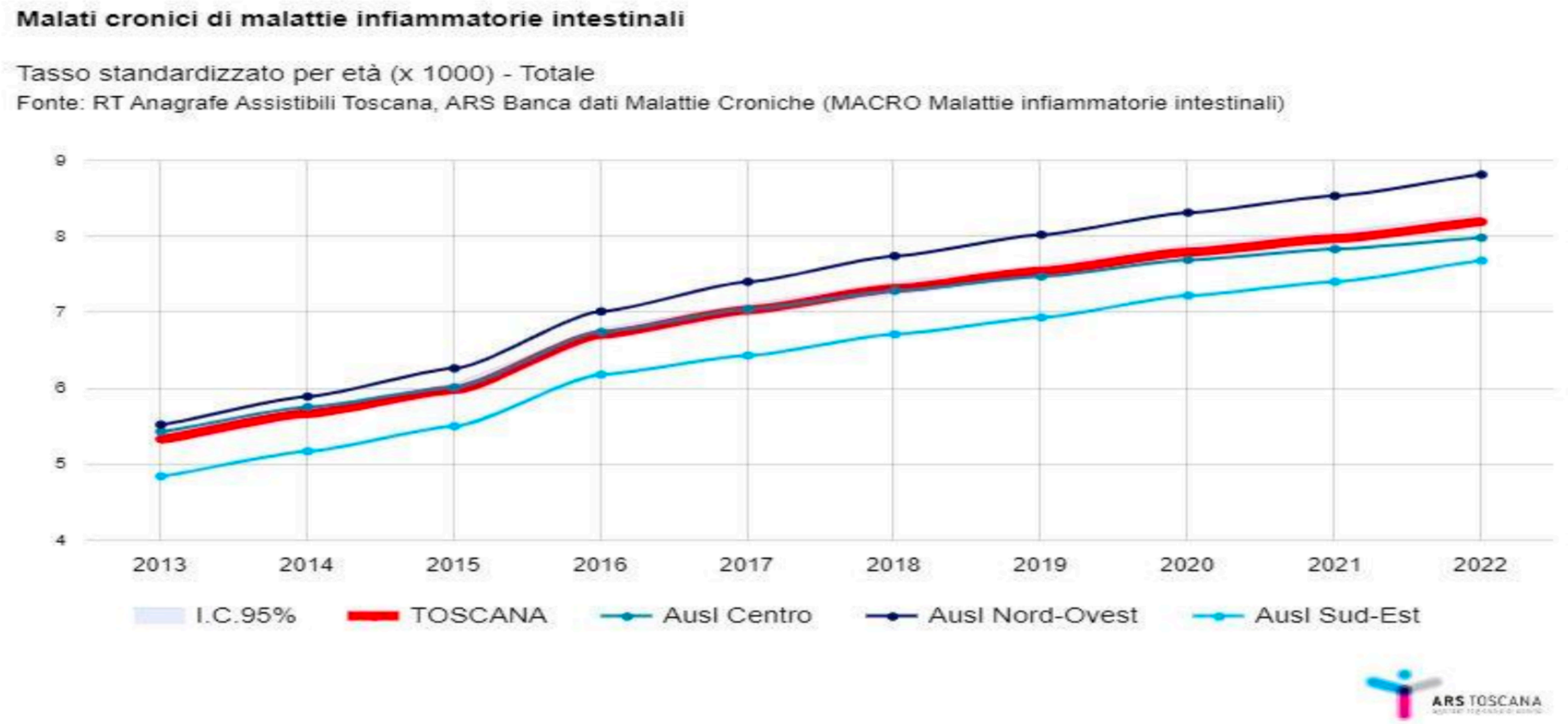

**AZIENDA OSPEDALIERO-UNIVERSITARIA PISANA**
UO Gastroenterologia
Direttore Prof M. Bellini

# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

**Dott.ssa Linda Ceccarelli**




**Toscana**

Dati elaborati nel 2022 dall' Agenzia regionale di sanità.

Stimati 31.188 pazienti adulti affetti da MICI, ben 3000 pazienti in più rispetto al 2019 (+ 12%).

In Italia il numero di nuovi casi all'anno è compreso tra 6 e 8 su 100.000 abitanti.

In Italia ci sono tra i 60 e i 100.000 casi di CU, con una distribuzione sostanzialmente equilibrata trai sessi.

# Acute severe ulcerative colitis (ASUC)

- FC > 90bpm
- Temp. > 37,8 C
- Hb < 10,5 g/dl
- VES > 30 mm/h o PCR > 30 mg/l

**ECCO statement 11F**

Patients with bloody diarrhoea ≥ 6/day and any signs of systemic toxicity (pulse > 90 $min^{-1}$, temperature > 37.8°C, haemoglobin < 105 g/l, erythrocyte sedimentation rate [ESR] > 30 mm/h, or C-reactive protein [CRP] > 30 mg/l) have severe colitis and should be admitted to hospital for intensive treatment [EL4]. Patients with comorbidities or > 60 years old have a higher risk of mortality [EL3]

In **più del 25%** di pz con RCU nel corso della loro malattia

Necessario ricovero ospedaliero per rischio di complicanze e morte, rischio colectomia in urgenza.

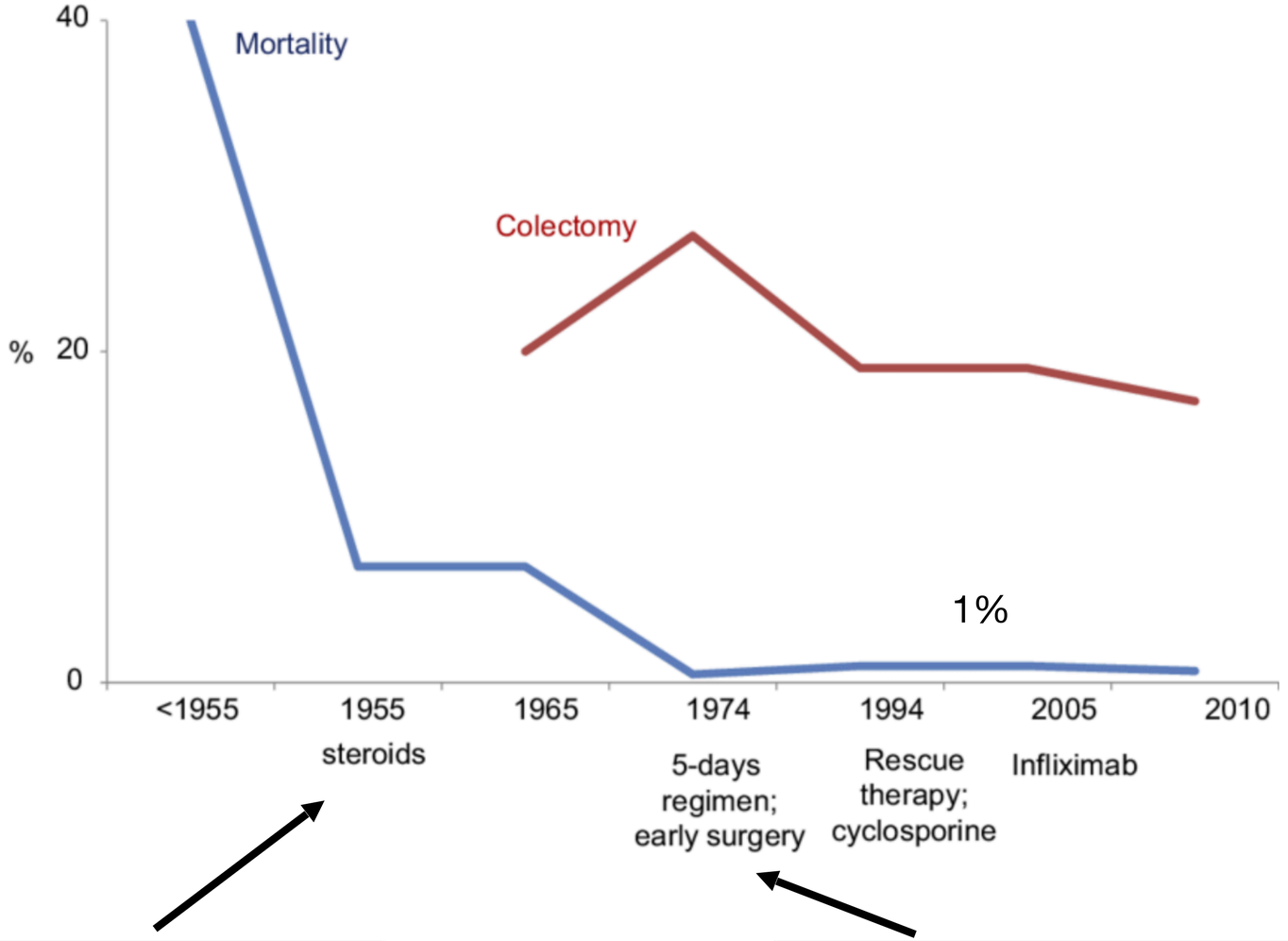
# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

| Reference | Hospital | Period | Patients (n) | Mortality: overall (%) | Mortality: 1st -year after acute onset (%) |
|---|---|---|---|---|---|
| Allchin 1909[27] | London | 1883–1909 | 177 | 56 | nr |
| Hawkins 1909[28] | London | Up to 1909 | 85 | 48 | nr |
| Marnham 1937 [30] | London | 1925–1929 | 214 | 49 | 32 |
| Hardy 1933[13] | Birmingham | 1920–1932 | 95 | 33 | 75 |
| Vaizey 1940[31] | London | 1931–1937 | 81 | 36 | 18 |
| Wheelock 1955[32] | Boston | 1915–1943 | 483 | 55 | 20 |
| Kirsner 1948[33] | Chicago | Up to 1947 | 100 | 14 | 60 |
| Rice-Oxley 1950[34] | Oxford | 1938–1948 | 72 | 31 | 22 |

**Abbreviation:** nr, not reported.

Viscido A. et al. Biologics: Targets and Therapy 2019

# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità




Mortalità ridotta dopo introduzione steroidi

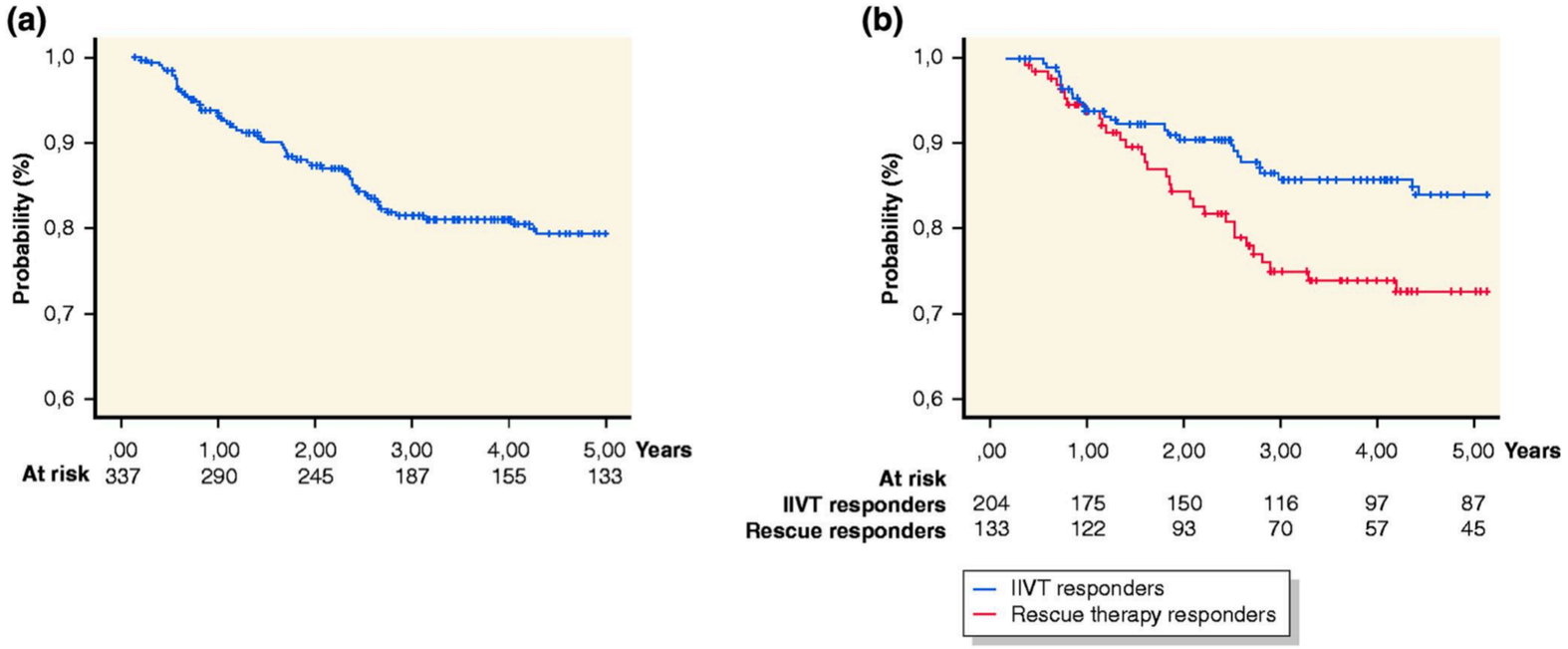
Mortalità 1%
Colectomia rimane al 20-30%

In 1955, **Truelove and Witts** reported the results of the first controlled trial of cortisone in the treatment of UC, in which steroids significantly reduced the mortality of patients with severe UC (7% in the cortisone group vs 24% in the placebo group)

1974, the date on which Truelove and Jewell reported the results of their uncontrolled experience in severe attacks of UC with a 5-day intensive program based on intravenous steroids and early surgery, recording a further decrease in the mortality rate to about 1% - **Oxford regimen**

Viscido A. Et al. Biologics: Targets and Therapy 2019

## Long-term outcomes of acute severe ulcerative colitis in the rescue therapy era: A multicentre cohort study




survival free from long-term colectomy in acute severe ulcerative colitis (ASUC) patients who avoided early colectomy

- La risposta agli steroidi è associata a basso rischio di colectomia long-term
- Rischio colectomia long-term è maggiore nei pz sottoposti a rescue therapy

50% dei pz entro 5 aa necessita di nuove terapie o di nuovo ricovero

Sopravvivenza libera da colectomia è 93.5%, 81.5% e 79.4% a 1, 3 e 5 aa

Festa S et al. United European Gastroenterol J. 2021

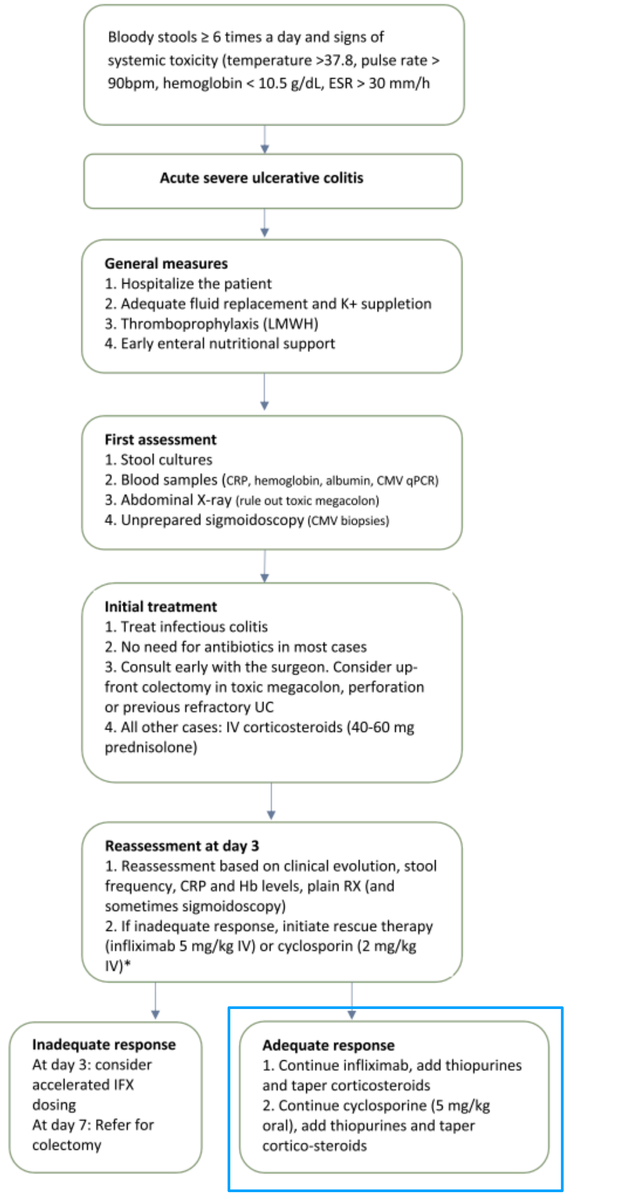
# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

**Table 1** Truelove and Witt's Criteria for Acute Severe Ulcerative Colitis

| Activity | Mild | Moderate | Severe |
|---|---|---|---|
| Number of bloody stools a day | < 4 | 4–6 | ≥ 6 |
| Pulse rate (bpm) | Normal | Intermediate | ≥ 90 |
| Temperature (°C) | Afebrile | Subfebrile | > 37.8 |
| Haemoglobin (g/dl) | >11 | 10.5–11 | < 10.5 |
| Erythrocyte sedimentation rate (ESR) (mm/h) | Not elevated | Not elevated | >30 |

**TABLE 4** Prognostic scores of corticosteroid failure in chronological order.

| Composite criteria | Factors | Steroids failure |
|---|---|---|
| Oxford criteria[23] | >8 stools or 3 to 8 stools per day and CRP >45 mg/L on day 3 | Colectomy rate 85% if one criterion is present |
| Lindgren et al[65] | Body temperature >37.4°C, number of bowel movements, persistence of bloody stools, elevated CRP on day 3.<br>Score: Stool frequency/day +0.14 × CRP | 72% of colectomy when score ≥8 |
| Ho et al[66] | Mean stool number on first 3 days, albumin <30 g/L on admission, colonic dilatation >5.5 cm on Xray | 85% of steroids failure when score ≥4 |
| Gibson et al[67] | 3 stools per day and CRP/albumin ratio on day 3 | Relative risk of steroids failure of 3.9 (95% CI 2.1–7.2) |
| Adams et al[31] | Albumin <25 g/L, CRP ≥100 mg/L, UCEIS ≥4 or ≥ 7 on admission | 84% of steroids failure when score ≥3 |




*combination with vedolizumab might be considered older than 50 years with anaemia, low albumin, UCEIS > 7 or Mayo 3.

Holvoet T. Clinical and Experimental Gastroenterology 2021

Calmejan L. United European Gastroenterol J. 2023

# All’ammissione

- Esami biochimici: emocromo, VES/PCR, funz renale, epatica , QPE
- Esclusione cause infettive: coprocoltura, coproparassitologica, Ricerca tossine C.Difficile, CMVDNA
- Rx diretta addome (valutazione distensione)
- Screening pre-biologico
- Allertare il Chirurgo
- Rettosigmoidoscopia (No preparazione)

# Terapia convenzionale

**Metilprednisone 1mg/kg/die / 60mg/die** o Idrocortisone 100mg ogni 6h

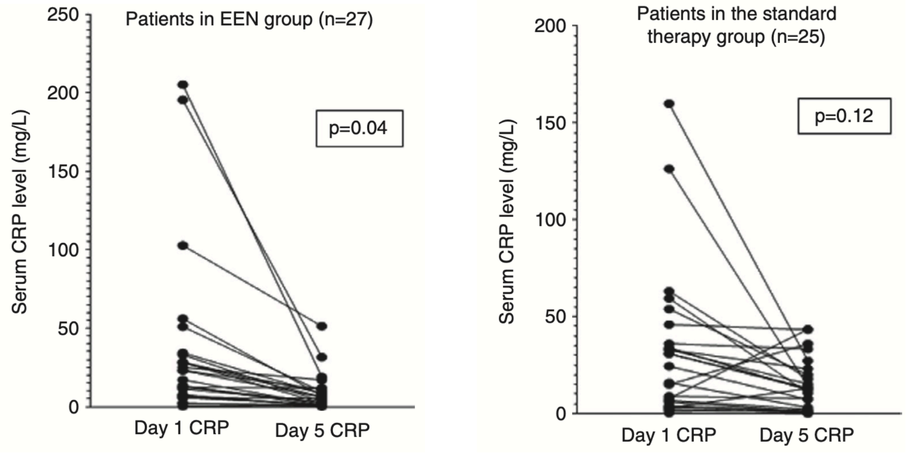
**Terapia di supporto:**

- Correzione squilibri elettrolitici in particolare di ipokaliemia e ipomagnesiemia (aumentano il rischio di megacolon tox.)
- EBPM
- Supporto nutrizionale enterale (da preferire a quello parenterale)
- Antibioticoterapia
- Trasfusioni di GRC se Hb < 8g/dl
- Terapia cortisonica o 5asa topica se tollerata
- Sospendere eventuali farmaci anticolinergici o FANS

## Randomised clinical trial: exclusive enteral nutrition versus standard of care for acute severe ulcerative colitis

Sanu et al. APT 2020

| | EEN group (n = 32) | Standard of care (SOC) group (n = 30) | *P* value |
|---|---|---|---|
| Day 7 haemoglobin (g/L) | 99 ± 18 | 97 ± 12 | 0.91 |
| Day 7 protein (g/L) | 64 ± 7 | 58 ± 7 | <0.01 |
| Day 7 albumin (g/L) | 34 ± 4 | 29 ± 3 | <0.01 |
| Day 5 CRP (mg/L) | 5.7 (1.1-39.3); n = 27 | 11.7 (4.3-55.4); n = 26 | 0.03 |
| Delta CRP (day1-day5) (mg/L) | 23.4 (6.8-38.9) | 11.4 (1.9-25) | 0.04 |
| Day 3 CRP (mg/L) | 10.1 (1.3-54.1) | 12.8 (1.2-77.2) | 0.13 |
| Day 3 ESR (mm/h) | 34 ± 11.5 | 37 ± 12.5 | 0.41 |
| Day 3 FCP (µg/g) | 720 (415-1126); n = 28 | 1103 (676-1552); n = 29 | 0.03 |
| Delta FCP (day1-day3) (µg/g) | 315 (129-797) | 140 (-386-459) | 0.04 |







| | EEN group (n = 25) | Standard of care (SOC) group (n = 23) | *P* value |
|---|---|---|---|
| Colectomy | 3(12%) | 5(22%) | 0.23 |
| Composite outcome (Colectomy or repeat hospitalisation) | 4(16%) | 9(39%) | 0.045 |

62 patients: 32 were randomised to EEN (7 Days) and 30 to SOC
- Corticosteroid failure was lower on EEN compared to SOC
- no difference in colectomy rate
- patients on EEN had a shorter hospital stay ( 10 vs 13 days)
- patients on pre-operative EEN had a lower composite endpoint of colectomy and re-admission at 6 months

Conclusioni: EEN per 7 gg può aumentare la risposta alla terapia steroide in pz con ASUC.

# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

Kedia S *et al*. Management of acute severe ulcerative cc

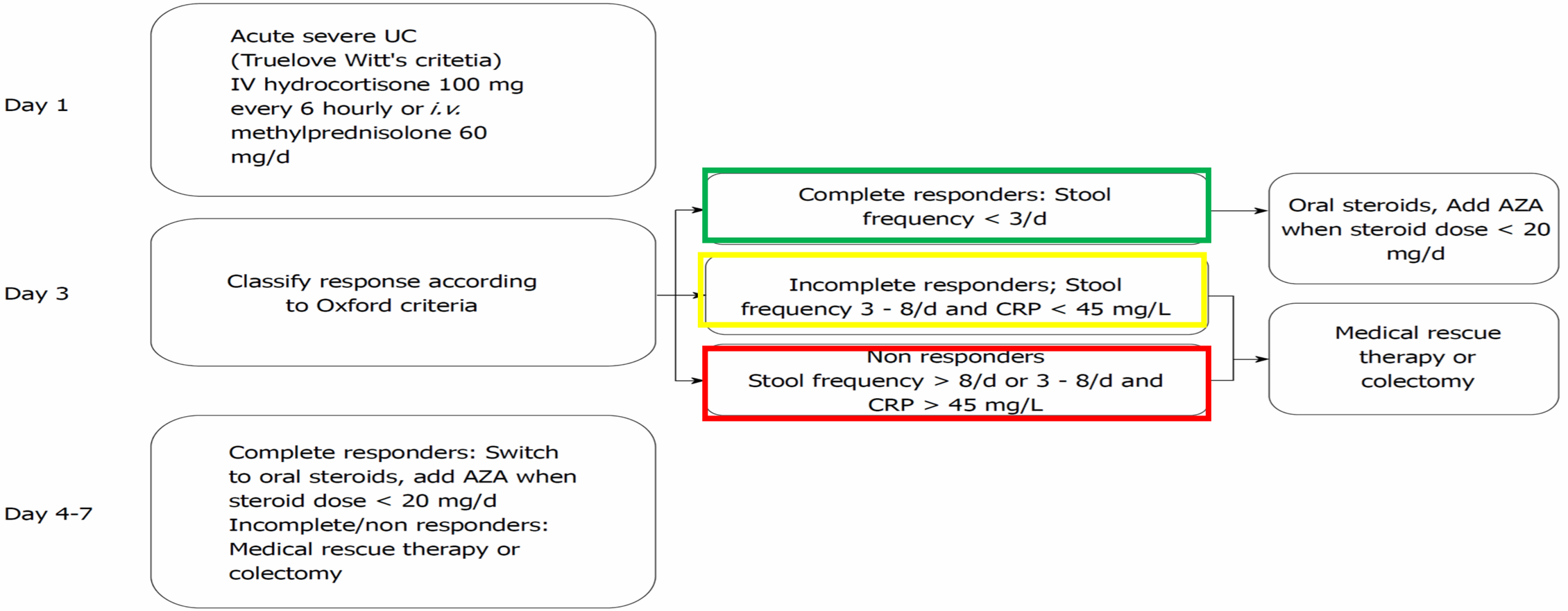



**Figure 1 Algorithm for treatment decisions for patients with acute severe ulcerative colitis on intensive steroid therapy.** AZA: Azathioprine.

# Algorithm for medical rescue therapy after failure of response to intravenous steroids

Kedia S *et al*. Management of acute severe ulcerative colitis

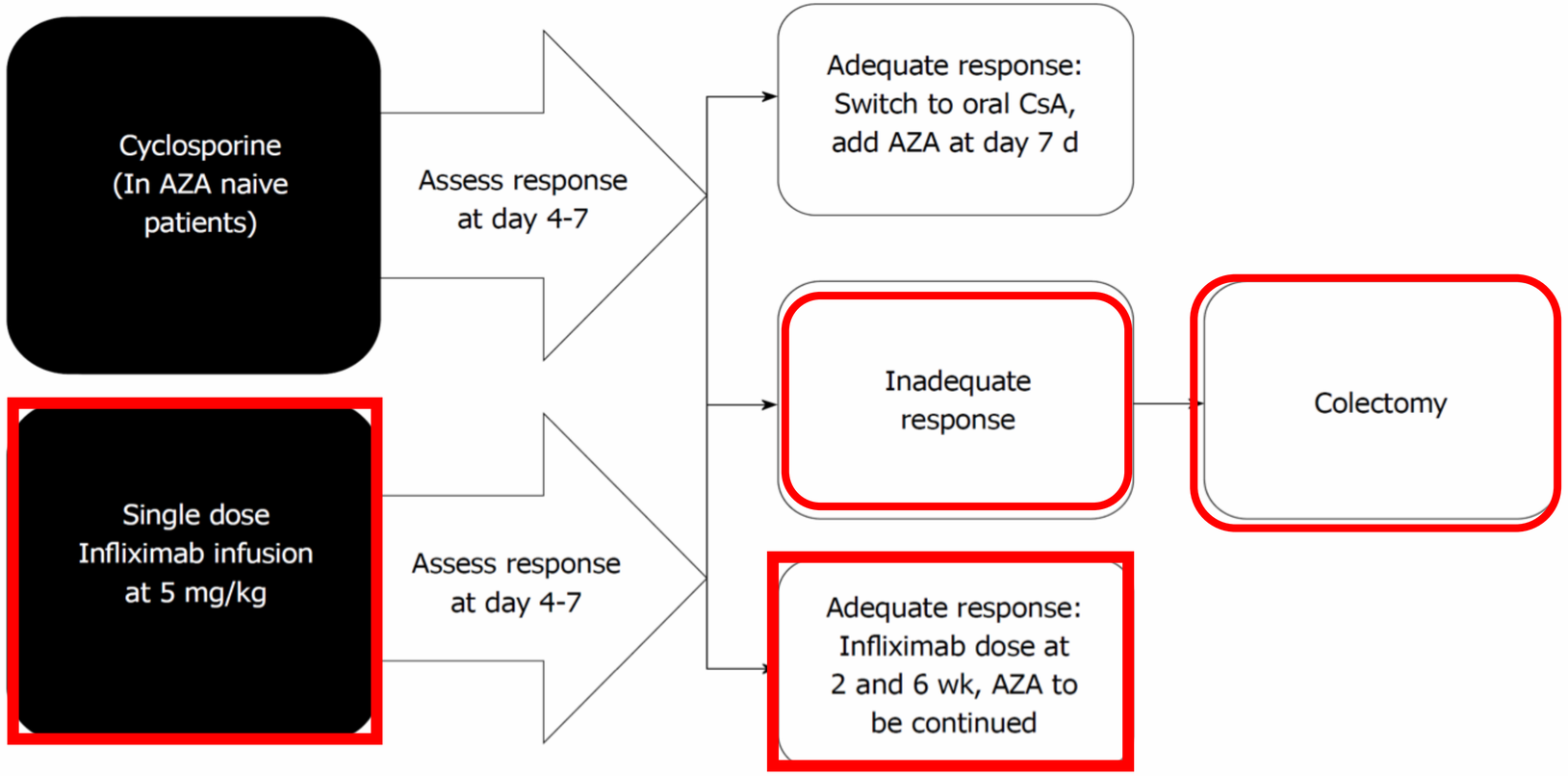



**Figure 2 Algorithm for medical rescue therapy after failure of response to intravenous steroids.**

# ECCO Guidelines on Therapeutics in Ulcerative Colitis: Surgical Treatment

Spinelli A. et al. JCC 2022

## ASUC

**1.1.Statement 1.1.**

Intravenous corticosteroids as the initial standard treatment for adult patients with ASUC are recommended, as this treatment induces clinical remission and reduces mortality [EL3]

**1.2.Statement 1.2.**

Either infliximab or cyclosporine should be used in adult patients with steroid-refractory ASUC. When choosing between these strategies, centre experience and a plan for maintenance therapy after cyclosporine should be considered [EL3]

**1.3.Statement 1.3.**

There is currently insufficient evidence to determine the optimal regimen of infliximab rescue therapy in patients with ASUC refractory to corticosteroid therapy [EL4]

# Intravenous Cyclosporine Versus Intravenous Corticosteroids as Single Therapy for Severe Attacks of Ulcerative Colitis

D'Haens, G. *Gastroenterology* 2001

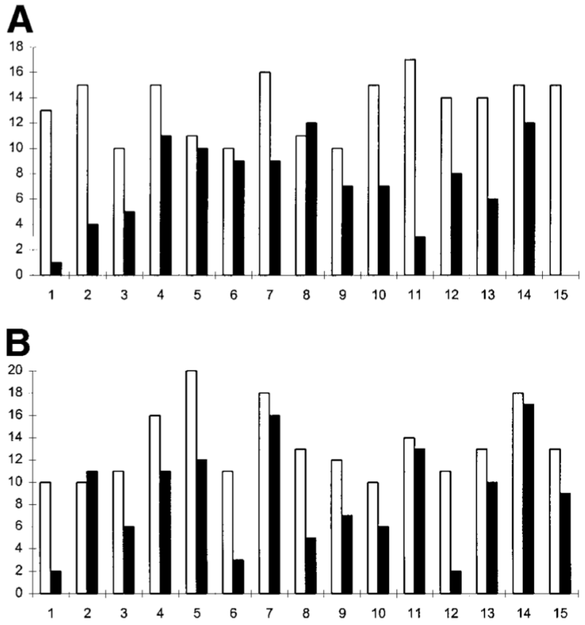



**Figure 1.** Response to (*A*) cyclosporine and (*B*) methylprednisolone treatments in all patients. Scores (Lichtiger score, modified Truelove and Witts) represent those before the start of therapy (day 0, □) and on day 8 (■).

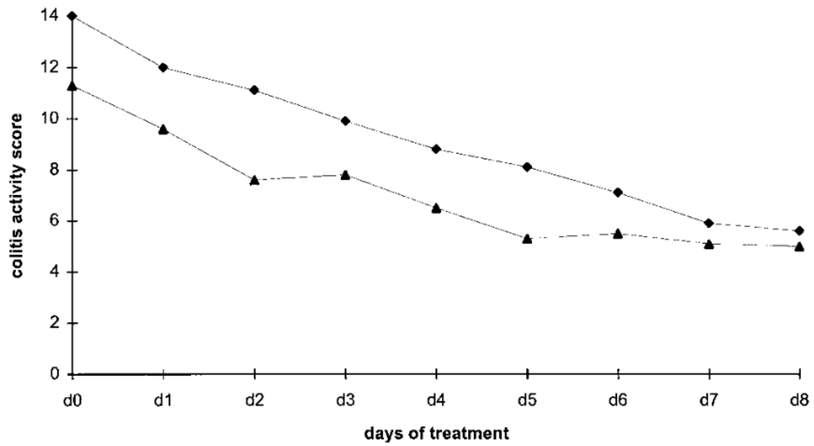



**Figure 2.** Mean clinical symptom score on the 8 study days in the patients responding to cyclosporine (◆) and methylprednisolone (▲) therapies.

**Conclusions:** Cyclosporine monotherapy is an effective and safe alternative to glucocorticosteroids in patients with severe attacks of UC.

- CyA has proven its efficacy as a rescue therapy in severe UC.
- CyA should not be considered as a maintenance therapy but exclusively as a bridge to other medications, such as thiopurines, biologics or surgery
- AEs are mainly dose-dependent and include nephrotoxicity, hypertension, neurotoxicity and a higher risk of infections, including Pneumocystis jirovecii
- Dosage: a lower dose (2 mg/kg/day) is considered the first choice due to the AEs, which are mainly dose-dependent

# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

**TABLE 5** Evidence from the main cohorts studying calcineurin inhibitors (CNIs) as a bridge therapy to vedolizumab or ustekinumab.

| Study | Treatments | Design, patients | Colectomy rate | Comments |
|---|---|---|---|---|
| Pellet et al.[38] | Ciclosporin 2 mg/kg intravenous or 4 mg/kg orally once daily. Switch to 4 mg/kg twice daily for IV treated patients when blood concentration target of 150–250 ng/mL was reached (95%).<br>Tacrolimus orally delivered 0.05–0.1 mg/kg (blood concentration target 10–15 ng/mL until week 2, 5–10 ng/mL after week 2) (5%).<br>Vedolizumab 300 mg at weeks 0, 2, 6 then every 8 weeks | Retrospective observational, 39 patients.<br>Anti-TNFs: Previously exposed (92%) or contra-indication (8%) | 11/39 (28%) at 11 months, 6/11 in the first 14 weeks | Colectomy-free survival rate: 68% at 1 year.<br>Survival without vedolizumab discontinuation: 44% at 1 year |
| Ollech et al.[39] | Ciclosoporin 2–4 mg/kg continuous infusion (blood concentration target 300–400 ng/mL). Switch to oral formulation when stools decreased by 50% and no hematochezia (68%).<br>Tacrolimus 0.1–0.2 mg/kg daily (blood concentration target 10–15 ng/mL) (32%).<br>Vedolizumab 300 mg at weeks 0, 2, 6 then every 8 weeks in patients who responded to CNIs | Retrospective observational, 71 patients.<br>Previous exposure to anti-TNFs: 85.4% for ciclosporin, 82.6% for tacrolimus | 30/71 (42%) for a median of 25 months (IQR 16–36) | Colectomy-free survival rate: 93% at 3 months, 67% at 1 year and 55% after 2 years.<br>Survival without vedolizumab discontinuation: 43% at 1 year, 28% at 2 years |
| Tarabar et al.[40] | Ciclosporin to vedolizumab in patients responding to ciclosporin | Prospective, uncontrolled, 17 patients admitted, 15 responded to ciclosporin | 17.6% at 1 year (2/17 patients underwent colectomy before vedolizumab and 1 patient after) | Colectomy-free survival rate at 1 year: 14/17 (82%) in all admitted patients and 14/15 (93%) treated by vedolizumab.<br>Endoscopic remission at 1 year: 71%.<br>Clinical remission at 1 year: 79% |
| Veyrard et al.[41] | Ciclosporin 2 mg/kg daily (blood concentration target 150–250 ng/mL) (90%).<br>Tacrolimus 0.05 mg/kg (10%).<br>Both CNIs were switched to oral formulation after 7 days at target and withdrawn within 3 months.<br>Ustekinumab 6 mg/kg followed by 90 mg subcutaneously every 8 weeks | Retrospective, 10 patients<br>Previous exposure:<br>- Anti-TNFs 9 patients (90%)<br>- Vedolizumab 8 patients (80%) | No colectomy at 6 months | Clinical response and remission at 6 months: 90%.<br>Dose optimization for 2 patients at 3 months |

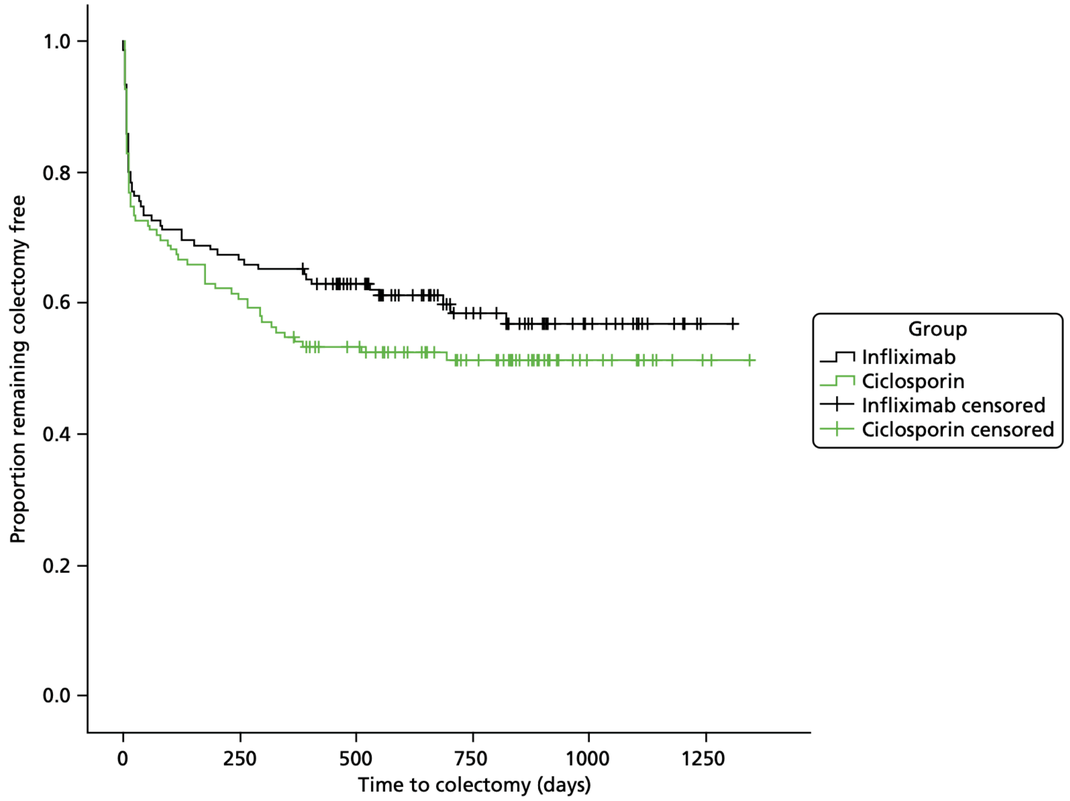
Ciclosporina come terapia ponte per mantenimento con

- Vedolizumab
- Ustekinumab

Calmejan L. United European Gastroenterol J. 2023

## Comparison Of iNfliximab and ciclosporin in STeroid Resistant Ulcerative Colitis: pragmatic randomised Trial and economic evaluation (CONSTRUCT)

Williams J G Lancet Gastroenterol Hepatol 2016




infliximab (5mg/kg intravenous infusion 0,2,6)

o

Ciclosporina (2mg/kg per day by continuous infusion for up to 7 days followed by twice-daily tablets delivering 5.5 mg/kg per day for 12 weeks).

- primary outcome was quality-adjusted survival (scores from the Crohn's and Ulcerative Colitis Questionnaire at baseline, 3 months, and 6 months, then every 6 months from 1year to 3 years). No statistically significant difference between the two groups.
- secondary end-point: colectomy rates, time to colectomy, serious adverse events or death. Colectomy rates were 29% for infliximab and 30% for ciclosporin at 3 months, and 35% and 45% respectively at 1 year, with no significant difference between the treatments.
- infliximab was associated with greater cost of ciclosporin.

# IFX VS CSA

## IFX

✓

- Profilo di tollerabilità
- Maggiore maneggevolezza
- Mantenimento
- Si può utilizzare negli AZA exp.

✗

- Alto costo
- Gestione periop.

## CSA

✓

- Basso costo
- Gestione periop.

✗

- Solo AZA naive
- No mantenimento
- Poco maneggevole (aggiustamento dosaggio)

# Systematic Review and Meta-analysis: Optimal Salvage Therapy in Acute Severe Ulcerative Colitis

**TABLE 2.** Pooled Colectomy-Free Survival (Random-Effects Model), Expressed as N% (95% CI)

| | Month 1 | Month 3 | Month 12 |
|---|---|---|---|
| Overall colectomy free-survival | 85.7% (82.0%–89.0%; $I^2$ = 70.6%; 36 studies, 1550/1860 cases) | 79.7% (75.48%–83.6%; $I^2$ = 77%; 36 studies, 1659/2129 cases) | 69.8% (65.7%–73.7%; $I^2$ = 67%; 33 studies, 1357/1943 cases) |
| 5-mg/kg single dose | 78.8% (68.4%–88.0%; $I^2$ = 40.2%; 9 studies, 127/168 cases) | 67.3% (57.1%–76.8%; $I^2$ = 55.1%; 10 studies, 200/307 cases) | 57.0% (40.7%–72.7%; $I^2$ = 60.2; 6 studies, 75/127 cases) |
| 5-mg/kg multiple dose | 90.0% (86.1%–93.3%; $I^2$ = 67.7%; 25 studies, 1027/1189 cases) | 85.1% (80.9%–89.0%; $I^2$ = 71.7%; 28 studies, 1125/1379 cases) | 72.8% (68.2%–77.2%; $I^2$ = 60.2%; 25 studies, 881/1231 cases |
| 5-mg/kg standard 026 induction | 89.4% (83.9%–93.9%; $I^2$ = 81.5%; 24 studies, 882/1038 cases) | 84.0% (78.3%–89.1%; $I^2$ = 80.5%; 25 studies, 923/1152 cases) | 73.8% (67.9%–79.4%; $I^2$ = 74.6%; 24 studies, 772/1080 cases) |
| 5-mg/kg accelerated induction | 86.3% (78.5%–92.8%; $I^2$ = 21.7%; 6 studies, 125/145 cases) | 79.7% (72.3%–86.2%; $I^2$ = 0%; 6 studies, 115/145 cases) | 71.2% (63.1%–78.6%; $I^2$ = 0%; 5 studies, 103/145 cases) |
| Dose-intensified induction | 84.8% (78.0%–90.6%; $I^2$ = 46.1%; 11 studies, 274/325 cases) | 78.5% (70.8%–85.4%; $I^2$ = 49.2%; 11 studies, 254/325 cases) | 70.1% (60.2%–79.2%; $I^2$ = 65.9%; 10 studies, 231/321 cases) |
| 10-mg/kg multiple-dose induction | 81.0% (65.4%–93.2%; $I^2$ = 39.9%; 4 studies, 59/75 cases) | 76.7% (59.1%–91.1%; $I^2$ = 48.3%; 4 studies, 56/75 cases) | 69.6% (54.0%–83.3%; $I^2$ = 37.3%; 3 studies, 50/71 cases) |
| 10-mg/kg standard schedule | 84.9% (71.6%–95.0%; $I^2$ = 0%; 2 studies, 36/43 cases) | 79.4% (53.9%–97.1%; $I^2$ = 50.1%; 2 studies, 35/43 cases) | 71.5% (36.4%–96.9%; $I^2$ = 69.7%; 2 studies, 33/43 cases) |
| 10-mg/kg accelerated schedule | 92.7% (60.3%–100%; $I^2$ = 43.7%; 3 studies, 13/15 cases) | 88.3% (63.5%–100%; $I^2$ = 68.9%; 3 studies, 12/15 cases) | 78.8% (8.3%–100%; $I^2$ = 81.7%; 2 studies, 8/11 cases) |

**Conclusions**: In acute severe ulcerative colitis, multiple 5-mg/kg infliximab doses are superior to single-dose salvage. Dose-intensified induction outcomes were not significantly different compared to standard induction and were more often used in patients with increased disease severity, which may have confounded the results.

There were insufficient data to make meaningful comparisons on **adverse events, postoperative complications, and mortality** between dose-intensified and standard-dose induction across studies

Choy et al. IBD 2019

## British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults

Lamb CA, *et al*. *Gut* 2019

**Statement 19.** We suggest that patients treated with infliximab for ASUC who have not responded sufficiently to a 5 mg/kg dose 3–5 days after first infusion should be treated with an accelerated induction regimen after colorectal surgical review to determine whether emergency colectomy is required (GRADE: weak recommendation, low-quality evidence. Agreement: 95.7%).

## Therapeutic Drug Monitoring of Infliximab in Acute Severe Ulcerative Colitis

*Gordon B.L. et al. J. Clin. Med.* **2023**

- Flogosi severa
- Perdita fecale IFX
- Malnutrizione con bassi livelli di albumina

→ Alti dosaggi IFX

**MA** Variabilità interindividuale di clearance di IFX in ASUC → TDM →

- Disponibilità
- costi
- Tempo per avere risultati

**PREDICT UC**: “Optimising Infliximab Induction Therapy for Acute Severe Ulcerative Colitis” is a multicenter RCT investigating whether accelerated dose infliximab (5 mg/kg at weeks 0, 1, and 3) or higher-dose infliximab (10 mg/kg at weeks 0 and week 1) is superior to standard dose infliximab (5 mg/kg at weeks 0, 2, and 6) in improving clinical response and decreasing short-term colectomy rates

**TITRATE**, inducTIon for acuTe ulceRATivE Colitis, is a multicenter RCT evaluating whether proactive individualized intensified infliximab dosing in ASUC patients—using a pharmacokinetics- driven dashboard system—can lead to better clinical and endoscopic responses at week 6 compared to standard dosing

# ECCO Guidelines on Therapeutics in Ulcerative Colitis: Surgical Treatment

Spinelli A. et al. JCC 2022

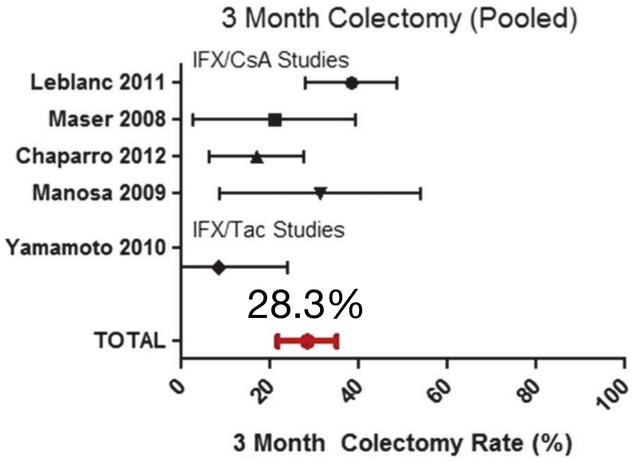
## ASUC

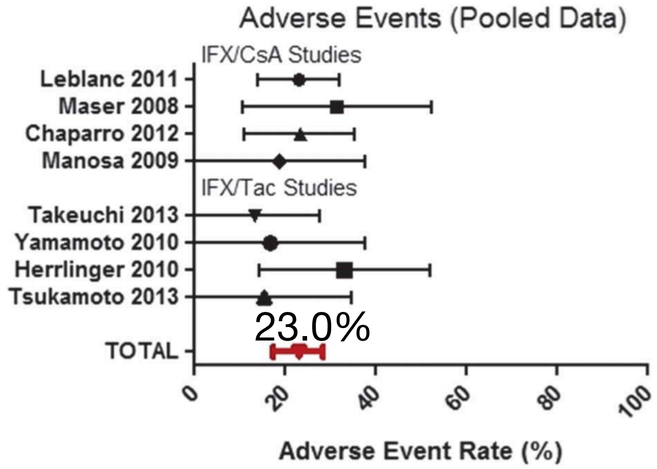
**1.4.Statement 1.4.**

Third-line sequential rescue therapies with calcineurin inhibitors [cyclosporine or tacrolimus] in ASUC refractory to corticosteroid therapy may delay the need for colectomy but are associated with high rates of adverse events and should only be administered in specialised centres [EL2a]

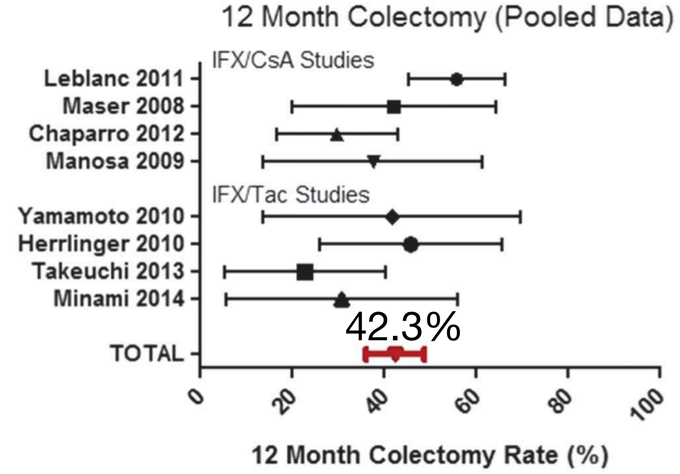
# Systematic Review: Sequential Rescue Therapy in Severe Ulcerative Colitis: Do the Benefits Outweigh the Risks?

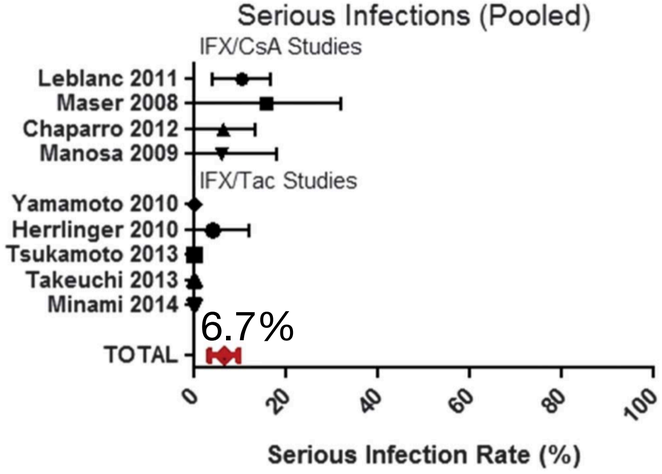
Narula et al. IBD 2015

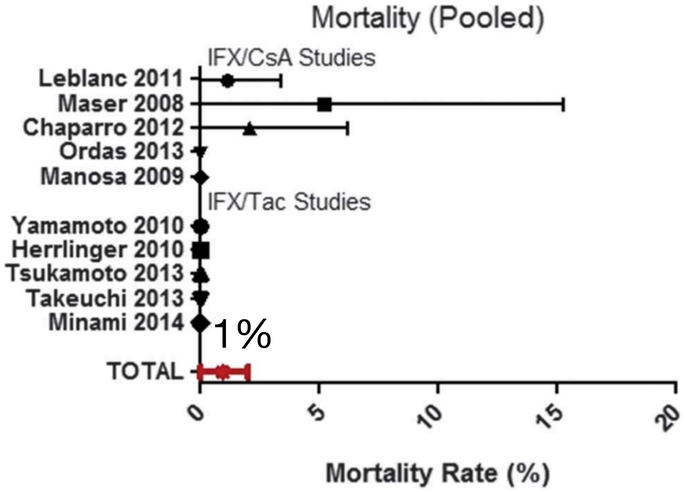



short-term treatment response in 62.4% of cases and remission in 38.9%



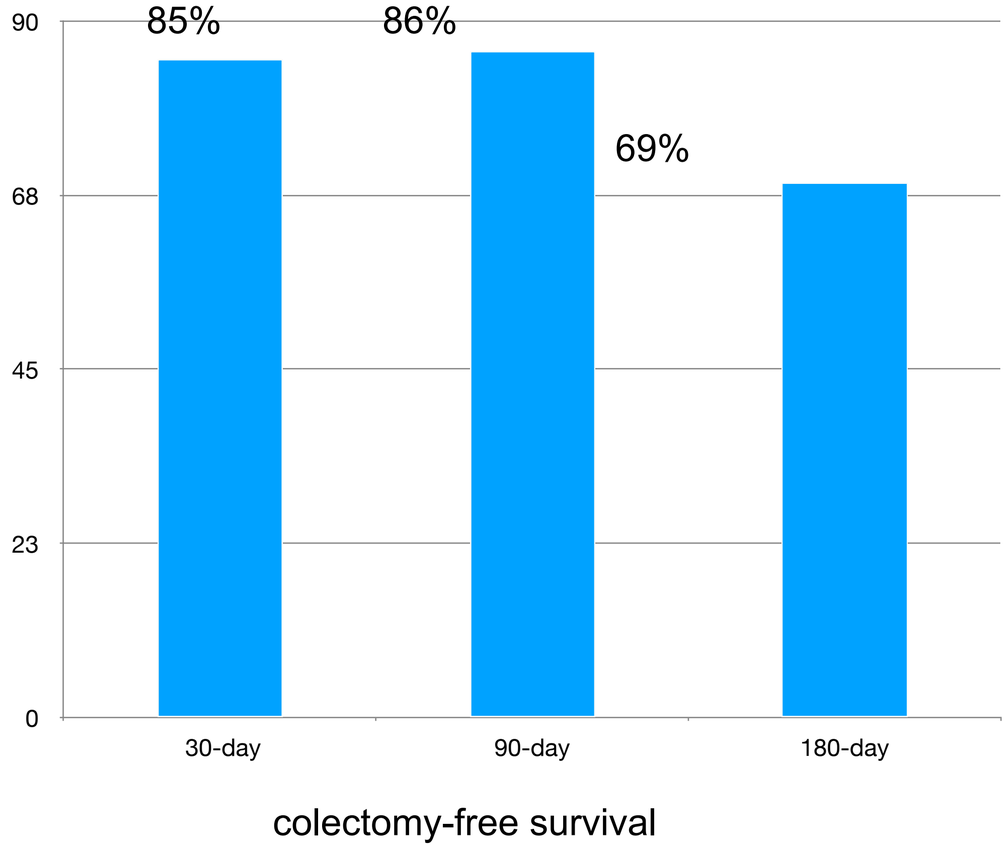
# Tofacitinib for acute severe ulcerative colitis: a systematic review

Steenholdt C et al. JCC 2023

148 reported cases: tofacitinib was used as second-line treatment after steroid failure in previous infliximab failures or third-line after sequential steroid and infliximab or cyclosporine failure.

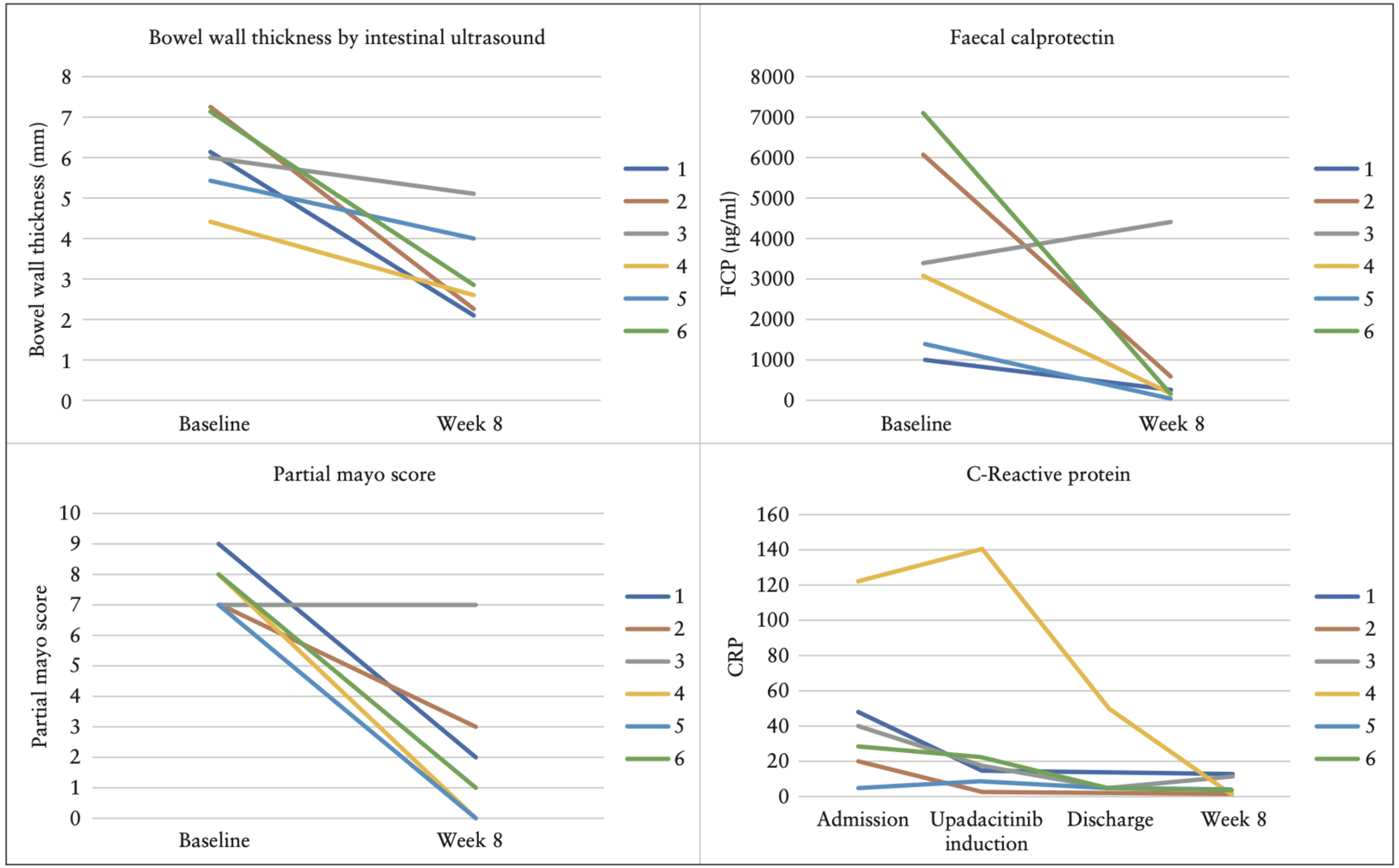
Tofacitinib persistence at follow-up was 68–91%, clinical remission 35–69% and endoscopic remission 55%.

Adverse events occurred in 22 patients, predominantly being infectious complications other than herpes zoster [n = 13], and resulted in tofacitinib discontinuation in 7 patients.



# La gestione della colite ulcerosa severa: tra vecchie sicurezze e novità

## Upadacitinib Salvage Therapy for Infliximab-Experienced Patients with Acute Severe Ulcerative Colitis




Gilmore R. et al. JCC 2023

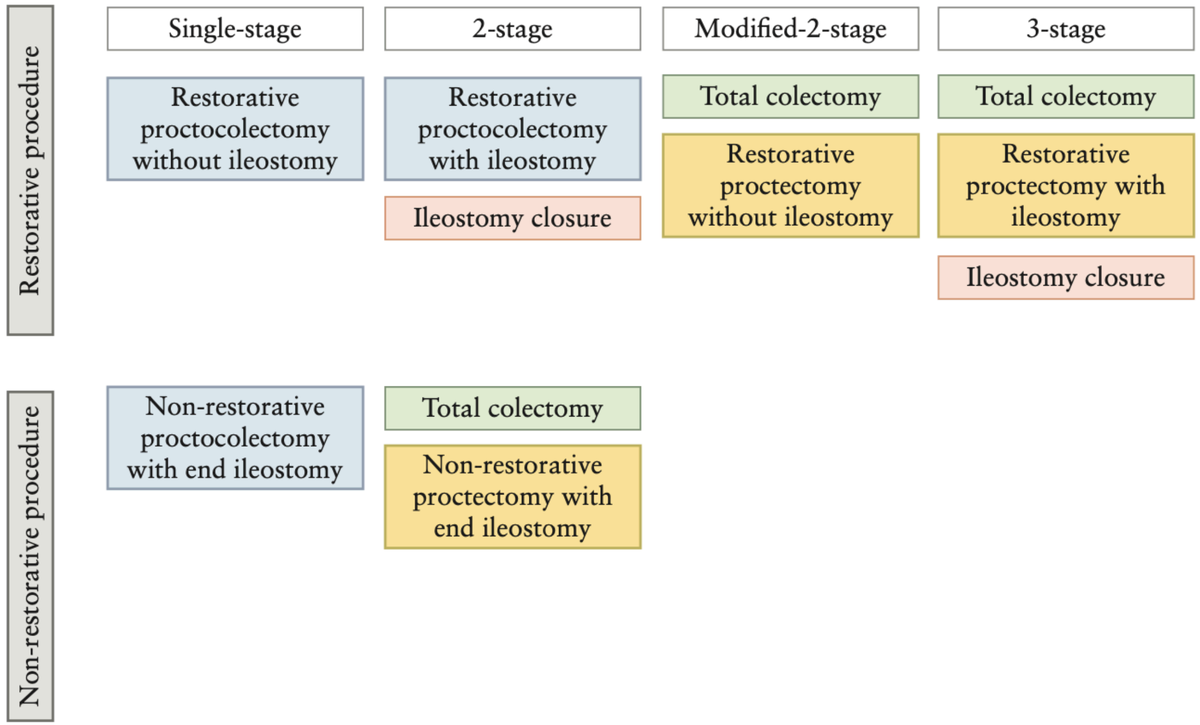
# ECCO Guidelines on Therapeutics in Ulcerative Colitis: Surgical Treatment

Spinelli A. et al. JCC 2022

## ASUC

after 7 days without significant improvements, a surgical intervention is highly recommended to avoid the perioperative complications usually associated with emergent procedures.

In case of semi-elective surgery, a staged procedure is preferred, including subtotal colectomy with ileostomy during the first operation, followed by ileal pouch-anal anastomosis [IPAA] construction, and then a final operation with ileostomy closure




early colectomy still determines a mortality rate of 5% and a complication rate of 64%

## Impact of surgery and its complications in ulcerative colitis patients in clinical practice: A systematic literature review of real-world evidence in Europe

Fradet C. et al. International Journal of Surgery Open 2020

Overall rate of surgery from treatment initiation:  6%-56%

Early complications ( 30 days post- operatively): 0%-53%

Late complications (>30 days post- operatively): 3.20%-58%.

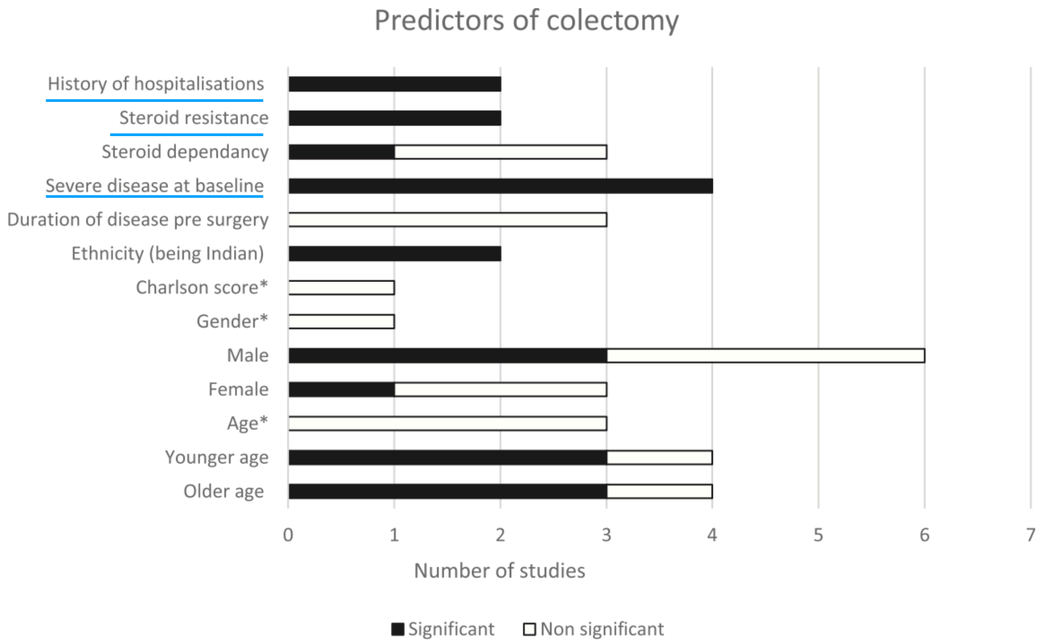
The common complications reported after colectomy (proctoco-lectomy or ileal pouch-anal anastomosis):

-bowel obstruction

-infectious complications

-pouch- related complications (pouchitis, pouch failure)

mortality rate after surgery was 0.1%.



# Conclusioni

- Colite Ulcerosa Acuta Severa può rappresentare ancora oggi una emergenza medica-chirurgica
- Necessario valutare outcomes a breve e lungo termine
- Necessari maggiori dati per utilizzo delle nuove terapie e per dosaggi di farmaci in uso
- Ruolo importante della chirurgia invariato

Pazienti complessi, refrattari alle terapie, con complicanze e necessità di chirurgia (ad esempio RCU severa/non responsiva o MC complicata/complessa) dovrebbero afferire ai centri di riferimento per le terapie di “salvataggio” o chirurgiche

PDTA regionale MICI


Grazie dell’attenzione