Conclusion: The biennial direct pharmaceutical costs for the approved IBD-BT schemes both for induction and maintenance phases in fully responders were estimated thoroughly for the first time in Greece. These results should motivate Governments and European Union policymakers in order to promote cost-benefit and cost-utility studies to offer the best patients' benefit by evaluating and deciding the most suitable regimen with respect to biologic prices, adverse effects, hospitalisation expenditures, IBD complications and recurrences.

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Dietary practices and beliefs of patients with older-onset inflammatory bowel disease: A prospective UK study

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Background: In an aging population, 25–35% of those with inflammatory bowel disease (IBD) are over 60 years old. A third of these are diagnosed at or over the age of 60 (older-onset IBD). Virtually no studies exist exploring the dietary practices and beliefs of patients with older-onset IBD. Elderly patients with IBD are at increased risk of nutritional deficiency and associated complications making it all the more important to understand the dietary habits and self-imposed restrictions of this group.
Methods: A prospective, cross-sectional, questionnaire-based study is being conducted across NHS Trusts within the UK. Two-hundred patients with older-onset IBD will be recruited to complete a questionnaire regarding demographics and dietary practices. Here we provide an interim analysis of the data collected from the first 75 patients.
Results: Mean patient age is 73 years, 51% are male and 95% Caucasian. 68% have ulcerative colitis. Mean disease duration is 6 years. Thirty-six per cent of patients believe diet was an initiating factor in their IBD and this is based on their own experience (78%) or advice from a gastroenterologist (33%), dietitian (22%) or GP (22%). Fifty-six per cent of patients report a disease relapse in the last year and just under a third believe that diet could trigger a relapse. The most commonly identified triggers are spicy foods (61%), raw fruit and vegetables (57%), fatty foods (39%) and milk products (30%). Sixty-three per cent of patients avoid certain foods to prevent a relapse of IBD. The most commonly avoided foods are spicy (81%) and fatty foods (66%), carbonated drinks (60%), red meat (53%), raw fruit and vegetables (49%) and alcohol (49%). Half of patients report being able to find specific advice regarding dietary recommendations in IBD and 72% of these obtain this information from the internet. A quarter of patients avoid eating the same menu as their family at least some of the time to prevent relapse of their IBD and 36% of patients avoid eating out. One in five patients has tried a specific exclusionary diet to help manage their symptoms, most commonly a gluten free diet, in the absence of coeliac disease, in 12% of patients.
Conclusion: Despite a relatively low proportion of older-onset IBD patients believing diet is implicated in the initiation of their disease or its relapse, a significant number continue to restrict their diet. This, along with co-existing frailty, comorbidities and polypharmacy, may put this group of patients at increased risk of nutritional deficiency and its associated complications as well as impacting upon quality of life. Improved knowledge of the dietary habits of those with 'older-onset' IBD will allow healthcare professionals to identify those at risk and offer appropriate dietary interventions.

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Adalimumab drug levels at secondary loss of response in Crohn's disease; are we aiming high enough? A retrospective, international multi-centre study

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Background: Evidence supporting therapeutic drug monitoring with adalimumab (ADA) in Crohn's disease (CD) is not as strong as for infliximab. Data examining whether changes in ADA drug exposure after dose intensification are associated with outcomes are lacking. We aimed to explore associations between ADA drug level exposure at loss of response and then at 6 and 12 months and compare these to short term clinical outcomes.
Methods: Retrospective study of adult CD patients who underwent ADA intensification to weekly dosing for secondary loss of response at three tertiary centres between 2013 and 2018. We compared trough ADA drug levels using a drug sensitive ELISA at loss of response and at 6 and 12 months after intensification with paired rates of clinical remission (Harvey Bradshaw Index <5 or Crohn's Disease Activity Index <150), biochemical remission (C-reactive protein <5 mg/L), objective remission (CRP < 5 mg/L, faecal calprotectin < 150 µg/g or absence of inflammation at endoscopy or imaging) and ADA failure (based on Physicians Global Assessment. We performed comparisons between continuous and categorical data using Fischer's exact or Mann–Whitney test. A receiver operated curve (ROC) analysis was used to identify target ADA levels associated with outcomes of interest.
Results: In total, 133 CD patients were included; median disease duration 8 years (IQR 4–17), 51% were biologic-exposed and 49% received concomitant immunomodulation. Rates of clinical remission, objective remission and ADA failure were 73.0%, 37.4% and 25.0% at 6 months and 65.8%, 34.0% and 42.8% at 12 months, respectively. Drug levels measured at secondary loss of response did not discriminate between subsequent responders and non-responders; however increases in drug levels at 6 and 12 months were associated with improved outcomes at these time points (Figure 1). ROC analysis demonstrated that ADA drug levels 6 months after intensification > 8.9, 9.6 and 8.9 µg/ml were associated with clinical remission, objective remission and ADA non-failure respectively. Similar results were demonstrated with ADA drug levels at 12 months after dose intensification (Figure 1).

	Clinical Remission *ADA level (µg/mL)*			Objective Remission *ADA level (µg/mL)*			Failure *ADA level (µg/mL)*		
	Yes	No	p	Yes	No	p	Yes	No	p
6 months	8.0	5.8	0.09	10.9	8.2	0.02	6.4	9.8	0.004
Target drug level – 6 months	8.9			9.6			8.9		
12 months	10.5	7.3	0.02	11.9	8.9	0.02	7.2	11.5	0.001
Target drug level - 12 months	9.6			10.9			7.7		

Conclusion: ADA drug levels at loss of response are not associated with subsequent 6 or 12 month outcomes. However, measurement of subsequent ADA drug levels at 6 and 12 months post escalation demonstrates that higher levels (with a target threshold between 7.7–10.9µg/ml) were associated with favourable outcomes. This study suggests that performing TDM subsequent to dose escalation of ADA has a role in predicting outcomes. Further, prospective studies dosing to target ADA drug levels are therefore needed.

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Anti-TNFα therapy has no effect on bone mineral density in younger patients with inflammatory bowel disease: A single-centre observational study

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Background: Active inflammation negatively affects bone mineral density. Biological treatment, among others silences the excessive reaction of the immune system, which can also reduce the risk of osteoporosis. The aim of the study is to determine whether bone mineral density is higher in patients with biological therapy.

Methods: In total, 112 patients over 18 years of age with CD (Crohn's Disease) or UC (Ulcerative colitis) were included in the study. The mean value age was 35 years. Patients who had received anti-TNFα therapy (biosimilar infliximab CT-P13 or adalimumab), and who underwent densitometric evaluation after two year treatment, were selected. Those who had never received anti-TNFα therapy were selected as controls. Information regarding age, sex, weight, duration of CD, use of glucocorticoids and bisphosphonates, and signs of disease activity at the time of densitometric measurement were collected. Bone mineral density was measured by dual-energy X-ray absorptiometry (DEXA) within femoral neck and lumbar spine. Results are reported as g/cm^2 and presented either as *Z*-score or as a *T*-score.

Results: The study group has characterised a mean value BMI (Body Mass Index)—24. The group of patients with anti-TNFαα therapy showed an average *T*-score left femur –0.7744 (CD) and –0.4382 (UC), but without anti-TNFα therapy –0.6636 (CD) and –0.2208 (UC). The entire study group showed a mean value *t*-score left femur of –0.54286. There were no significant statistical differences between the examined groups and the effect of anti-TNFα therapy on BMI, *T*-score left femur, *T*-score L2–L4

Conclusion: The results of the preliminary study assessing the effect of anti-TNFα therapy on bone mineral density among the two treatment groups (CD and UC) do not indicate significant differences after the introduction of such therapy

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Studied factor	Average	Median	Standard deviation	Lower quartile	Upper quartile	Statistical analysis
Crohn's disease (CD)						
Anti-TNFα therapy						
BMI	23.1372	21.7000	3.67281	20.1000	26.6000	$p > 0.05$
L2–L4 *T*-score	–0.4953	–0.6000	1.36468	–1.5000	0.7000	
Left femur *T*-score	–0.7744	–0.8000	1.03420	–1.8000	–0.1000	
No anti-TNFα therapy						
BMI	23.6545	24.0000	3.56549	20.5000	26.6000	$p > 0.05$
L2–L4 *T* -score	–0.3273	–0.6000	1.33423	–1.1000	0.8000	
Left femur *T*-score	–0.6636	–0.8000	0.79909	–1.1000	–0.3000	
Colitis ulcerosa (UC)						
Anti-TNFα therapy						
BMI	26.0206	23.9500	11.27138	20.5000	28.2000	$p > 0.05$
L2-L4 T -score	–0.1529	–0.2000	1.30853	–1.0000	0.7000	
Left femur T - score	–0.4382	–0.4000	1.06002	–1.2000	0.0000	
No anti-TNFα therapy						
BMI	23.8833	22.7500	4.83912	20.5000	27.9000	$p > 0.05$
L2-L4 *T*-score	0.0833	0.0000	1.27541	–0.6500	1.0500	
Left femur *T*-score	–0.2208	–0.2500	0.83613	–0.8000	0.2000	

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The effect of psychotherapy on quality of life in inflammatory bowel disease patients: A systematic literature review

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Background: Inflammatory bowel disease (IBD) is a chronic disease, both influencing patients physical and mental health and thereby interfering with quality of life (QoL). This systematic review aims to assess the effect of psychotherapy on IBD patients' QoL.

Methods: A systematic search was conducted on 07 October 2019 using Embase, Medline (Ovid), PubMed, Cochrane, Web of Science, PsycInfo and Google Scholar, to collect all types of clinical trials with psychotherapeutic interventions that measured QoL in IBD patients aged 18 and over. Quality of evidence was assessed using GRADE criteria.