



international bowel  
ULTRASOUND GROUP

# Treat to Target in 2026 – Abbvie TRUST lecture

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University Teaching Hospital Lueneburg, Lueneburg, Germany



Guangzhou, China – July 11<sup>th</sup> – 12<sup>th</sup>, 2026

Hosted by:



**北京健康促进会**

BEIJING HEALTH PROMOTION ASSOCIATION

Organized in  
collaboration with:



**中山大学 附属第六医院**

The Sixth Affiliated Hospital, Sun Yat-sen University

# Disclosure

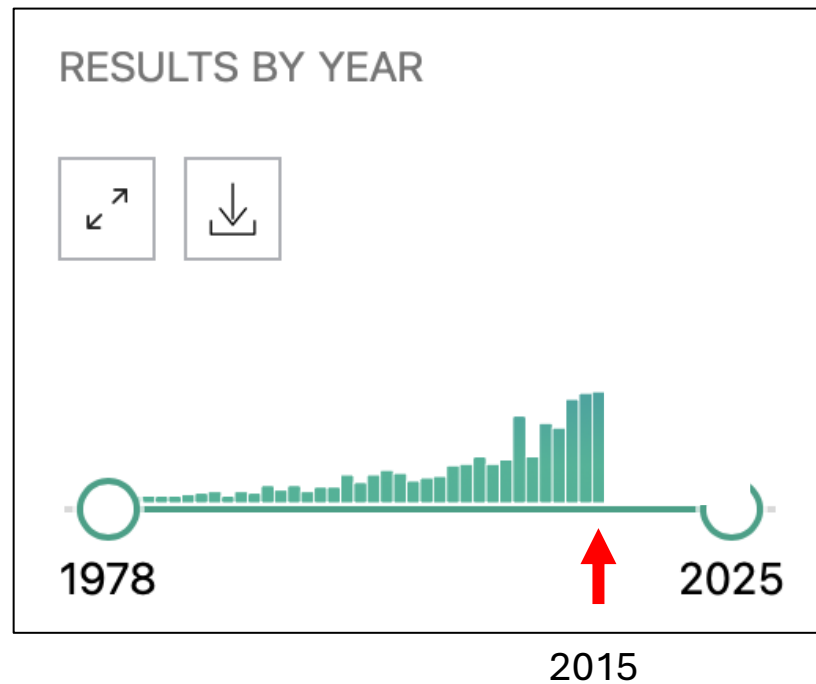
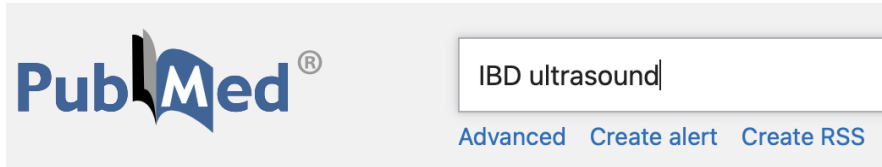
## **Advisory function**

Abbvie, Alfasigma, Biogen, Galapagos, Gilead, Janssen, MSD Sharp & Dome GmbH, Pfizer, Roche, Samsung, TakedaPharmaGmbH

## **Lectures**

Abbvie, Alfasigma, Biogen, Dr. Falk PharmaGmbH, Ferring Arzneimittel GmbH, Janssen, Lilly, MSD Sharp & Dome GmbH, Pfizer, Takeda PharmaGmbH, Vifor Pharma

# Scientific evidence on IUS in IBD

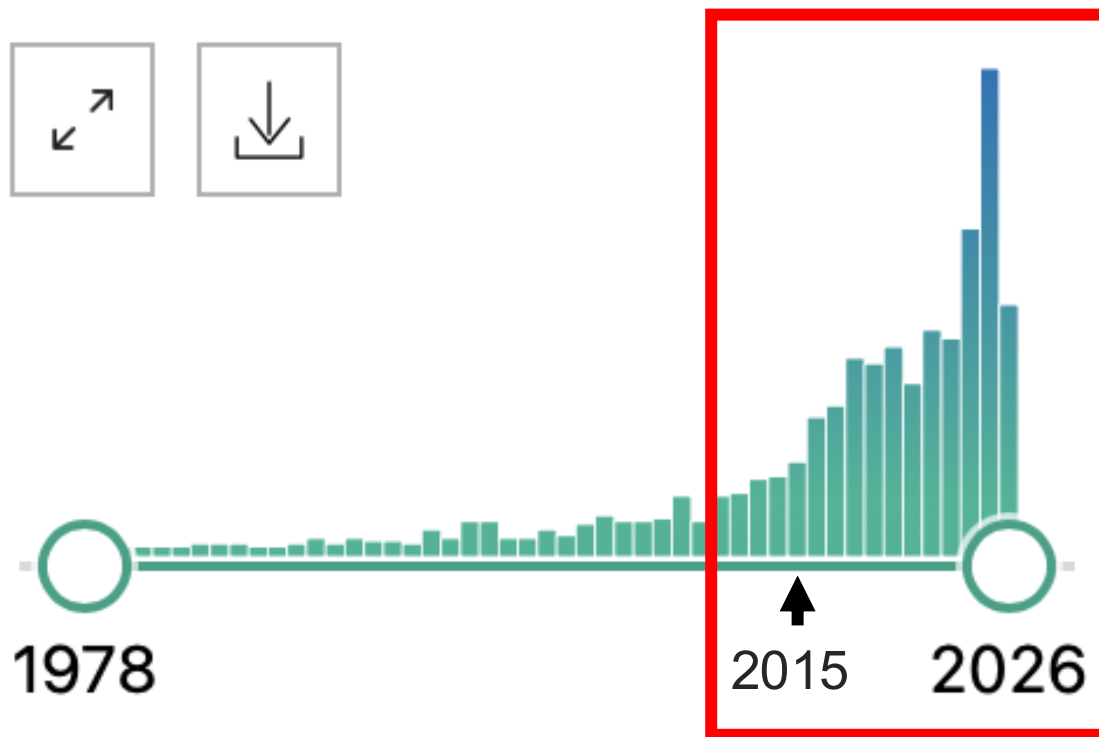


# Scientific evidence on IUS in IBD



intestinal ultrasound ibd

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# ECCO-ESGAR-ESP-IBUS 2025 multi-society guideline for Diagnostics and Monitoring of Patients with IBD: **Initial Diagnosis**

## Recommendation 1

The diagnosis of Crohn's disease (CD) and ulcerative colitis (UC) is based on a combination of clinical symptoms, laboratory tests, endoscopy, histology and imaging (EL5). We recommend ileocolonoscopy with biopsies **combined with imaging evaluation with intestinal ultrasound and/or magnetic resonance enterography as first line examinations** in patients with suspected IBD (EL5). (94% agreement)

## Recommendation 2

**Small bowel assessment** should be performed in all newly diagnosed Crohn's disease patients using **MR enterography and/or intestinal ultrasound** (EL 2). (85% agreement)

# 27year old: ileal CD initial diagnosis 2 years ago

- Recurrent abdominal cramping, diarrhoea (2-5x/d), occasional blood → stable for last year
- No current medication
- Colonoscopy 1.5 years ago: Budesonid for a few weeks, no further therapy since then

# IUS same day: August 23rd

Im: 1/816  
Se: 1  
Lossy compression (JPEG)

LOGIQ  
S8



Sonografie Abdomen  
Sonografie Abdomen

2"



4"



WL: 128 WW: 256 [D]

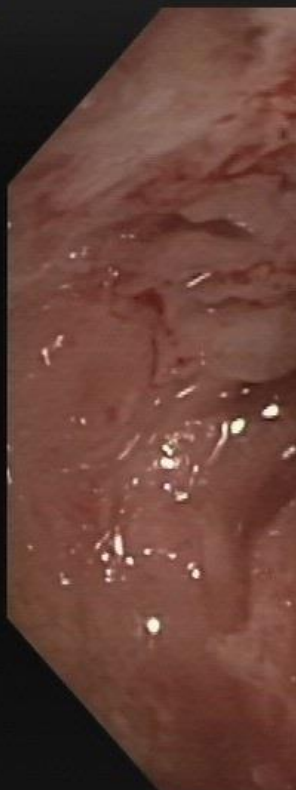
23.08.2018 15:39:31

## Marcel 27years old: ileal CD initial diagnosis 2 years ago

- WBC normal, Hb 11.0 g/dl (13.5-17.2), platelets 529/nl (150-370), CRP 33.1 mg/l (<5.0), Transferrin saturation 5.97% (16-45), Ferritin 40 ng/ml (30-400), folic acid 1.71 ng/ml (3.5-20.5)

→ colonoscopy with biopsies

Marcel 27years old



# ECCO-ESGAR-ESP-IBUS 2025 multi-society guideline for Diagnostics and Monitoring of Patients with IBD: Monitoring Crohn's Disease

## Before treatment initiation

### Recommendation 11

Patients with CD in need of **initiation** or optimization should undergo clinical and biochemical assessment, endoscopy (EL1), cross-sectional imaging (IUS or MRE) **and/or** capsule endoscopy (EL3) at baseline. (95% agreement)

## Following treatment initiation

### Recommendation 12

In patients with CD following **initiation** or optimization, we recommend clinical (EL1), biochemical (EL1), **cross-sectional imaging** (IUS or MRE) (EL3) at baseline. (95% agreement)

## Proactive monitoring of asymptomatic patient

### Recommendation 14

In patients with Crohn's disease in **remission** we suggest proactive monitoring with clinical (EL1), biochemical (EL1), **cross-sectional imaging** (IUS or MRE) (EL3) at baseline. (86% agreement)

## Postoperative monitoring

### Recommendation 18

In patients with Crohn's disease who underwent ileocaecal resection, we recommend endoscopy 6-12 months after surgery [EL2]. **Cross-sectional imaging (IUS [EL3] or MRE [EL3]) in combination with FCP 3-6 months after surgery [EL3]** could be used to detect early recurrence. Small bowel capsule endoscopy can be considered as a noninvasive alternative [EL3]. (90% agreement)

## **CD patient Marcel: IBD clinic Oct 8th**

Prednisolontherapy starting with 60 mg/d:

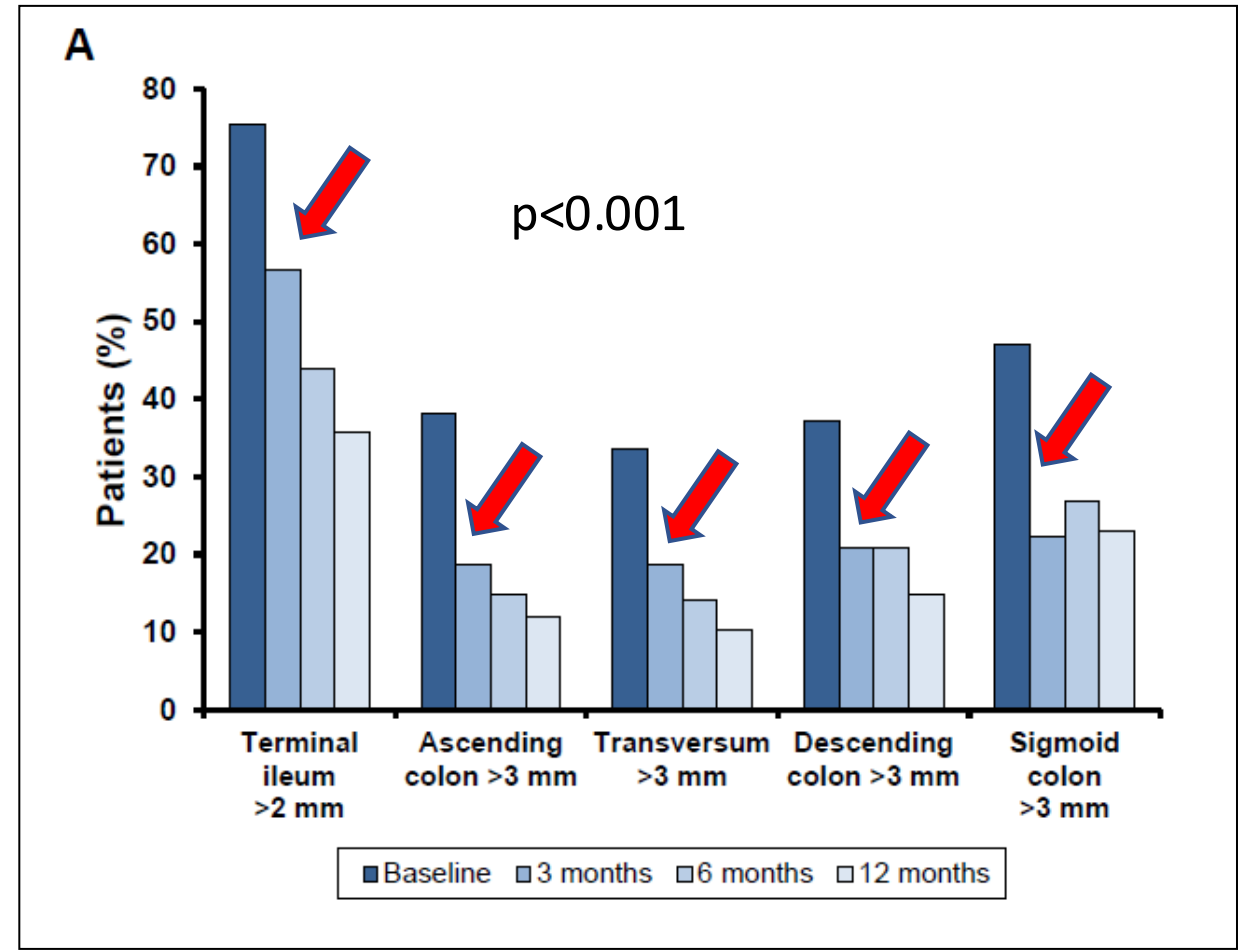
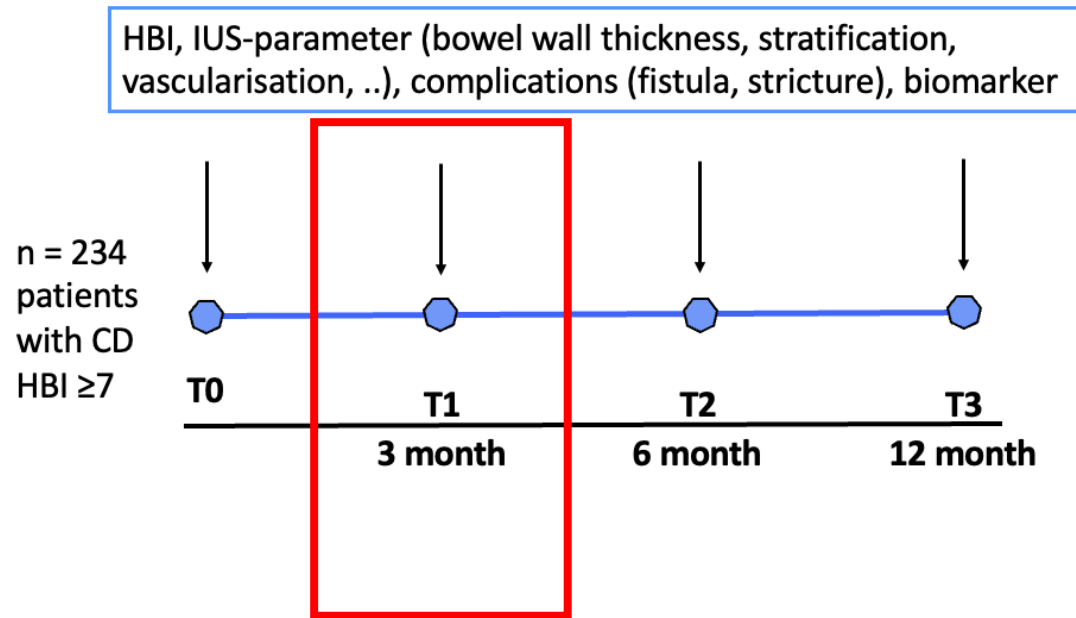
Gained 10 kg, only mild abdominal symptoms left, normal stool frequency almost solid, no blood

→ How to proceed?

# IUS in CD: Scientific evidence for monitoring activity

- *TRUST-Study*: normalization of bowel wall parameters as early as 3 month after start of therapy
- *Stardust-Substudy*: IUS response to therapy as early as 4 weeks after start of therapy
- IUS response as early as 4 weeks post start of therapy predicts endoscopic response in children and adults
- CD in IUS transmural remission at „baseline“ has significantly better outcome at 1 year (no surgery, less hospitalization, less steroids, less flares, less therapy escalation)
- IUS can identify postoperative recurrence
- ...

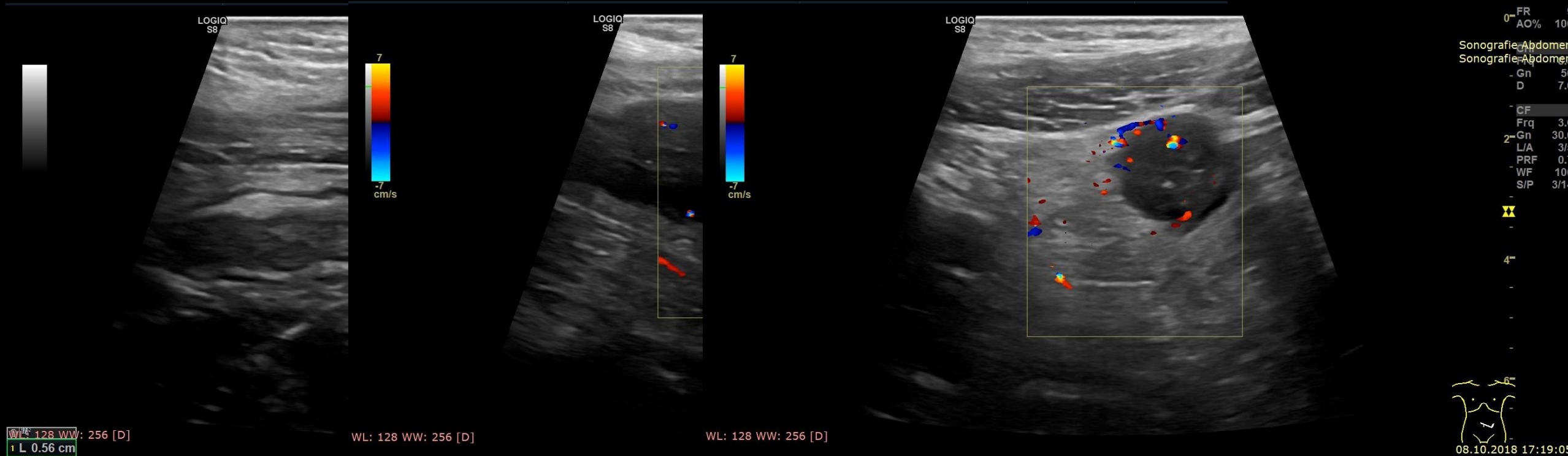
# TRUST Crohn Study: Normalisation of bowel wall thickness under therapy as early as 3 month



# IUS in CD: Scientific evidence for monitoring activity

- *TRUST-Study*: normalization of bowel wall parameters as early as 3 month after start of therapy
- *Stardust-Substudy*: IUS response to therapy as early as 4 weeks after start of therapy
- IUS response as early as 4 weeks post start of therapy predicts endoscopic response in children and adults
- CD in IUS transmural remission at „baseline“ has significantly better outcome at 1 year (no surgery, less hospitalization, less steroids, less flares, less therapy escalation)
- IUS can identify postoperative recurrence
- ...

# CD patient Marcel: IBD clinic Oct 8th



CRP 11.7 mg/l (<5.0), WBC 17.9/nl (3.9-10.2)

## **CD patient Marcel: IBD clinic Oct 16th**

- Aza started, planned first IFX infusion
- Clinically severe perianal pain, on inspection normal

# ECCO-ESGAR-ESP-IBUS 2025 multi-society guideline for Diagnostics and Monitoring of Patients with IBD: Detection of complications

## Strictures

### Recommendation 20

We recommend **cross sectional imaging (MRE and/or IUS)** to **detect small bowel strictures** [EL 1]. Active inflammation within strictures should be assessed using MRE and/or IUS [EL

2]. Currently no imaging technique can quantify fibrosis [EL 3]. Cross-sectional imaging has low sensitivity for detecting small bowel strictures in Crohn's disease [EL 3]. (97% agree)

## Intra-abdominal abscess

### Recommendation 21

We recommend **cross-sectional imaging (MRE and/or MRI and/or IUS)** to detect **penetrating disease and intra-abdominal abscesses** in Crohn's disease [EL 4]. (97% agree)

is inconclusive in the presence of high-grade inflammation. We suggest performing additional cross-sectional imaging (CT and/or IUS) [EL 4]. (97% agree)

## Perineal disease

### Recommendation 22

Patients with IBD suspected of perianal disease should undergo a clinical and endoscopic examination, including digital rectal exam to assess for anal stricture, in addition to a pelvic MR or transrectal US (TRUS) and an examination under anaesthesia (EUA) if indicated (EL1). **Transperineal ultrasound (TPUS) could be used alternatively** (EL3). (91% agreement)

# CD patient Marcel: IBD clinic Oct 16th

Im: 1/667

Se: 3

Lossy compression (JPEG)



LOGIQ  
S8



Sonografie Abdomen  
Sonografie Abdomen

0"

-

-

2"

-

-

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4"

-

-

XX

6"

-

-

-

8"

WL: 128 WW: 256 [D]

16.10.2018 14:55:29

## CD patient Marcel:

- Next morning: Abscess drainage, transsphincteric drainage
- 26.11.18: IFX + Azathioprine
- 24.1.19: 2 weeks after 3rd IFX-infusion

# IUS and Complications in CD

Practice Guideline > [Lancet Gastroenterol Hepatol](#). 2024 Dec;9(12):1101-1110.

doi: 10.1016/S2468-1253(24)00265-6. Epub 2024 Oct 22.

## International expert guidance for defining and monitoring small bowel strictures in Crohn's disease on intestinal ultrasound: a consensus statement

Cathy Lu <sup>1</sup>, Ryan Rosentreter <sup>2</sup>, Claire E Parker <sup>3</sup>, Julie Remillard <sup>3</sup>, Stephanie R Wilson <sup>4</sup>, Mark E Baker <sup>5</sup>, Gauraang Bhatnagar <sup>6</sup>, Jakob Begun <sup>7</sup>, David H Bruining <sup>8</sup>, Robert V Bryant <sup>7</sup>, Britt Christensen <sup>9</sup>, Brian G Feagan <sup>10</sup>, Joel G Fletcher <sup>11</sup>, Ilyssa Gordon <sup>12</sup>, Gaylyn Henderson <sup>13</sup>, Vipul Jairath <sup>14</sup>, John Knudsen <sup>11</sup>, Torsten Kucharzik <sup>15</sup>, Kyle Lesack <sup>2</sup>, Christian Maaser <sup>16</sup>, Giovanni Maconi <sup>17</sup>, Kerri Novak <sup>2</sup>, Jordi Rimola <sup>18</sup>, Stuart A Taylor <sup>19</sup>, Rune Wilkens <sup>20</sup>, Florian Rieder <sup>21</sup>;

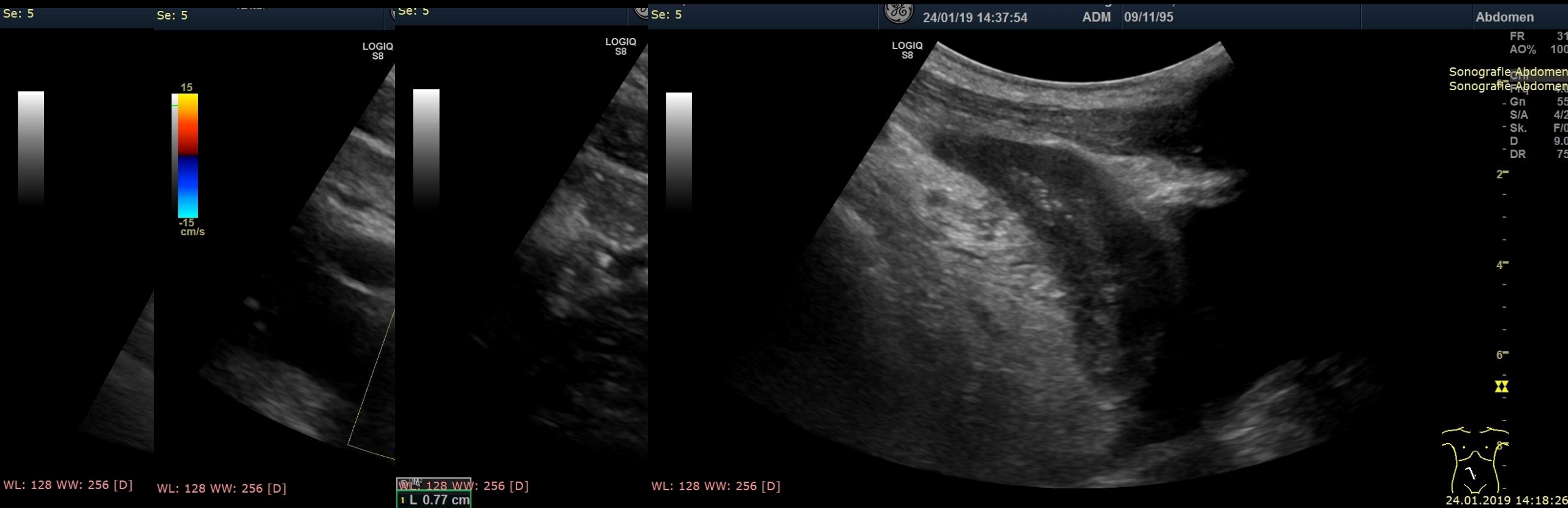
Stenosis Therapy and Anti-Fibrotic Research (STAR) consortium

Review > [J Crohns Colitis](#). 2024 Jun 3;18(6):958-972. doi: 10.1093/ecco-jcc/jjad215.

## Diagnostic Accuracy of Intestinal Ultrasound in the Detection of Intra-Abdominal Complications in Crohn's Disease: A Systematic Review and Meta-Analysis

Maarten J Pruijt <sup>1</sup>, Floris A E de Voogd <sup>1</sup>, Nahid S M Montazeri <sup>1</sup>, Faridi S van Etten-Jamaludin <sup>2</sup>, Geert R D'Haens <sup>1</sup>, Krisztina B Gecse <sup>1</sup>

# CD patient Marcel: Jan 24th, 2weeks post 3rd IFX-infusion



# CD patient Marcel: Jan 24th, 2weeks post 3rd IFX-infusion

Im: 1/794  
Se: 5  
Lossy compression (JPEG)



LOGIQ  
S8



Sonografie Abdomen  
Sonografie Abdomen

0"

2"

4"

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8"

WL: 128 WW: 256 [D]

24.01.2019 14:18:26

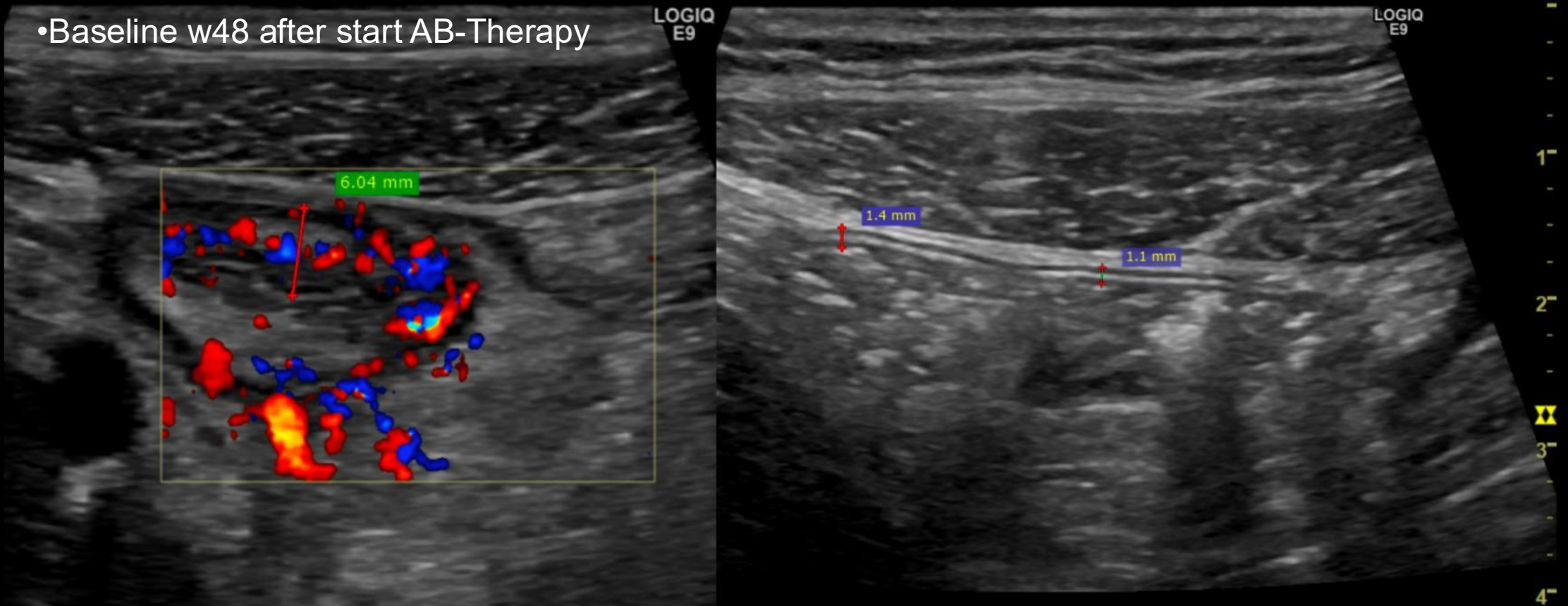


## **CD patient Marcel: MDT meeting**

Surgical therapy: Ileo-cecal resection, side-to-side- ileo-ascendostomie March 15th

# Treatment goal: Transmural Remission

- Baseline w48 after start AB-Therapy



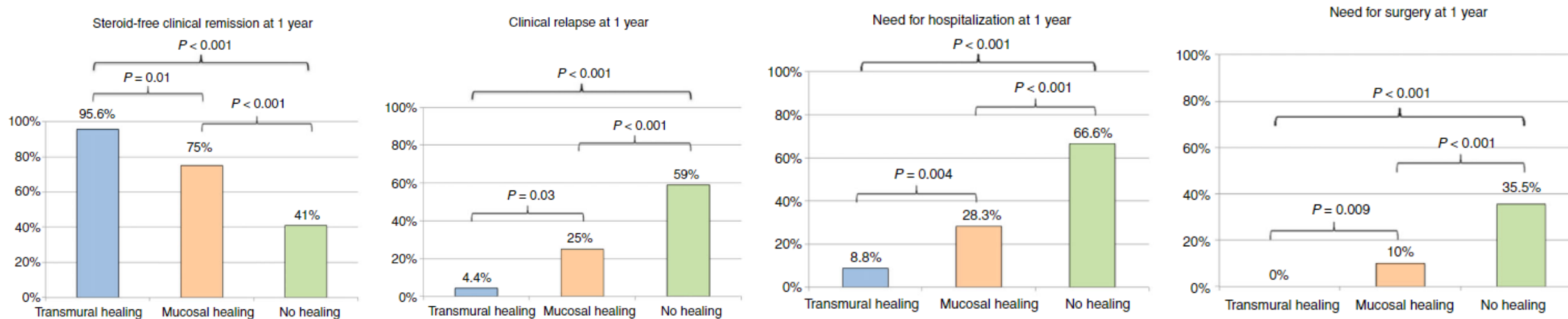
# One-year clinical outcomes with biologics in CD: transmural healing compared with mucosal or no healing



N = 231 CD patients that continued a 2yr treatment period with ADA or IFX



Prospective observational single center study in Italy 2014-2018



No healing: SES-CD > 2 and BWT > 3 mm

Mucosal healing: SES-CD ≤ 2

Transmural healing: BWT ≤ 3



## Early transmural response assessed by intestinal ultrasound predicts long term clinical remission in IBD patients – Results from the TRUST BEYOND study

# TRUST BEYOND

### Study Objective & Design

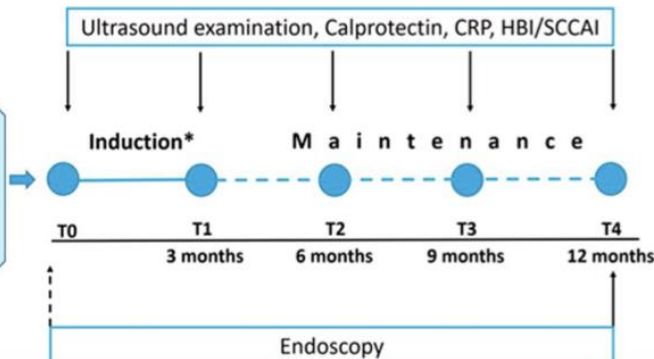
- To prospectively examine clinical, biochemical, and transmural outcomes the latter assessed by ultrasound after one year in IBD patients treated with advanced therapies in line with standard of care
- A prospective, multi-centre, non-interventional study



n = 282 Pts. with:

- increased bowel wall thickness
- active CD/UC
- selected for advanced therapy

Of these, 163 patients with documented BL, T1, T4 visit



**Intestinal ultrasound is a suitable non-invasive modality to monitor IBD patients in routine care. Transmural endpoints can be achieved in IBD patients treated with standard of care and can predict outcomes after one year.**

### Results

- IBD patients demonstrated vast improvements in clinical, biochemical, and ultrasound assessments as early as week 12.
- Rates of transmural response and healing progressively increased over the study period to up to 77.5% and 39.3%, respectively in UC patients and to 66.2% and 27.0%, respectively in CD patients.
- Patients with early transmural response achieved numerically higher rates of various outcomes at week 52 than patients without early transmural response.
- **In a multivariate analysis, transmural response at week 12 predicted clinical remission at week 52 (OR 4.3 (2.45-7.52);  $p < 0.001$ ).**

# Transmural healing data confirmed

> [Inflamm Bowel Dis](#). 2025 Apr 25:izaf068. doi: 10.1093/ibd/izaf068. Online ahead of print.

## **Transmural Healing Assessed by Combination of Fecal Calprotectin and Intestinal Ultrasonography Is Associated With Reduced Risk of Bowel Damage Progression in Patients With Crohn's Disease**

Julie Huet <sup>1</sup>, Kelly Mathieu <sup>1</sup>, Marie Dodel <sup>1</sup>, Dilek Coban <sup>1</sup>, Maëva Bazoge <sup>1</sup>, Bruno Pereira <sup>2</sup>, Anthony Buisson <sup>3</sup>

**But note: Transmural healing is not reachable in every patient with current treatment options**

> [Aliment Pharmacol Ther](#). 2022 Jul;56(1):84-94. doi: 10.1111/apt.16892. Epub 2022 Mar 28.

## **Toward transmural healing: Sonographic healing is associated with improved long-term outcomes in patients with Crohn's disease**

Rose Vaughan <sup>1</sup>, Douglas Tjandra <sup>1</sup>, Ashwin Patwardhan <sup>1</sup>, Nicholas Mingos <sup>1</sup>, Robert Gibson <sup>2</sup>, Alex Boussioutas <sup>1</sup>, Zaid Ardalan <sup>1</sup>, Aysha Al-Ani <sup>1</sup>, Peter R Gibson <sup>3</sup>, Britt Christensen <sup>1</sup>

- **Marcel: June = 3 month postoperative**

- → postsurgical Monitoring?

# IUS +fCalpro for postsurgical monitoring:



Ileoascendostomie

fCalprotectin: 250  $\mu\text{g/g}$

# ECCO-ESGAR-ESP-IBUS 2025 multi-society guideline for Diagnostics and Monitoring of Patients with IBD: **Monitoring Ulcerative colitis**

## **Before treatment initiation**

### **Following treatment initiation**

### **Proactive monitoring of asymptomatic patient**

#### **Recommendation 8**

In patients with UC requiring **treatment initiation or optimization** we recommend early (within 12 weeks) clinical [EL1], biochemical [EL1] and **endoscopic** [EL1] **or ultrasonographic** [EL2] response assessment. Results should be interpreted based on prior baseline assessment. (92% agreement)

#### **Recommendation 9**

In patients with UC in **stable remission**, we suggest using patient reported outcomes and biomarkers (such as fecal calprotectin and CRP) **and/or intestinal ultrasound** to monitor for relapse of disease, based on risk stratification. [EL3] (94% agreement)

#### **Recommendation 10**

In patients with UC **with new or worsening GI symptoms**, we suggest disease activity assessment with FC, **cross sectional imaging and/or lower endoscopy**, depending on disease severity (EL3). We suggest excluding alternative aetiologies, particularly *Clostridioides difficile* (EL3). Consider CMV infection in patients with acute severe colitis or steroid-refractory disease (EL4). (85% agreement)

# IUS in UC: Recent Scientific evidence

- *TRUST-UC*: normalization of bowel wall parameters as early as **2 weeks** after start of therapy
- Correlation of IUS and endoscopy:  $BWT \geq 3mm$  on IUS identifies inflammation on endoscopy
- ASUC: IUS can identify Steroid-responders as early as **48h** after start of treatment and predict patients at risk for colectomy
- IUS is a prognostic tool in new-onset ulcerative colitis
- Early IUS response to biologic and small molecule therapy is accurate to predict treat-to-target endoscopic outcomes in children and adults with UC
- Early response of BWT on transperineal US predicts treatment success in active UC
- ...

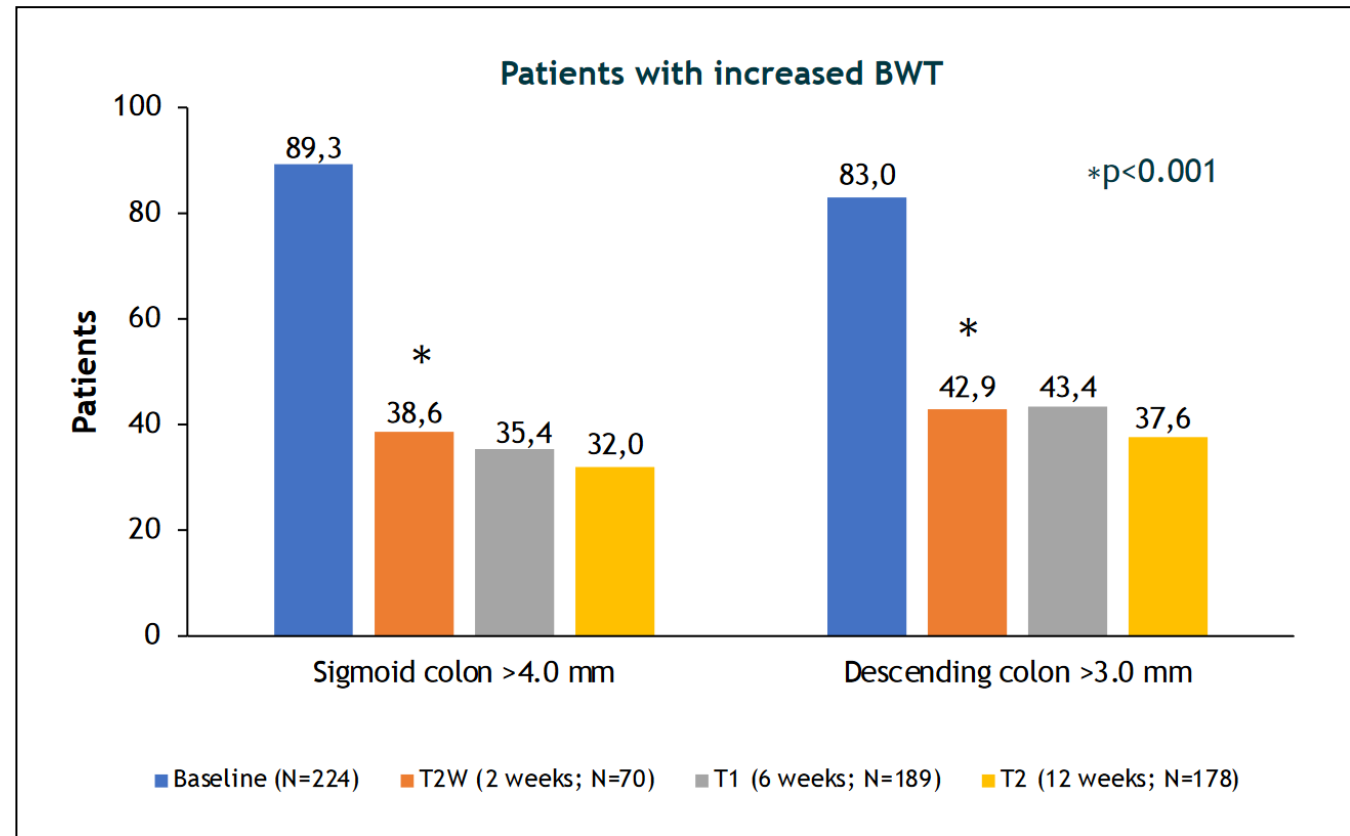
# TRUST&UC: *Intestinal Ultrasound Response as early as 2 weeks after start of treatment*

**Patients:** 224 UC patients (E2/E3) with clinically active disease (SCCAI  $\geq 5$ ) receiving standard treatment in 40 centers

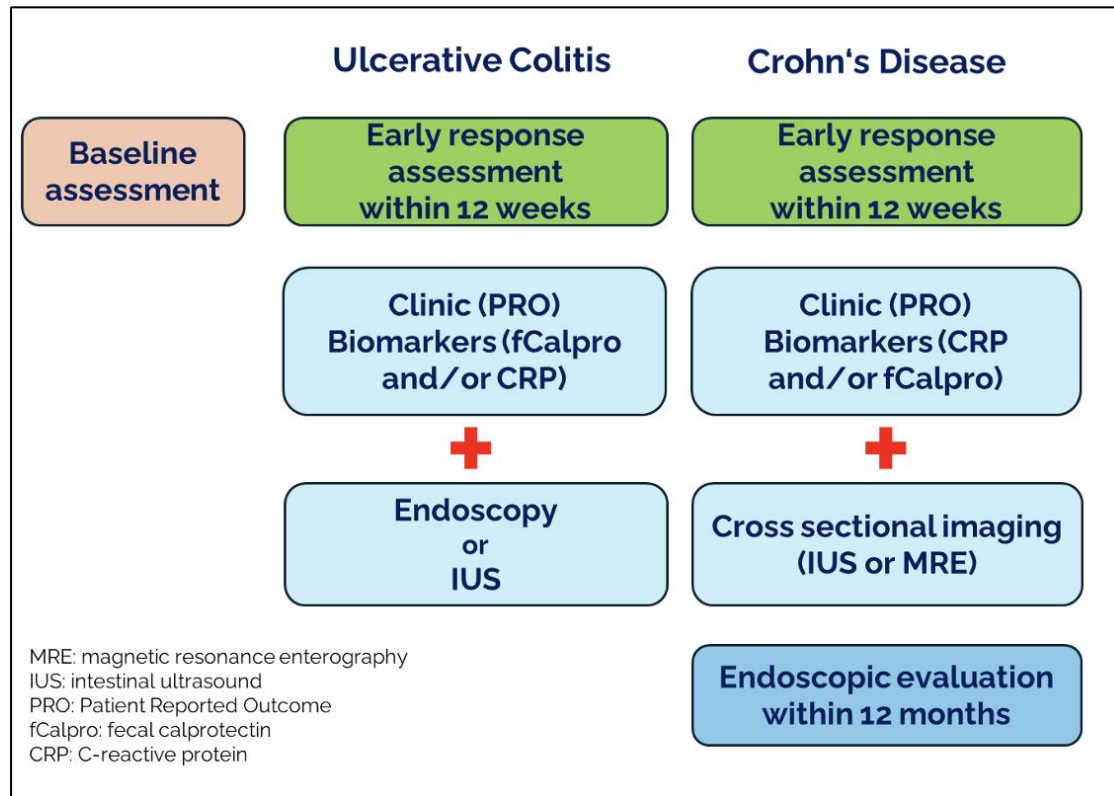
**Intervention:** IUS at baseline, w2, w6 and w12

**Outcome:** Proportion of patients with normalisation of BWT in patients with clinical response (decrease in SCCAI by  $\geq 3$  points) at week 12 as compared with baseline

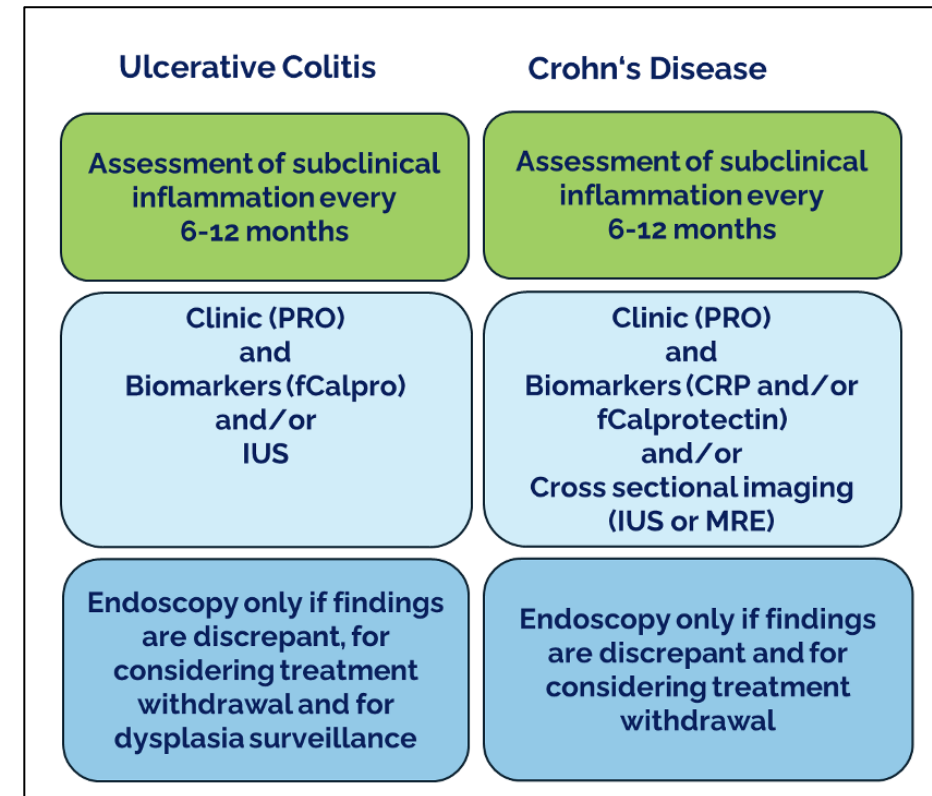
**Results:** 90.5% patients with normalised BWT had symptomatic response after 12 weeks of treatment vs 9.5% of patients without symptomatic response ( $p < 0.001$ )



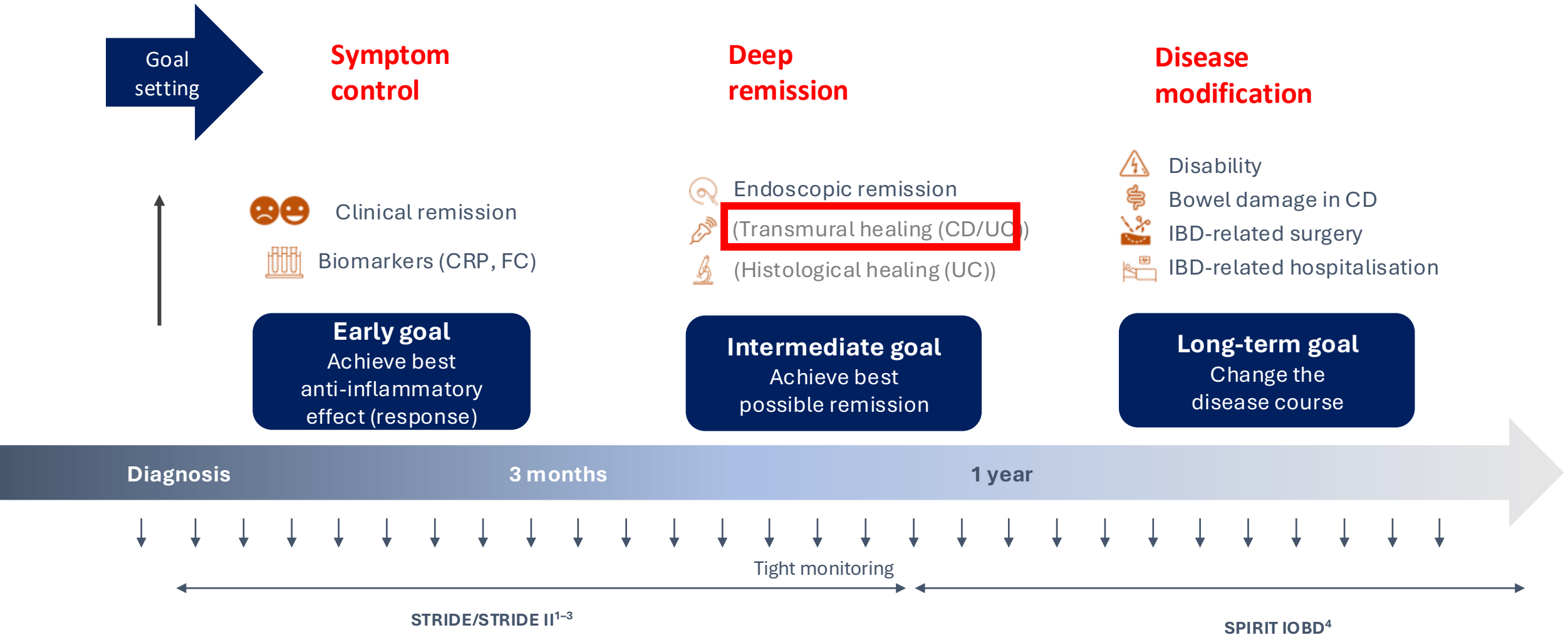
## Monitoring of active IBD after treatment initiation and optimization



## Monitoring of IBD in clinical remission



# Goal of Disease Monitoring in IBD: **Disease Modification**

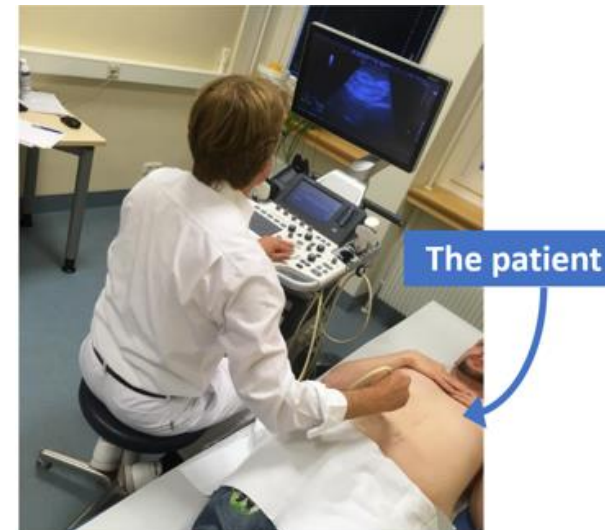


## Future of IUS: To keep in mind

### Point-of-Care IUS and patient understanding

Gastroenterologist-performed point of care IUS improved patient understanding of:

- Disease activity
- Symptomatology
- Management decisions
- Clinical outcomes



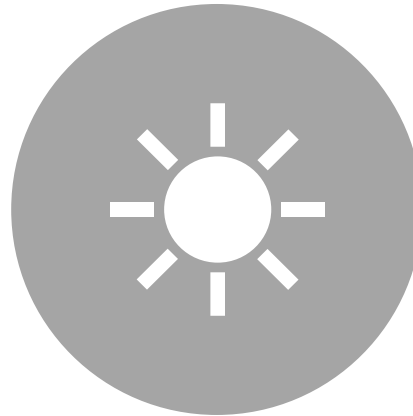
IUS may improve adherence with treatment and clinical outcomes

# Future of IUS: To keep in mind

## *Green Management of IBD – New paradigms for an Eco-Friendly Approach*

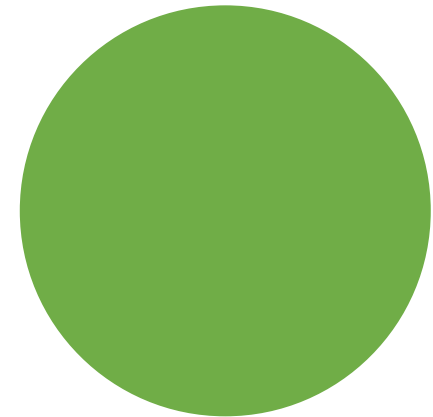


DOES ANYBODY KNOW THE  
NUMBERS?



CONSUMPTION OF ENERGY  
FOR ANY EXAM PERFORMED?

Annual energy consumption:  
1 MRI machine = 26 households  
1 MRI = average 20 kg CO<sub>2</sub> emission  
= 83 km driving of a petrol-powered car



IUS IS GREENER....

**Strong recommendations to use IUS for  
monitoring IBD**

**.... but still many open questions to be  
answered**

# DEVELOPMENT OF AN INTESTINAL ULTRASOUND SCORE TO EVALUATE INFLAMMATION AND TREATMENT RESPONSE IN CD

## USE-IT

### A PROSPECTIVE MULTICENTER STUDY

PI: Kerri Novak, Canada



## Calculating the LEmann IndeX Using InTEstiNal Ultrasound (EXTENT)

ClinicalTrials.gov ID ⓘ NCT06647823

Sponsor ⓘ International Bowel Ultrasound Group e.V.

Information provided by ⓘ International Bowel Ultrasound Group e.V. (Responsible Party)

Last Update Posted ⓘ 2024-10-23

PIs:  
Carolina Palmela, Portugal  
Bram Verstockt, Belgium



[Source: ClinicalTrials.gov](https://clinicaltrials.gov)

# IUS for postoperative monitoring

## Prediction and Close Monitoring of Postoperative Recurrence by Intestinal Ultrasound After Ileocecal Resection in Crohn's Disease Patients (INSIGHT)

ClinicalTrials.gov ID ⓘ NCT05713409

Sponsor ⓘ Academisch Medisch Centrum - Universiteit van Amsterdam (AMC-UvA)

Information provided by ⓘ Krisztina Gecse, Academisch Medisch Centrum - Universiteit van Amsterdam (AMC-UvA) (Responsible Party)

Last Update Posted ⓘ 2023-02-06

# IUS for measuring fibrosis

Recruiting 

## Shear-Wave Elastography in **Intestinal** Fibrosis Evaluation in Crohn's Disease (EL-CHIR)

ClinicalTrials.gov ID  NCT06056986

Sponsor  Fondazione Policlinico Universitario Agostino Gemelli IRCCS

Information provided by  Zocco Maria Assunta, Fondazione Policlinico Universitario Agostino Gemelli IRCCS (Responsible Party)

Last Update Posted  2023-09-28

# Ultrasound for monitoring the pouch

Recruiting 

**Non-invasive Assessment of RECTUM (POUCH) by US (RECT-US) in a Cohort of IBD Patients (RECT-US)**

ClinicalTrials.gov ID  NCT06407674

Sponsor  IRCCS San Raffaele

Information provided by  Mariangela Allocca, IRCCS San Raffaele (Responsible Party)

Last Update Posted  2024-05-09

[Source: ClinicalTrials.gov](https://clinicaltrials.gov)

# IUS in IBD: Hand-helds the future?

> J Crohns Colitis. 2023 Jul 5;17(7):1089-1096. doi: 10.1093/ecco-jcc/jjad024.

## Hocus Pocus: the Role of Hand-held Ultrasonography in Predicting Disease Extension and Endoscopic Activity in Ulcerative Colitis

Antonio Rispo<sup>1</sup>, Giulio Calabrese<sup>1</sup>, Anna Testa<sup>1</sup>, Nicola Imperatore<sup>2</sup>, Marta Patturelli<sup>1</sup>, Mariangela Allocca<sup>3</sup>, Alessia Dalila Guarino<sup>1</sup>, Nicola Mattia Cantisani<sup>1</sup>, Benedetta Toro<sup>1</sup>, Fabiana Castiglione<sup>1</sup>

Not yet recruiting ⓘ

## The Utility of Hand-held **Ultrasound** Devices to Detect **Bowel** Wall Inflammatory Activity in Crohn's Disease

ClinicalTrials.gov ID ⓘ NCT06686589

Sponsor ⓘ Sheba Medical Center

Information provided by ⓘ Dr. Dan Carter, Gastroenterologist, Sheba Medical Center (Responsible Party)

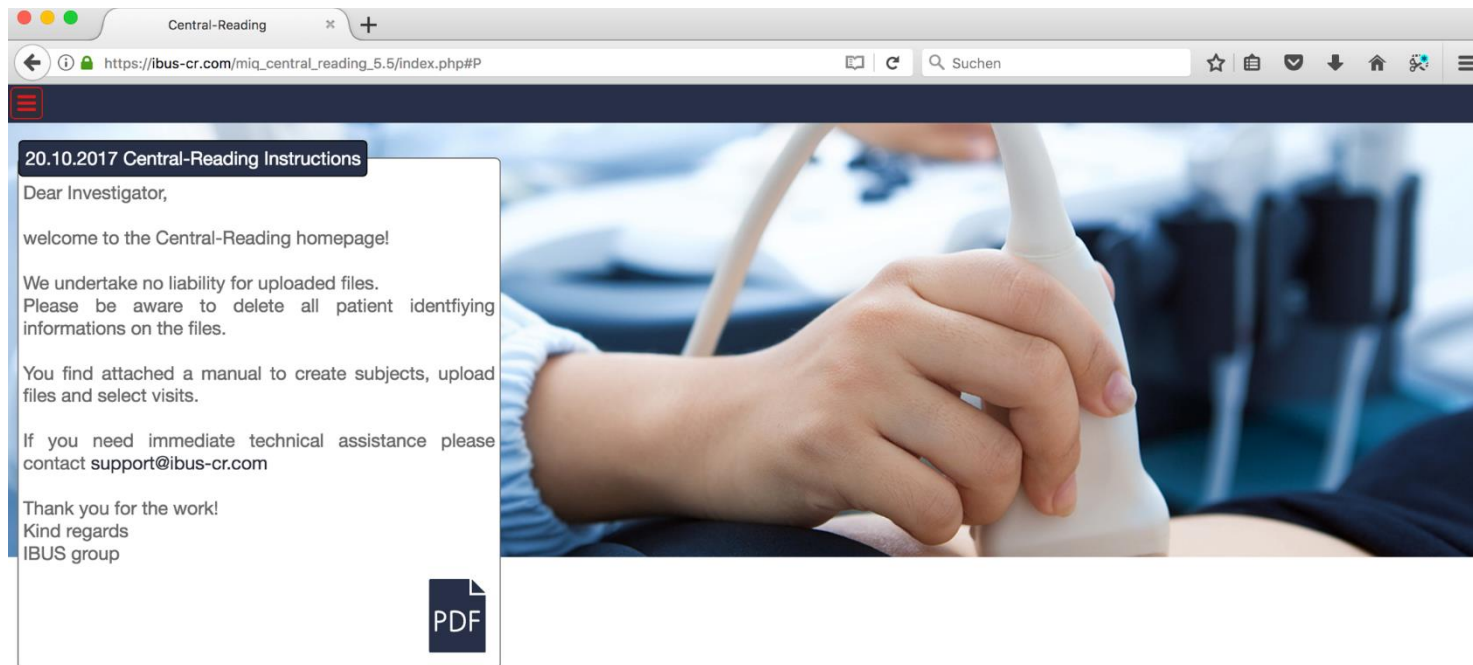
Last Update Posted ⓘ 2024-11-13

|                                                                                                                                                                                                   |                                                                                                                                                                                                    |                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>GE Healthcare<br/>Vscan Air CL...<br/>5.355,00 €<br/>DocCheckShop.<br/>Kostenloser ...<br/>Von smec</p>    |  <p>Butterfly iQ+<br/>mit Lightning-...<br/>3.449,81 €<br/>praxisdienst.de<br/>Kostenloser ...<br/>Von smec</p> |  <p>3-in-1 Handheld<br/>WLAN...<br/>2.200,00 €<br/>eBay.de<br/>Kostenloser ...<br/>Von Stendia</p>  |
|  <p>Gymna<br/>Ultraschallthe...<br/>2.299,00 €<br/>Sport-Tec.de<br/>Kostenloser ...<br/>Von Smarketer</p>      |  <p>Philips Lumify<br/>Ultraschallgerät<br/>6.783,00 €<br/>Medizinio<br/>Kostenloser ...<br/>Von Google</p>     |  <p>DAS NOVAFON<br/>power 2 I...<br/>499,00 €<br/>Novafon<br/>Kostenloser ...<br/>Von Google</p>    |
|  <p>Clarius HD3<br/>Ultraschallsys...<br/>6.531,91 €<br/>praxisdienst.de<br/>Kostenloser ...<br/>Von smec</p> |  <p>NOVAFON<br/>max+ inkl...<br/>699,00 €<br/>Novafon<br/>Kostenloser ...<br/>Von Google</p>                   |  <p>Gymna<br/>»Ultrasound...<br/>2.140,81 €<br/>Medizina<br/>Kostenloser ...<br/>Von Smarketer</p> |

Source: google

Source: ClinicalTrials.gov

# IUS has entered IBD-pharma trials as secondary or exploratory endpoint



## CENTRAL-READING

Username

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## ***A Phase 3b, Open-label, Multicenter Study to Evaluate Transmural Healing and Disease Modifying Effect of Guselkumab in CD Patients***

**Recruiting** ⓘ

**Transmural Healing and Disease-Modifying Effect of Guselkumab in Crohn's Disease Patients (REASON)**

ClinicalTrials.gov ID ⓘ NCT06408935

**Sponsor** ⓘ Janssen-Cilag Ltd.

**Information provided by** ⓘ Janssen-Cilag Ltd. (Responsible Party)

**Last Update Posted** ⓘ 2025-02-11

*An Interventional Study to Evaluate Treating to a Target of Transmural Healing in Patients With Moderately to Severely Active Crohn's Disease*

Recruiting

VECTORS - A Study to Evaluate Transmural Healing as a Treatment Target in Crohn's Disease (VECTORS)

ClinicalTrials.gov ID

NCT06257706

Sponsor

Alimentiv Inc.

Information provided by

Alimentiv Inc. (Responsible Party)

Last Update Posted

2025-01-29

|                                |  |
|--------------------------------|--|
| Study Start (Actual)           |  |
| 2024-08-07                     |  |
| Primary Completion (Estimated) |  |
| 2027-01-03                     |  |
| Study Completion (Estimated)   |  |
| 2028-09-06                     |  |
| Enrollment (Estimated)         |  |
| 304                            |  |
| Study Type                     |  |
| Interventional                 |  |
| Phase                          |  |
| Phase 4                        |  |

# Integrating IUS in clinical trial

## Challenges of IUS in clinical trials

- IUS experienced staff needed
- IUS video loop documentation including test loops different from point-of-care IUS
- IUS recording for clinical trials takes time
- IUS recordings still need to be downloaded from the machine and uploaded on the central reading platform
- ...

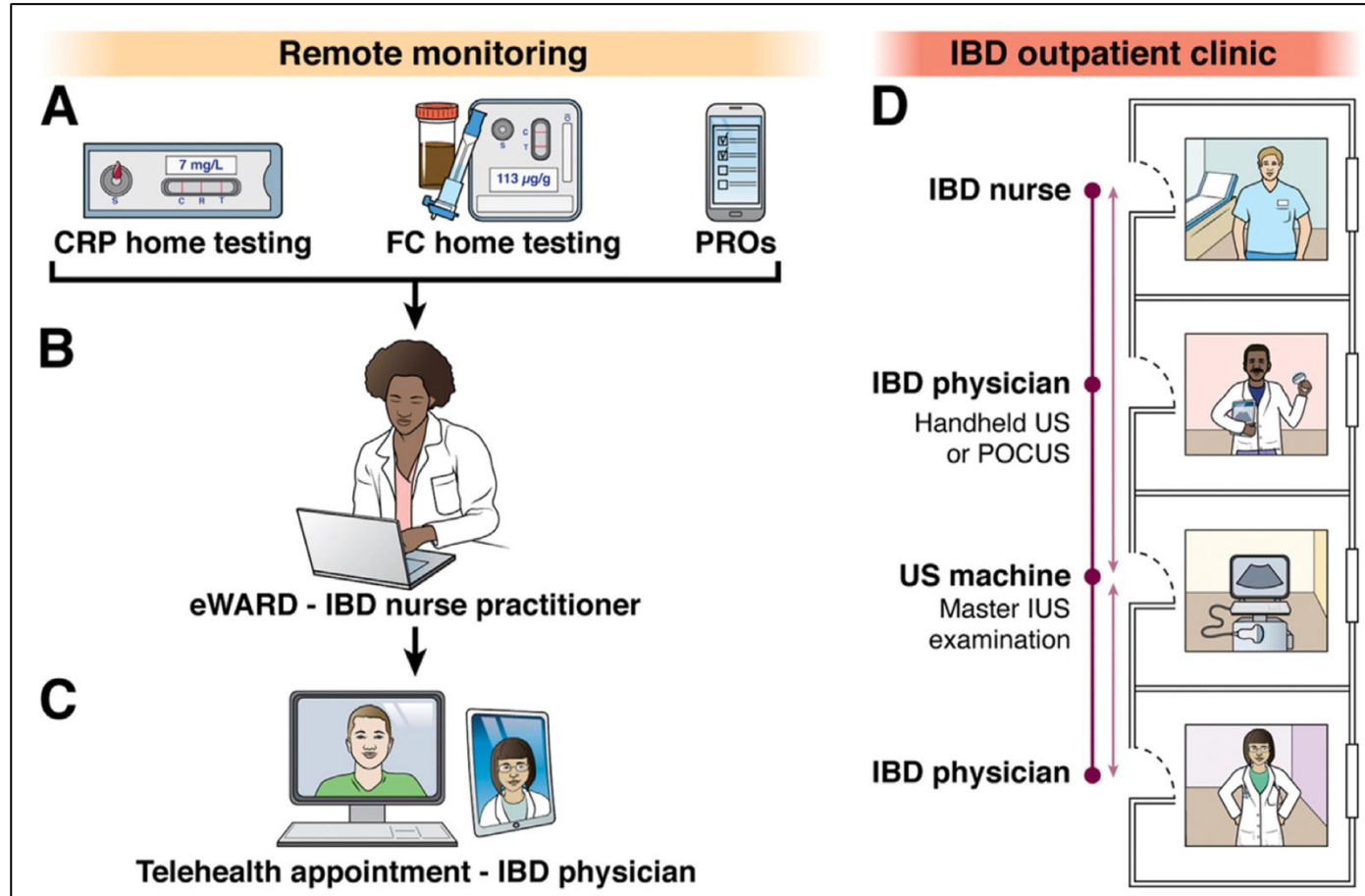
**You are  
needed!**

## Opportunities of IUS in clinical trials

- Prestudy IUS to select the correct patients
- Information on early response to study drug compared to endoscopy
- Information on transmural response and healing
- Detection and exclusion of complications
- ...

**Look into the potential future**

# Tight monitoring concept to optimize short- and longterm outcomes



Overcrowded clinics +  
shortage of staff



Patient performed  
remote IUS?

# Home based patient performed ultrasound



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What do we stand for?

## Remote & reliable prenatal care

Pulsenmore is a digital prenatal care platform that enables ultrasound imaging and care from home. Prescribed by a physician, our solution enhances access to care, improves resource management and provides greater flexibility for caregivers.



Bridging healthcare gaps with  
Home Ultrasound

[Source: pulsenmore.com](https://pulsenmore.com)

# Patient performed ultrasound: Scientific evidence



CLINICAL ARTICLE

## Hybrid remote and in-clinic maternal-fetal surveillance for women with gestational diabetes: A prospective pilot study

Michal Axelrod , Hila Lahav Ezra, Esther Galler, Omer Nir, Keren Ofir, Galia Barkai, Eyal Sivan, Shali Mazaki-Tovl, Abraham Tsur

First published: 24 January 2025 | <https://doi.org/10.1002/ijgo.16148>



CLINICAL ARTICLE |  Open Access | 

## Integrating technologies to provide comprehensive remote fetal surveillance: A prospective pilot study

Omer Nir , Gur Dvir, Esther Galler, Michal Axelrod, Adel Farhi, Galia Barkai, Boaz Weisz, Eyal Sivan, Shali Mazaki Tovi, Abraham Tsur

First published: 08 August 2023 | <https://doi.org/10.1002/ijgo.15018> | Citations: 1



J. Clin. Med. 2025, 14(2), 654; <https://doi.org/10.3390/jcm14020654>

Submission received: 3 December 2024 / Revised: 15 January 2025 / Accepted: 17 January 2025 / Published: 20 January 2025



Open Access | Brief Report

## Dialysis Patients' Evaluation of Lung Edema at Home Using a Mobile Phone Tele-Ultrasound Application: A Pilot Study

by Itamar Ben Shitrit <sup>1,2,3,\*</sup> , Aviya Kedmi <sup>1,3</sup> , Khaled El Haj <sup>3</sup> , Amit Kosto <sup>1,3</sup> , Ofri Karmi <sup>1</sup> , Sharon Elnav <sup>4</sup> , Tomer Poleg <sup>1</sup> , Ariel Avraham Hasidim <sup>5,6</sup> , Noa Bineth <sup>3</sup> , Tomer Gat <sup>1,3</sup> , Alla Shnaider <sup>7</sup> , Orli Barad <sup>2</sup> and Lior Fuchs <sup>1,3</sup> 

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Original Article

## Fetal heart rate and amniotic fluid volume measurements with a home ultrasound device

Anat Pardo, Shir Nahum Fridland, Or Lee Rak, Emilie Klochender Frishman, Hadas Zafirir Danielli, Anat Shmuelli, Shiri Barbash-Hazan, Arnon Wiznitzer, Asnat Wallfisch, Tomer Sela, Leor Wolff, Eran Hadar

Author Affiliations  
Supported by: Pulsenmore 0062-23-RMC

Further Information

Also available at eRef

Abstract PDF (2156 kb)



American Journal of Obstetrics & Gynecology  
MFM

Volume 6, Issue 10, October 2024, 101447



Original Research

## The effect of home ultrasound on maternal anxiety in patients with previous recurrent pregnancy loss: A randomized control trial

Liat Mor MD , Eran Weiner MD, Or Marom MD, Daniel Tairy MD, Moran Nardi-Arad MD, Giulia Bardo MD, Liliya Tamayev MD, Michal Levy MD

Source: [pulsenmore.com](https://pulsenmore.com)

# Novice-performed point-of-care ultrasound for homebased imaging



Lung ultrasound performed by 31 volunteers  
→ experts



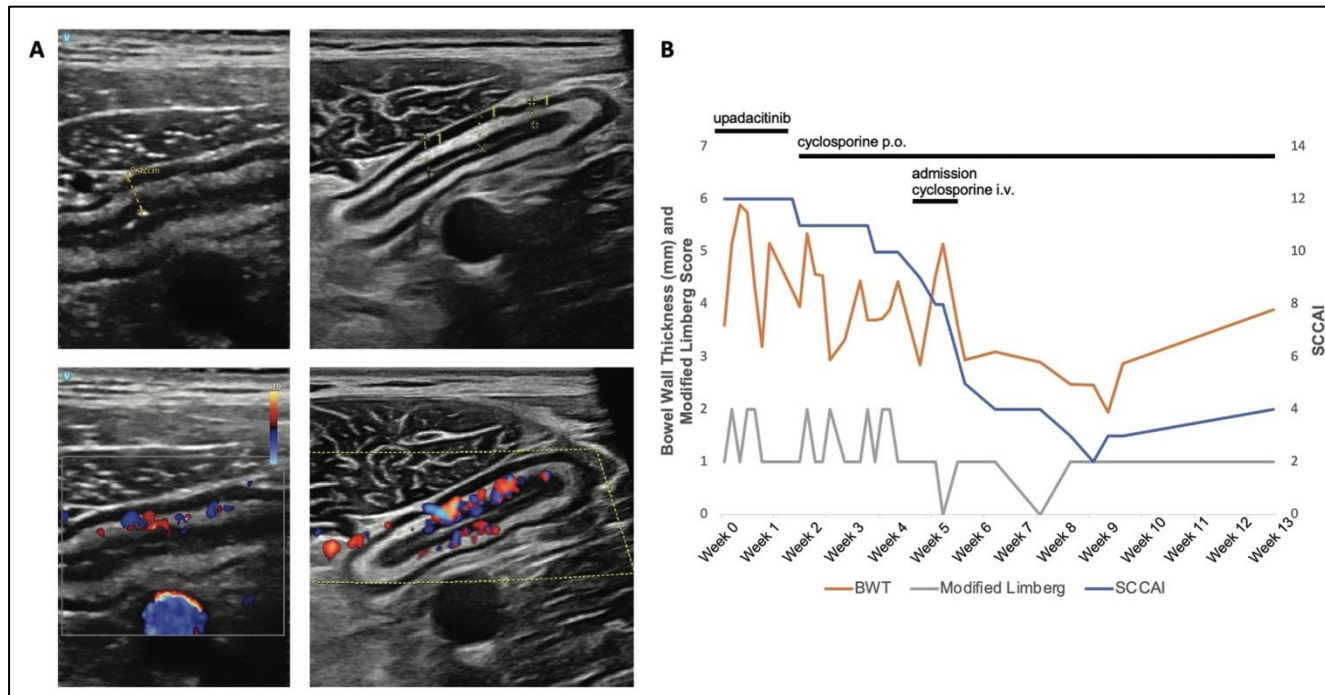
- Quality of scans did not differ ( $p = 0.09$ )
- Individual zone quality did not differ ( $P > 0.05$ ).
- Interpretability of LUS was similar between expert and novice scanners  $p = 0.42$ )
- Interpretability of novice-obtained scans did not differ from expert scans ( $p = 0.42$ ).

# At-home Disease Monitoring by Patient-performed Intestinal Ultrasound in Severe Ulcerative Colitis

Noa Krugliak Cleveland, MD,\* Yusuke Miyatani, MD,\* Emma A. Picker, BA,\* and David T. Rubin, MD\* 

From the \*University of Chicago Medicine Inflammatory Bowel Disease Center, Chicago, IL, USA

Address correspondence to: David T Rubin, 5841 S. Maryland Avenue, MC 4076, Chicago, IL 60637, USA ([drubin@bsd.uchicago.edu](mailto:drubin@bsd.uchicago.edu)).



*Inflammatory Bowel Diseases*, 2023, **29**, 1997–1998

<https://doi.org/10.1093/ibd/izad237>

Advance access publication 16 October 2023

**Case Report**



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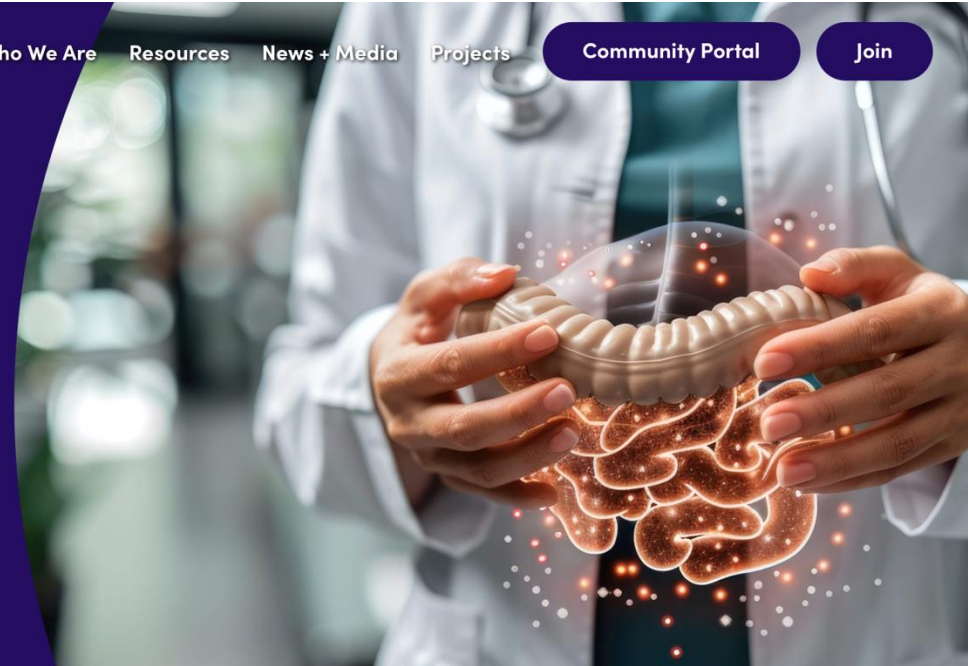
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# AI-Powered Ultrasound for Gastrointestinal Healthcare

Revolutionizing intestinal ultrasound with AI for quicker and more accurate diagnosis of gastrointestinal diseases.



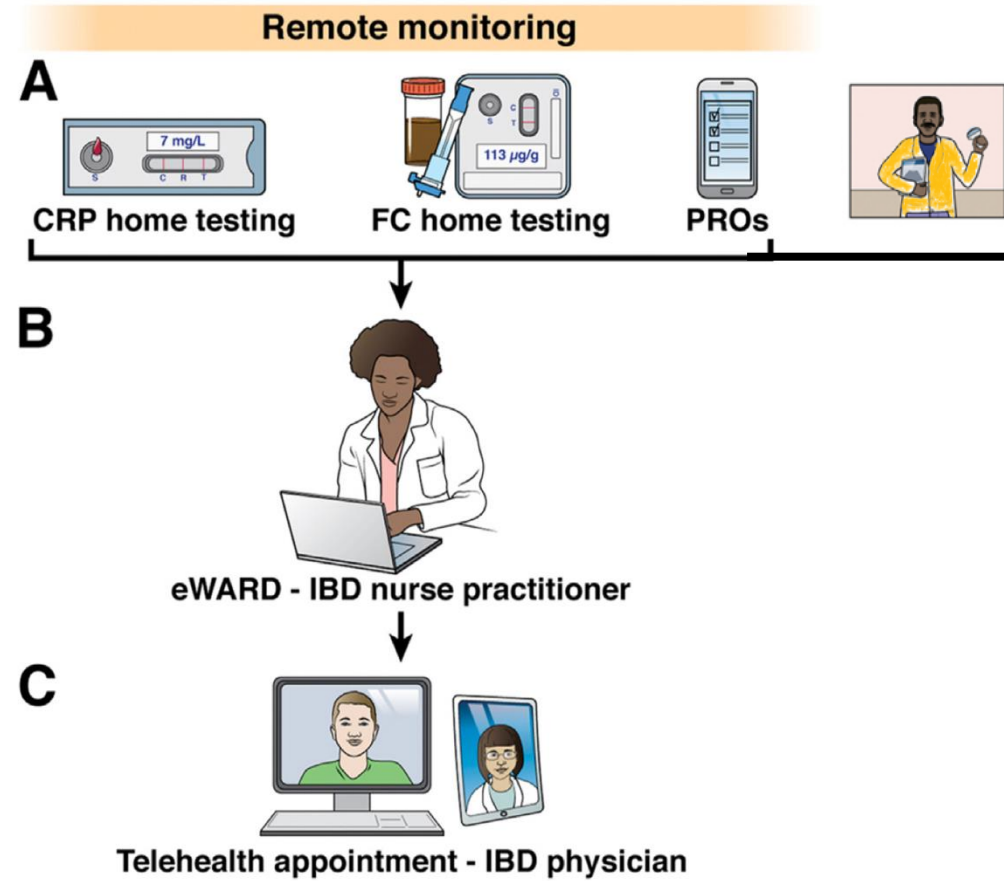
## Project Lead

## Project Partners



[Source: digitalsupercluster.ca](https://digitalsupercluster.ca)

# Tight home monitoring of IBD to improve the transmural healing rate: The Future?



# Welcome to the IBUS family

**July 2026  
IBUS XP**

