95% Confidence interval (CI), and p-value under the random-effects model in the open meta-analyst software.
Results: We found 10 interventional studies and 35 cohort studies, including 4,794 patients eligible for our review. Most of the included citations were single-arm studies. Our meta-analysis showed that VDZ therapy could induce a significant clinical response in UC patients up to 54 weeks (proportion 0.516, 95% CI [0.453, 0.578], p < 0.001). VDZ was associated with clinically significantly clinical remission and steroid-free clinical remission after 54 weeks (p < 0.0001). Durable clinical remission, histological remission, and endoscopic response rates were maintained in UC patients taking VDZ at the 52nd week. There was no significant difference between VDZ and placebo regarding the incidence of drug-related serious adverse events (p = 0.113) and death rates (p = 0.085).
Conclusion: Our systematic review and meta-analysis showed that the use of VDZ in patients with active moderate to severe UC was associated with high percentages of clinical response and remission rates in induction and maintenance treatment stages. VDZ seems to be well tolerated in UC patients, apart from some infections and inflammations. Future RCTs should compare VDZ to active treatments for longer follow-up periods with larger sample size.

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Drug Survival in Patients with Inflammatory Bowel disease: An observational study

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Background: Although the therapeutic array has significantly widened, over the past decades predicting treatment persistence in IBD patients is still a challenge. In this study we collected longitudinal data to determine drug survival on the medications currently available for IBD.
Methods: Patients treated in the IBD outpatient clinic of the Goethe University Hospital were retrospectively analyzed. Laboratory parameters and data on treatment adherence were collected via the electronic patient file. We investigated how many patients continued on the respective substances after the induction period and after the 1-year mark.
Results: A total of 601 patients were included. 321 patients were female (53.4), 280 patients were male (46.6). The median age was 43 (range 19–86). The median disease duration was 14 years (range 1–52). 320 patients (53.2) suffered from CD and 281 (46,8) patients suffered from UC.
95 patients were treated with Infliximab (IFX) with a median duration of 912 days (20–5273). 91 patients (96.8) were still on IFX after the induction period. 73 patients (76.8) patients reached the 1-year mark. At the endpoint of this investigation, 39 patients (41.9) were still on IFX. 172 patients were started on Adalimumab (ADA) with a median of 1054 (48–4458) days on the medication. Of this collective, 172 (100%) patients continued on ADA after the end of the induction period. 136 patients (79.1) reached the 1-year mark. At the endpoint of this investigation, 90 patients (52.3) were still on ADA. Of the entire cohort, 124 patients were treated with Vedolizumab (VDZ) with a median of 745.50 (0-2204) days on the medication. After the induction period for this medication, 123 patients (99.2%) were still on VDZ. 89 patients (71.8%) achieved the 1-year mark. At the endpoint of this investigation, 82 patients (66.1%) were still on VDZ. Lastly, 66 patients were treated with Ustekinumab (UST) with a median duration of 720 days (50–1777). 64 patients (98.5%) achieved clinical remission. 48 patients (72.7%) achieved the 1-year mark. At the endpoint of this investigation, 54 patients (83.1%) were still on UST. As we provided longitudinal data some patients have been exposed to several medications which in part explains the lower patient numbers in the more recently approved drugs.
Conclusion: Conclusion: The majority of patients were still on the medication after the respective induction in all treatment groups. 1-year treatment persistence was higher for and ADA in comparison to VDZ and UST. Our study provides further evidence on drug survival in IBD and may aid in advising patients in this matter.

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Changing Lanes: Switching Therapies in Inflammatory Bowel Disease, An Observational Study.

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Background: Switching between therapies in inflammatory bowel disease (IBD) is common and a paucity of data exists regarding the optimal switching strategy. A number of new drug therapies have recently emerged for the treatment of IBD. Failure of biologic and small molecule therapies occur regularly, prompting the need for a treatment switch. Our aim is to review trends amongst our patients who switched biologic/small molecule therapy to identify high risk characteristics and to look for predictor variables which may reduce the need to switch in the future.
Methods: This is a 4 year retrospective observational study of IBD patients who underwent a therapy switch. Patients were identified from a prospectively maintained IBD database of 141 patients. Patient demographics, treatment history, disease history, biomarkers (within 3 months of switch) and endoscopy results were reviewed. Minitab17 was used for statistical analysis.
Results: Switching of biologic therapy was observed in 39 patients (28%); 21 (54%) were male; mean age was 42.8Y. Of these, 21 (53.9%) had Crohn's disease (CD), 17 (44%) had ulcerative colitis (UC) and 1 patient had indeterminate colitis. Mean disease duration at time of switch was 78 months. 82% (n=14/17) of UC patients had pancolitis. 43% (n=9/21) of CD patients had a previous intestinal resection. The most common initial therapy was Adalimumab 46% (n=18) (Fig1) with the most common switch to IFX 36% (n=14) (Fig2). Primary LOR occurred in 28% (n=11) and secondary LOR in 44% (n=17), the remainder switched due to infusion reaction/adverse effects (n=10) and clinical remission (n=1). Mean CRP was 13.68 (95% CI: 7.28, 20.09), mean FCP was 874 (95% CI: 418, 1329), mean mayo score was 1.88 (95% CI: 1.37, 2.39), mean SES CD score was 5.79 (95% CI: 3.24, 8.33). Median IFX level was 0.8ug/ml (IQR 0.4, 9.7), 37.5% (n=6/16) of the patients on IFX developed ADAs to IFX. Median Adalimumab level was 5.2ug/ml (IQR 1.4, 13.5) and 11% (n=2/18) developed ADAs to Adalimumab. A significant negative correlation was found between FCP and IFX

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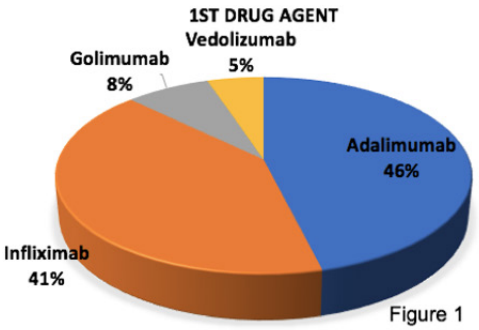

Figure 1

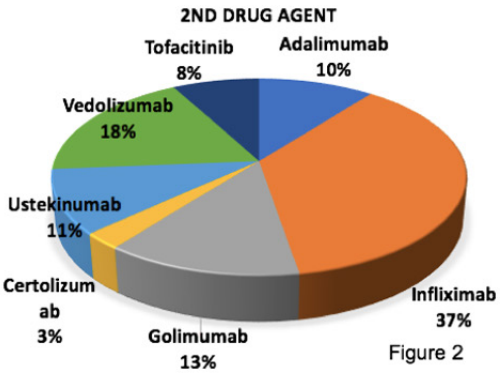

Figure 2

level using Spearman rank correlation -0.822, p = 0.01. 39% (n=15) were on an immunomodulator, no significant association was found between immunomodulator therapy and primary/secondary LOR, p= 0.67 and p= 0.63. 28% (n=11) were admitted with an IBD flare in the 1st year post switch and 13% (n=5) underwent intestinal resection. 8 (21%) subsequently switched to a 3rd biologic agent.

Conclusion: The most common therapy switch was within Anti-TNF drug class, mean CRP and FCP were raised at the time of switch and a significant number of patients were admitted in the year post switch with an IBD flare. Pancolitis in UC and previous intestinal surgery in CD were common characteristics of those who switched.

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Short term effects of a combined lifestyle intervention in patients with Inflammatory Bowel Disease

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Background: Diet and physical activity might help to improve quality of life and maintain remission in patients with inflammatory bowel disease (IBD). In other conditions, interventions in which diet and physical activity are combined seem to be more effective than separate interventions. Therefore, we assessed the effect of a combined lifestyle intervention on the impact of disease on daily life, clinical disease activity, fatigue and quality of life in patients with Crohn's disease (CD) or ulcerative colitis (UC).

Methods: A single arm intervention study was performed in IBD patients in remission or with mildly active disease. Participants received personal advice to improve their diet and level of physical activity by a dietician and a physiotherapist in one face-to-face and one telephone consult. These advices were supported by guidelines based on the Dutch dietary and physical activity guidelines, a recipe app and a booklet with physical activity exercises. IBD disability index (IBD-DI) to assess impact of disease on daily life, clinical disease activity questionnaires (P-HBI or P-SCCAI), IBD fatigue (IBD-F) patient self-assessment scale and IBD quality of life questionnaire (IBDQ) were completed. The Eetscore Food Frequency Questionnaire (Eetscore FFQ) and Short Questionnaire to Assess Health-enhancing physical activity (SQUASH) were used to assess diet and physical activity. Changes from baseline to 5 weeks after start were investigated by paired samples t-tests or Wilcoxon signed rank tests.

Results: We included 29 participants. At time of this preliminary analysis, 25 participants completed baseline and 5-week assessments (11 males, 11 CD, median age 36 years [IQR 29–53], median BMI 25 kg/m^2 [IQR 24–28]). After 5 weeks, diet quality had significantly improved (p<0.001), but level of physical activity had not (p=0.509). Impact of disease on daily life (IBD-DI) decreased with 2.5 points (95%CI -5.5-0.4; p=0.09). Disease activity did not change significantly. There was a significant decrease in fatigue (median IBD-F 20 [IQR 8–29] to 15 [IQR 3–24; p=0.03]) and a significant increase in quality of life (median IBDQ 194 [IQR 179–206] to 196 [IQR 186–209; p=0.03]).

Conclusion: These preliminary results suggest that a combined lifestyle intervention is effective to reduce fatigue and to increase quality of life in patients with IBD, at least in the short term. Impact of disease on daily life and clinical disease activity did not improve significantly. Participants reported their level of physical activity to be restricted due to COVID-19 measures, which could explain the lack of effect on this outcome. This study is still ongoing and we expect follow-up data up till 1 year after start.

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Lack of adherence to infliximab in inflammatory bowel disease patients contributes to loss of response in Crohn's disease.

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Background: Lack of adherence in patients with inflammatory bowel disease (IBD) is a relevant problem in our clinical practice. Non-adherence to anti-TNF increases healthcare costs. The aim of this study was both to measure adherence and also to study the factors and consequences related to non-adherence in patients with IBD under maintenance treatment with infliximab (IFX).