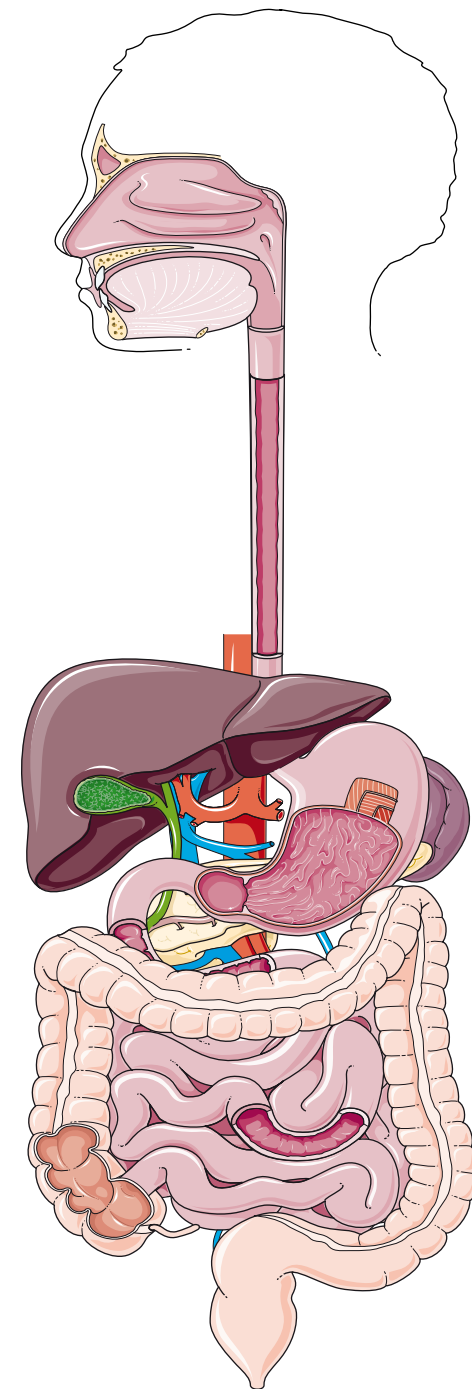


Duración	Título	Conferencista
20 minutos	Generalidades de la enfermedad inflamatoria intestinal; fisiopatología, diagnóstico y tratamiento.	Dr. Otero
40 minutos	Uso de Vedolizumab en líneas tempranas de terapia biológica; revisión de evidencia clínica	Dr. Otero
30 minutos	¿Cuál es el paciente candidato a Vedolizumab?, sesión de discusión	Dr. Otero
20 minutos	sesión de preguntas y respuestas	Dr. Otero

# El: Generalidades, Fisiopatología, diagnóstico tratamiento



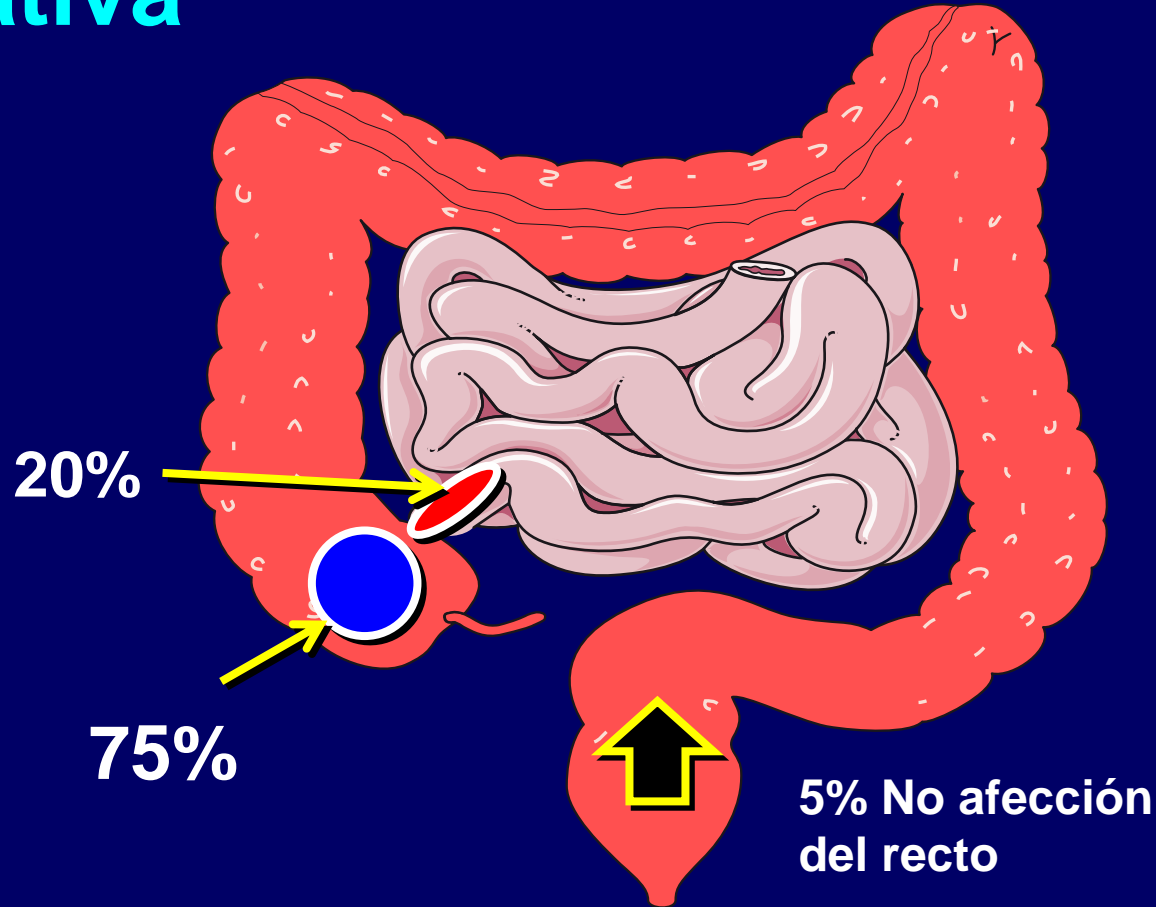
***William Otero R MD, FAGA, FACP  
Profesor Titular de Medicina,  
Coordinador de Gastroenterología  
Universidad Nacional de Colombia  
Hospital Universitario Nacional de Colombia***



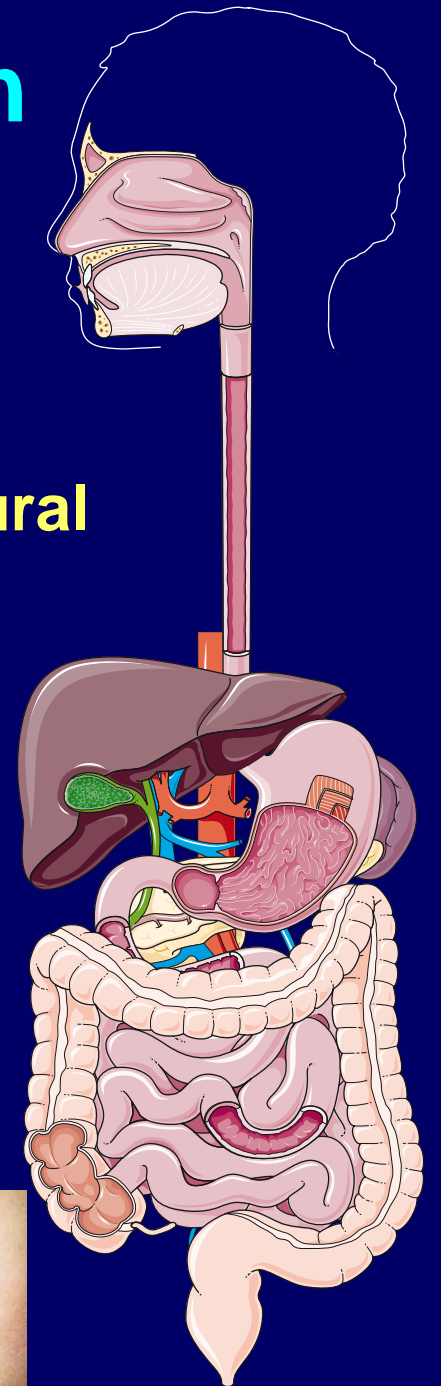
# Colitis Ulcerativa

# EII

# E de Crohn

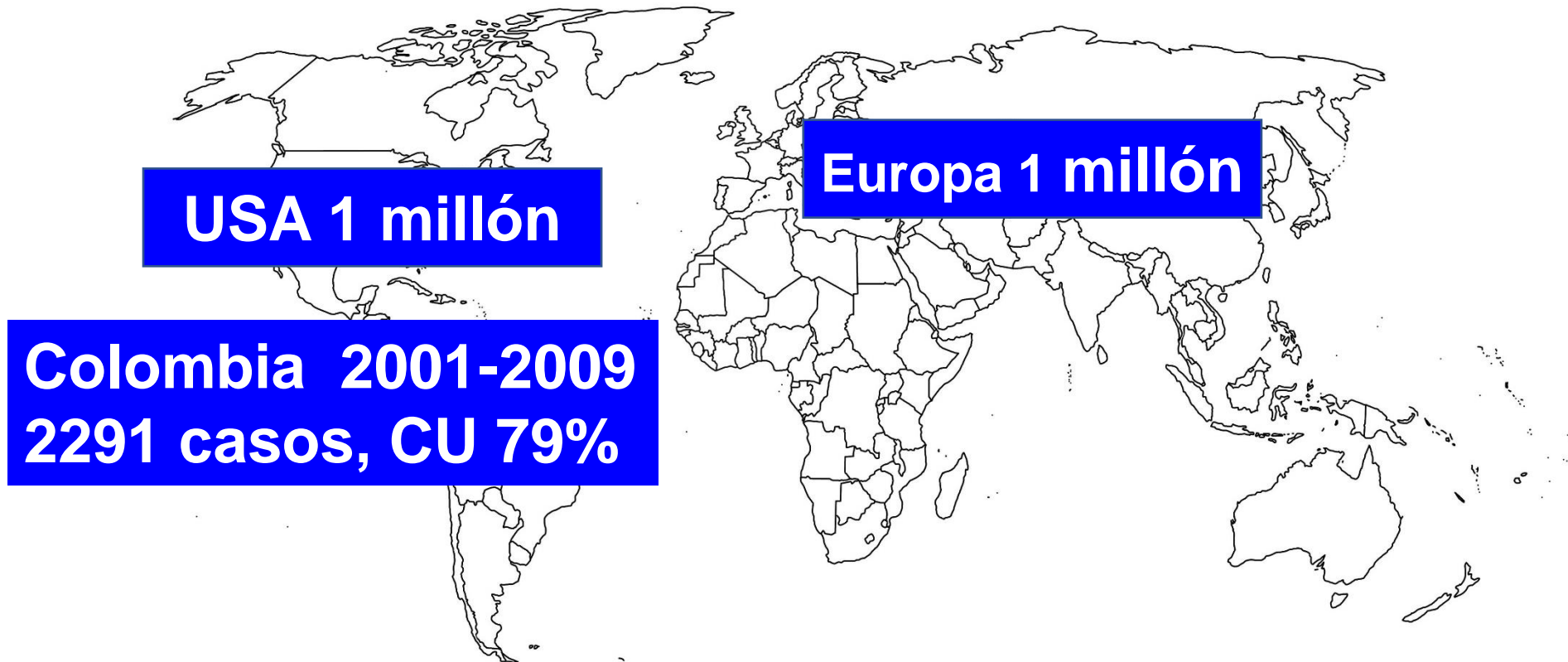


## Focal Transmural



Mowat C, Gut 2011;60:571-607  
Ungaro R, Lancet 2016 On line Nov 30  
Rubin DT Am J Gastroenterol 2019;114:384-413

# Colitis ulcerativa Epidemiología

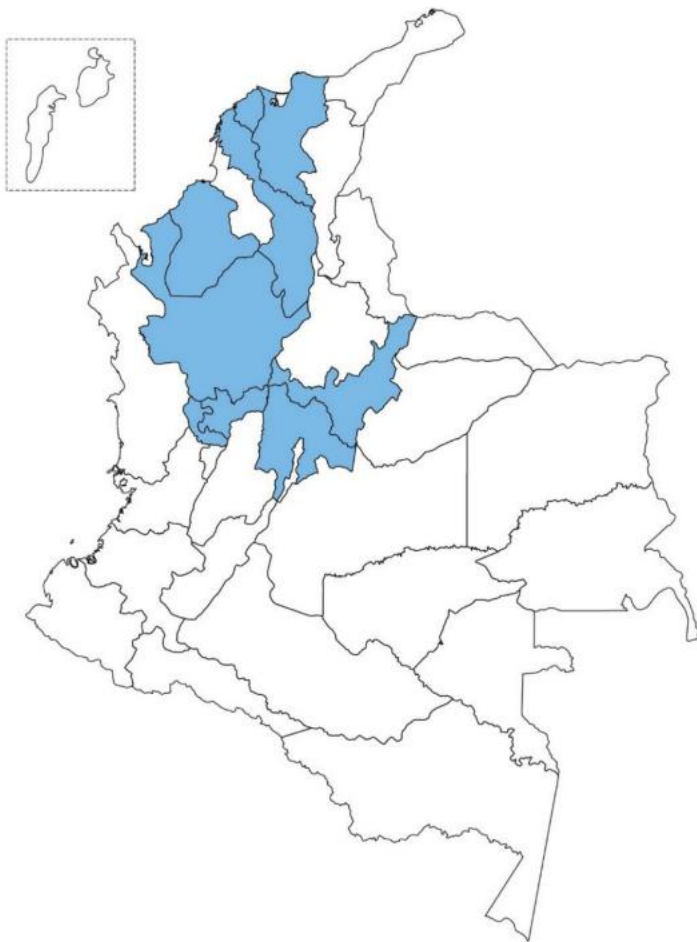


Rubin D, et al. Am J Gastroenterol 2019;114:384–413  
Juliao F, et al. Rev Gastroenterol Mex 2021; 86:153-162

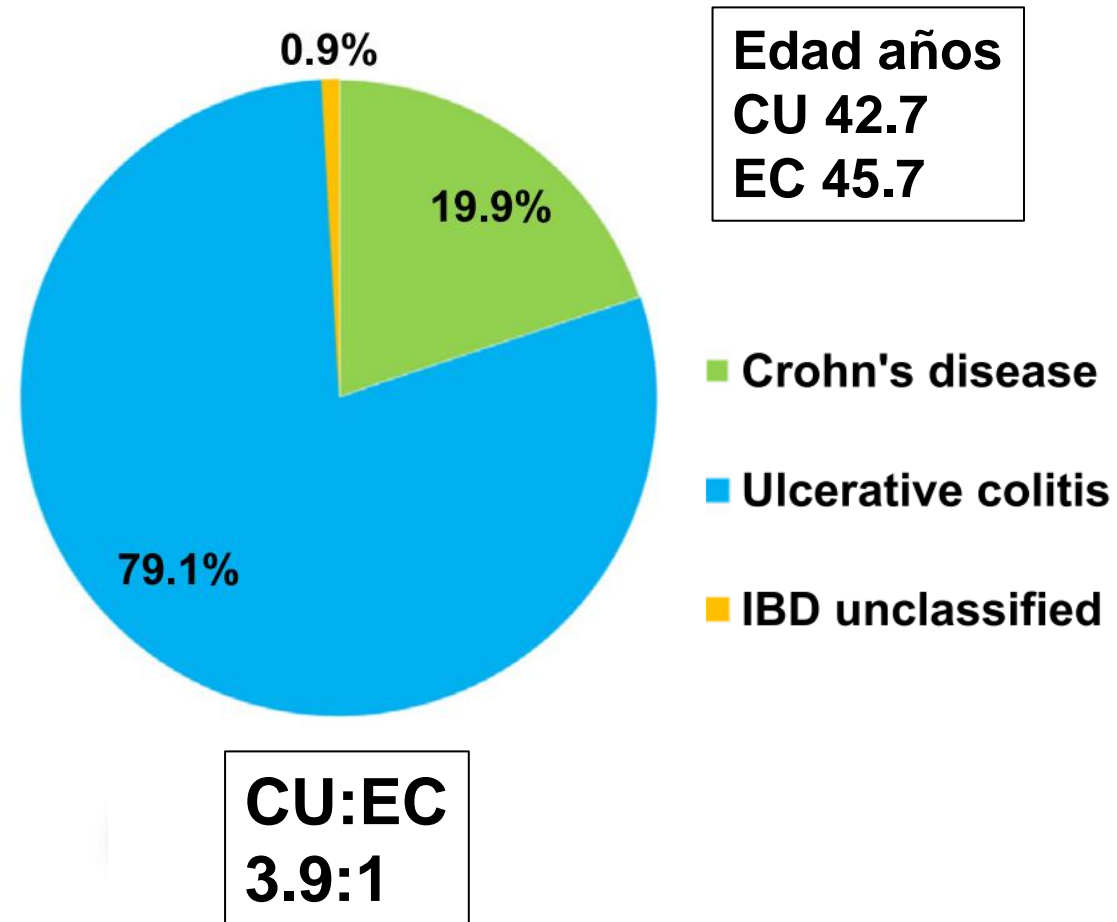
# Characterization of inflammatory bowel disease in Colombia: Results of a national register<sup>☆</sup>



F. Juliao-Baños<sup>a,\*</sup>, F. Puentes<sup>b</sup>, R. López<sup>c</sup>, M.A. Saffon<sup>d</sup>, G. Reyes<sup>e</sup>, V. Parra<sup>f</sup>, M.T. Galiano<sup>g</sup>, M. Barraza<sup>h</sup>, J. Molano<sup>i</sup>, E. Álvarez<sup>j</sup>, R. Corrales<sup>k</sup>, L.E. Vargas<sup>l</sup>, F. Gil<sup>e</sup>, P. Álvarez<sup>m</sup>, L. Limas<sup>n</sup>, R. Prieto<sup>o</sup>, P. Yance<sup>p</sup>, F. Díaz<sup>q</sup>, J. Bareño<sup>r</sup>, Grupo del Registro Colombiano de Enfermedad Inflamatoria Intestinal



**Pacientes Evaluados**  
**2.291**



# Universidad Nacional 1991

**108 casos**

**EC 10**

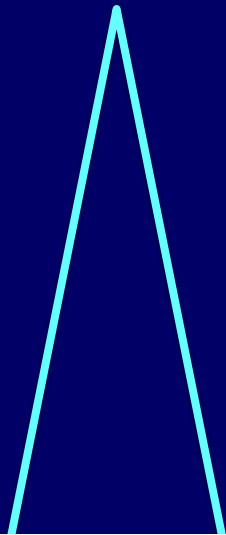
**CU 98**

Argüello M, Archila P, Sierra F, Otero W.  
Rev Col Ggastroenterol 1991;6:237-72

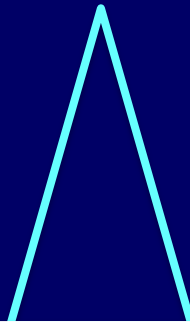
# CU, Picos de incidencia

A cualquier edad

30-40 años



60-70 años



Disminuye > 60 años

10-30%  $\geq$  60 años  
10% >80 años  
El comienzo tardío

Próximas décadas 30%

Everhov AH Gastroenterology 2018;154:518-28  
Butter M, Maturitas 2018;110:71-8

Cosnes J, Gastroenterology 2011;140:1785-94  
Gisbert JP, Aliment Pharmacol Ther 2014;39:459-77

# Fisiopatologia

## Cotton top Tamarin

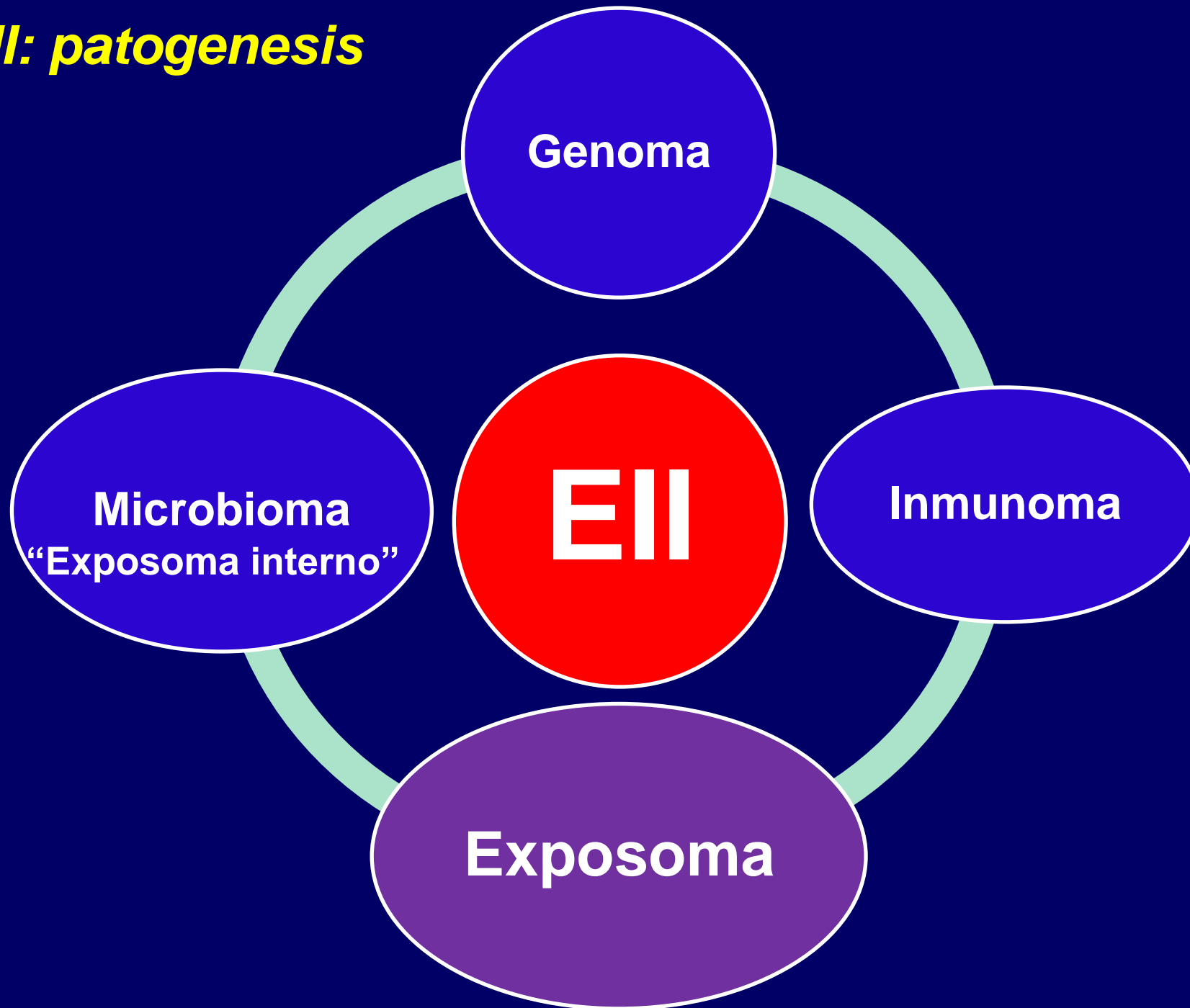


Tamarino cabeza de algodón



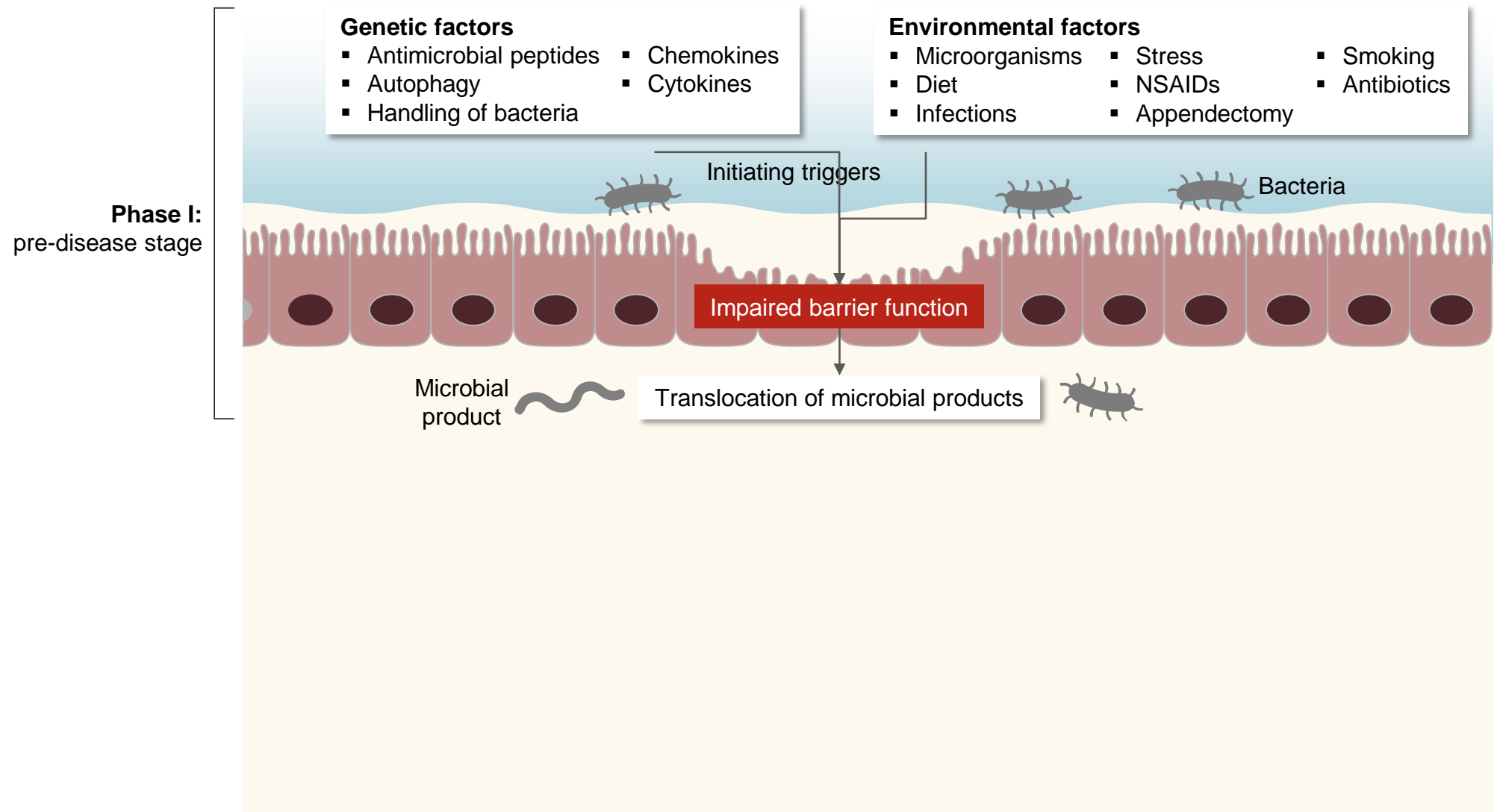


***Ell: patogenesis***



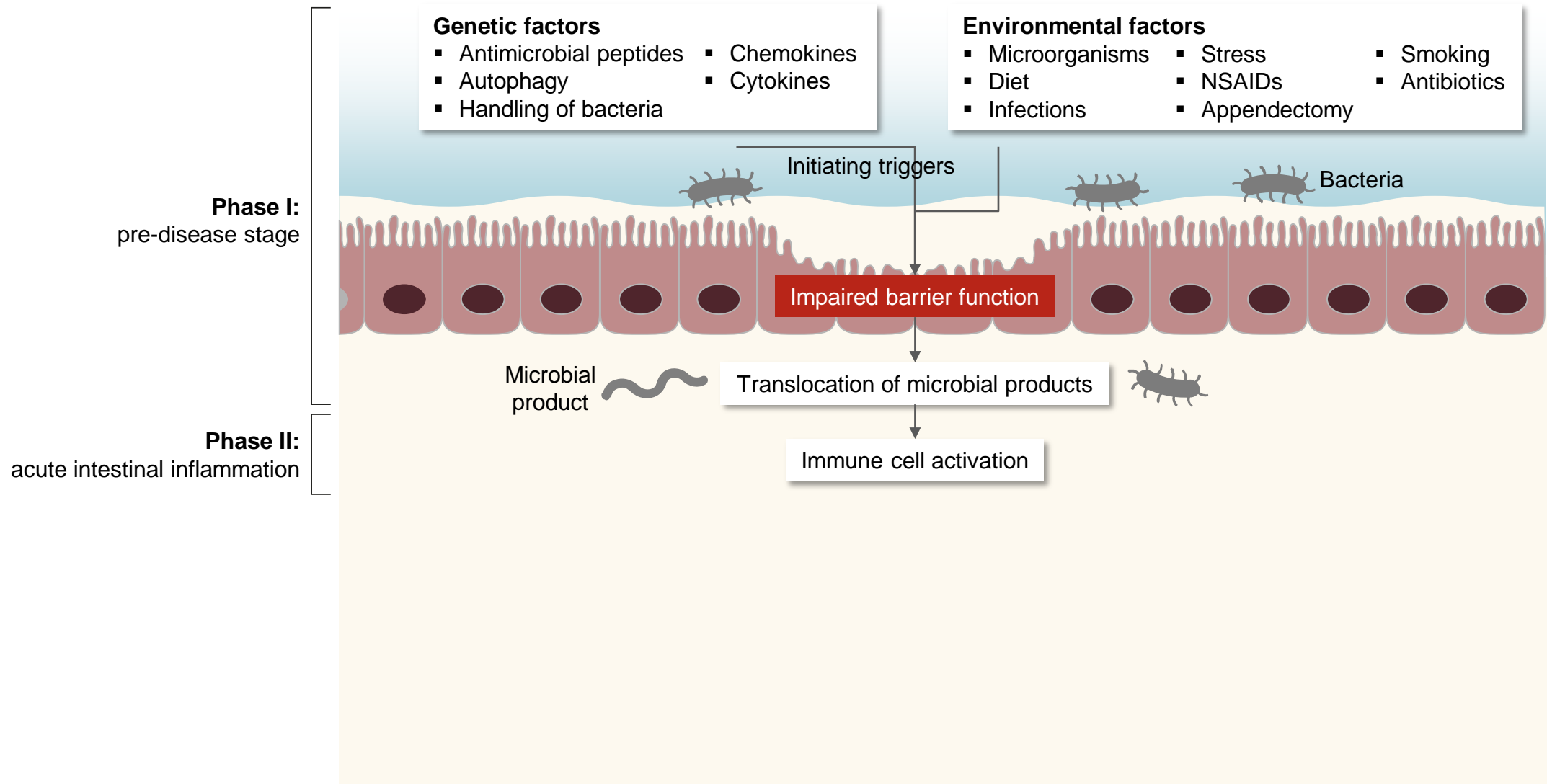
# Enfermedad inflamatoria intestinal

## Activación immune y disregulación de linfocitos



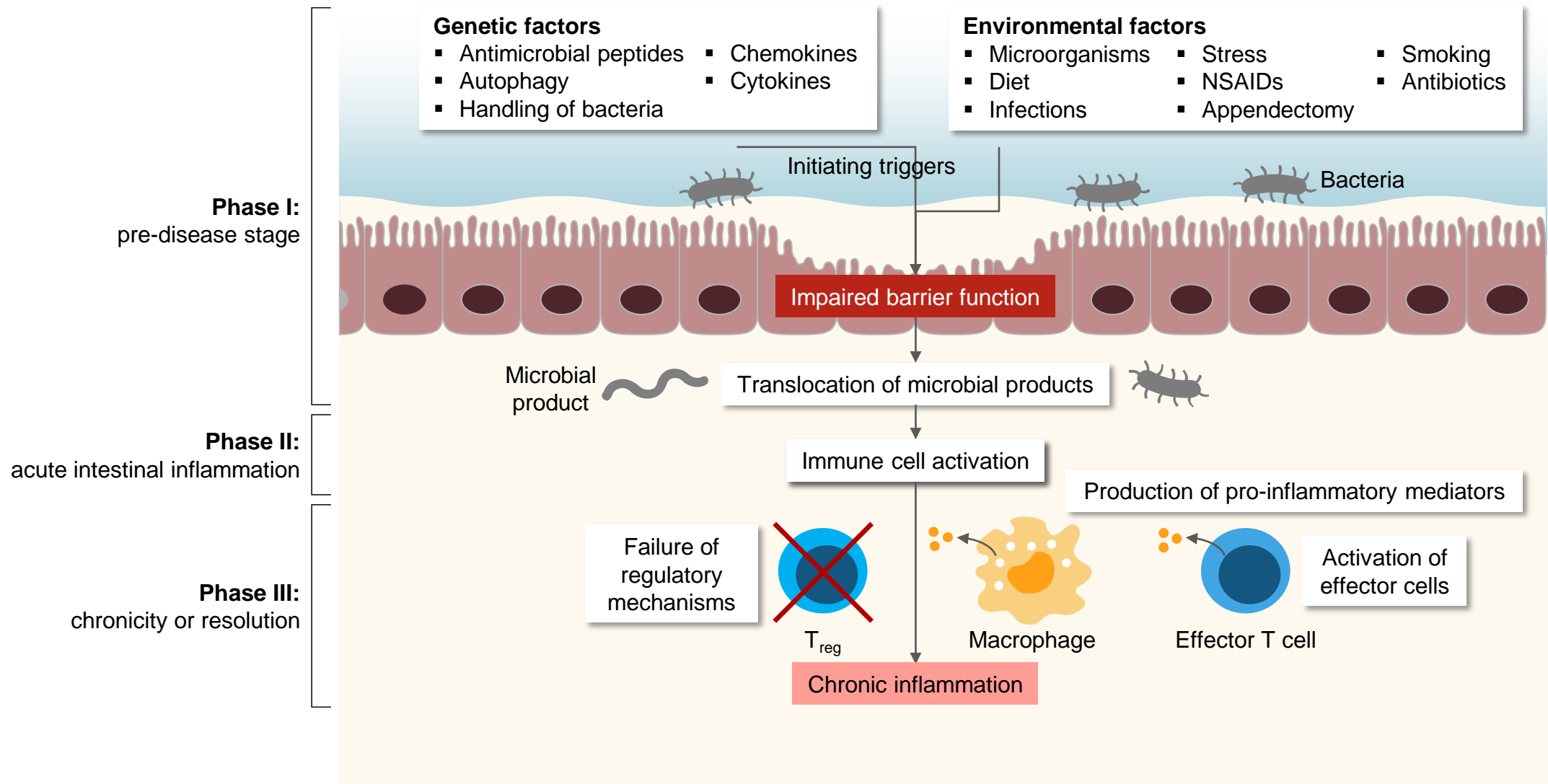
# Enfermedad inflamatoria intestinal

## Activación immune y disregulación de linfocitos



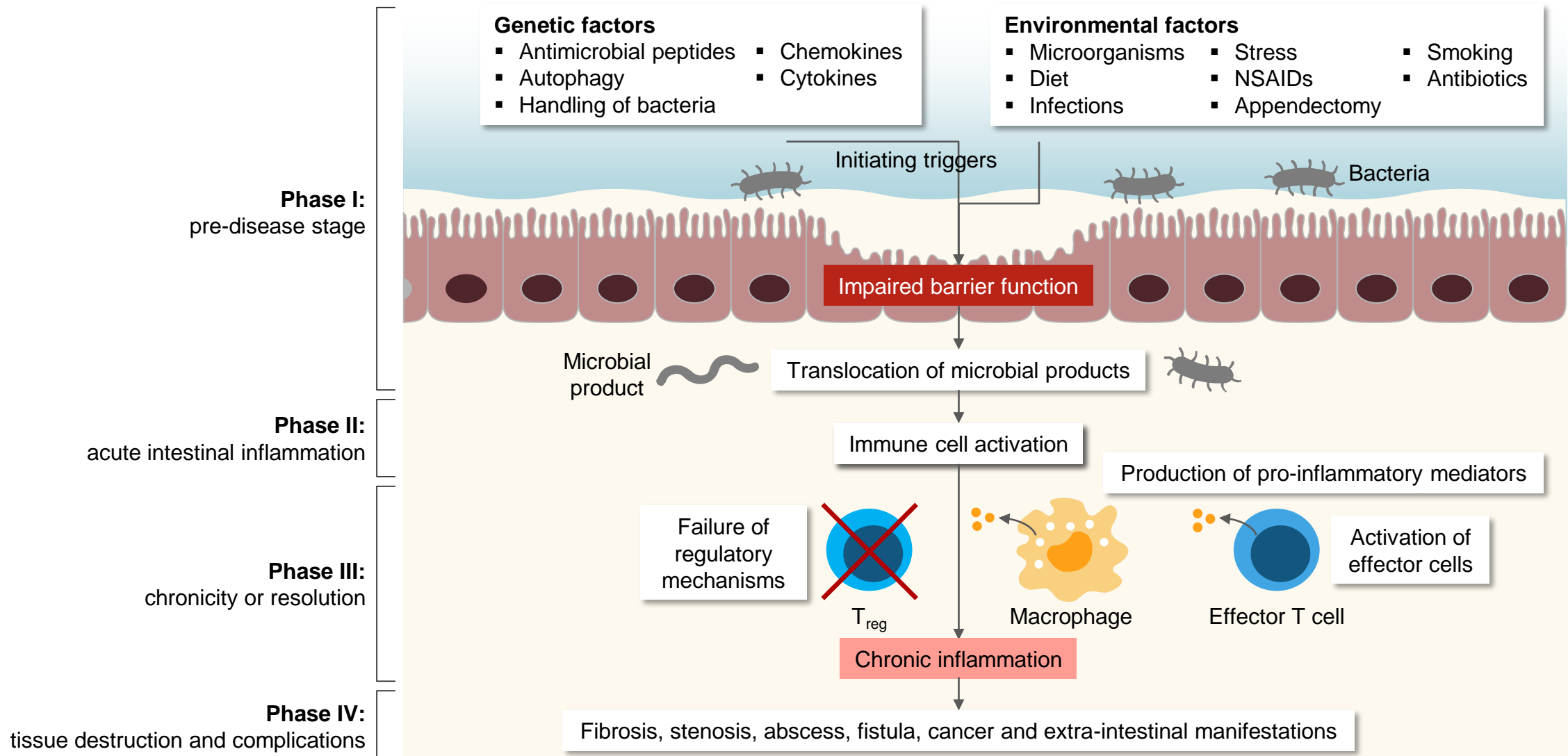
# Enfermedad inflamatoria intestinal

## Activación immune y disregulación de linfocitos

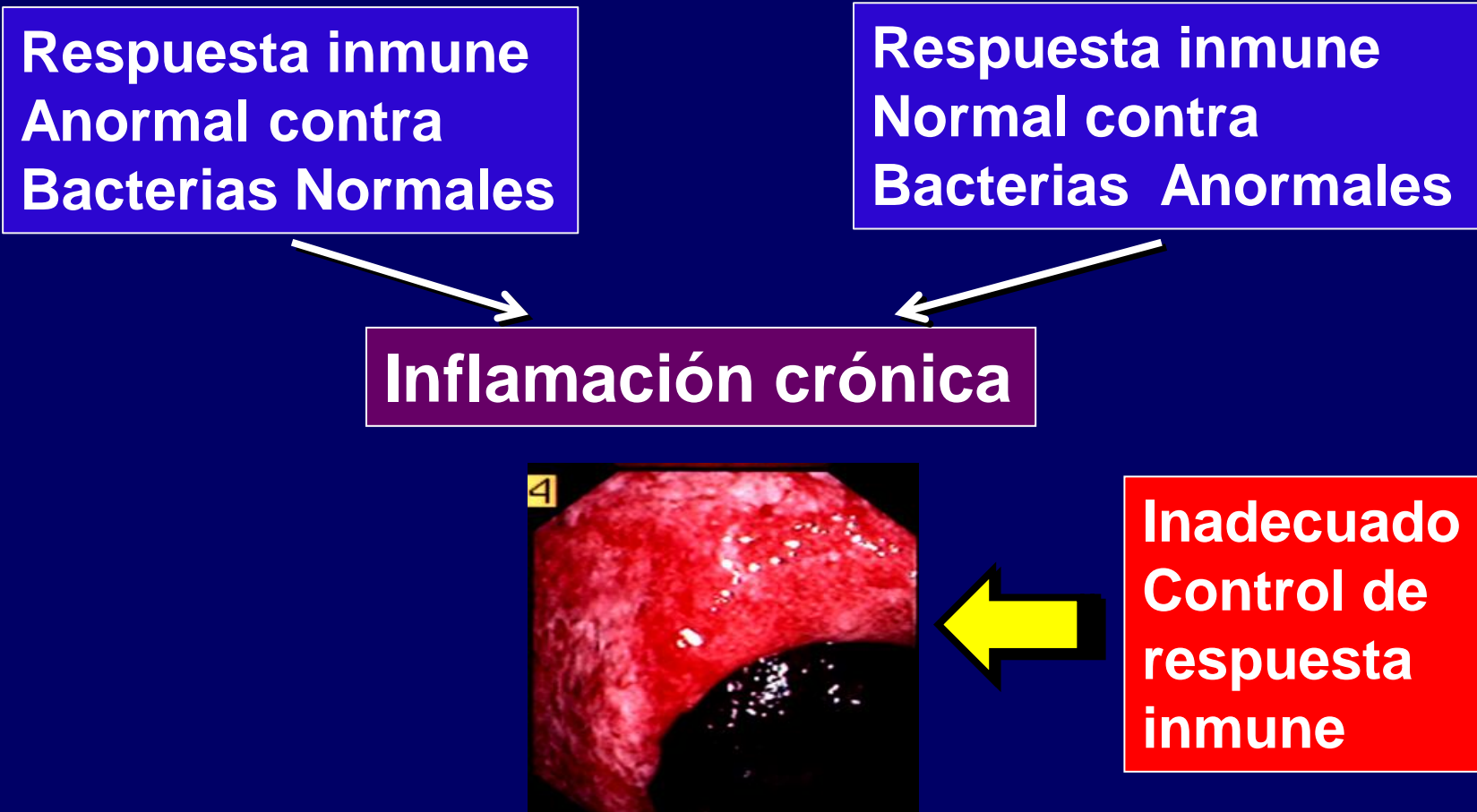


# Enfermedad inflamatoria intestinal

## Activación immune y disregulación de linfocitos



# Enfermedad Inflamatoria intestinal Inmunopatogenesis



# Manifestaciones clínicas

# Enfermedad de Crohn

Presenting symptoms are abdominal pain, diarrhea, nausea, vomiting, and weight loss; rarely, obstructive or perforating symptoms.

## Location

May affect the entire gastrointestinal tract

## Pattern

Discontinuous with **skip lesions** primarily in small intestine and colon; most commonly in terminal ileum and cecum

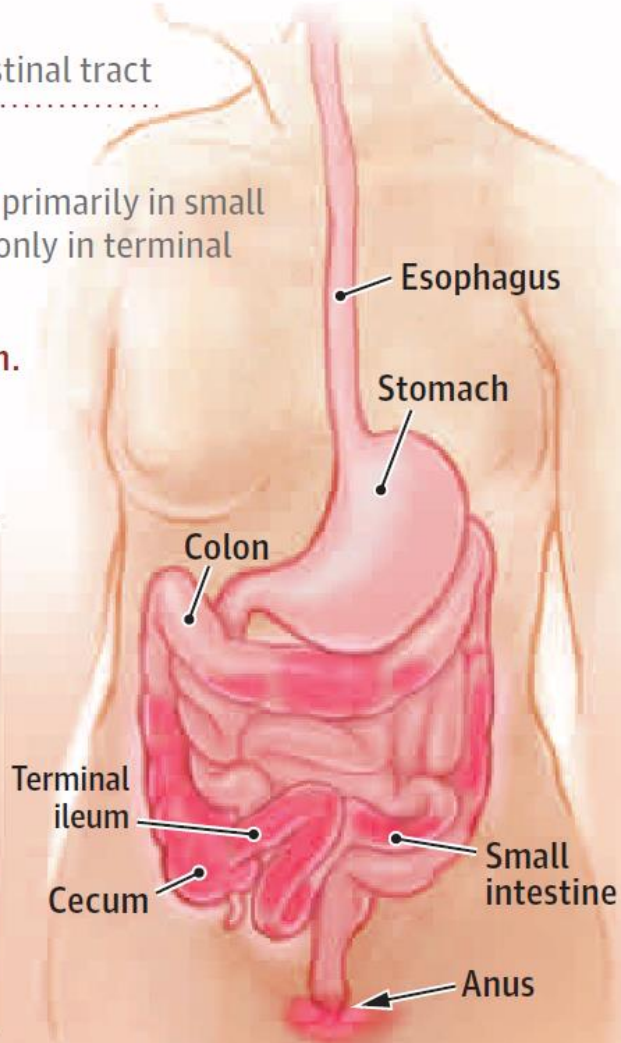
**Rectal involvement is uncommon.**

**Perianal disease is common.**

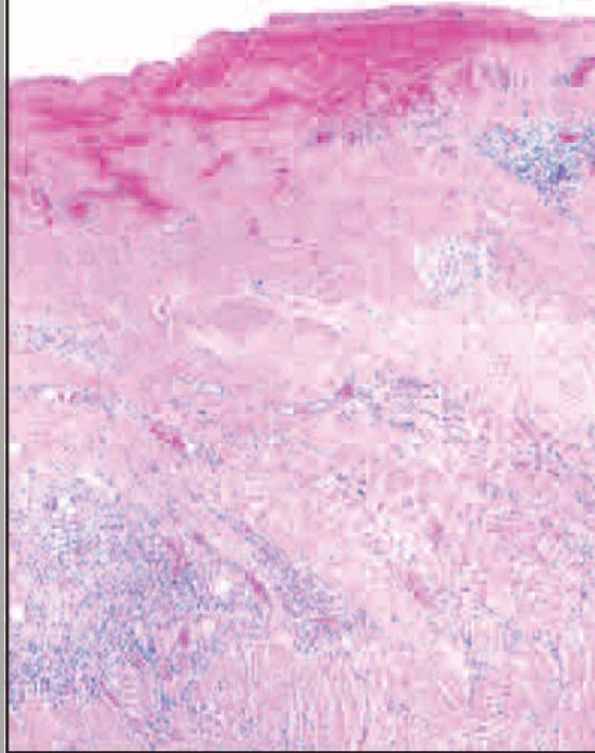
## Endoscopic features



Representative view of terminal ileum demonstrating significant ulcerations, granularity, edema, and erythema



## Transmural inflammation



Representative colonic resection specimen with lymphoid-predominant inflammation through all layers of the colonic wall including muscularis propria (hematoxylin-eosin; original magnification x40)

## Fistulas are common.

They can be enterocutaneous, entero-enteric, enterovesicular, or enterovaginal.

## Enterocutaneous



## Entero-enteric



## Strictures are common.



# Enfermedad de Crohn

## Symptoms

Fatigue

Fever

Abdominal pain and cramping

Diarrhea

Mouth sores

Lack of appetite

Thirst and lightheadedness

Urgent bowel movements

Redness or pain in the eyes from uveitis, iritis, or episcleritis

Swollen and painful joints, especially knees, hips, and elbows

Skin inflammation, including eczema, psoriasis, erythema nodosum, and pyoderma gangrenosum

## Signs

Weight loss

Slowed growth in children

Anemia (both iron deficiency and anemia of inflammation)

Mucus in the stool

Blood in the stool

Drainage of serum, pus, or stool from an opening near the anus

Dry mucus membranes

Psoas sign (consider abscess adjacent to terminal ileum)

Orthostatic signs

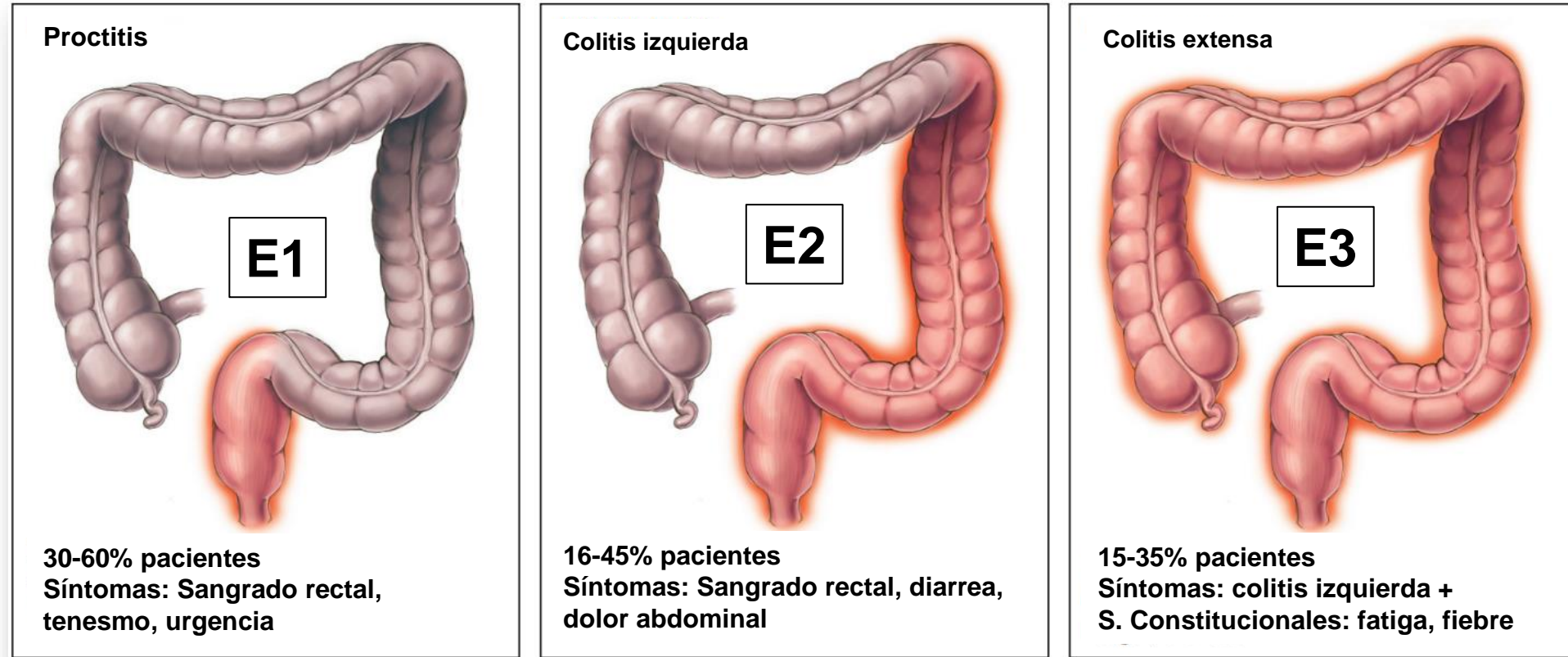
Elevated markers of inflammation (C-reactive protein, fecal calprotectin, erythrocyte sedimentation rate)

Elevated alkaline phosphatase is associated with primary sclerosing cholangitis

# Colitis ulcerativa

Type of UC	Prevalence at presentation in adult-onset IBD	Prevalence at presentation in childhood-onset IBD [28]
Proctitis	40–50%	1.4%
Left-side colitis (up to flexura sinistra)	30–40%	16%
Pancolitis (in rare cases with additional backwash ileitis)	25–30%	82%
Symptoms and signs		
Diarrhoea	70–90%	
Abdominal pain	30–70%	
Weight loss	35–45%	
Rectal bleeding	50–90%	
Growth impairment in children	5%	
Extraintestinal manifestation	2–15%	

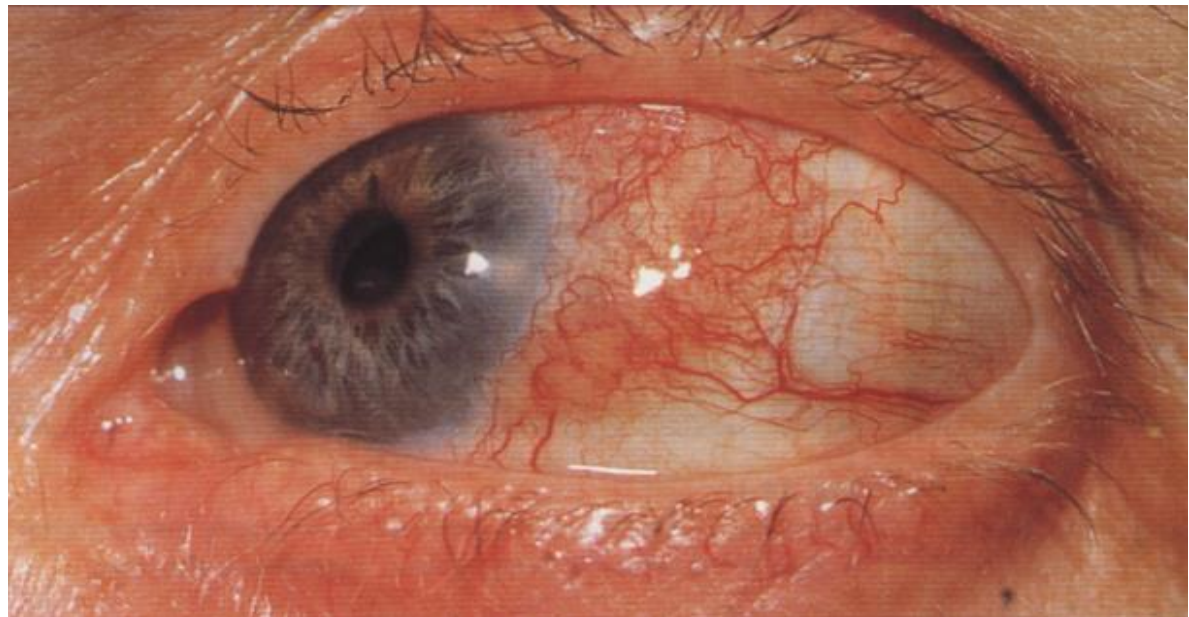
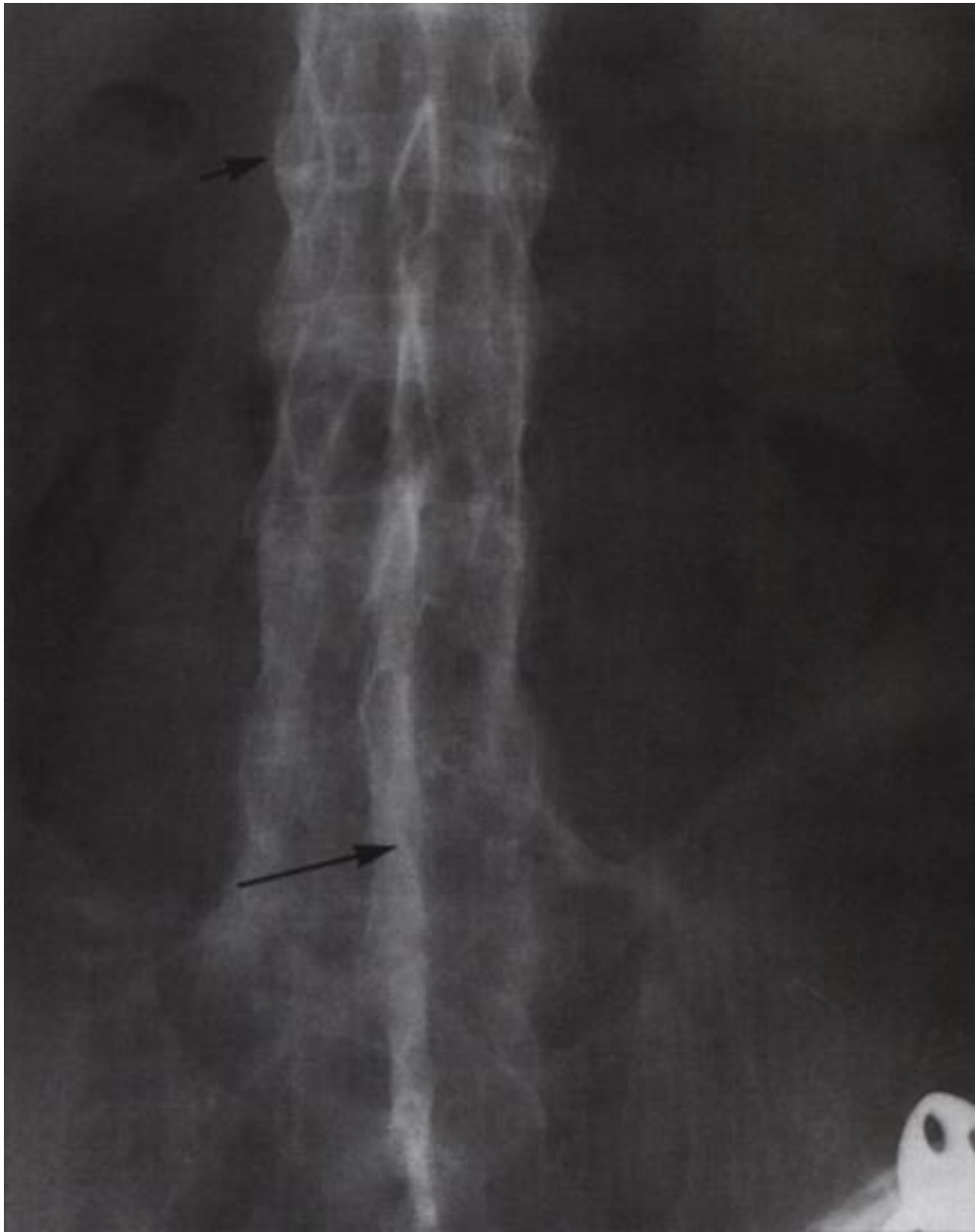
## Fenotipos, Clasificación de Montreal

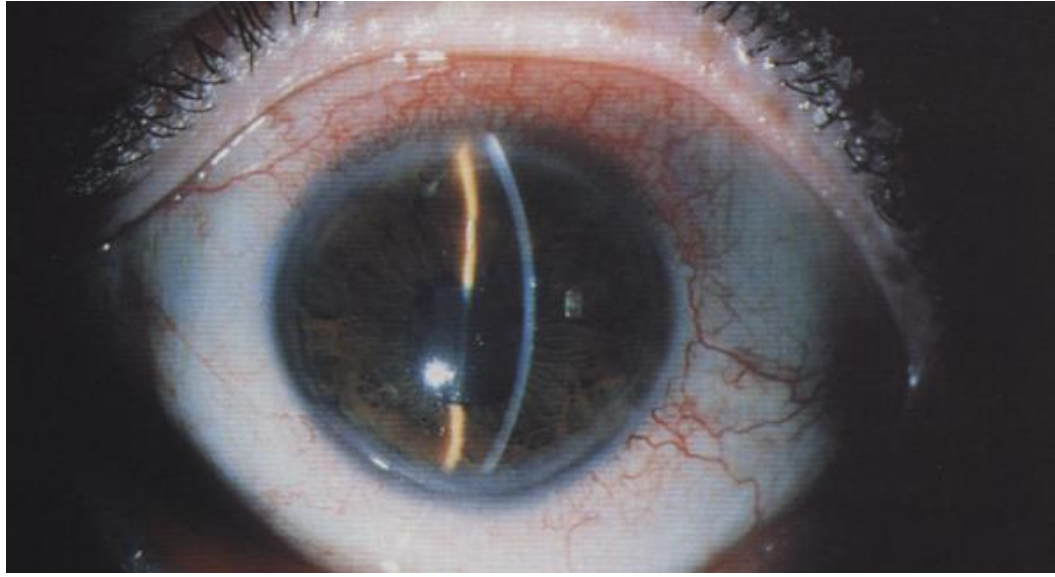


**Colitis ulcerativa**

**Pioderma  
Gangrenoso**







**Diagnóstico**

# **Colitis Ulcerativa / Enfermedad de Crohn**

## **Diagnostico**

---

**Historia clínica**

**Hallazgos EF**

**Endoscopia**

**Radiología**

**Laboratorios de rutina**

**Histología**

**Serología: pANCA-ASCA (10%)**

*Podolsky DK NEJM 2002;347:417,*

*Plevy S J Clin Gastroenterol 2004; May/June:S51-6*

# ***Colitis Ulcerativa, Laboratorios***

---

**Cuadro hemático completo**

**Creatinina, BUN**

**Perfil hepático.**

**Ferrocinética**

**Vitamina D**

**PCR**

***Normal leve-moderada***

***15% población general no eleva PCR***

***Sensibilidad 49% (IC95% 34-64)***

***Especificidad 92% (IC 95%***

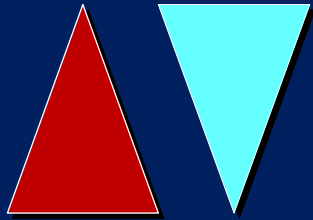
***Infecciones, cáncer, obesidad***

# Manifestaciones clínicas

---

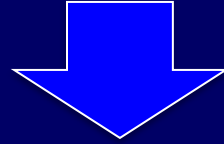
**Dolor abdominal**  
**Diarrea**  
**Sangrado**

**Perdida de peso**  
**Fiebre**  
**Cansancio**  
**Náuseas, vòmito**  
**Extraintestinales**



**No Biomarcadores**

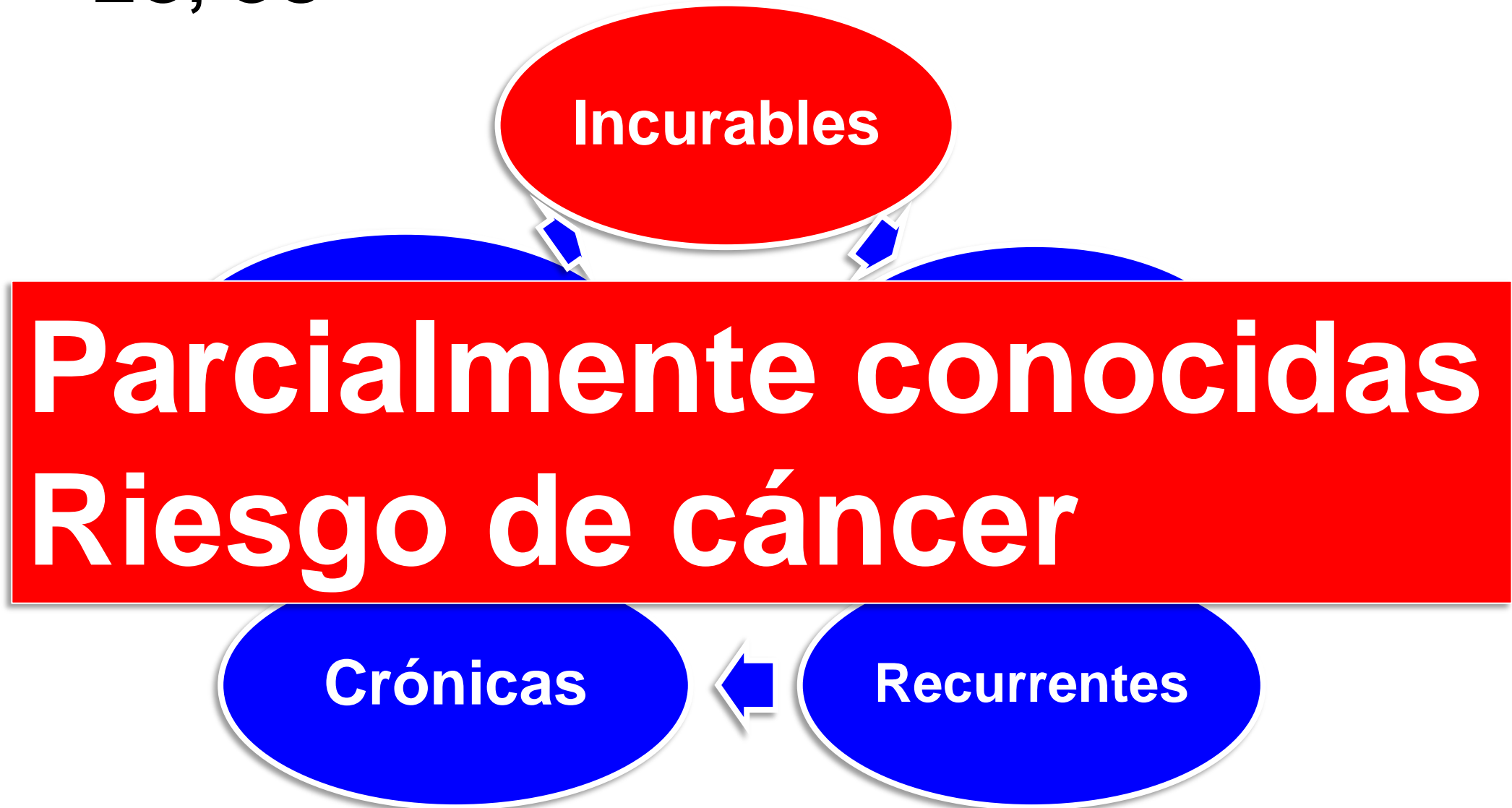
**Biopsia**



**Confirmatoria**  
**No es para diagnosticar**  
**Aisladamente**  
**Colitis crónica Activa**

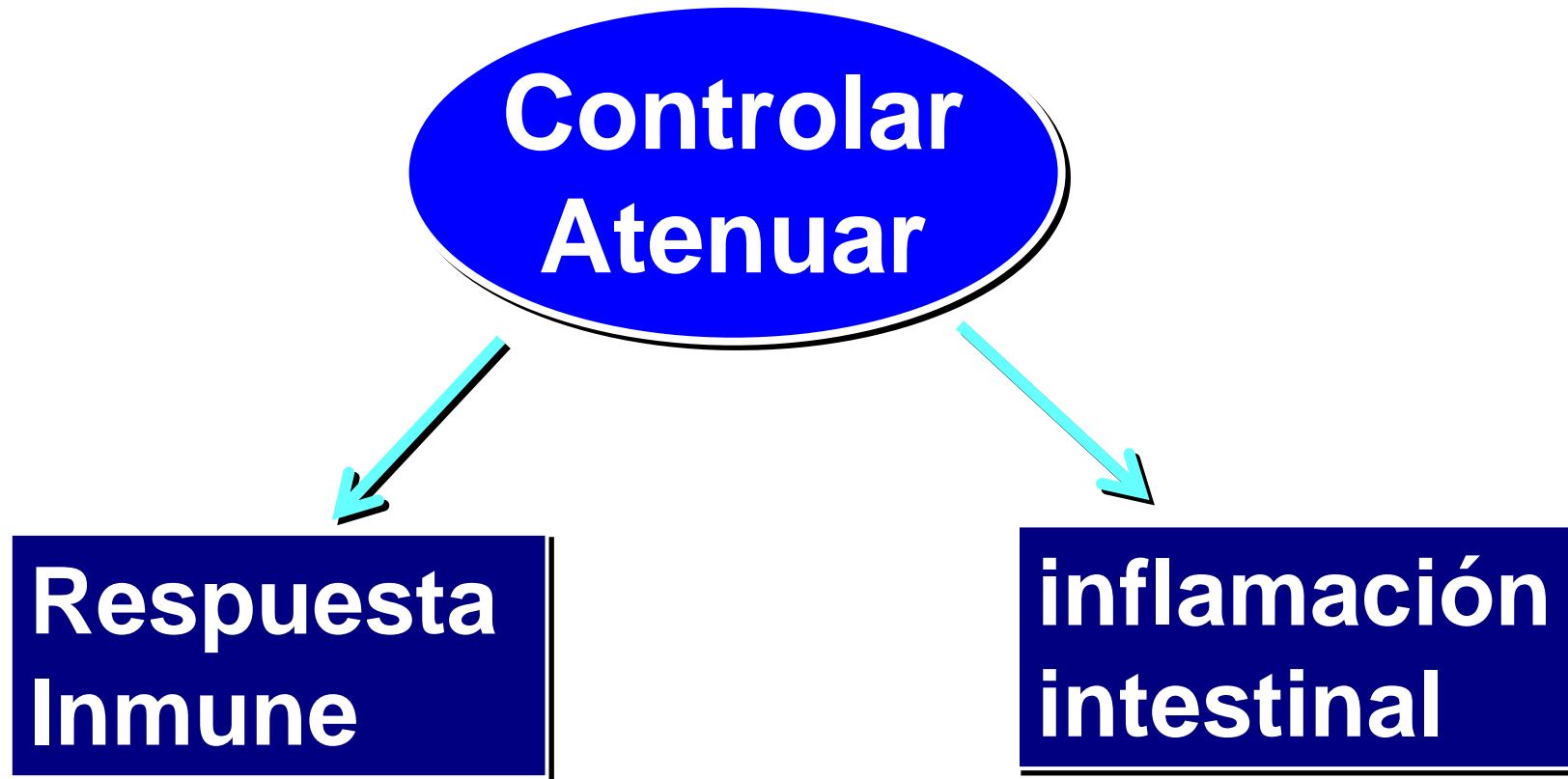
# Enfermedad inflamatoria intestinal, 2022

## EC, CU



# El Tratamiento 2022

---



# El Tratamiento 2022

Terapias de inducción

Rápido  
Comienzo  
De acción

Esteroides

Terapias biológicas

Terapias de  
Mantenimiento

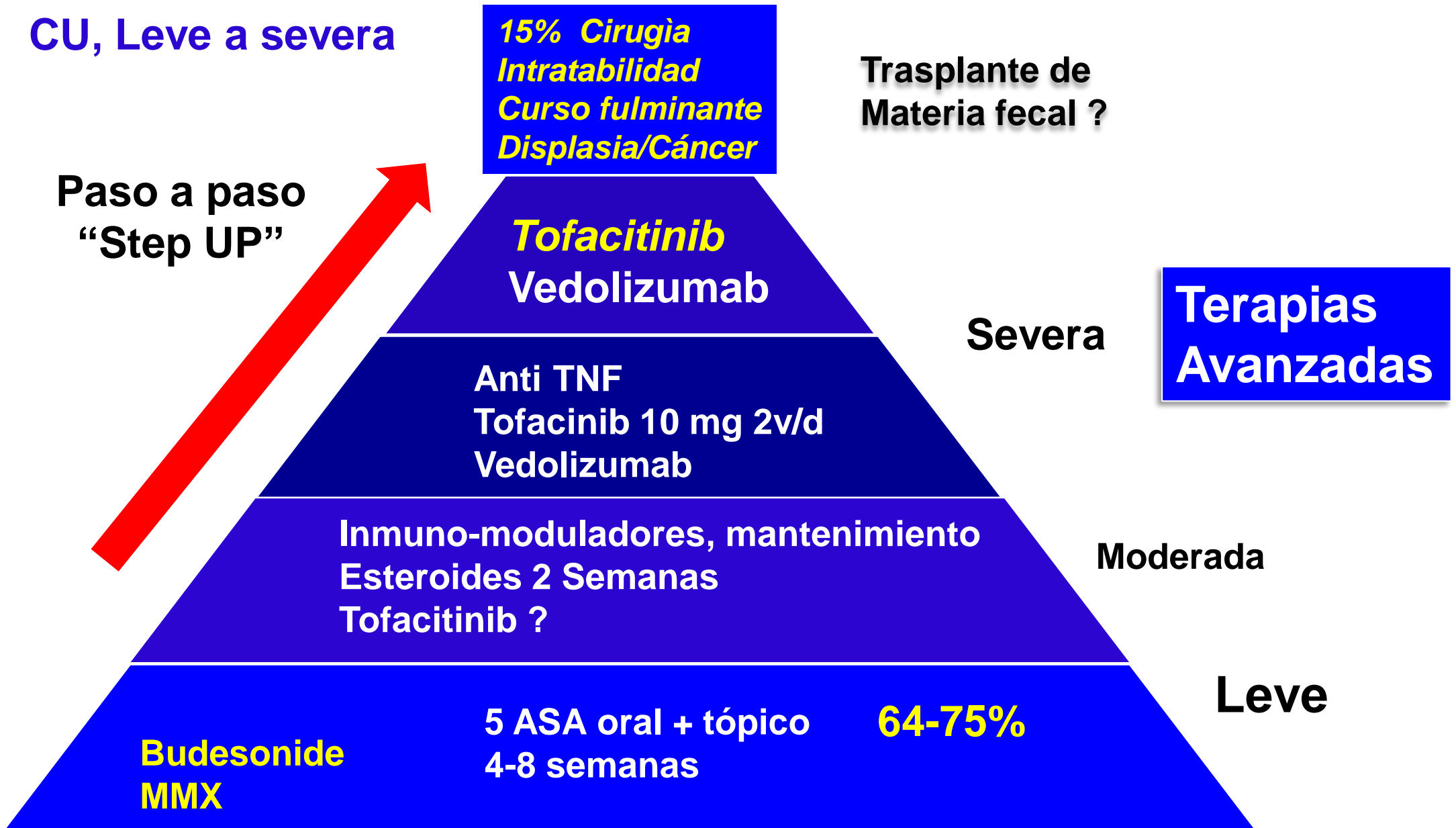
Adecuado  
uso largo  
Plazo

Libre esteroides

AGA 2020  
ACG 2019

CU, Leve a severa

Paso a paso  
"Step UP"



**Colitis Ulcerativa**



**15% curso agresivo**



**10 años**



**Anti TNF**

**70-80% recaen**

**Vedolizumab**

**10-40% No  
Responden**

**23-46% Pierden  
Respuesta 1 año**

**35% Pierden  
Respuesta 1 año**

Pudipeddi A, Med J Aust 2021;214:365-70  
Fumerey M, Clin Gastroenterol hepatol 2018;16:343-56  
Jeong DY, Autoimm Rev 2019;18:439-54  
Feuerstein JD, (AGA) Gastroenterology 2020;158:1450-61  
Schmidt E, Inflamm Bowel Dis 2018;24:2461-7

# Enfermedad de Crohn alto y bajo riesgo

	High-risk Crohn's disease	Low-risk Crohn's disease
Structural damage	<ul style="list-style-type: none"> <li>Large or deep mucosal lesions</li> <li>Fistula and/or perianal abscess</li> <li>Prior intestinal resections, particularly of segments &gt;40 cm</li> <li>Presence of strictures</li> </ul>	<ul style="list-style-type: none"> <li>Aphthous or small superficial ulcers</li> <li>Absence of fistulae, abscess, or strictures</li> <li>No prior intestinal surgeries</li> </ul>
Inflammatory burden	<ul style="list-style-type: none"> <li>Extensive disease (ileal involvement &gt;40 cm or pancolitis)</li> <li>Increased C-reactive protein</li> <li>Low albumin</li> </ul>	<ul style="list-style-type: none"> <li>Limited anatomic involvement</li> <li>Normal C-reactive protein</li> <li>Normal albumin</li> </ul>
Impact on quality of life	<ul style="list-style-type: none"> <li>Presence of stoma</li> <li>&gt;10 loose stools/wk</li> <li>Lack of symptomatic improvement with prior exposure to biologics and/or immunosuppressive agents</li> <li>Significant impact of disease on activities of daily living</li> <li>Presence of anorectal symptoms (anorectal pain, bowel urgency, incontinence, discharge, tenesmus)</li> <li>Anemia</li> <li>Daily abdominal pain</li> <li>Corticosteroid use within past 1 year</li> </ul>	<ul style="list-style-type: none"> <li>Modest impact of disease on daily activities</li> <li>No prior exposure to biologics and/or immunosuppressive agents</li> <li>No prior disease-related hospitalization within the past 1 year</li> <li>Absent to mildly active symptoms</li> </ul>
Emerging predictors	<ul style="list-style-type: none"> <li>High number and titer of antimicrobial antibodies</li> <li>Antimicrobial genetic peptide signature</li> </ul>	–

***Inducir la  
Remisión de  
Los síntomas***

***Objetivos***

***Mantener  
Remisión de  
Síntomas + Cicatrización  
endoscópica***

# **STRIDE-II: An Update on the Selecting Therapeutic Targets in Inflammatory Bowel Disease (STRIDE) Initiative of the International Organization for the Study of IBD (IOIBD): Determining Therapeutic Goals for Treat-to-Target strategies in IBD**



**Dan Turner,<sup>1,\*</sup> Amanda Ricciuto,<sup>2,\*</sup> Ayanna Lewis,<sup>3,\*</sup> Ferdinando D'Amico,<sup>4,\*</sup> Jasbir Dhaliwal,<sup>5,\*</sup> Anne M. Griffiths,<sup>2</sup> Dominik Bettenworth,<sup>6</sup> William J. Sandborn,<sup>7</sup> Bruce E. Sands,<sup>8</sup> Walter Reinisch,<sup>9</sup> Jürgen Schölmerich,<sup>10</sup> Willem Bemelman,<sup>11</sup> Silvio Danese,<sup>4</sup> Jean Yves Mary,<sup>12</sup> David Rubin,<sup>13</sup> Jean-Frederic Colombel,<sup>14</sup> Laurent Peyrin-Biroulet,<sup>15</sup> Iris Dotan,<sup>16</sup> Maria T. Abreu,<sup>3</sup> and Axel Dignass,<sup>17</sup> on behalf of the International Organization for the Study of IBD**

# Estrategia de manejo en EII

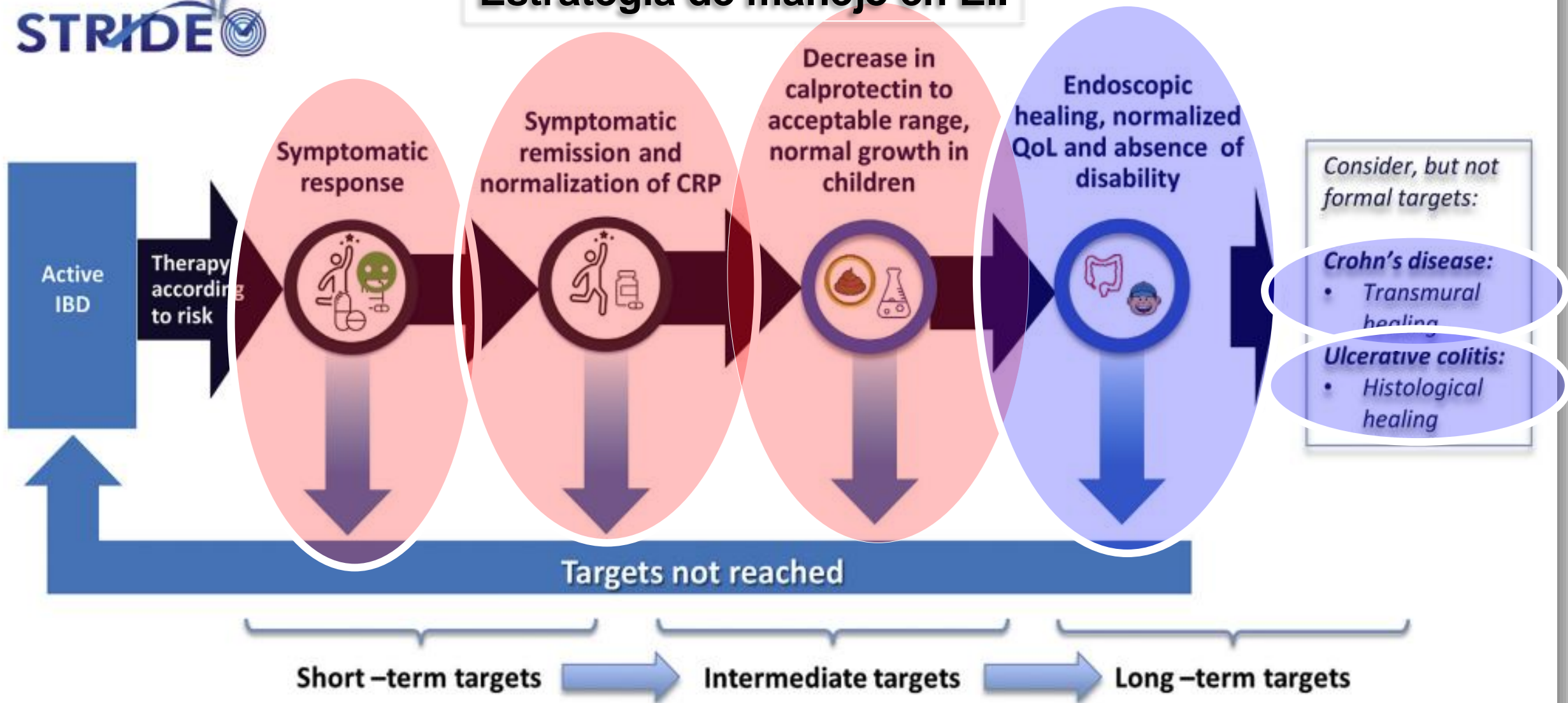
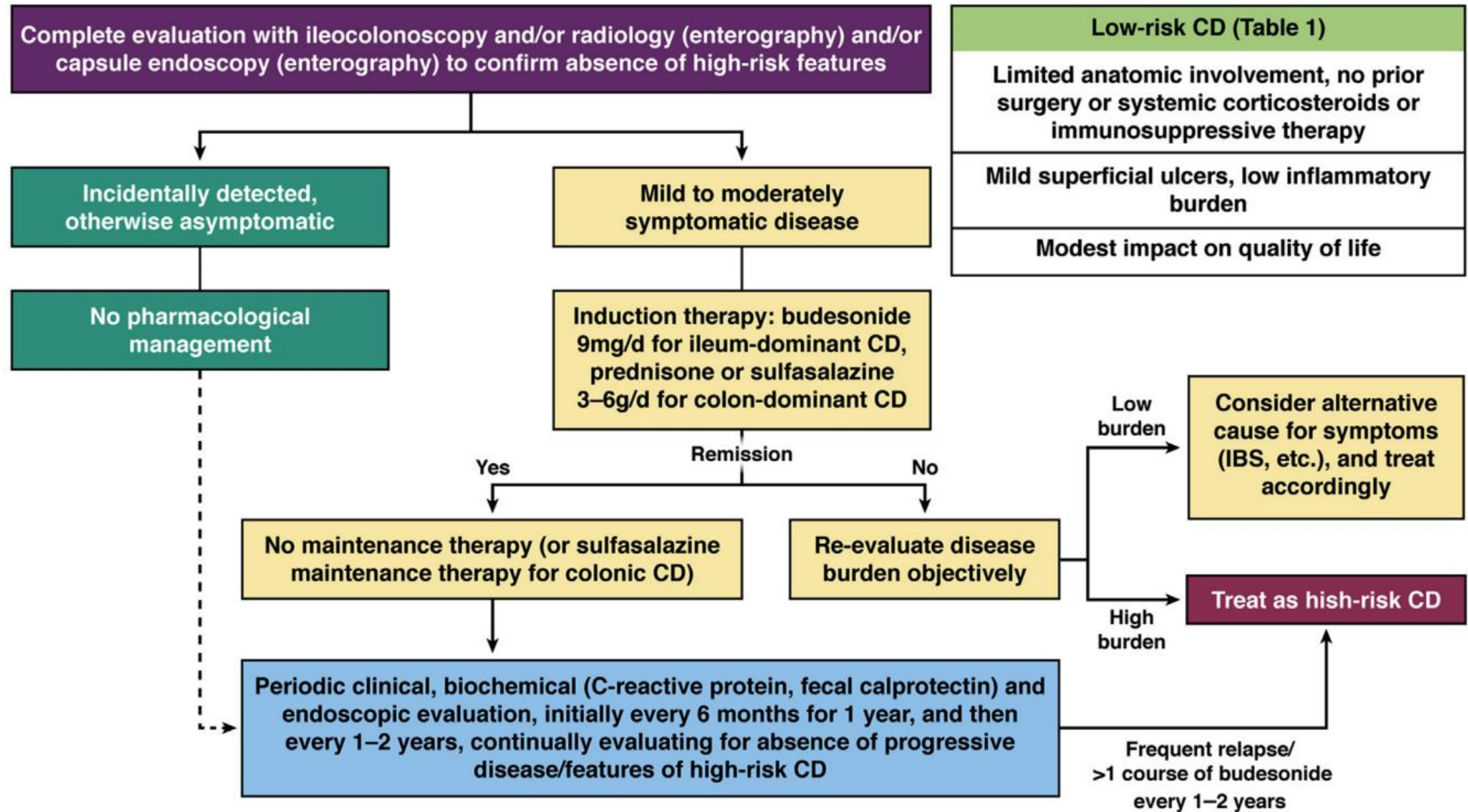
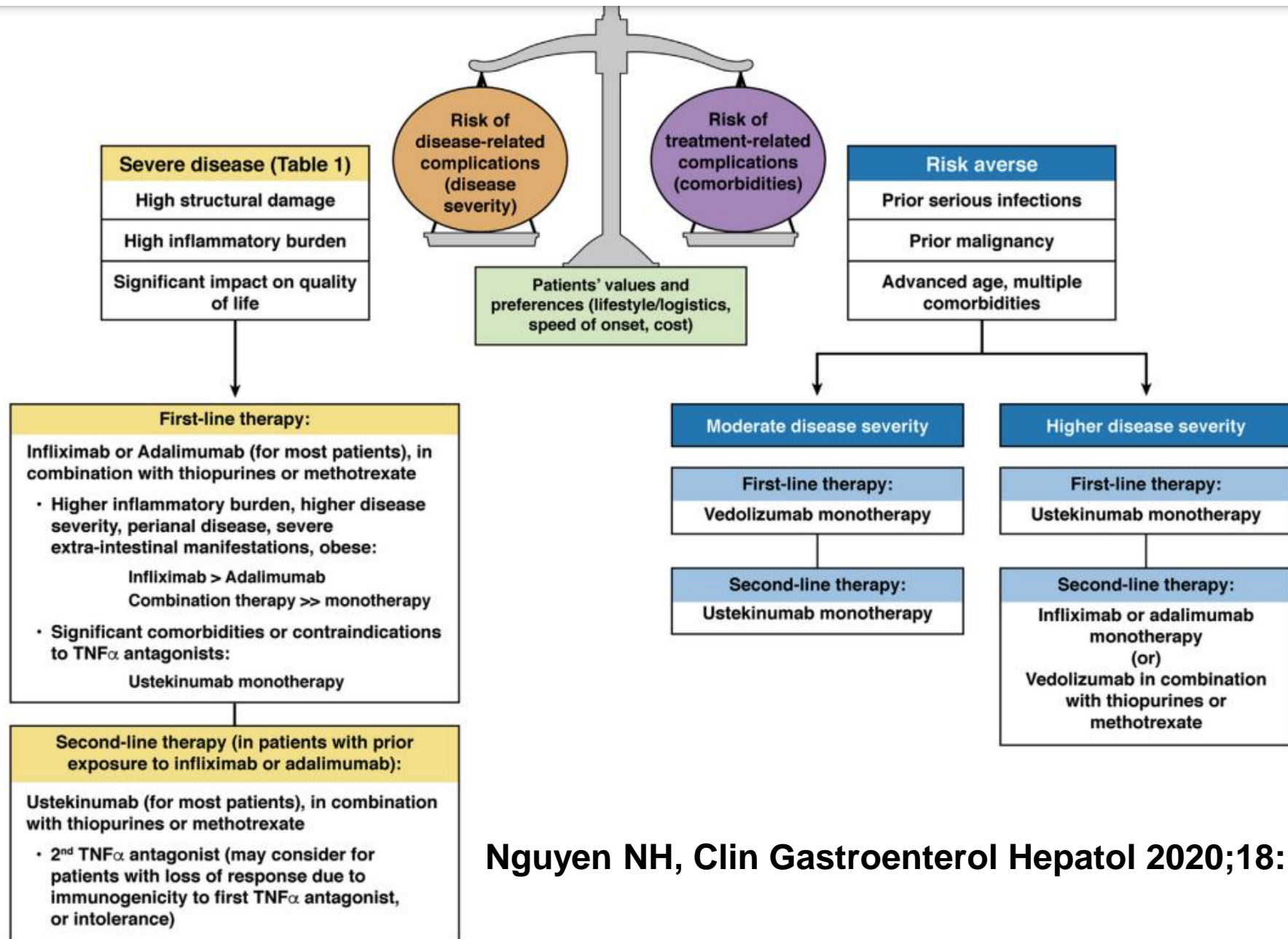


Figure 2. Treatment targets in CD and UC.

# Enfermedad de Crohn de Bajo riesgo



# Enfermedad de Crohn de Alto Riesgo



8 febrero 2022

20 años

Perdida de peso

8 meses evolución

“Gastroenteritis, colitis amibas”

**Esteroides, azatioprina  
Vedolizumab**



FISURAS ANALES PROFUNDAS



RECTO NORMAL



ULCERAS PROFUNDAS DE  
DIFERENTES MORFOLOGIA  
(SERPIGINOSAS, LINEALES, OVALADAS.



ULCERAS PROFUNDAS DE  
DIFERENTES MORFOLOGIA  
(SERPIGINOSAS, LINEALES, OVALADAS.



ULCERAS PROFUNDAS DE  
DIFERENTES MORFOLOGIA  
(SERPIGINOSAS, LINEALES, OVALADAS.

# ***Mensajes para la casa***

---

**CU y EC crónicas, recurrentes, incurables**

**Múltiples complicaciones**

**Terapias convencionales**

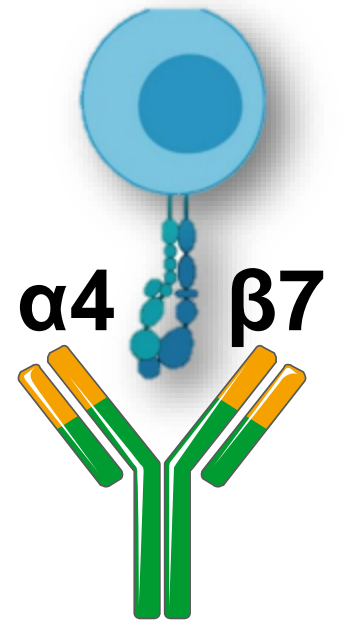
**Terapias avanzadas o biológicas**

**Tratamiento toda la vida**

**Tratamiento depende severidad y fenotipo**

**Elección terapéutica es individualizada**

# Uso de vedolizumab en líneas tempranas De terapia biológica: evidencia clínica



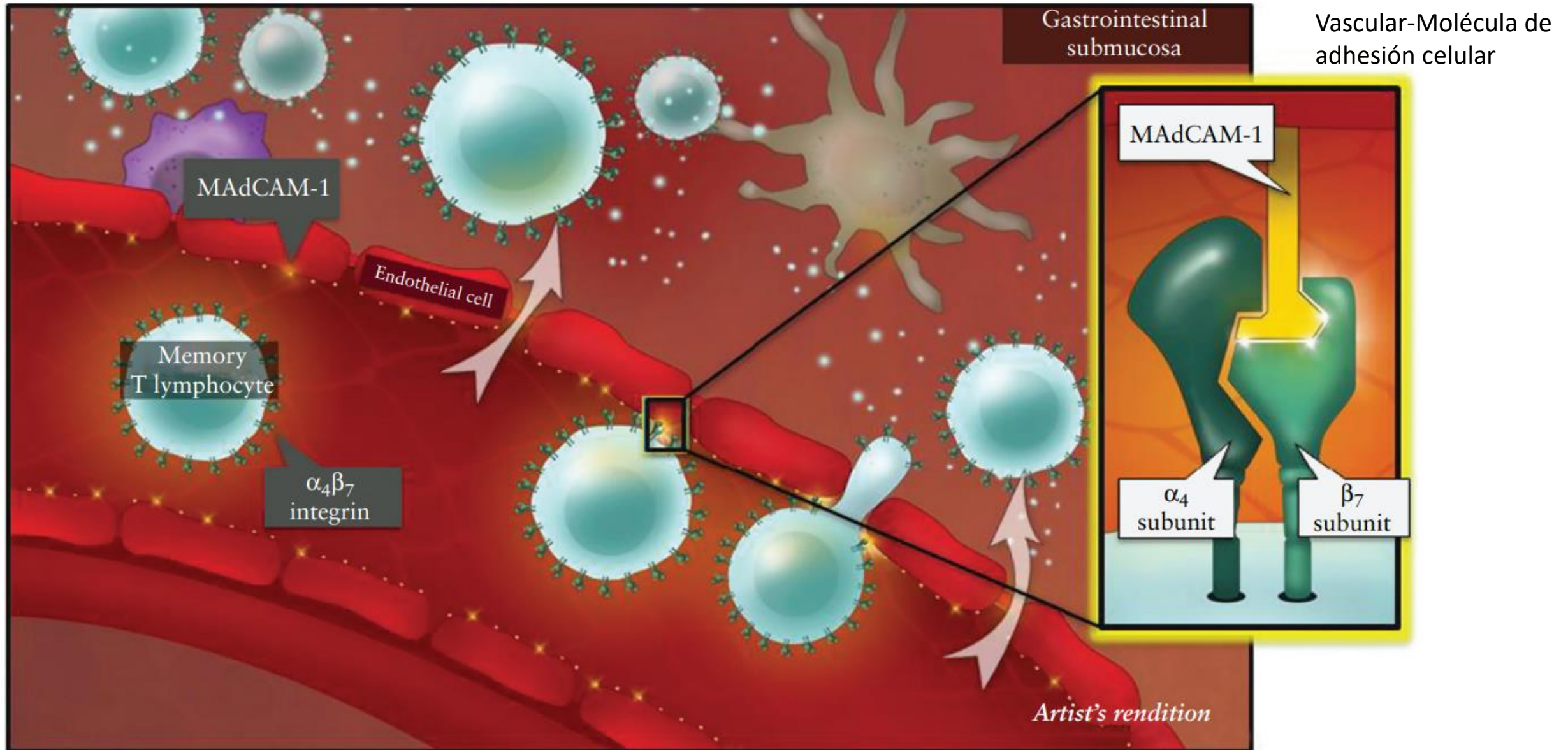
**William Otero R MD, FAGA, FACP**  
**Profesor Titular de Medicina,**  
**Coordinador de Gastroenterología**  
**Universidad Nacional de Colombia**  
**Hospital Universitario Nacional de Colombia**



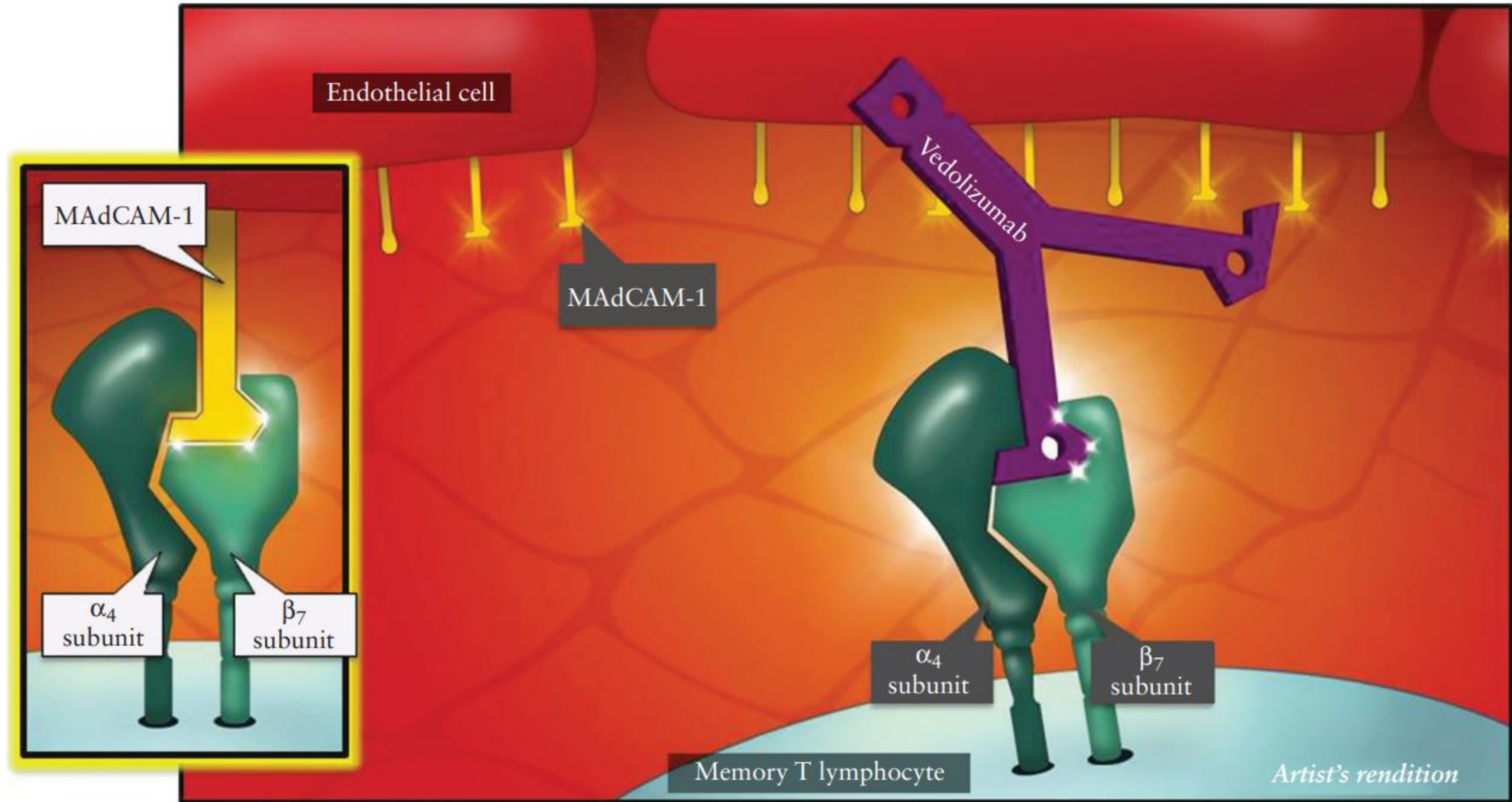
# Rapid Resolution of Chronic Colitis in the Cotton-top Tamarin With an Antibody to a Gut-Homing Integrin $\alpha 4\beta 7$

PAUL E. HESTERBERG, DAWN WINSOR–HINES, MICHAEL J. BRISKIN, DULCE SOLER–FERRAN, CHRISTOPHER MERRILL, CHARLES R. MACKAY, WALTER NEWMAN, and DOUGLAS J. RINGLER  
LeukoSite Inc., Cambridge, Massachusetts

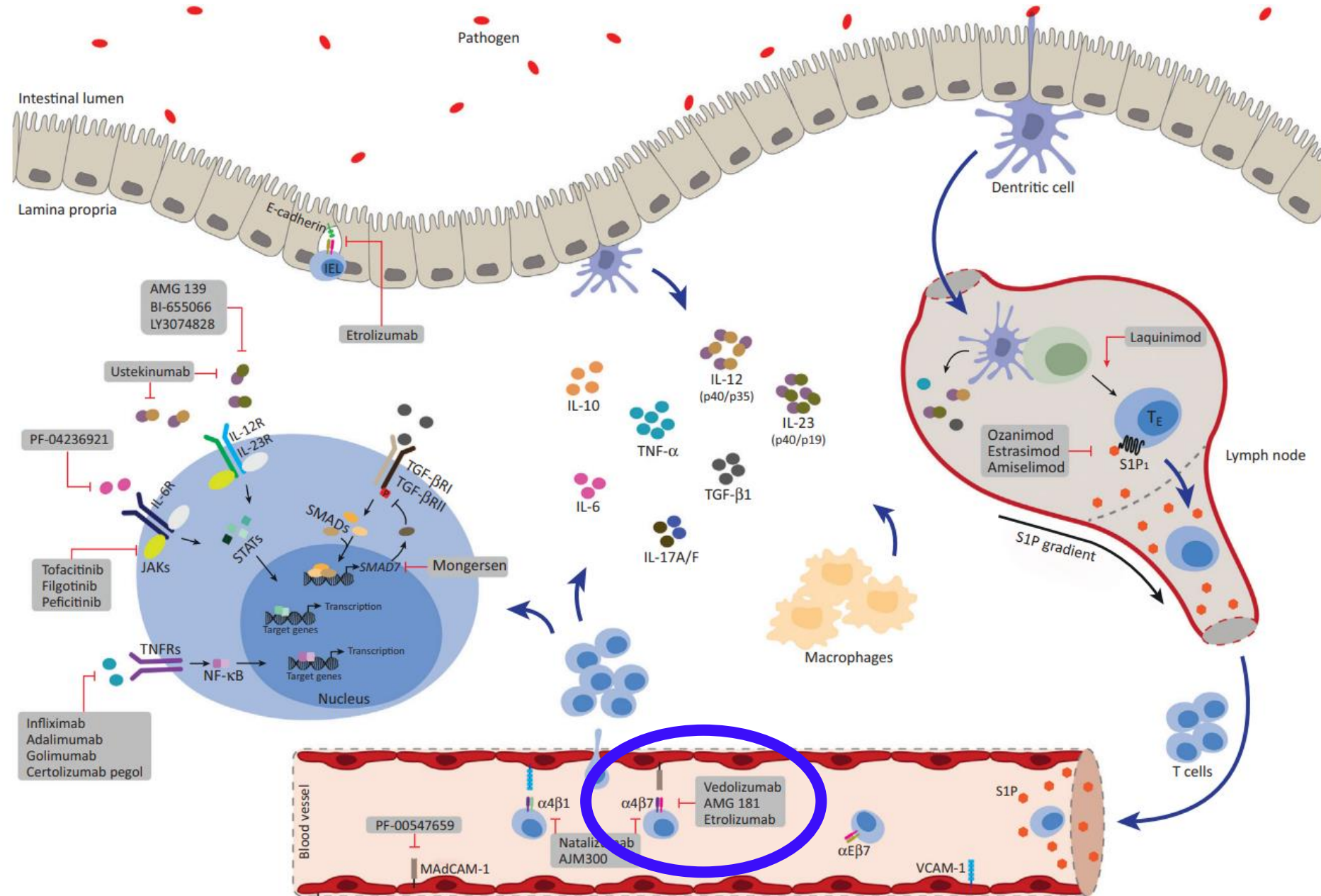
# Vedolizumab



# Vedolizumab



# EII – Blancos terapéuticos



# Vedolizumab

Drug	Target	Indication	Gut selectivity <sup>a</sup>
Adalimumab	TNF $\alpha$	UC, CD	No
Certolizumab pegol	TNF $\alpha$	CD	No
Golimumab	TNF $\alpha$	UC	No
Infliximab	TNF $\alpha$	UC, CD	No
Natalizumab	$\alpha_4$ integrin	CD	No
Vedolizumab	$\alpha_4\beta_7$ integrin	UC, CD	Yes

## Ustekinumab and Vedolizumab Are Not Associated With Subsequent Cancer in IBD Patients with Prior Malignancy

Simon J. Hong, MD<sup>1</sup>, Cameron Zenger, MD, Jillian Pecoriello, MD, Alice Pang, MD, Margaret Vallely, RN, David P. Hudesman, MD, Shannon Chang, MD, MBA, and Jordan E. Axelrad, MD, MS

# Vedolizumab for Ulcerative Colitis: Treatment Outcomes from the VICTORY Consortium

Neeraj Narula, MD, MPH<sup>1,2</sup>, Farhad Peerani, MD<sup>1,3</sup>, Joseph Meserve, MD<sup>4</sup>, Gursimran Kochhar, MD<sup>5</sup>, Khadija Chaudrey, MD<sup>6</sup>, Justin Hartke, MD<sup>7</sup>, Prianka Chilukuri, MD<sup>7</sup>, Jenna Kolianni-Pace, MD<sup>8</sup>, Adam Winters, MD<sup>1</sup>, Leah Katta, MD<sup>1</sup>, Eugenia Schmidt, MD<sup>1</sup>, Robert Hirten, MD<sup>1,9</sup>, David Faleck, MD<sup>1</sup>, Malav P. Parikh, MD<sup>5</sup>, Diana Whitehead, MD<sup>8</sup>, Brigid S. Boland, MD<sup>4</sup>, Siddharth Singh, MD, MS<sup>4</sup>, Sashidhar Varma Sagi, MD<sup>7</sup>, Monika Fischer, MD<sup>7</sup>, Shannon Chang, MD<sup>10</sup>, Morris Barocas, MD<sup>11</sup>, Michelle Luo, MS, PhD<sup>11</sup>, Karen Lasch, MD<sup>11</sup>, Matthew Bohm, MD<sup>7</sup>, Dana Lukin, MD<sup>12</sup>, Keith Sultan, MD<sup>9</sup>, Arun Swaminath, MD<sup>13</sup>, David Hudesman, MD<sup>10</sup>, Nitin Gupta, MD<sup>14</sup>, Bo Shen, MD<sup>5</sup>, Sunanda Kane, MD<sup>6</sup>, Edward V. Loftus, MD<sup>5</sup>, Corey A. Siegel, MD<sup>8</sup>, Bruce E. Sands, MD<sup>1</sup>, Jean-Frederic Colombel, MD<sup>1</sup>, William J. Sandborn, MD<sup>4</sup> and Parambir S. Dulai, MD<sup>4</sup>

*Journal of Crohn's and Colitis*, 2022, XX, 1–11  
<https://doi.org/10.1093/ecco-jcc/jjac009>  
 Advance access publication 25 January 2022  
 Original Article



## Introduction of Subcutaneous Infliximab CT-P13 and Vedolizumab in Clinical Practice: A Multi-Stakeholder Position Statement Highlighting the Need for Post-Marketing Studies

Liselotte Fierens,<sup>a</sup> Claire Liefferinckx,<sup>b</sup> Eveline Hoefkens,<sup>c</sup> Triana Lobatòn,<sup>d,e</sup> Erwin Dreesen,<sup>f</sup> the DIAMOND Platform from the Belgian IBD Research and Development (BIRD) Group, João Sabino,<sup>a,g</sup> Marc Ferrante<sup>a,g</sup>

plISSN 1598-9100 • eISSN 2288-1956  
<https://doi.org/10.5217/ir.2021.00091>  
 Intest Res, Published online February 8, 2022

RESEARCH

## Vedolizumab for perianal fistulizing Crohn's disease: systematic review and meta-analysis

Fares Ayoub, Matthew Odenwald, Dejan Micic, Sushila R. Dalal, Joel Pekow, Atsushi Sakuraba

*Journal of Crohn's and Colitis*, 2021, 1–13  
 doi:10.1093/ecco-jcc/jiab058  
 Advance Access publication March 30, 2021  
 Original Article



Original Article

## Vedolizumab and Anti-Tumour Necrosis Factor α Real-World Outcomes in Biologic-Naïve Inflammatory Bowel Disease Patients: Results from the EVOLVE Study

Brian Bressler,<sup>a</sup> Andres Yarur,<sup>b</sup> Mark S. Silverberg,<sup>a</sup> Marielle Bassel,<sup>d</sup> Emanuelle Bellaguarda,<sup>a</sup> Chris Fournent,<sup>f</sup> Anthie Gatopoulou,<sup>g</sup> Pantelis Karatzas,<sup>h</sup> Uri Kopylov,<sup>i</sup> George Michalopoulos,<sup>j</sup> Spyridon Michopoulos,<sup>k</sup> Udayakumar Navaneethan,<sup>l</sup> David T. Rubin,<sup>m,n</sup> Jesse Siffledeen,<sup>a</sup> Andrew Singh,<sup>a</sup> Konstantinos Soufleris,<sup>p</sup> Dara Stein,<sup>q</sup> Dirk Demuth,<sup>r</sup> Gerassimos J. Mantzaris<sup>a</sup>



*Gastroenterology* 2021;161:1156–1167

## Histologic Outcomes With Vedolizumab Versus Adalimumab in Ulcerative Colitis: Results From An Efficacy and Safety Study of Vedolizumab Intravenous Compared to Adalimumab Subcutaneous in Participants With Ulcerative Colitis (VARSITY)

Laurent Peyrin-Biroulet,<sup>1</sup> Edward V. Loftus Jr.,<sup>2</sup> Jean-Frédéric Colombel,<sup>3</sup> Silvio Danese,<sup>4</sup> Raquel Rogers,<sup>5</sup> Jeffrey D. Bornstein,<sup>5</sup> Jingjing Chen,<sup>5</sup> Stefan Schreiber,<sup>6</sup> Bruce E. Sands,<sup>3</sup> and Richard A. Lirio<sup>5</sup>



## Vedolizumab has longer persistence than infliximab as a first-line biological agent but not as a second-line biological agent in moderate-to-severe ulcerative colitis: real-world registry data from the Persistence Australian National IBD Cohort (PANIC) study

Aviv Pudipeddi, Yanna Ko, Sudarshan Paramsothy and Rupert W. Leong<sup>1</sup>, for the PANIC Study Group – Persistence in Australian National IBD Cohort

*Ther Adv Gastroenterol*  
 2022, Vol. 15: 1–17  
 DOI: 10.1177/  
 17562848221080793  
 © The Author(s), 2022.  
 Article reuse guidelines:  
[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

**Estudios  
Gemini**

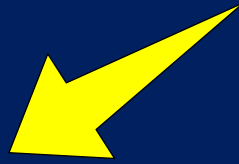
**Sistemáticas  
Meta-análisis**

**Vedolizumab Cu-EC  
Moderada – Severa  
Eficacia y seguridad**

**Estudios  
Mundo real**

Lam MC, Immunotherapy 2014;6:963  
Schreiber S, J gastroenterol 2018;53:1048-63  
Engel T, J Cronhs Colitis 2018;12:245-57

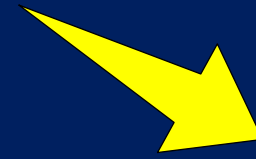
**Vedolizumab Cu-EC Moderada – Severa  
300 mg IV 0-2-6 semanas- C/ 8 semanas**



**Respuesta  
Inadecuada**



**Pérdida Respuesta  
Inmunosupresores  
Anti TNF**



**Problemas  
Seguridad**

**Entyvio, EMA 2019**

ORIGINAL ARTICLE

# Vedolizumab versus Adalimumab for Moderate-to-Severe Ulcerative Colitis

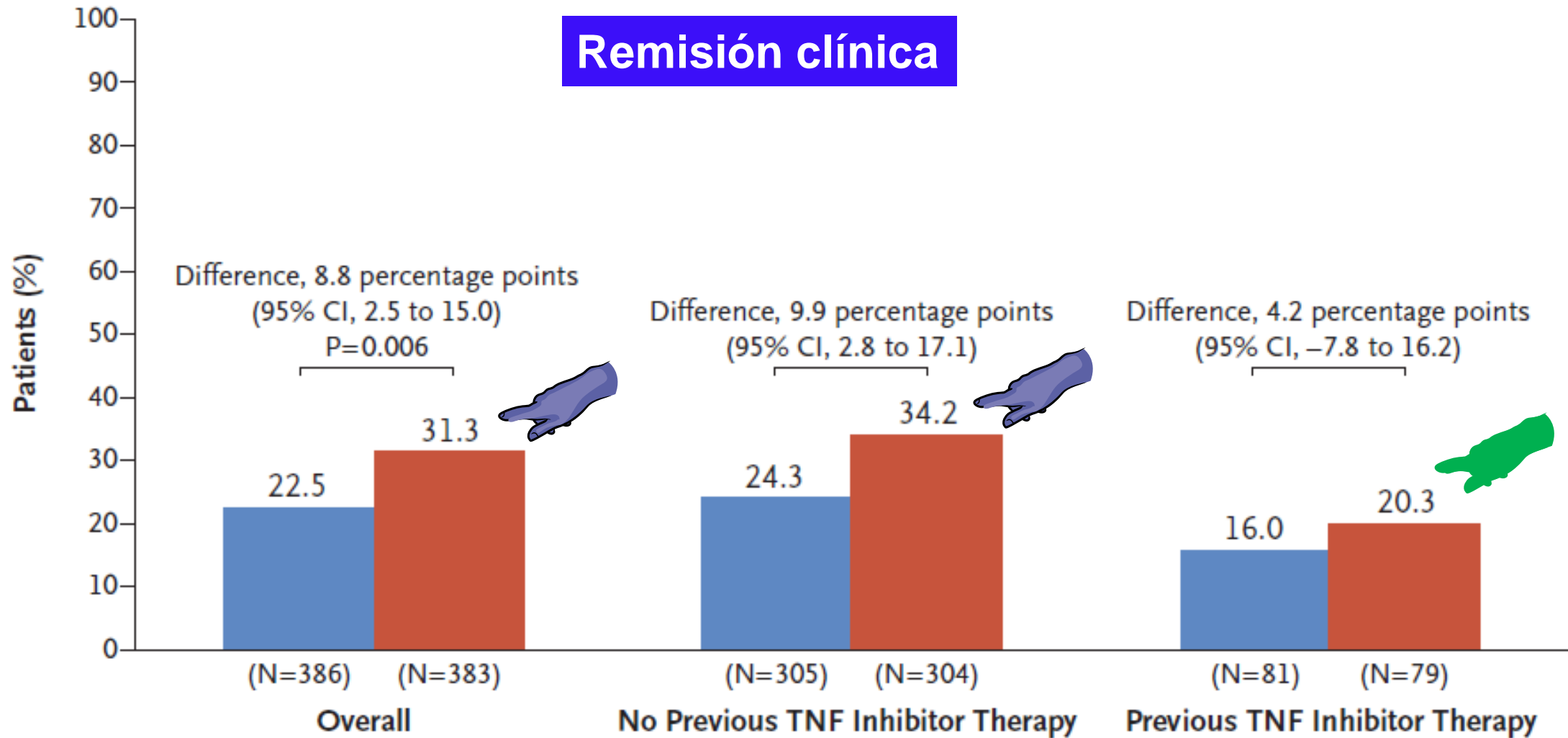
Bruce E. Sands, M.D., Laurent Peyrin-Biroulet, M.D., Ph.D., Edward V. Loftus, Jr., M.D.,  
Silvio Danese, M.D., Jean-Frédéric Colombel, M.D., Murat Törüner, M.D.,  
Laimas Jonaitis, M.D., Ph.D., Brihad Abhyankar, F.R.C.S., Jingjing Chen, Ph.D.,  
Raquel Rogers, M.D., Richard A. Lirio, M.D., Jeffrey D. Bornstein, M.D., and  
Stefan Schreiber, M.D., Ph.D., for the VARSITY Study Group\*

**Sands BE, N Engl J Med 2019;381:1215-26.**

# Varsity

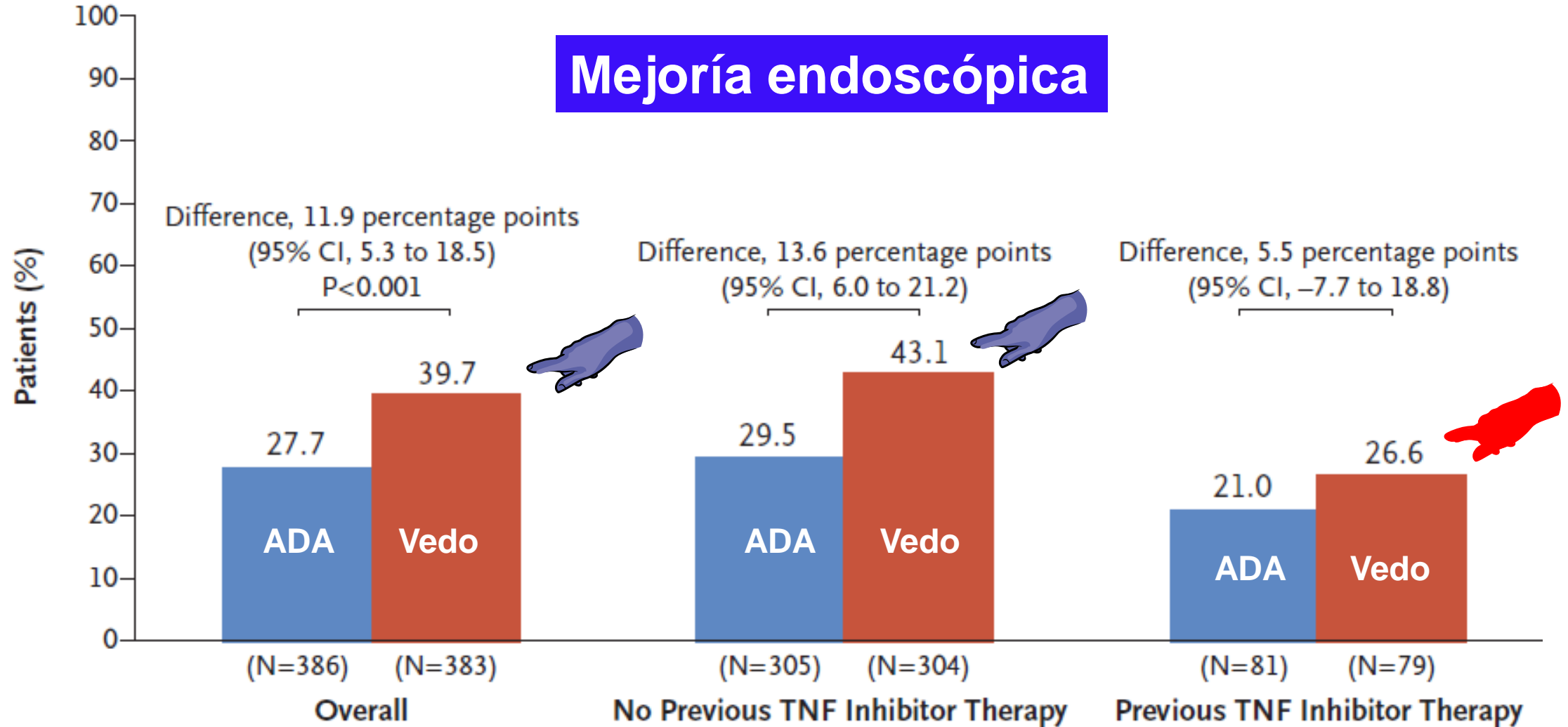
■ Adalimumab ■ Vedolizumab

## A Clinical Remission



# Varsity

## B Endoscopic Improvement



Sands BE, N Engl J Med 2019;381:1215-26.



# Histologic Outcomes With Vedolizumab Versus Adalimumab in Ulcerative Colitis: Results From An Efficacy and Safety Study of Vedolizumab Intravenous Compared to Adalimumab Subcutaneous in Participants With Ulcerative Colitis (VARSITY)

Laurent Peyrin-Biroulet,<sup>1</sup> Edward V. Loftus Jr,<sup>2</sup> Jean-Frédéric Colombel,<sup>3</sup> Silvio Danese,<sup>4</sup> Raquel Rogers,<sup>5</sup> Jeffrey D. Bornstein,<sup>5</sup> Jingjing Chen,<sup>5</sup> Stefan Schreiber,<sup>6</sup> Bruce E. Sands,<sup>3</sup> and Richard A. Lirio<sup>5</sup>

## Histologic Outcomes in Ulcerative Colitis from the VARSITY Study

### Study Design

Study Duration 52 weeks

Randomized  
N=769

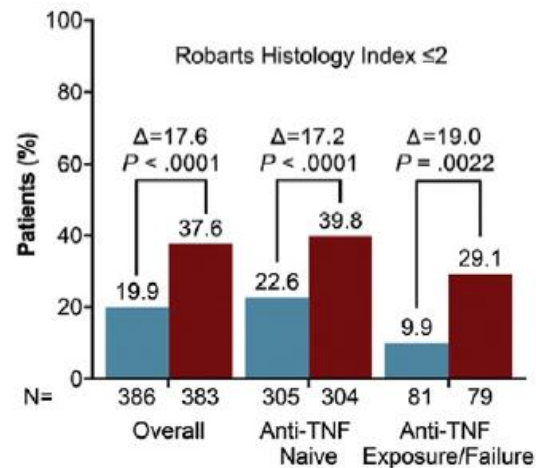


Baseline Histologic  
Disease Activity

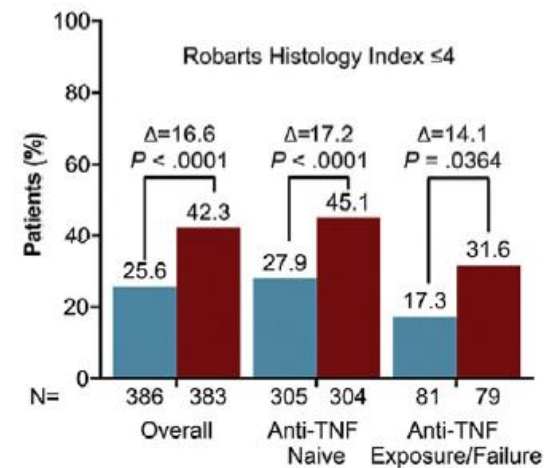
Robarts Histology Index

19.6	19.5
Adalimumab SC 40 mg Q2W	Vedolizumab IV 300 mg Q8W

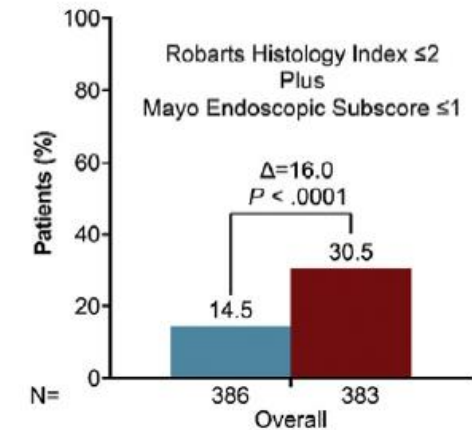
Vedolizumab-treated patients had higher rates of **histologic remission at Week 52**



Vedolizumab-treated patients had higher rates of **minimal histologic disease activity at Week 52**



Vedolizumab-treated patients had higher rates of **histologic remission plus endoscopic improvement at Week 52**



Gastroenterology

Original Article

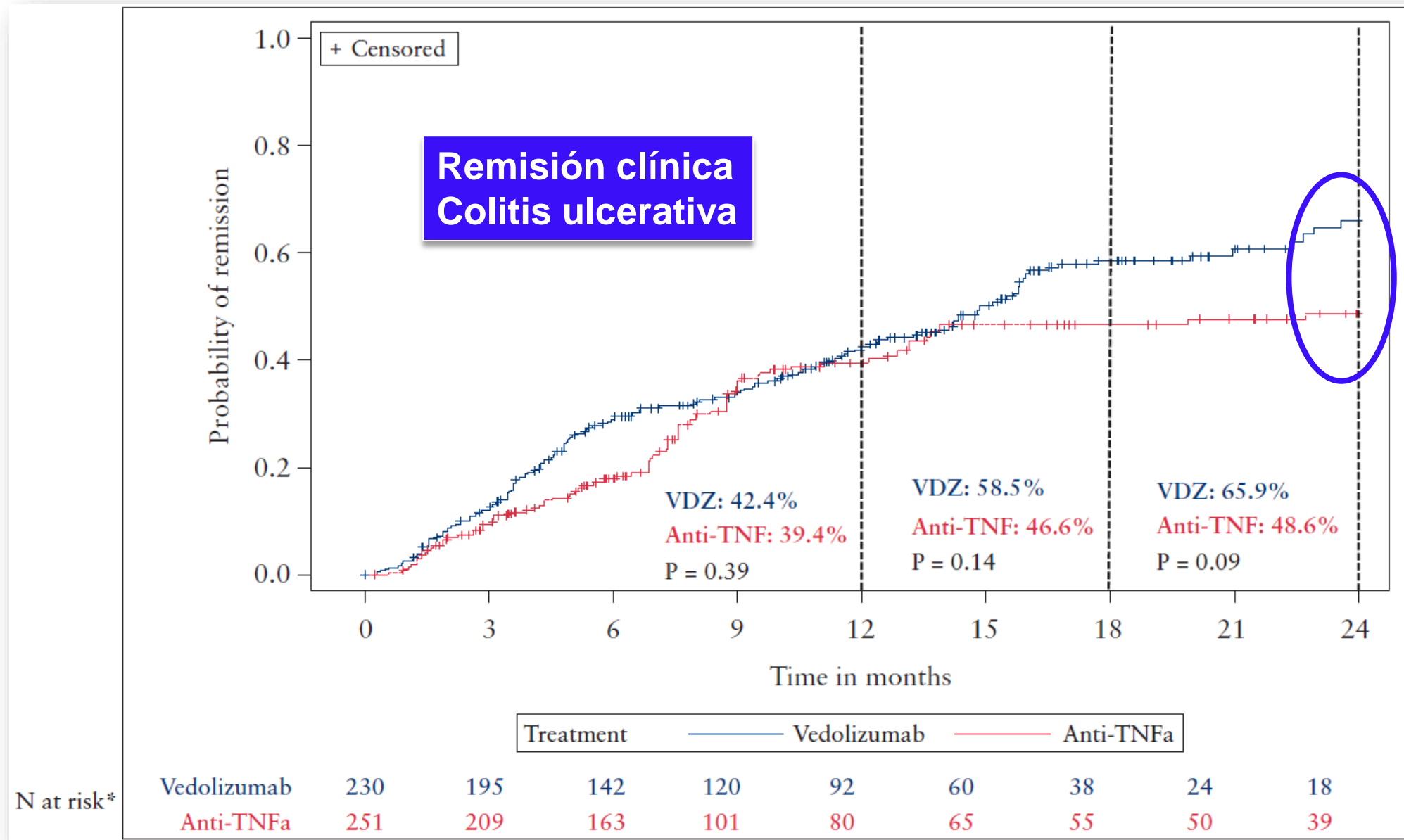
# Vedolizumab and Anti-Tumour Necrosis Factor $\alpha$ Real-World Outcomes in Biologic-Naïve Inflammatory Bowel Disease Patients: Results from the EVOLVE Study

Brian Bressler,<sup>a</sup> Andres Yarur,<sup>b</sup> Mark S. Silverberg,<sup>c</sup> Marielle Bassel,<sup>d</sup>  
Emanuelle Bellaguarda,<sup>e</sup> Chris Fourment,<sup>f</sup> Anthie Gatopoulou,<sup>g</sup>  
Pantelis Karatzas,<sup>h</sup> Uri Kopylov,<sup>i</sup> George Michalopoulos,<sup>j</sup>  
Spyridon Michopoulos,<sup>k</sup> Udayakumar Navaneethan,<sup>l</sup> David T. Rubin,<sup>m, </sup>  
Jesse Siffledeen,<sup>n</sup> Andrew Singh,<sup>o</sup> Konstantinos Soufleris,<sup>p</sup> Dara Stein,<sup>q</sup>  
Dirk Demuth,<sup>r</sup> Gerassimos J. Mantzaris<sup>s</sup>

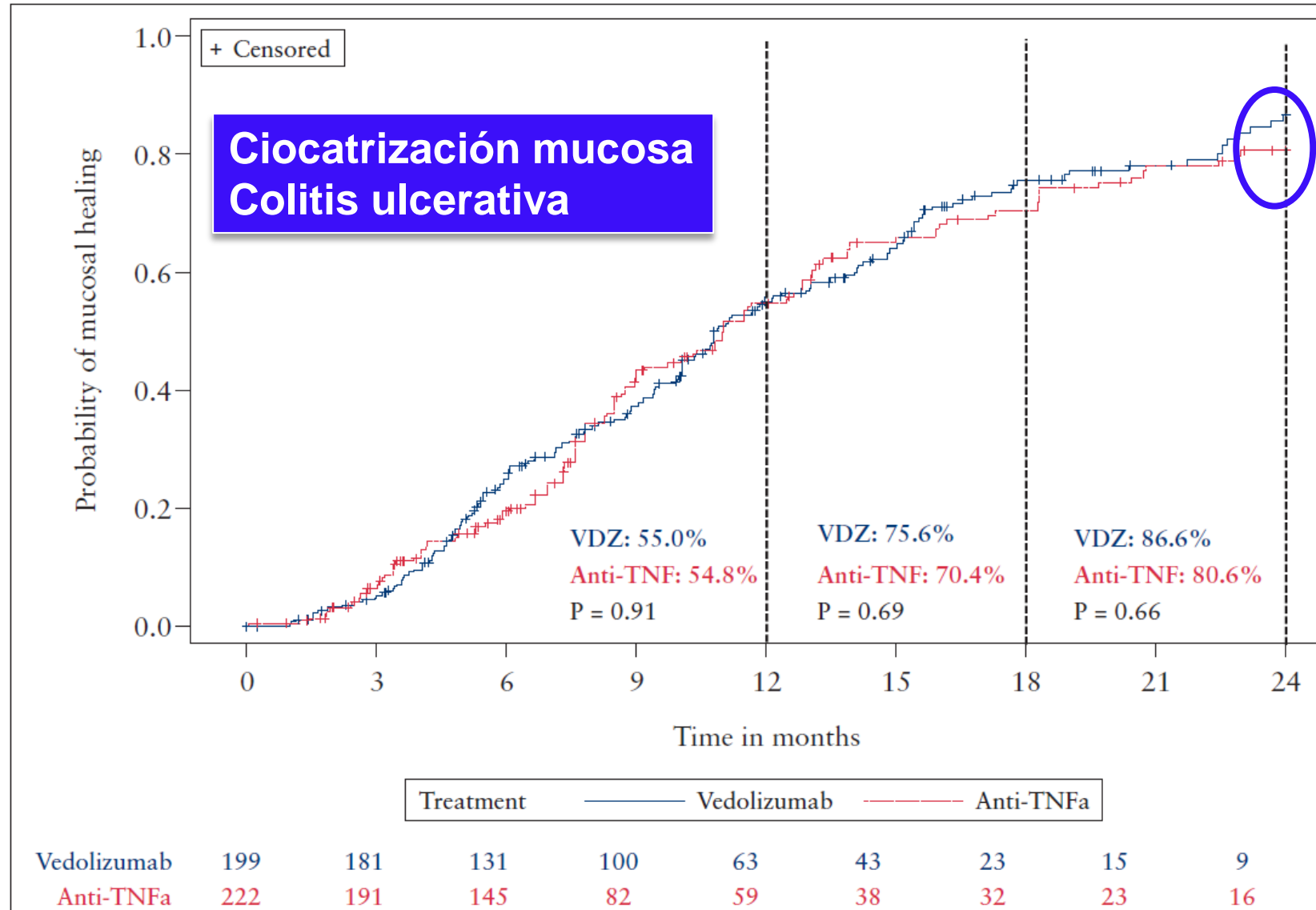


USA  
Canadá  
Grecia

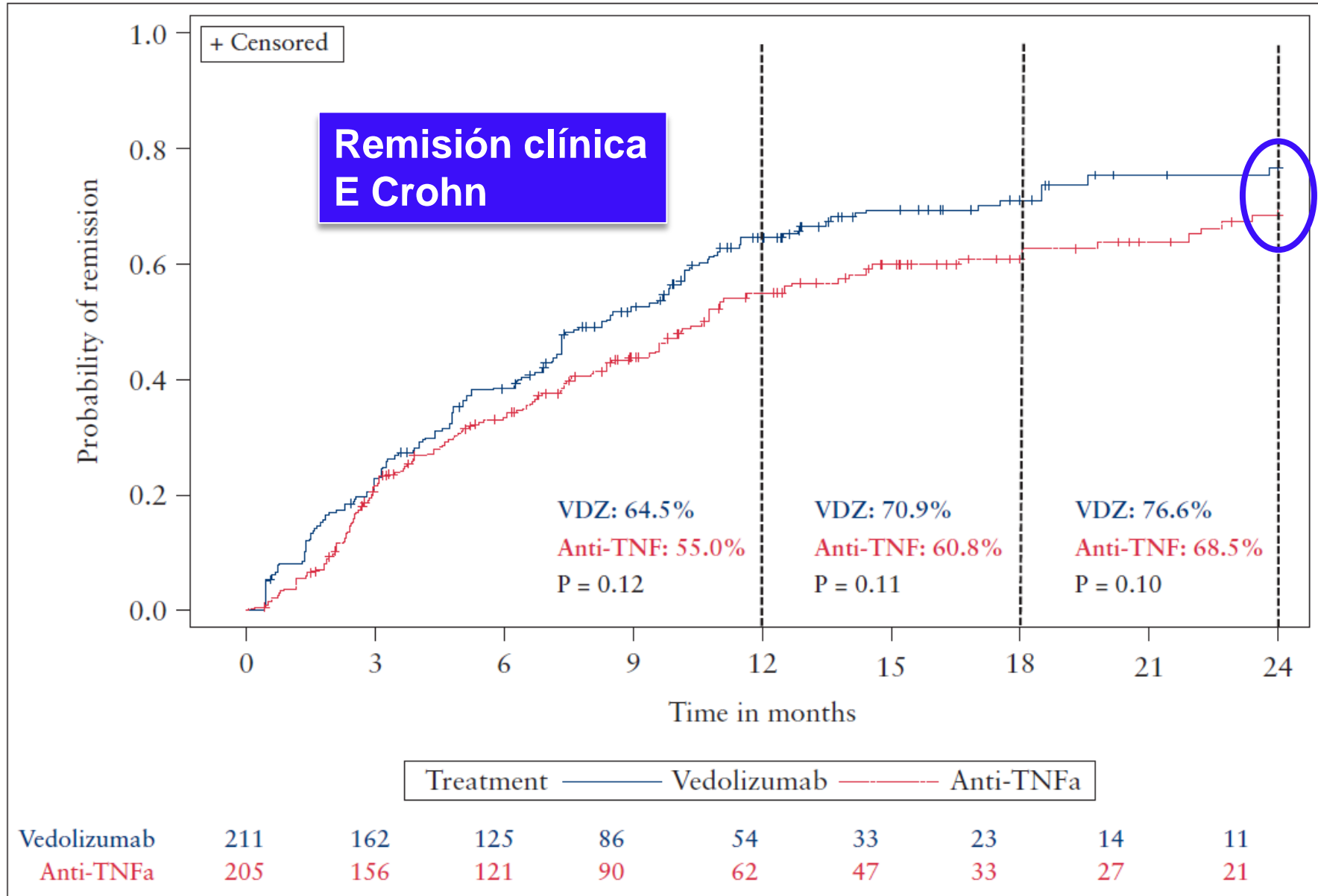
# Estudio EVOLVE



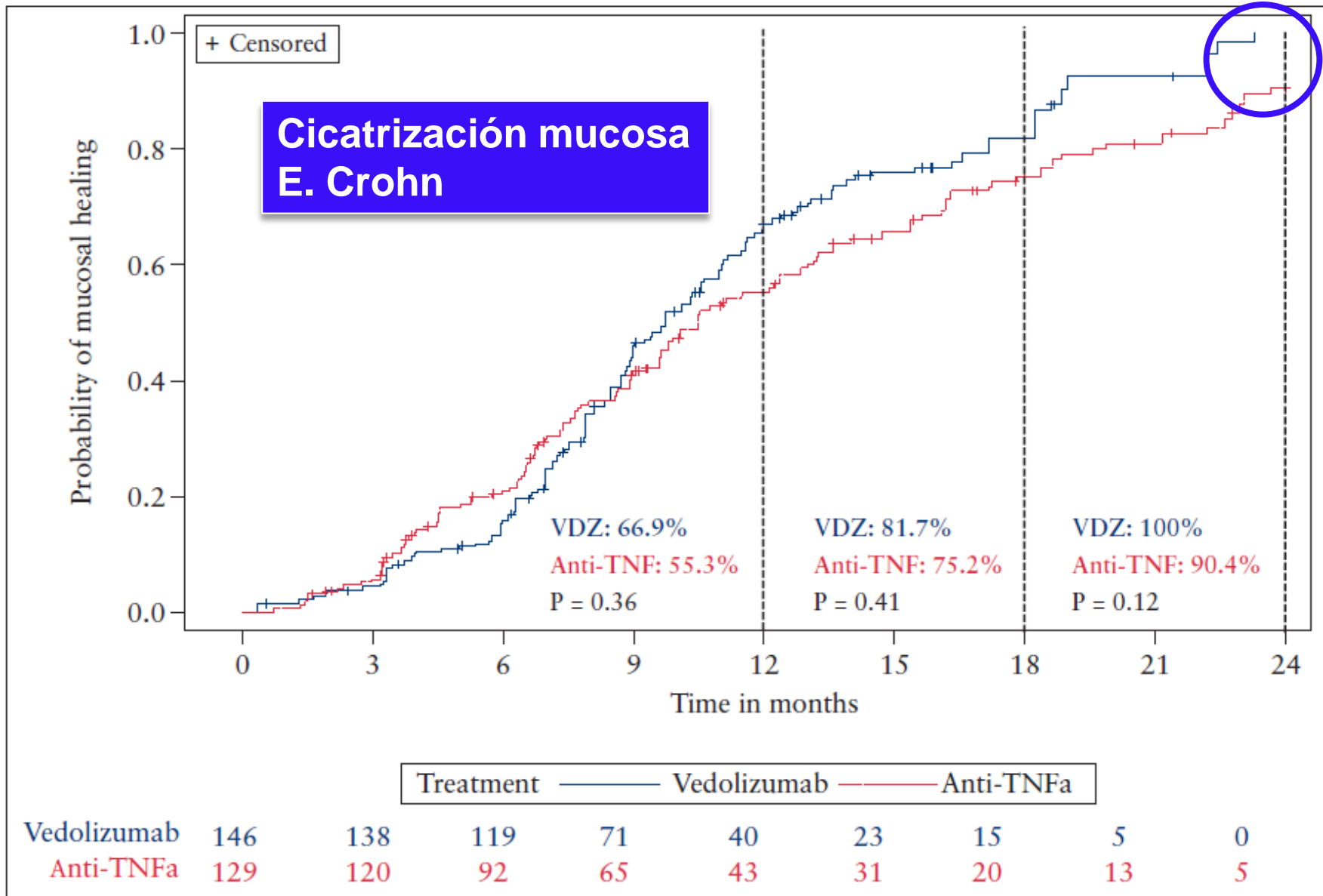
# Estudio EVOLVE



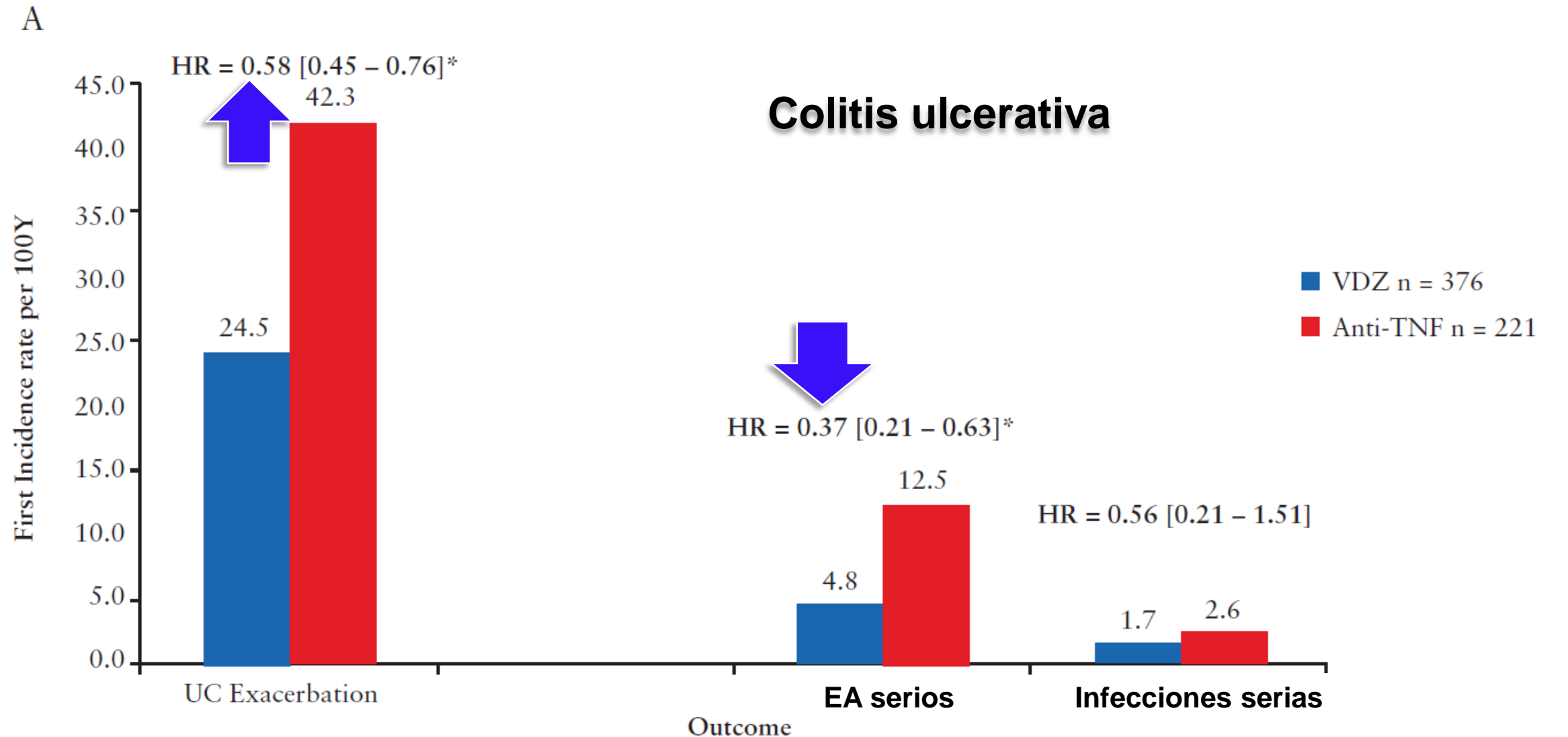
# Estudio EVOLVE



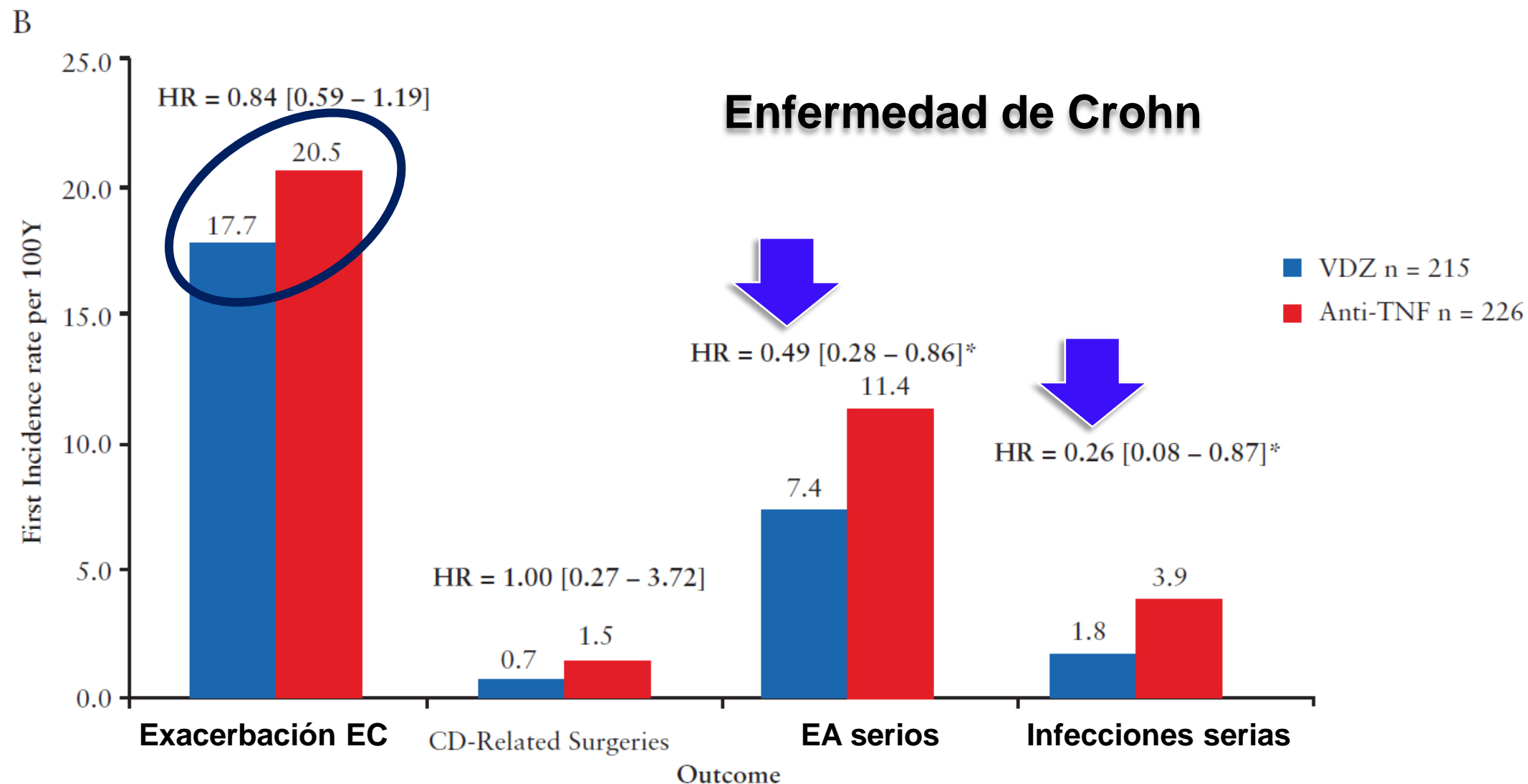
# Estudio EVOLVE



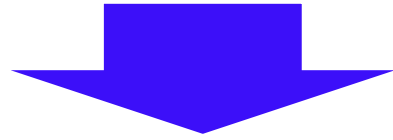
# Estudio EVOLVE



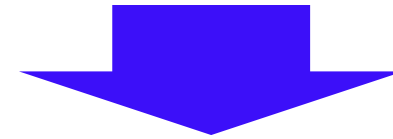
# Estudio EVOLVE



**Vedolizumab superior**



**Adalimumab en múltiples  
Objetivos terapéuticos**



**Remisión clínica  
Remisión endoscópica  
Remisión histológica**

# Vedolizumab for Ulcerative Colitis: Treatment Outcomes from the VICTORY Consortium

Neeraj Narula, MD, MPH<sup>1,2</sup>, Farhad Peerani, MD<sup>1,3</sup>, Joseph Meserve, MD<sup>4</sup>, Gursimran Kochhar, MD<sup>5</sup>, Khadija Chaudrey, MD<sup>6</sup>, Justin Hartke, MD<sup>7</sup>, Prianka Chilukuri, MD<sup>7</sup>, Jenna Koliiani-Pace, MD<sup>8</sup>, Adam Winters, MD<sup>1</sup>, Leah Katta, MD<sup>1</sup>, Eugenia Shmidt, MD<sup>1</sup>, Robert Hirten, MD<sup>1,9</sup>, David Faleck, MD<sup>1</sup>, Malav P. Parikh, MD<sup>5</sup>, Diana Whitehead, MD<sup>8</sup>, Brigid S. Boland, MD<sup>4</sup>, Siddharth Singh, MD, MS<sup>4</sup>, Sashidhar Varma Sagi, MD<sup>7</sup>, Monika Fischer, MD<sup>7</sup>, Shannon Chang, MD<sup>10</sup>, Morris Barocas, MD<sup>11</sup>, Michelle Luo, MS, PhD<sup>11</sup>, Karen Lasch, MD<sup>11</sup>, Matthew Bohm, MD<sup>7</sup>, Dana Lukin, MD<sup>12</sup>, Keith Sultan, MD<sup>9</sup>, Arun Swaminath, MD<sup>13</sup>, David Hudesman, MD<sup>10</sup>, Nitin Gupta, MD<sup>14</sup>, Bo Shen, MD<sup>5</sup>, Sunanda Kane, MD<sup>6</sup>, Edward V. Loftus, MD<sup>5</sup>, Corey A. Siegel, MD<sup>8</sup>, Bruce E. Sands, MD<sup>1</sup>, Jean-Frederic Colombel, MD<sup>1</sup>, William J. Sandborn, MD<sup>4</sup> and Parambir S. Dulai, MD<sup>4</sup>

**Table 2 Overall cumulative rates of treatment outcomes stratified by TNF $\alpha$  antagonist exposure**

	Overall		TNF $\alpha$ antagonist naive		1 TNF $\alpha$ antagonist		$\geq 2$ TNF $\alpha$ antagonists	
	6 mo	12 mo	6 mo	12 mo	6 mo	12 mo	6 mo	12 mo
Response	54%	75%	63%	74%	52%	78%	45%	70%
Remission	36%	51%	51%	61%	31%	48%	28%	44%
CSF-REM	21%	37%	25%	44%	17%	32%	18%	33%
EI	29%	62%	36%	65%	28%	60%	23%	43%
ER	18%	41%	24%	51%	16%	45%	14%	28%
Deep remission	14%	30%	20%	40%	13%	35%	9%	19%
Colectomy	6%	13%	0%	2%	6%	19%	11%	18%

Deep remission defined as achieving both clinical remission and endoscopic remission  
*CSF-REM* corticosteroid-free remission, *EI* endoscopic improvement, *ER* endoscopic remission

## CLINICAL PRACTICE GUIDELINES

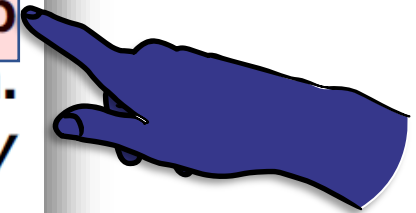
### AGA Clinical Practice Guidelines on the Management of Moderate to Severe Ulcerative Colitis



Joseph D. Feuerstein,<sup>1</sup> Kim L. Isaacs,<sup>2</sup> Yecheskel Schneider,<sup>3</sup> Shazia Mehmood Siddique,<sup>3</sup> Yngve Falck-Ytter,<sup>4,5</sup> and Siddharth Singh,<sup>6</sup> on behalf of the AGA Institute Clinical Guidelines Committee

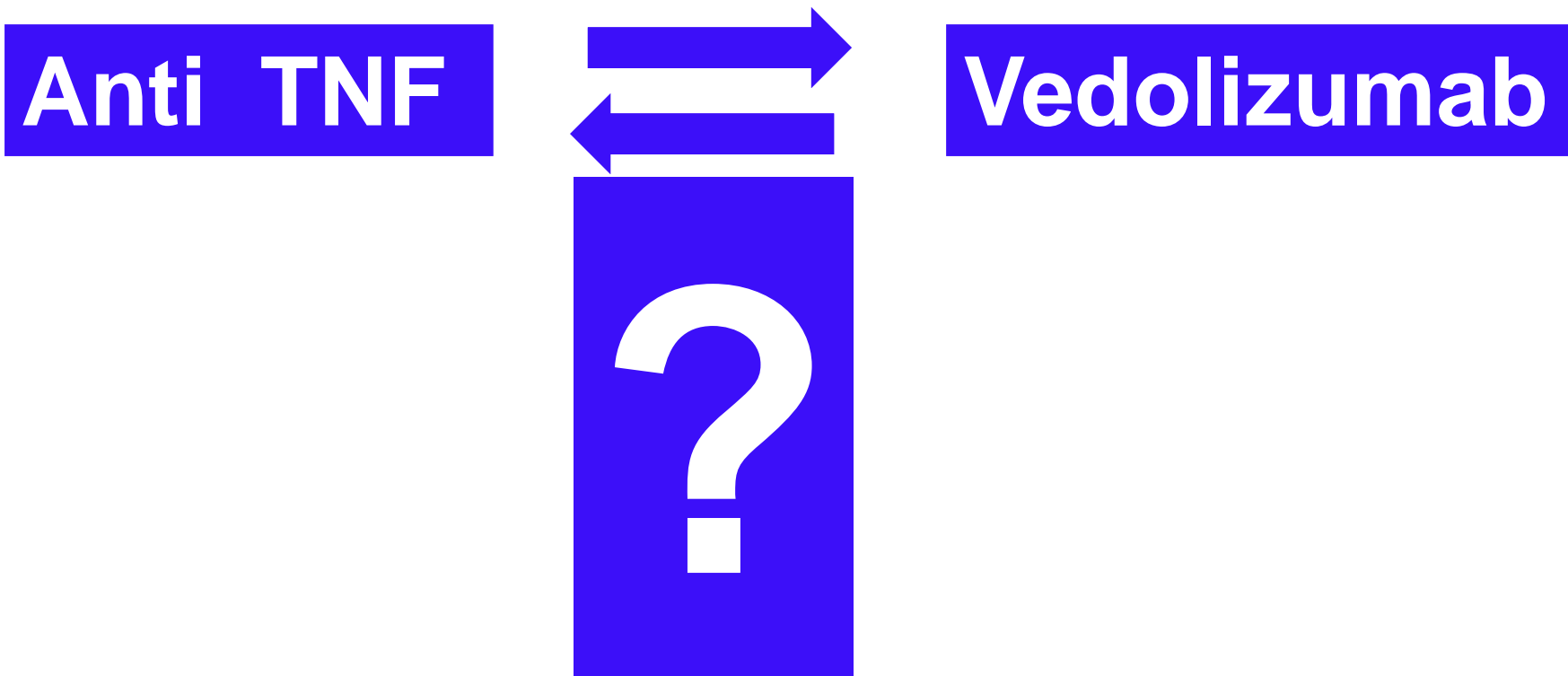
**2a. In adult outpatients with moderate to severe ulcerative colitis who are naïve to biologic agents, the AGA suggests using infliximab or vedolizumab rather than adalimumab, for induction of remission. (Conditional recommendation, moderate quality evidence)**

Comment: Patients, particularly those with less severe disease, who place higher value on the convenience of self-administered subcutaneous injection, and a lower value on the relative efficacy of medications, may reasonably chose adalimumab as an alternative.



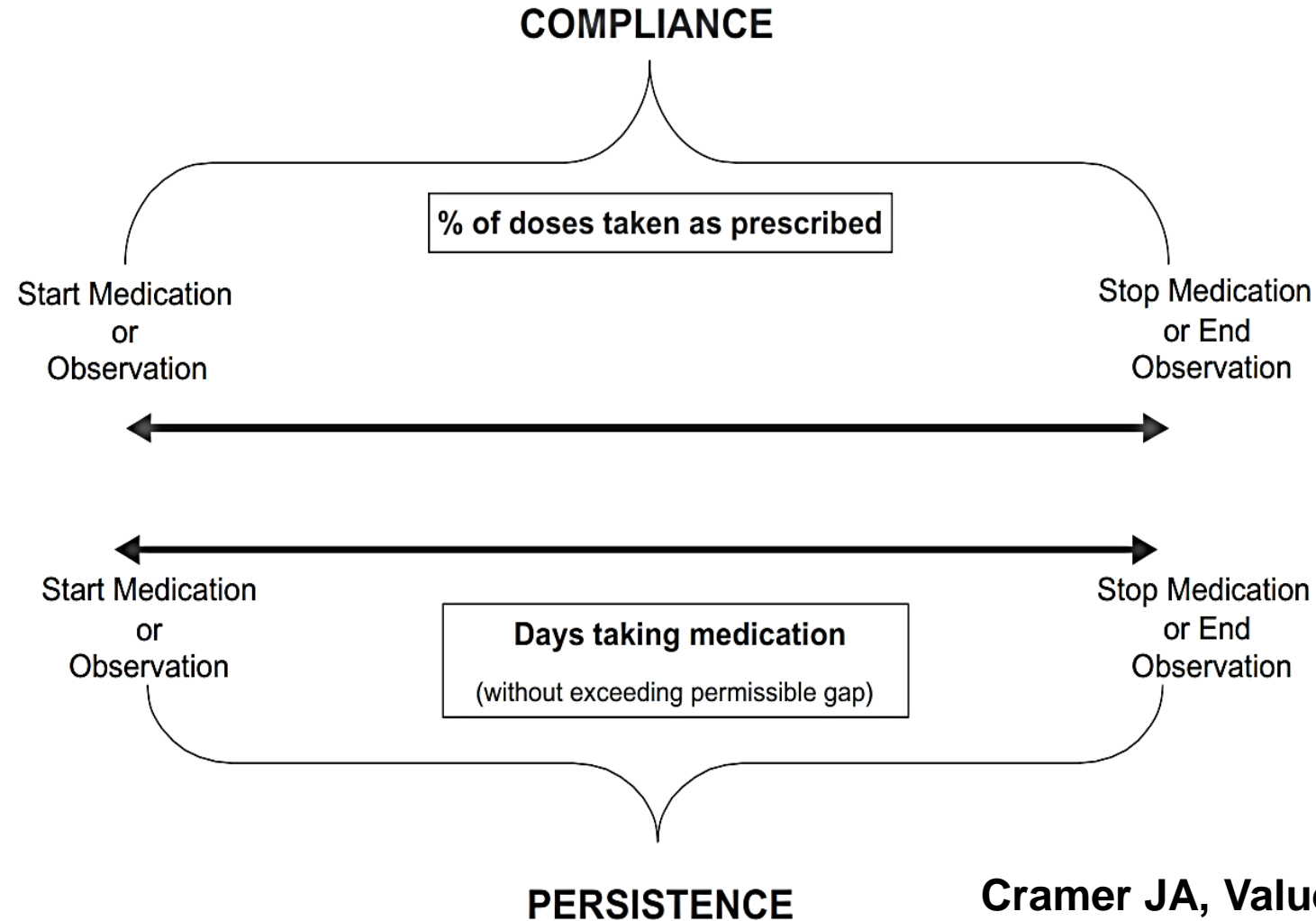
# Colitis ulcerativa

---



# Medication Compliance and Persistence: Terminology and Definitions

Joyce A. Cramer, BS,<sup>1</sup> Anuja Roy, MBA, MSc,<sup>2</sup> Anita Burrell, MBA,<sup>3</sup> Carol J. Fairchild, PhD,<sup>4</sup>  
Mahesh J. Fuldeore, PhD, RPh, MBA,<sup>5</sup> Daniel A. Ollendorf, MPH,<sup>6</sup> Peter K. Wong, PhD, RPh, MS, MBA<sup>7</sup>



# Superior treatment persistence with ustekinumab in Crohn's disease and vedolizumab in ulcerative colitis compared with anti-TNF biological agents: real-world registry data from the Persistence Australian National IBD Cohort (PANIC) study

Yanna Ko<sup>1,2</sup>  | Sudarshan Paramsothy<sup>1,2,3</sup>  | Yunki Yau<sup>1</sup> | Rupert W. Leong<sup>1,2,3</sup> 

# Persistencia de Biológicos CU Moderada-Severa

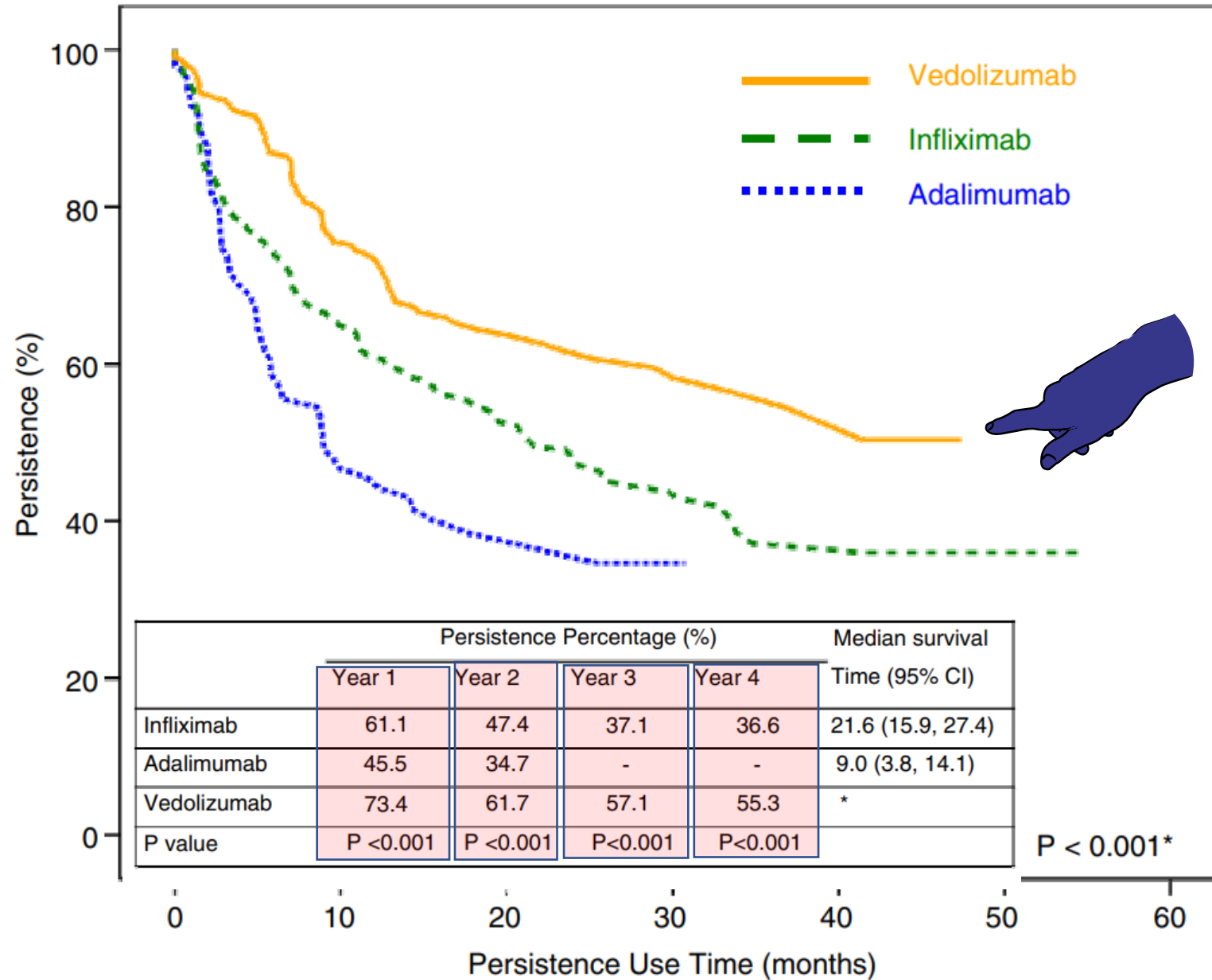
**Persistencia  
Proporción de  
Pacientes continúan  
Con medicación**



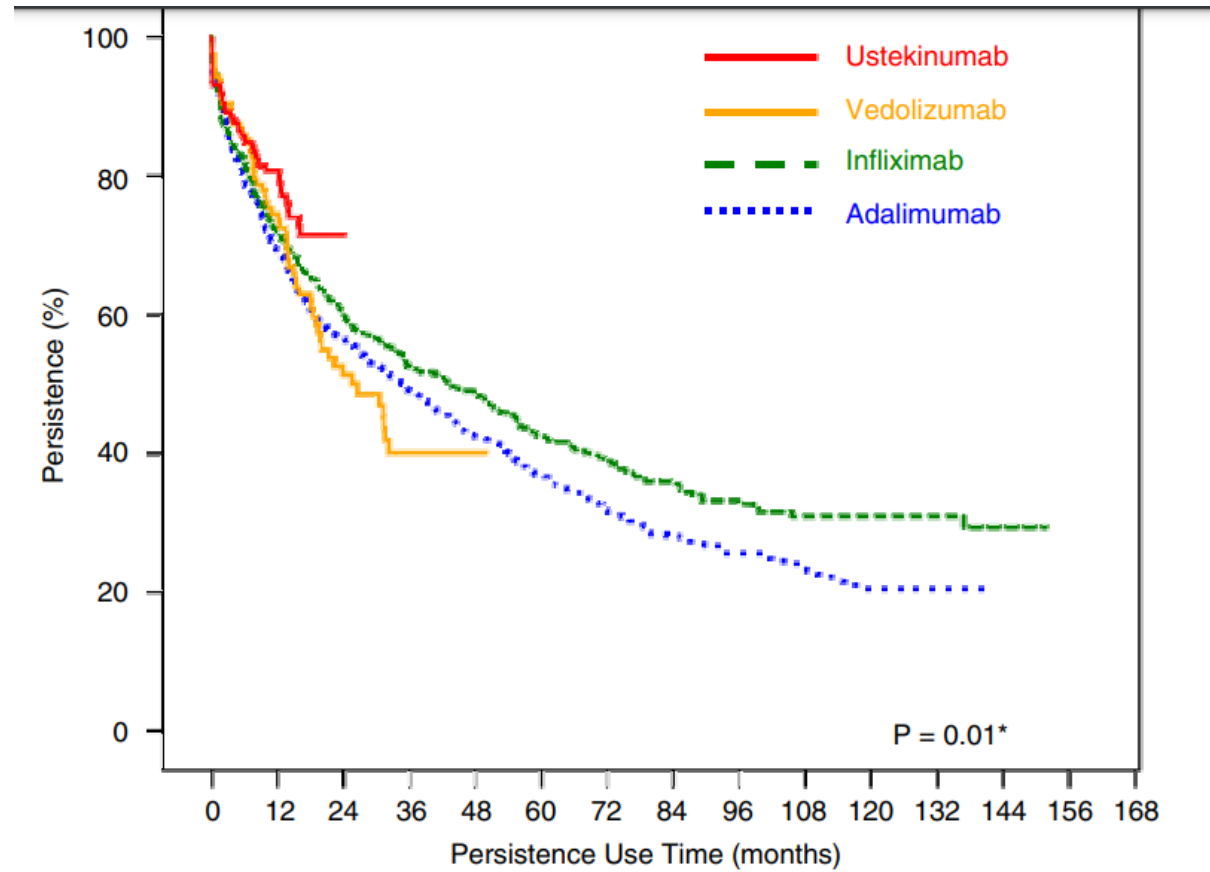
**Marcador  
Subrogado**



**Eficacia  
Efectos adversos  
Mundo real**



# Persistencia de Biológicos Enfermedad de Crohn



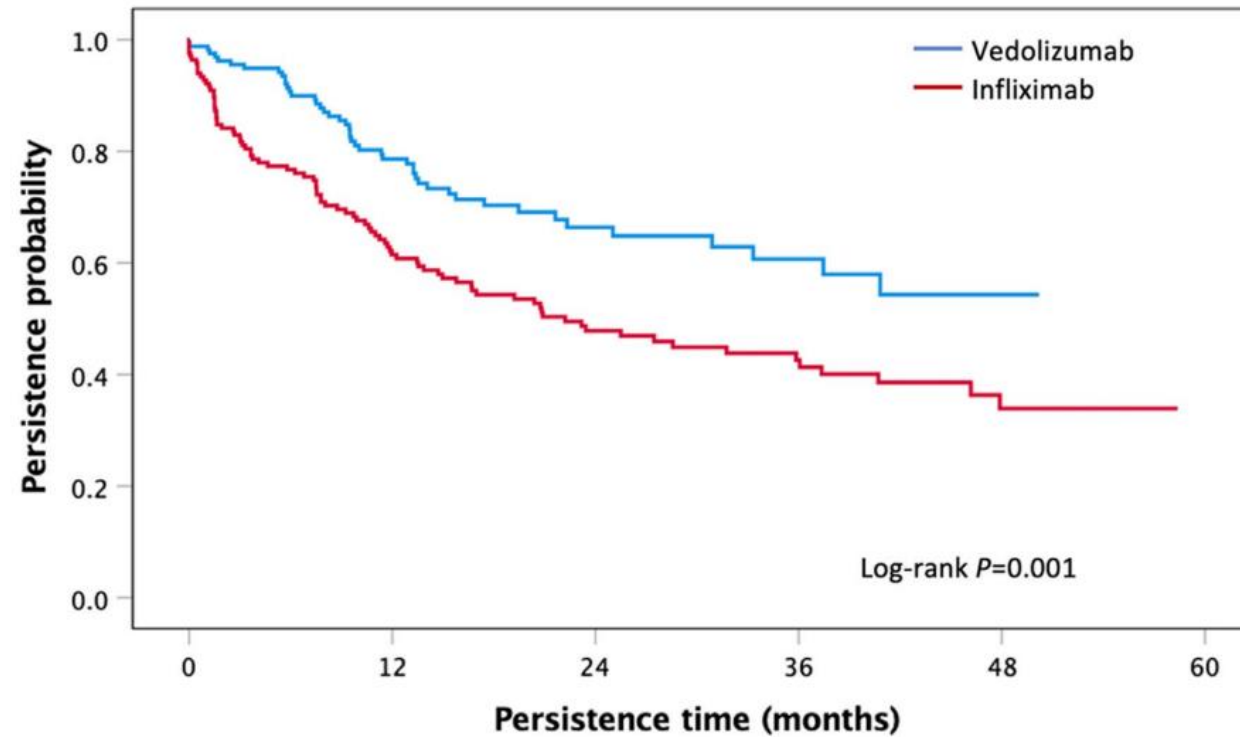
	Persistence Percentage (%)					Median survival Time (95% CI)
	Year 1	Year 2	Year 3	Year 4	Year 5	
Infliximab	68.1	59.1	51.1	46.8	40.9	40.5 (33.0, 48.0)
Adalimumab	64.2	56.1	48.9	42.3	36.4	34.4 (28.7, 40.0)
Vedolizumab	73.5	51.4	40.2	40.2	-	26.5 (16.7, 36.3)
Ustekinumab	80.0	71.6	-	-	-	*
P value	P < 0.001	P < 0.001	P = 0.31	P = 0.03	P = 0.15	



# **Vedolizumab has longer persistence than infliximab as a first-line biological agent but not as a second-line biological agent in moderate-to-severe ulcerative colitis: real-world registry data from the Persistence Australian National IBD Cohort (PANIC) study**

**Aviv Pudipeddi, Yanna Ko, Sudarshan Paramsothy and Rupert W. Leong , for the PANIC Study Group – Persistence in Australian National IBD Cohort**

# Primera línea



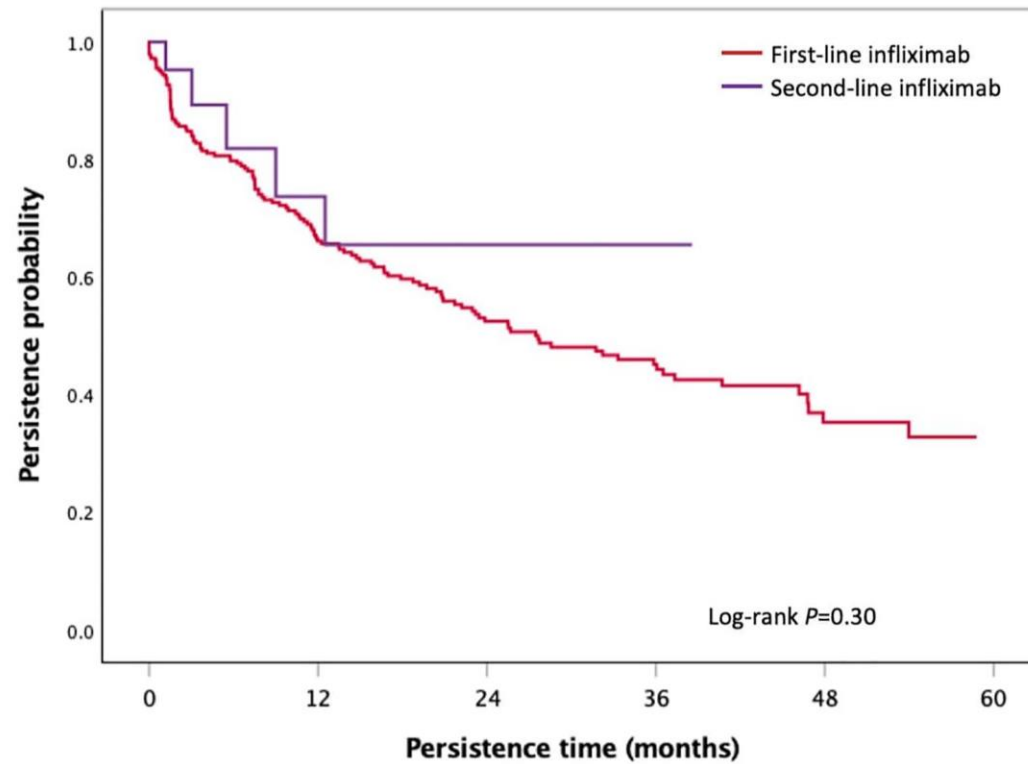
	Persistence Percentage (95%CI) (%)				Median survival time in months (95% CI)
	12 months	24 months	36 months	48 months	
Infliximab	61.5 (52.0-71.0)	47.9 (38.1-57.7)	43.8 (34.1-53.5)	33.9 (24.6-43.2)	22.2 (12.7–31.7)
Vedolizumab	78.6 (72.3-84.8)	66.4 (59.3-73.5)	60.7 (53.3-68.1)	54.3 (46.8-61.8)	> 50.2*
<i>P</i> -value <sup>†</sup>	<0.001 <sup>‡</sup>	<0.001 <sup>‡</sup>	<0.001 <sup>‡</sup>	<0.001 <sup>‡</sup>	

CI, confidence interval

**Infliximab de Segunda línea**



**No se modifica la Persistencia**



	Persistence Percentage (95%CI) (%)				Median survival time in months (95% CI)
	12 months	24 months	36 months	48 months	
First-line IFX	66.1 (60.2-71.9)	52.5 (46.3-58.7)	45.1 (38.9-51.3)	35.3 (29.4-41.2)	27.6 (18.7–36.6)
<u>Second-line</u> IFX	73.7 (55.3-92.1)	65.5 (45.6-85.4)	65.5 (45.6-85.4)	-	> 38.6*
P-value <sup>†</sup>	0.53	0.32	0.09	n/a	

CI, confidence interval; IFX, infliximab; n/a, not applicable

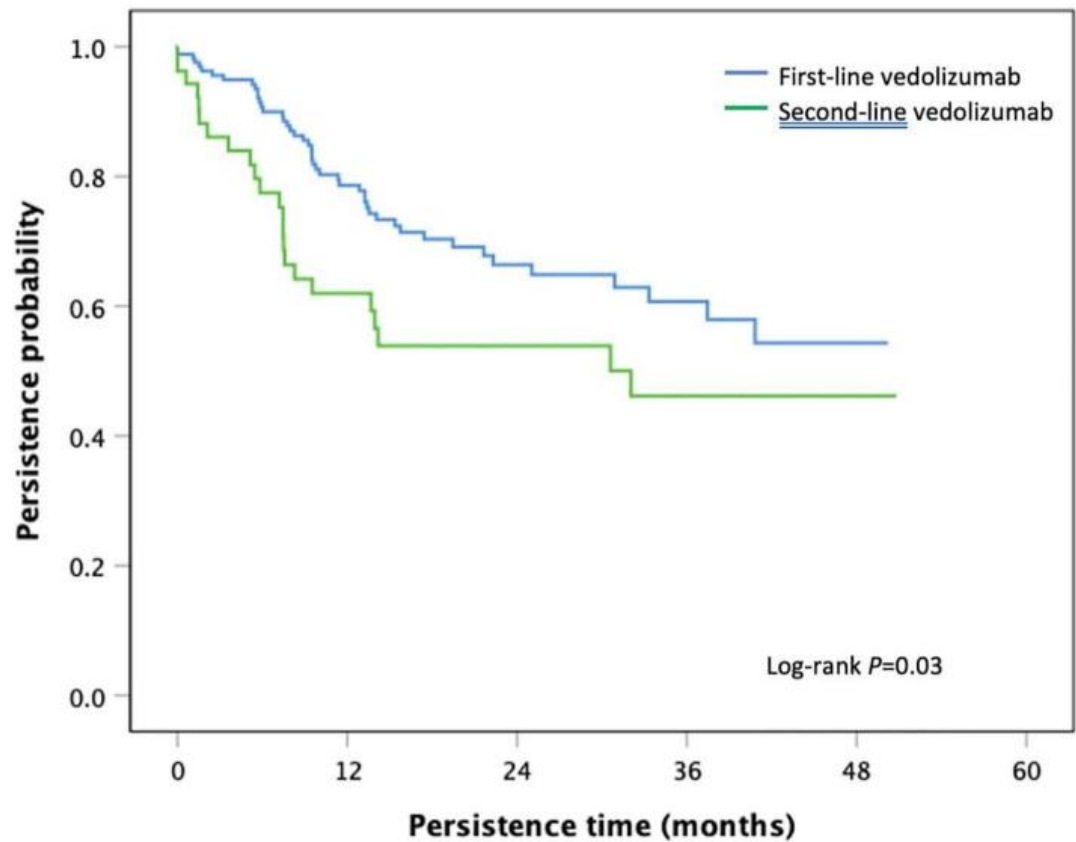
\*The median survival or its confidence interval cannot be exactly calculated when event rate is higher than 50%.

<sup>†</sup>Based on Bonferroni correction, statistical significance defined as  $P < 0.017$

**Vedolizumab de Segunda línea**



**Disminuye la Persistencia**



	Persistence Percentage (95%CI) (%)				Median survival Time in months (95% CI)
	12 months	24 months	36 months	48 months	
First-line VED	78.6 (72.4-84.8)	66.4 (59.3-73.5)	60.7 (53.3-68.1)	54.3 (46.8-61.8)	> 50.2*
<u>Second-line</u> VED	62.0 (48.9-75.1)	53.9 (40.5-67.3)	46.2 (32.8-59.6)	-	32.0^
P-value <sup>†</sup>	0.02	0.13	0.04	n/a	

CI, confidence interval; VED, vedolizumab; n/a, not applicable

# Effectiveness and Safety of Vedolizumab in Anti-TNF-Naïve Patients With Inflammatory Bowel Disease—A Multicenter Retrospective European Study

Uri Kopylov, MD,<sup>\*,a</sup> Bram Verstockt, MD,<sup>†,a</sup> Luc Biedermann, MD,<sup>‡</sup> Shaji Sebastian, MD,<sup>§</sup> Daniela Pugliese, MD,<sup>¶</sup> Elena Sonnenberg, MD,<sup>||</sup> Peter Steinhagen, MD,<sup>\*\*</sup> Naila Arebi, MD,<sup>††</sup> Yulia Ron, MD,<sup>‡‡</sup> Torsten Kucharzik, MD,<sup>§§</sup> Xavier Roblin, MD,<sup>¶¶</sup> Bella Ungar, MD,<sup>\*†</sup> Ariella Bar-Gil Shitrit, MD,<sup>|||</sup> Sandro Ardizzone, MD,<sup>\*\*\*</sup> Pauliina Molander, MD,<sup>†††</sup> Marina Coletta, MD,<sup>‡‡‡</sup> Laurent Peyrin-Biroulet, MD,<sup>§§§</sup> Peter Bossuyt, MD,<sup>¶¶¶</sup> Irit Avni-Biron, MD,<sup>||||</sup> Emmanouela Tsoukali, MD,<sup>\*\*\*\*</sup> Mariangela Allocca, MD,<sup>††††</sup> Konstantinos Katsanos, MD,<sup>‡‡‡‡</sup> Tim Raine, MD,<sup>§§§§</sup> Taina Sipponen, MD,<sup>††††</sup> Gionata Fiorino, MD,<sup>¶¶¶¶</sup> Shomron Ben-Horin, MD,<sup>\*</sup> Rami Eliakim, MD,<sup>\*</sup> Alessandro Armuzzi, MD,<sup>¶</sup> Britta Siegmund, MD,<sup>||</sup> Daniel C. Baumgart, MD,<sup>\*\*</sup> Nikolaos Kamperidis, MD,<sup>††</sup> Nitsan Maharshak, MD,<sup>‡‡</sup> Christian Maaser, MD,<sup>§§</sup> Gerassimos Mantzaris, MD,<sup>\*\*\*\*</sup> Henit Yanai, MD,<sup>||||</sup> Dimitriou K. Christodoulou, MD,<sup>‡‡‡‡</sup> Iris Dotan, MD,<sup>||||,a</sup> and Marc Ferrante, MD<sup>†,a</sup>

**Pérdida de respuesta es menor en “Naive” versus Exposición previa Anti TNF**

> Ann Clin Lab Sci. 2021 Sep;51(5):678-685.

# **Alterations in MAdCAM1-Positive Mucosal Capillaries and Integrin $\alpha_4\beta_7$ -Positive Lymphocytes in Crohn's Disease Treated with Anti-TNF $\alpha$ Biologics**

Mamoun Younes <sup>1</sup>, Andrew W DuPont <sup>2</sup>, Brooks D Cash <sup>2</sup>, Atilla Ertan <sup>2</sup>

**Objective:** To elucidate the reasons for the decreased effectiveness of Vedolizumab (VDZ) treatment in patients with Crohn's disease (CD) previously treated (CD-T) with anti-TNF- $\alpha$  biologics.

**Methods:** Immunohistochemical staining was performed on sections of formalin-fixed paraffin-embedded ileocolonic biopsies using antibodies for the mucosal addressin molecule (MAdCAM-1) and Etrolizumab.

**Results:** The mean number of MAdCAM-1 positive capillaries (MAdCAM-1-C) was 3 in controls, 8.5 in CD, 5.37 in CD-T, 5.7 in ulcerative colitis (UC), and 3.1 in lymphocytic colitis (LC) ( $p=0.0032$ ). When all biopsies with inflammatory bowel disease (IBD) in this series were considered together, the number of MAdCAM-1-C increased with an increased histologic activity score (HAS) ( $p<0.001$ ). The mean MAdCAM-1-C was lower in CD-T than CD (5.37 vs. 8.5,  $p=0.0362$ ), even in cases with high HAS (6.46 vs. 9.5,  $p=0.073$ ). Two of 6 (33%) controls, 4 of 6 (67%) CD, 9 of 16 (56%) CD-T, 6 of 7 (86%) UC, and 0 of 8 (0%) LC showed Etrolizumab-positive lymphocytes (E-Ly,  $p=0.0106$ ). IBD biopsies positive for E-Ly were associated with higher HAS ( $p=0.0546$ ). MAdCAM-1-C was heterogenous in some IBD cases.

**Conclusions:** Our results suggest that treatment with anti-TNF- $\alpha$  reduces the number of MAdCAM-1-C in CD, even in biopsies with high HAS. This suggests that high inflammation in such cases obviously failed to respond to anti-TNF- $\alpha$ , may be less dependent on the migration of  $\alpha 4\beta 7$ -lymphocytes to the inflamed mucosa, and therefore may not optimally respond to VDZ treatment. Presented in part at the Digestive Diseases Week meeting, San Diego, CA, May 2019. Supported by Takeda Pharmaceuticals.

**Menos eficacia Vedolizumab  
pos ANTI TNF**

**Farmacocinética  
Vedolizumab**

**Niveles 22.5 vs  
36.0 µgr/ml**

**Menor expresión  
MAdCAM1**

Liefferinckx C, Eur J Gastroenterol Hepatol 2019;31:478-85  
Biancheri P, Inflamm Bowel Dis 2013;19:259-64

*Background:* The efficacy and safety of vedolizumab in bio-naïve patients with ulcerative colitis (UC) and Crohn's disease (CD) remain unknown.

*Aims:* To perform a meta-analysis regarding vedolizumab as first line of biological therapy for UC or CD.

*Methods:* A systematic review of Medline, EMBASE, and Cochrane databases per December 2020 was undertaken. Meta-analysis was conducted using random-effects models.

*Results:* This systematic review identified 79 eligible studies with 4,520 and 3,494 bio-naïve patients with UC and CD, respectively, and 8,105 and 11,140 bio-exposed patients. Among bio-naïve patients with UC, a total of 40.0% (95%CI 27.0–54.0,  $I^2=86%$ ) and 63.9% (95%CI 47.0–79.2,  $I^2=36%$ ) achieved clinical remission at weeks 14 and 52, respectively. The corresponding rates in CD were 54.0% (95%CI 42.0–66.0,  $I^2=23%$ ), and 61.7% (95%CI 55.2–68.1,  $I^2=0%$ ). Bio-naïvety was associated with a higher probability of clinical remission at week 52 in UC (relative risk (RR)=1.32 (95%CI 1.14–1.53)), while this was only apparent until week 26 in CD (RR=1.60 (95%CI 1.30–1.95)). Finally, bio-naïve UC patients had a lower risk of serious adverse events (RR=0.29 (95%CI 0.09–0.95)).

*Conclusion:* Vedolizumab was found to have a favorable efficacy and safety profile in bio-naïve patients with UC and CD. The findings have implications in the management of IBD.

Mohamed Attauabi<sup>a,b,c,\*</sup>, Gorm Roager Madsen<sup>b,c</sup>, Flemming Bendtsen<sup>b,c</sup>,  
Jakob Benedict Seidelin<sup>a</sup>, Johan Burisch<sup>b,c</sup>

**79 estudios**  
**4520 CU, 3494 EC Bio “naive”**  
**8105 y 11.140 Expuestos**



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

# Best Practice & Research Clinical Gastroenterology

journal homepage: <https://ees.elsevier.com/ybega/default.asp>

## Should we use anti-tumor necrosis factor agents or vedolizumab as first-line biological therapy in ulcerative colitis?



Lieven Pouillon <sup>a, b, \*</sup>, Johan Van Stappen <sup>c</sup>, Peter Bossuyt <sup>b</sup>, Silvio Danese <sup>d</sup>,  
Laurent Peyrin-Biroulet <sup>a</sup>

Treatment comparison of different biological agents versus placebo as induction therapy in biological-naïve UC patients [13].

	Clinical response	Clinical remission	Mucosal healing
Infliximab vs. placebo, OR (95% CI)	3.56 (2.65–4.79)	4.03 (2.75–5.89)	3.05 (2.26–4.10)
Adalimumab vs. placebo, OR (95% CI)	1.77 (1.36–2.29)	1.92 (1.29–2.86)	1.63 (1.25–2.13)
Golimumab vs. placebo, OR (95% CI)	2.13 (1.55–2.94)	2.81 (1.69–4.69)	1.74 (1.25–2.41)
Vedolizumab vs. placebo, OR (95% CI)	3.17 (1.71–5.86)	4.26 (1.58–11.52)	2.91 (1.56–5.42)

CI: confidence interval, OR: odds ratio.

**Costo eficacia**

## Cost-effectiveness of vedolizumab compared with conventional therapy for ulcerative colitis patients in the UK

**Results:** Vedolizumab had incremental cost-effectiveness ratios of £4,095/quality-adjusted life-year (QALY), £4,423/QALY, and £5,972/QALY compared with conventional therapy in the intent-to-treat, anti-TNF-naïve, and anti-TNF-failure populations, respectively. Patients on vedolizumab accrued more QALYs while incurring more costs than patients on conventional therapy. The sensitivity analyses showed that the results were most sensitive to induction response and transition probabilities for each treatment.

**Conclusion:** The results suggest that vedolizumab results in more QALYs and may be a cost-effective treatment option compared with conventional therapy for both anti-TNF-naïve and anti-TNF-failure patients with moderately-to-severely active UC.

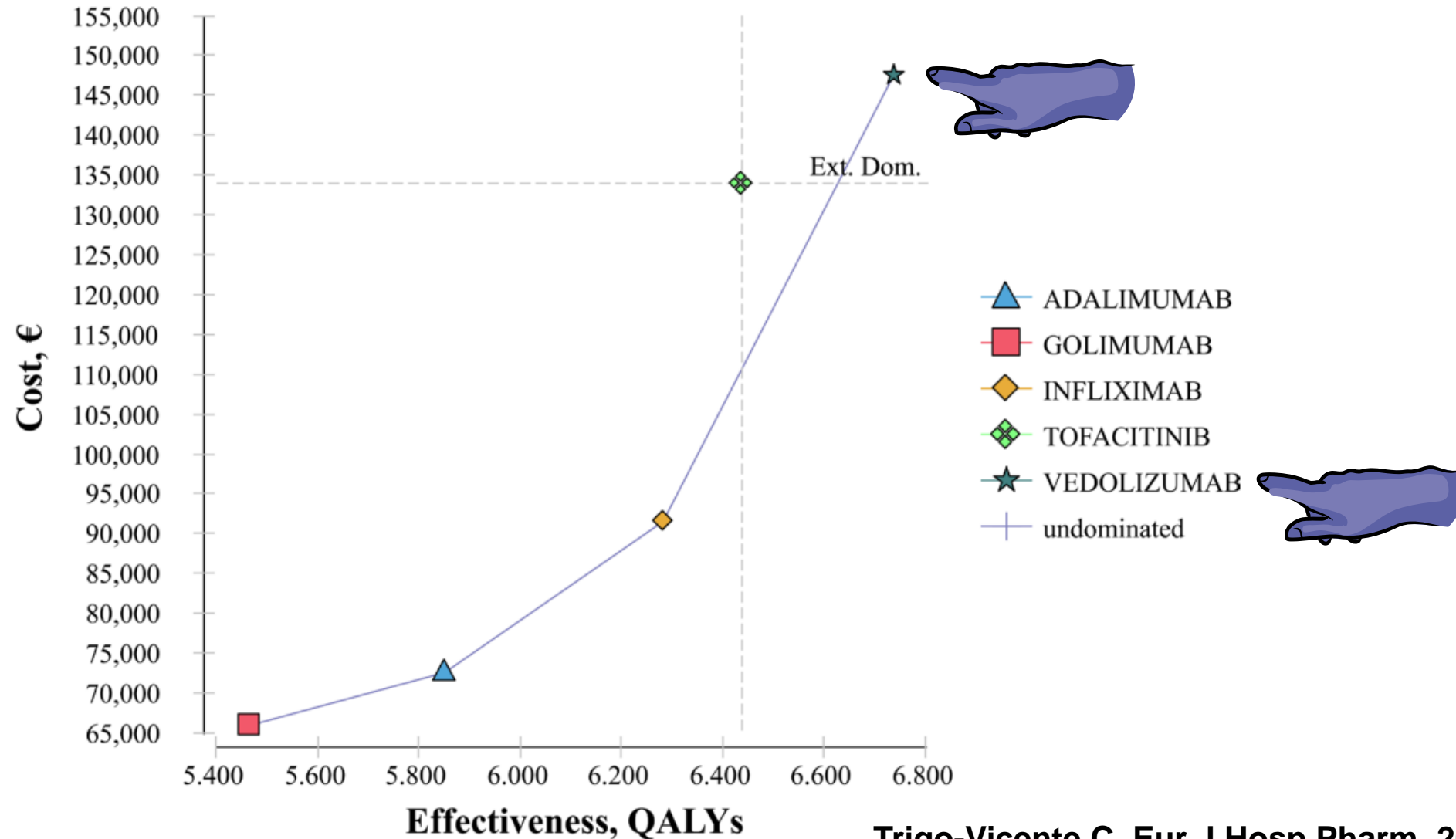
ORIGINAL PAPER

## **Cost-effectiveness of vedolizumab compared with infliximab, adalimumab, and golimumab in patients with ulcerative colitis in the United Kingdom**

**Michele R. Wilson<sup>1</sup> · Annika Bergman<sup>2</sup> · Helene Chevrou-Severac<sup>2</sup> ·  
Ross Selby<sup>3</sup> · Michael Smyth<sup>4</sup> · Matthew C. Kerrigan<sup>5</sup>**

# Cost-effectiveness analysis of infliximab, adalimumab, golimumab, vedolizumab and tofacitinib for moderate to severe ulcerative colitis in Spain

Cristina Trigo-Vicente,<sup>1</sup> Vicente Gimeno-Ballester,<sup>2</sup> Alejandro López-Del Val<sup>3</sup>



# ***Mensajes para la casa***

---

**Vedolizumab en “bionaiive” superior anti TNF**  
**Vedo inicial no disminuye eficacia anti TNF**  
**Vedo 2da línea disminuye su eficacia**  
**Persistencia de Vedo supera anti TNF**  
**Mejor estrategia CU Vedo --- Anti TNF**  
**Costo eficacia vedolizumab necesita estudios**

# Cuál es el paciente Candidato para Vedolizumab



***William Otero R MD, FAGA, FACP  
Profesor Titular de Medicina,  
Coordinador de Gastroenterología  
Universidad Nacional de Colombia  
Hospital Universitario Nacional de Colombia***



# Predictores de respuesta

Predictors of response in Crohn's disease	Anti-TNF alpha	Vedolizumab	Ustekinumab
Patient-related factors			
Young age at initiation	Positive predictor	Insufficient data or controversy	Insufficient data or controversy
Smoking	Negative predictor	Negative predictor	Not examined
High BMI	Negative predictor	Insufficient data or controversy	Not examined
Disease-related factors			
Shorter duration of disease	Positive predictor	Insufficient data or controversy	Insufficient data or controversy
Severe disease activity at induction	Negative predictor	Negative predictor	Negative predictor
Complicated phenotype (stricturing, penetrating)	Negative predictor	Negative predictor	Negative predictor
History of intestinal resection	Negative predictor	Not examined	Negative predictor
Ileocolonic disease	Positive predictor	Not examined	Positive predictor
Elevated inflammatory biomarkers	Positive predictor	Negative predictor	Insufficient data or controversy
No recent hospitalisation (12 months)	Not examined	Positive predictor	Not examined
Treatment-related factors			
Early response	Positive predictor	Positive predictor	Positive predictor
Mucosal healing	Positive predictor	Not examined	Not examined
Low trough level of biologic	Negative predictor	Negative predictor	Negative predictor
Anti-drug antibodies	Negative predictor	Insufficient data or controversy	Insufficient data or controversy
No prior anti-TNF exposure	Positive predictor	Positive predictor	Not examined
Concomitant steroid use	Not examined	Negative predictor	Not examined
Concomitant immunomodulator use	Positive predictor	Insufficient data or controversy	Positive predictor
Others			
Genetic: Fas-ligand-843 TT, caspase-9 93 CC/CT	Negative predictor	Not examined	Not examined
Microbiome: higher alpha diversity	Not examined	Positive predictor	Not examined

Predictors of response in ulcerative colitis	Anti-TNF alpha	Vedolizumab
Patient-related factors		
Young age	Positive predictor	Not examined
High BMI	Negative predictor	Insufficient data or controversy
Disease-related factors		
Severe disease activity at induction	Negative predictor	Negative predictor
Disease extent	Negative predictor	Not examined
Elevated inflammatory biomarkers	Insufficient data or controversy	Negative predictor
High hemoglobin at baseline	Positive predictor	Not examined
Low serum albumin	Negative predictor	Insufficient data or controversy
pANCA +	Negative predictor	Not examined
Treatment-related factors		
Early response	Positive predictor	Positive predictor
Mucosal healing	Positive predictor	Not examined
Low trough level of biologic	Negative predictor	Negative predictor
Anti-drug antibodies	Negative predictor	Insufficient data or controversy
No prior anti-TNF exposure	Positive predictor	Positive predictor
Concomitant steroid use	Not examined	Negative predictor
Concomitant immunomodulator use	Positive predictor	Not examined
Others		
Genetic: high expression oncostatin M, TNF receptor 1 36G	Negative predictor	Not examined

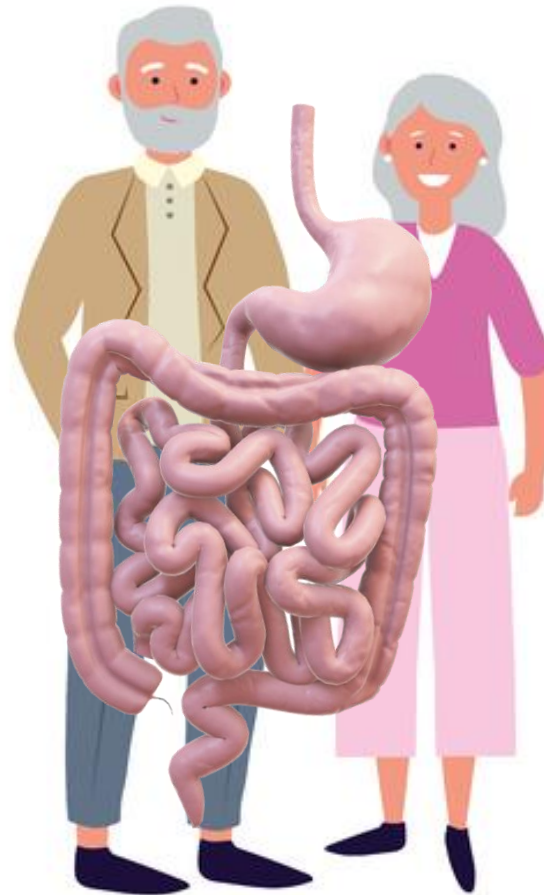
<span style="color: green;">■</span> Positive predictor	<span style="color: yellow;">■</span> Insufficient data or controversy
<span style="color: red;">■</span> Negative predictor	<span style="color: gray;">■</span> Not examined

# Vitamin D Is Associated with $\alpha 4\beta 7+$ Immunophenotypes and Predicts Vedolizumab Therapy Failure in Patients with Inflammatory Bowel Disease

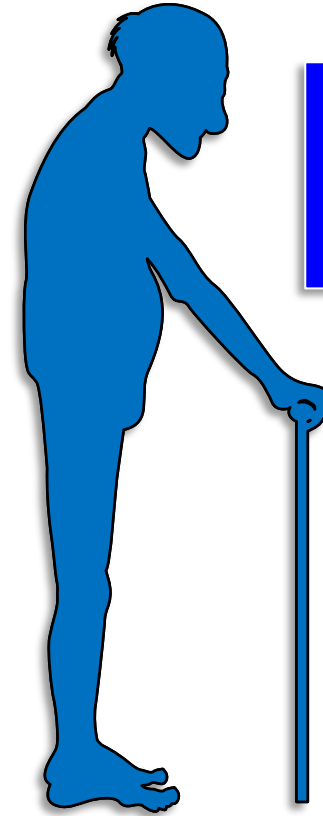
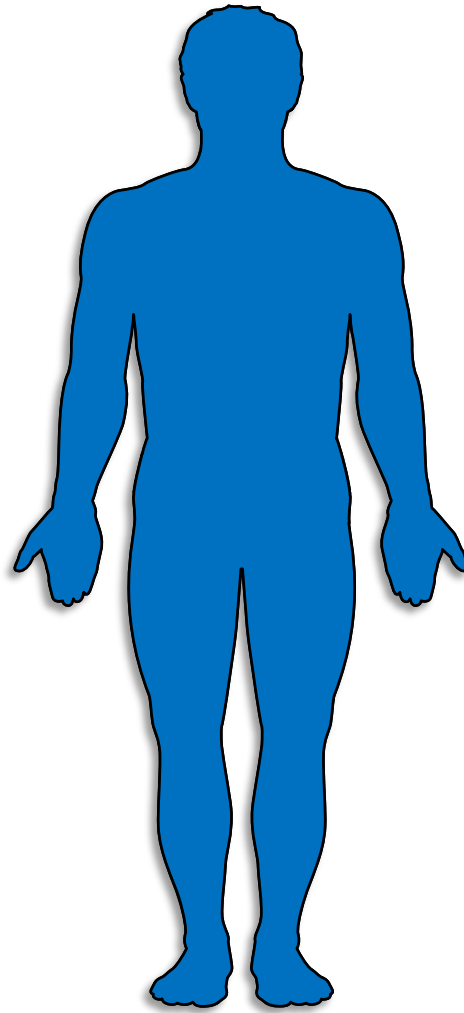
John Gubatan,<sup>a,b,○</sup> Samuel J. S. Rubin,<sup>a,c</sup> Lawrence Bai,<sup>a,c,○</sup>  
 Yeneneh Haileselassie,<sup>a</sup> Steven Levitte,<sup>a</sup> Tatiana Balabanis,<sup>a</sup> Akshar Patel,<sup>a</sup>  
 Arpita Sharma,<sup>a</sup> Sidhartha R. Sinha,<sup>a</sup> Aida Habtezion<sup>a,c</sup>

Clinical variables	All IBD patients, N = 252			Predictores de No respuesta y de respuesta		
	Univariate			Multivariate		
	Odds ratio	95% CI	p-Value	Odds ratio	95% CI	p-Value
IBD disease duration $\geq$ 2years	0.77	0.22–1.12	0.080			
Fistulising disease	1.97	0.85–4.56	0.112			
Low serum 25[OH]D	24.87	10.60–58.35	<0.001	26.10	14.30–48.90	<0.001
Albumin [g/L]	0.56	0.30–1.05	0.071			
C-reactive protein [mg/dL]	0.98	0.92–1.05	0.604			
Active endoscopic inflammation	3.34	1.55–7.17	0.002	2.51	0.87–7.29	0.090
Previous bowel surgery	7.88	3.13–19.80	<0.001	9.45	4.62–28.87	<0.001
Previous anti-TNF failure	2.48	1.04–5.91	0.041	1.48	0.50–4.41	0.482
Current vitamin D supplementation	0.64	0.33–1.25	0.192	0.36	0.14–0.95	0.039

# Enfermedad inflamatoria intestinal en el adulto mayor



**Próximas décadas  
30% de pacientes  
con EII serán  
Adultos mayores!!**



**Nueva biología  
Geriatría**



<b>Colombia</b>	<b>60 años</b>
<b>En general</b>	<b>≥65 años</b>
<b>Japón</b>	<b>&gt;75 años</b>

**Aumento  
Grasa corporal**

**Disminución  
Masa muscular**

**Disminución  
Agua total**



**Cambios en la  
Función hepática**

**Menor filtración  
Glomerular**

**Hipoproteïnemia**

**Alteración Farmacocinética  
Metabolismo medicamentos**

REVIEW

### Management of elderly ulcerative colitis in Japan

Masaaki Higashiyama<sup>1</sup> · Akira Sugita<sup>2</sup> · Kazutaka Koganei<sup>2</sup> · Kenji Wanatabe<sup>3</sup> · Yoko Yokoyama<sup>3</sup> · Motoi Uchino<sup>4</sup> · Masakazu Nagahori<sup>5</sup> · Makoto Naganuma<sup>6</sup> · Shigeaki Bamba<sup>7</sup> · Shingo Kato<sup>8</sup> · Ken Takeuchi<sup>9</sup> · Teppei Omori<sup>10</sup> · Tomohisa Takagi<sup>11</sup> · Satohiro Matsumoto<sup>12</sup> · Mitsuo Nagasaka<sup>13</sup> · Shintaro Sagami<sup>14</sup> · Kazuya Kitamura<sup>15</sup> · Takehiko Katsurada<sup>16</sup> · Ken Sugimoto<sup>17</sup> · Noritaka Takatsu<sup>18</sup> · Masayuki Saruta<sup>19</sup> · Toshiyuki Sakurai<sup>19</sup> · Kazuhiro Watanabe<sup>20</sup> · Shiro Nakamura<sup>3</sup> · Yasuo Suzuki<sup>21</sup> · Ryota Hokari<sup>1</sup>

*Ther Adv Gastroenterol*  
2021, Vol. 14: 1–15  
DOI: 10.1177/  
17562848211023399  
© The Author(s), 2021.  
Article reuse guidelines:  
sagepub.com/journals-  
permissions

## The elderly IBD patient in the modern era: changing paradigms in risk stratification and therapeutic management

Simon J. Hong<sup>1</sup> and Seymour Katz

## Inflammatory Bowel Disease in the Older Adult

Shirley Cohen-Mekelburg, MD, MS<sup>a,b,c,\*</sup>, Akbar K. Waljee, MD, MSc<sup>a,b,c,d</sup>

Gastroenterology 2021;160:445–451

## AGA Clinical Practice Update on Management of Inflammatory Bowel Disease in Elderly Patients: Expert Review

Ashwin N. Ananthakrishnan,<sup>1</sup> Geoffrey C. Nguyen,<sup>2</sup> and Charles N. Bernstein<sup>3</sup>



### Digestion

#### Review

Digestion  
DOI: 10.1159/000503099

Received: April 16, 2019  
Accepted: September 2, 2019  
Published online: January 14, 2020

## Management of the Elderly Inflammatory Bowel Disease Patient

Petr Hruz<sup>a</sup> · Pascal Juillerat<sup>b</sup> · Gerd-Achim Kullak-Ublick<sup>c</sup> · Alain M. Schoepfer<sup>d</sup> · Gerassimos J. Mantzaris<sup>e</sup> · Gerhard Rogler<sup>f</sup> on behalf of the Swiss IBDnet, an official working group of the Swiss Society of Gastroenterology

Current Gastroenterology Reports (2019) 21:60  
https://doi.org/10.1007/s11894-019-0720-7

GASTROENTEROLOGY IN GERIATRIC PATIENTS (S CHOKHAVATIA, SECTION EDITOR)

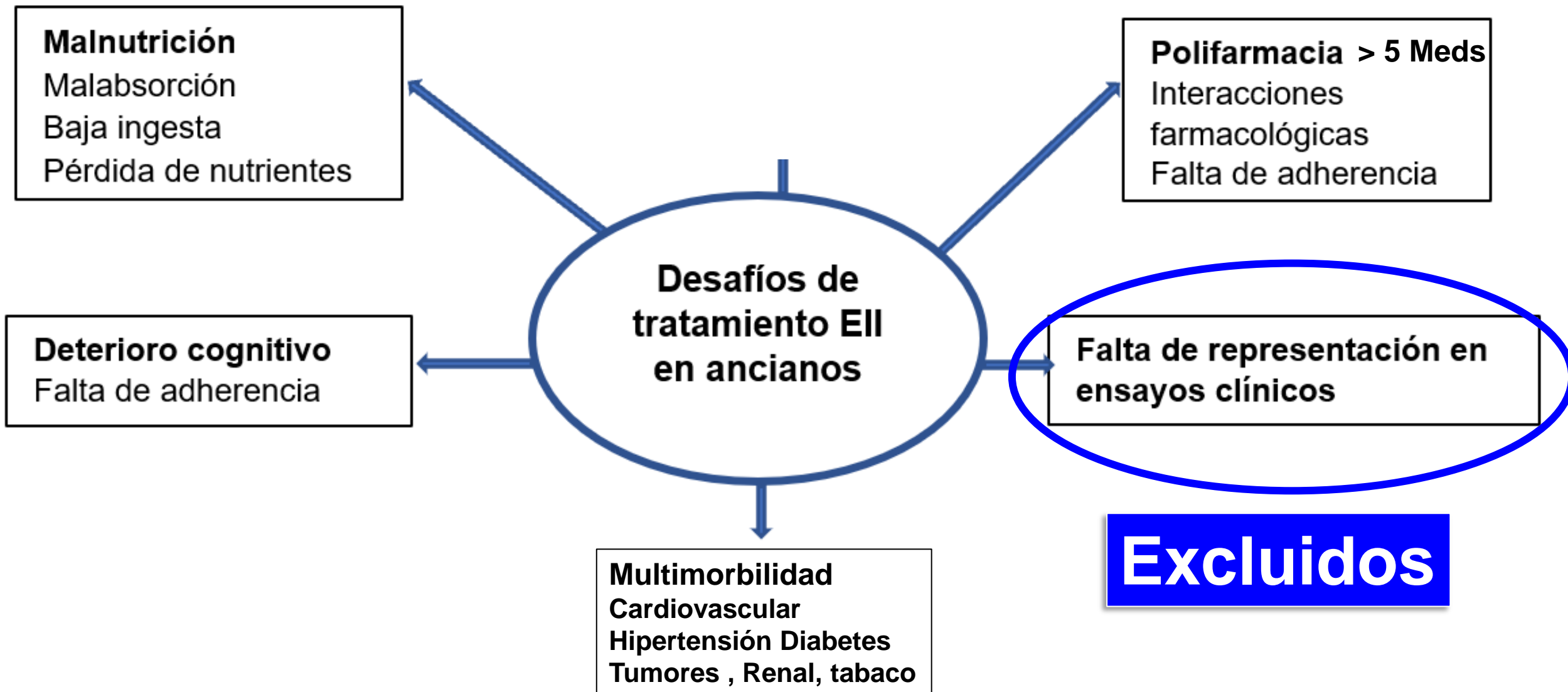
## IBD in the Elderly: Management Challenges and Therapeutic Considerations

Vivy Tran<sup>1</sup> · Berkeley N. Limketkai<sup>1,2,3</sup> · Jenny S. Sauk<sup>1,2,3</sup>

# Factores característicos EII de comienzo anciano



# Adulto mayor y Tratamiento de EII



# Tratamiento CU en el anciano

---

**No hay estudios específicos en ancianos**

**Ancianos subrepresentados en ECA**

**Recomendaciones inferidas de no ancianos**

**Tratamiento individualizado**

**Polifarmacia: Interacciones medicamentosas**

**Comorbilidades: Índice de comorbilidad Charlson**

# Conceptos claves en el manejo del adulto mayor

---

**Privilegiar remisión síntomas sobre remisión profunda**

**Evitar combos IM + biológicos Infecciones**

**Empezar dosis bajas ir lentamente**

**Desafiante transferir resultados ECC población menor**

**Consultas presenciales familiar escuche recomendaciones**

**Vacunación actualizada Herpes Zoster (Riesgo 1.5-2 veces)**

**Con Inmunosupresión No vacunas vivas (HZ recombinante)**

# Medicamentos en el adulto mayor con EI

## 5 ASA Piedra angular

*Filtración glomerular  
Tópicos Incontinencia  
Interacción tiopurinas*

## Anti TNF

*Infección  
Falla cardíaca  
Menor eliminación  
Vacunas vivas*

## Tiopurinas

*Toxicidad hematológica  
Linfoma no Hodgkin RR15  
Cáncer piel no melanoma  
Warfarina  
AINES  
IECA*



## Esteroides

*Osteoporosis  
Fractura cadera  
Siquiatria  
Glaucoma  
Cataratas  
Infecciones*

## Tofacitinib, datos limitados Reumatología

*Mayor riesgo Herpes Zoster 100 p/año  
10 mg 5,5, 5mg 3.1 placebo 0. Leve >90%  
Mayor riesgo trombosis venosa y TEP  
10 mg 2v/d u otros factores riesgo  
HA, Diabetes, Tabaco, Coronaria*

## Ustekinumab, (P40 IL12/L23) Datos limitados

*Favorable  
Menor riesgo infecciones*

## Vedolizumab; Datos limitados?

*Favorable  
Menor riesgo infecciones*

# Efficacy of Vedolizumab in a Nationwide Cohort of Elderly Inflammatory Bowel Disease Patients

Nabeel Khan, MD,<sup>\*,†,‡,§,¶</sup> Tyler Pernes, BA,<sup>\*,||</sup> Alexandra Weiss, MD,<sup>‡</sup> Chinmay Trivedi, MBBS,<sup>\*</sup> Manthankumar Patel, MS,<sup>\*</sup> Elina Medvedeva, MS,<sup>\*</sup> Dawei Xie, PhD,<sup>§</sup> and Yu-Xiao Yang, MD<sup>\*,†,¶</sup>

**Cohorte retrospectivo  
N=568, EC 56.7% CU 43.3%**

	<b>Jóvenes</b>	<b>Viejos</b>	<b>p</b>
Libre de esteroides 6-12 meses inicio VDZ	46.8%	40.1%	0.23
Hospitalización relacionada con EII 1 año VDZ	11.2	11.3	0.37
Tasas de cirugía dentro de 1 año de VDZ	3.9%	3.9%	0.51

# INCIDENCE OF INFECTIONS AND MALIGNANCY AMONG ELDERLY IBD PATIENTS EXPOSED TO VEDOLIZUMAB, PREDNISONE, AND MESALAMINE

Alexandra Weiss, Chinmay Trivedi, Tyler Pernes, Manthankumar Patel, Nabeel H. Khan

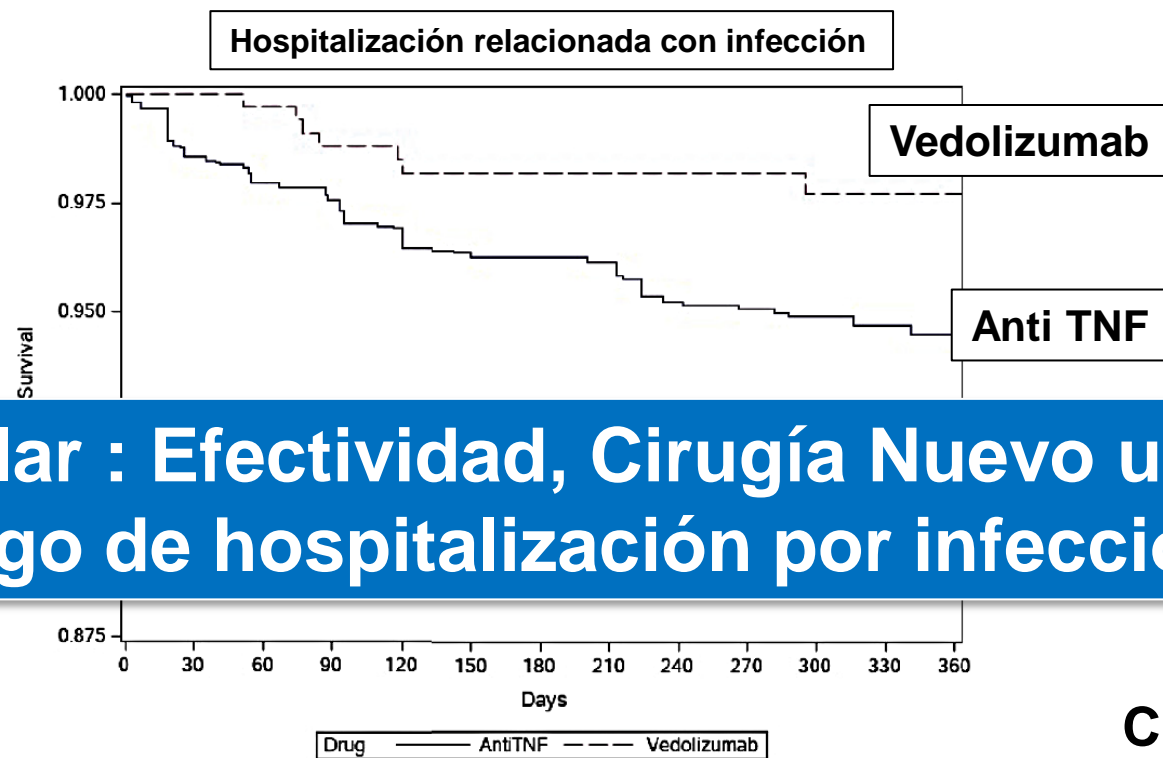
**Table 1. Primary outcomes and incidence rates by exposure group**

Outcome	VDZ group			5ASA group			Steroid group		
	Number	PYs	Per 1,000 PYs	Number	PYs	Per 1,000 PYs	Number	PYs	Per 1,000 PYs
Mild Infection	34	365	93.1	61	533	114.4	35	226	155.1
Severe Infection	15	390	38.5	19	621	30.6	19	282	67.4
Malignancy (exc. NMSC)	7	399	17.6	10	641	15.6	12	281	42.6
C piel no melanoma	14	386	36.3	3	651	4.6	11	282	39.0

# Vedolizumab Is Associated With a Lower Risk of Serious Infections Than Anti-TNF Agents in Older Adults

Bharati Kochar,<sup>\*,‡,§</sup> Virginia Pate,<sup>||</sup> Michael D. Kappelman,<sup>¶,#</sup> Millie D. Long,<sup>#,\*\*</sup>  
Ashwin N. Ananthakrishnan,<sup>\*,‡,§</sup> Andrew T. Chan,<sup>\*,‡,§</sup> and Robert S. Sandler<sup>#,\*\*</sup>

Cohortes retrospectivas 65 años Edad promedio 71 años, inicio Anti TNF, VDZ  
Índice de Chalsón  $\geq 2$



Similar : Efectividad, Cirugía Nuevo uso esteroides  
Riesgo de hospitalización por infección VDZ 0.47 (IC95% 0.25-0.85)

# **Paciente Candidato para Vedolizumab**

# Colitis ulcerativa o EC moderada a severa

## Vedolizumab

**Corta evolución**  
**Infecciones previas**  
**Cáncer extraintestinal**  
**No exposición Anti TNF**  
**Vitamina D normal**  
**PCR Baja**  
**Adulto mayor  $\geq$  65 años**

## Anti TNF

**Colitis aguda severa**  
**Extraintestinales**  
**Embarazo**

***Muchas gracias!***  
***Fue un honor!***

# Safety and Efficacy of Tumor Necrosis Factor Antagonists in Older Patients With Ulcerative Colitis: Patient-Level Pooled Analysis of Data From Randomized Trials

N=2257

Análisis combinado de ECCA CU moderada-severa

David Cheng,<sup>\*,‡,a</sup> Kelly C. Cushing,<sup>‡,§,||,a</sup> Tianxi Cai,<sup>\*,‡</sup> and Ashwin N. Ananthakrishnan<sup>‡,§</sup>

35

**Eficacia similar ancianos y no anciano**

Inducción OR 1.05 (IC95% 0.33 - 3.39)

Mantenimiento OR 0.49 (IC95% 0.18 - 1.33)

**Ancianos mayor riesgo de efectos adversos severos y no se aumenta con Anti TNF**

**Controvierte concepto clásico de > riesgos con Anti TNF viejos!**

**Efectos adversos**

Muerte

Evento que an

Hospitalización

Significativa i

1.3 0 0.1 0

Neoplasias