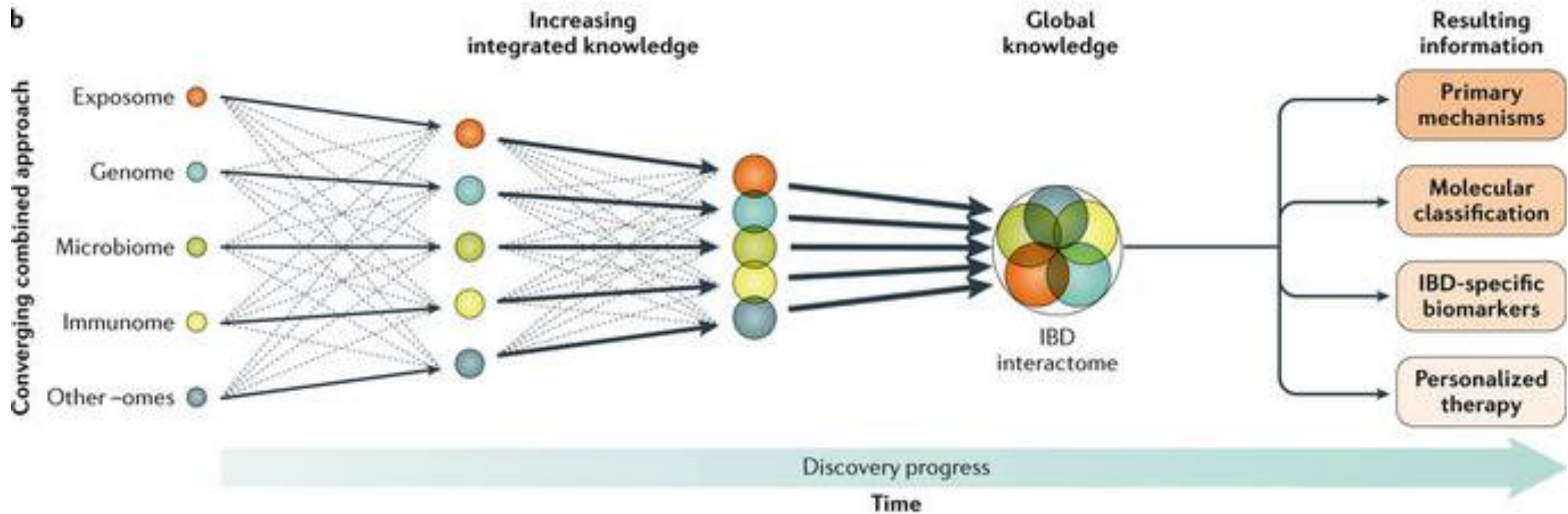
2015



Direct effect op intestinaal epitheel,
mucosale immune cellen, extraintestinale cellen

Indirect effect via modulatie
van de intestinale microbiota

Oorzaak IBD : toekomst



Overview of research projects at the IBD research Unit

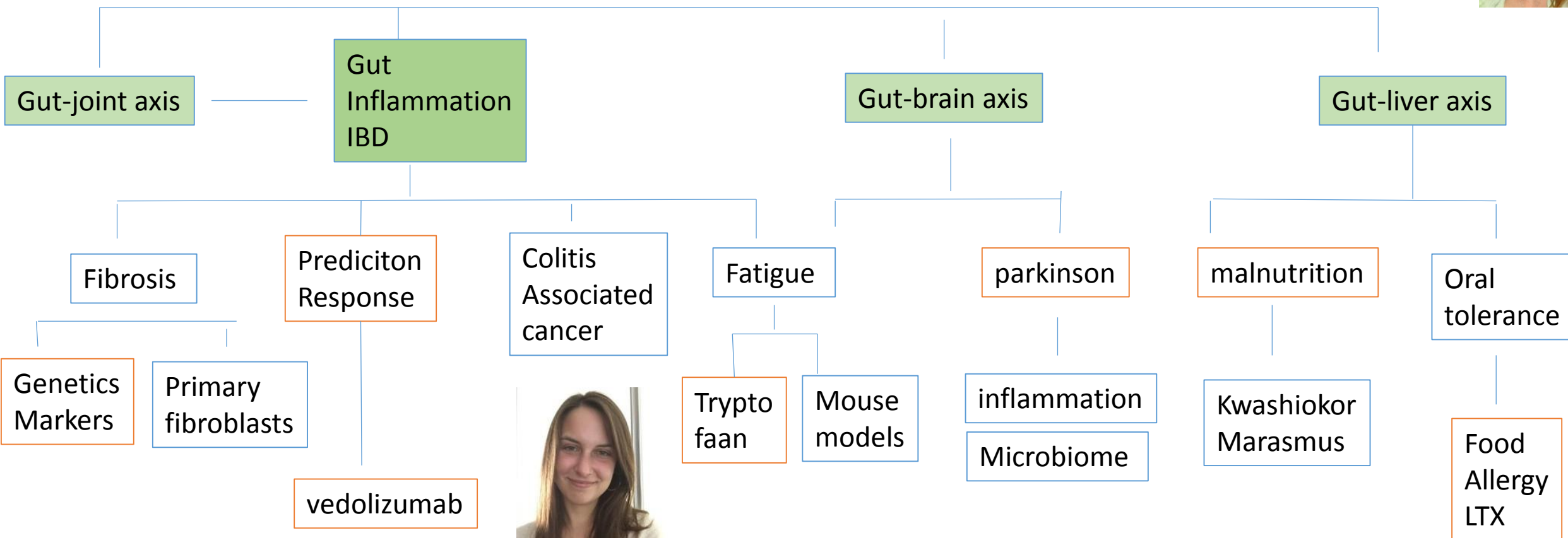


Reumatology
Unit : SpA



Gastroenterology
Unit

Hepatology
Unit



Waar zeilen we naar toe tegen 2023 ?



- Ulcus : zeer zeldzame ziekte
- IBD : gepersonaliseerd gebruik van biologicals
- Chronische infectieuze hepatitis : zeldzame ziekte
- Darmkanker : hopelijk zeldzame ziekte (door succesvolle screeningprogramma)
- Ander GI tumoren : genezen of chronische ziekte
- Endoscopie : steeds invasievere (echo)endoscopische ingrepen
- Pancreas : mogelijks iets beter te behandelen



FUTURE IS BRIGHT