score. The proportion of websites with excellent or good grading was significantly higher in those from government agencies and professional societies (33.3% and 30% vs. 2% and 0%, p < 0.05). None of the health press websites showed excellent or good grading. Surprisingly, no websites from patient organisations were identified.

Conclusion: The quality of online information on p-IBD is highly variable. Most of the easily found websites are from hospitals, but professional societies and government agencies provide a higher quality of information. Improvement of online information on p-IBD is still needed.

P489

Are patients with inflammatory bowel disease receiving an adequate immunisation?

D. Simian¹, P. Núñez², L. Flores¹, C. Figueroa¹, P. Ibáñez¹,

U. Kronberg*1, J. Lubascher1, G. Pizarro1, R. Quera1

¹Clínica Las Condes, Gastroenterology Department - Inflammatory Bowel Disease, Santiago, Chile, ²Gastroenterology Department - IBD Fellow Clínica Las Condes, San Juan de Dios Hospital, Santiago, Chile

Background: Inflammatory Bowel Disease (IBD) treatment may increase the risk of infections. Vaccines are part of the comprehensive IBD patient care. The aim of this study was to describe indications and adherence of immunisations in IBD and identify possible associated factors.

Methods: A cross-sectional, analytic study was conducted in patients from an IBD Program of a tertiary centre in Chile, between April – June 2019. Demographic and clinical data were obtained from the hospital IBD registry, approved by the local IRB. Patients were asked to answer a vaccine survey and complementary information was obtained from the National Immunization Registry. Descriptive and association statistic were used (χ^2 ; p < 0.05).

Results: A total of 243 patients were included (Table 1). The influenza vaccine rate has significantly increased (Figure 1), reaching 67% in 2019, being higher in women (66% vs. 34%; *p* 0.045) and patients in biological therapy (BT) (29% vs. 14%; *p* 0.011) (Table 1). Vaccination rates are shown in Figure 2. Combination of Influenza/Hepatitis B/Pneumococcus vaccines was administered in 56 patients (23%), significantly higher in patients with BT and with fewer years of IBD. Forty patients received a live virus vaccine, 18% were on immunomodulatory treatment. The survey showed that 57 patients (23%) have not been immunised with any vaccine, mainly due to lack of time, lack of medical prescription and high cost.



Figure 1. Influenza vaccine rates per year (2017–2019).

Table 1. Demographic and clinical characteristics of inflammatory box	owel disease patients by	/ Influenza vaccine 2019
--	--------------------------	--------------------------

Female109 (66) $42 (53)$ 0.045 Age in years (median; range) $36 (18-78)$ $37 (18-75)$ 0.490 Insurance 0.673 Private $133 (81)$ $66 (83)$ Public $31 (19)$ $13 (17)$ Educational level 0.451 Basic/high school $27 (17)$ $11 (14)$ College/university $107 (65)$ $47 (59)$ Postgraduate studies $30 (18)$ $21 (27)$ Smoking habit $8 (5)$ $23 (29)$ Vicerative colitis $97 (59)$ $51 (65)$ Crohn's disease $63 (38)$ $23 (29)$ Non-classifiable IBD $4 (3)$ $5 (6)$ Years of disease (median; range) $5 (0-49)$ $6 (6-47)$ BD current treatment 5 0.221 JBD current treatment $5 (22)$ $17 (22)$ Biological therapy $47 (29)$ $11 (14)$ Prednisone $3 (2)$ $1 (1)$ Budesonide $3 (2)$ $3 (4)$ CAM $0 (0)$ $1 (1)$ Without treatment $11 (7)$ $8 (10)$ Output $3 (2)$ $3 (2)$		Influenza vaccine 2019 n = 164 (67%)	Without influenza vaccine 2019 N = 79 (33%)	<i>p</i> value
Age in years (median; range) $36 (18-78)$ $37 (18-75)$ 0.490 Insurance0.673Private $33 (81)$ $66 (83)$ Public $31 (19)$ $13 (17)$ Educational level 0.451 Basic/high school $27 (17)$ $11 (14)$ College/university $107 (65)$ $47 (59)$ Postgraduate studies $30 (18)$ $21 (27)$ Smoking habit $8 (5)$ $23 (29)$ Type of IBD 0.431 Ulcerative colitis $97 (59)$ $51 (65)$ Non-classifiable IBD $4 (3)$ $5 (6)$ Years of disease (median; range) $5 (0-49)$ $6 (6-47)$ $5 -ASA$ $64 (39)$ $38 (48)$ 0.179 Imunomodulators $36 (22)$ $17 (22)$ 0.879 Biological therapy $47 (29)$ $11 (14)$ 0.011 Prednisone $3 (2)$ $3 (4)$ $3 (4)$ CAM $0 (0)$ $1 (1)$ 0.352	Female	109 (66)	42 (53)	0.045
	Age in years (median; range)	36 (18–78)	37 (18–75)	0.490
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Insurance			0.673
Public 31 (19) 13 (17) Educational level 0.451 Basic/high school 27 (17) 11 (14) College/university 107 (65) 47 (59) Postgraduate studies 30 (18) 21 (27) smoking habit 8 (5) 23 (29) <0.001	Private	133 (81)	66 (83)	
Educational level 0.451 Basic/high school $27 (17)$ $11 (14)$ College/university $107 (65)$ $47 (59)$ Postgraduate studies $30 (18)$ $21 (27)$ Smoking habit $8 (5)$ $23 (29)$ Type of IBD 0.221 Ulcerative colitis $97 (59)$ $51 (65)$ Crohn's disease $63 (38)$ $23 (29)$ Non-classifiable IBD $4 (3)$ $5 (6)$ Years of disease (median; range) $5 (0-49)$ $6 (6-47)$ BD current treatment $5 -ASA$ $64 (39)$ $38 (48)$ Jinnunomodulators $36 (22)$ $17 (22)$ 0.879 Biological therapy $47 (29)$ $11 (14)$ 0.011 Prednisone $3 (2)$ $3 (4)$ CAM $0 (0)$ Without treatment $11 (7)$ $8 (10)$ 0.352	Public	31 (19)	13 (17)	
Basic/high school 27 (17) 11 (14) College/university 107 (65) 47 (59) Postgraduate studies 30 (18) 21 (27) Smoking habit 8 (5) 23 (29) <0.001	Educational level			0.451
$\begin{array}{cccc} College/university & 107 (65) & 47 (59) \\ Postgraduate studies & 30 (18) & 21 (27) \\ Smoking habit & 8 (5) & 23 (29) & <0.001 \\ Type of IBD & 0.221 \\ Ulcerative colitis & 97 (59) & 51 (65) \\ Crohn's disease & 63 (38) & 23 (29) \\ Non-classifiable IBD & 4 (3) & 5 (6) \\ Years of disease (median; range) & 5 (0-49) & 6 (6-47) & 0.603 \\ IBD current treatment & & & \\ 5-ASA & 64 (39) & 38 (48) & 0.179 \\ Immunomodulators & 36 (22) & 17 (22) & 0.879 \\ Biological therapy & 47 (29) & 11 (14) & 0.011 \\ Prednisone & 3 (2) & 1 (1) \\ Budesonide & 3 (2) & 3 (4) \\ CAM & 0 (0) & 1 (1) \\ Without treatment & 11 (7) & 8 (10) & 0.352 \\ \end{array}$	Basic/high school	27 (17)	11 (14)	
Postgraduate studies $30 (18)$ $21 (27)$ Smoking habit $8 (5)$ $23 (29)$ <0.001 Type of IBD 0.221 Ulcerative colitis $97 (59)$ $51 (65)$ Crohn's disease $63 (38)$ $23 (29)$ Non-classifiable IBD $4 (3)$ $5 (6)$ Years of disease (median; range) $5 (0-49)$ $6 (6-47)$ 0.603IBD current treatment 0.603 IBD current treatment $5 (-49)$ $38 (48)$ $5 -ASA$ $64 (39)$ $38 (48)$ $6 (22)$ $17 (22)$ 0.879 Biological therapy $47 (29)$ $11 (14)$ Prednisone $3 (2)$ $3 (4)$ CAM $0 (0)$ $1 (1)$ Without treatment $11 (7)$ $8 (10)$	College/university	107 (65)	47 (59)	
Smoking habit 8 (5) 23 (29) <0.001 Type of IBD 0.221 0.221 Ulcerative colitis 97 (59) 51 (65) 0.23 (29) Crohn's disease 63 (38) 23 (29) 0.603 Non-classifiable IBD 4 (3) 5 (6) 0.603 Years of disease (median; range) 5 (0-49) 6 (6-47) 0.603 IBD current treatment 5 5 0.403 IBD current treatment 5 5 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 3 (4) 11 CAM 0 (0) 1 (1) 11 Without treatment 11 (7) 8 (10) 0.352	Postgraduate studies	30 (18)	21 (27)	
Type of IBD 0.221 Ulcerative colitis 97 (59) $51 (65)$ Crohn's disease $63 (38)$ $23 (29)$ Non-classifiable IBD $4 (3)$ $5 (6)$ Years of disease (median; range) $5 (0-49)$ $6 (6-47)$ 0.603 IBD current treatment $5 -ASA$ $64 (39)$ $38 (48)$ 0.179 Immunomodulators $36 (22)$ $17 (22)$ 0.879 Biological therapy $47 (29)$ $11 (14)$ 0.011 Prednisone $3 (2)$ $3 (4)$ CAM $0 (0)$ $1 (1)$ Without treatment $11 (7)$ $8 (10)$ 0.352	Smoking habit	8 (5)	23 (29)	< 0.001
Ulcerative colitis 97 (59) 51 (65) Crohn's disease 63 (38) 23 (29) Non-classifiable IBD 4 (3) 5 (6) Years of disease (median; range) 5 (0–49) 6 (6–47) 0.603 IBD current treatment 5 5 0.49) 38 (48) 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 11 Budesonide 3 (2) 3 (4) 2 CAM 0 (0) 1 (1) 0.352	Type of IBD			0.221
Crohn's disease 63 (38) 23 (29) Non-classifiable IBD 4 (3) 5 (6) Years of disease (median; range) 5 (0–49) 6 (6–47) 0.603 IBD current treatment 5 5 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 1 Budesonide 3 (2) 3 (4) 1 CAM 0 (0) 1 (1) 0.352	Ulcerative colitis	97 (59)	51 (65)	
Non-classifiable IBD 4 (3) 5 (6) Years of disease (median; range) 5 (0-49) 6 (6-47) 0.603 IBD current treatment - - - 5-ASA 64 (39) 38 (48) 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) - Budesonide 3 (2) 3 (4) - CAM 0 (0) 1 (1) - Without treatment 11 (7) 8 (10) 0.352	Crohn's disease	63 (38)	23 (29)	
Years of disease (median; range) 5 (0-49) 6 (6-47) 0.603 IBD current treatment 5 5 64 (39) 38 (48) 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 1 Budesonide 3 (2) 3 (4) 1 CAM 0 (0) 1 (1) 1 Without treatment 11 (7) 8 (10) 0.352	Non-classifiable IBD	4 (3)	5 (6)	
IBD current treatment 5-ASA 64 (39) 38 (48) 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 10 Budesonide 3 (2) 3 (4) 0.00 CAM 0 (0) 1 (1) 0.352	Years of disease (median; range)	5 (0-49)	6 (6-47)	0.603
5-ASA 64 (39) 38 (48) 0.179 Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 0.179 Budesonide 3 (2) 3 (4) 0.000 CAM 0 (0) 1 (1) 0.352	IBD current treatment			
Immunomodulators 36 (22) 17 (22) 0.879 Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 11 (14) 0.011 Budesonide 3 (2) 3 (4) 1 (1) 0.011 CAM 0 (0) 1 (1) 0.352	5-ASA	64 (39)	38 (48)	0.179
Biological therapy 47 (29) 11 (14) 0.011 Prednisone 3 (2) 1 (1) 1 Budesonide 3 (2) 3 (4) 1 CAM 0 (0) 1 (1) 0.352	Immunomodulators	36 (22)	17 (22)	0.879
Prednisone 3 (2) 1 (1) Budesonide 3 (2) 3 (4) CAM 0 (0) 1 (1) Without treatment 11 (7) 8 (10) 0.352	Biological therapy	47 (29)	11 (14)	0.011
Budesonide 3 (2) 3 (4) CAM 0 (0) 1 (1) Without treatment 11 (7) 8 (10) 0.352	Prednisone	3 (2)	1 (1)	
CAM0 (0)1 (1)Without treatment11 (7)8 (10)0.352	Budesonide	3 (2)	3 (4)	
Without treatment 11 (7) 8 (10) 0.352	CAM	0 (0)	1 (1)	
	Without treatment	11 (7)	8 (10)	0.352



Figure 2. Vaccinations rates in patients with inflammatory bowel disease. **Conclusion:** In this cohort, vaccination rates are low, however, adherence to Influenza vaccine has increased. Immunisation should be considered early by the multidisciplinary team, educating patients about its importance.

P490

Assessment of body weight changes in patients with inflammatory bowel diseases initiating biologic therapy: A prospective cohort study

N. Borren^{*1}, W. Tan¹, A. Jess¹, P.H.M. Li¹, J. Garber¹, J. Luther¹, F. Colizzo¹, H. Khalili¹, A. Ananthakrishnan¹

¹Division of Gastroenterology, Massachusetts General Hospital, Boston, USA

Background: Biologic therapies are effective in inducing sustained clinical and endoscopic remission in inflammatory bowel diseases. While side effects are infrequent, prior studies have inconsistently suggested that tumour necrosis factor α (anti-TNF) therapy may be associated with weight gain. We performed this prospective study to compare weight gain across different biologic therapy classes with distinct mechanisms of action.

Methods: This prospective cohort study recruited patients with moderate to severe IBD initiating outpatient biologic therapy with anti-TNF (infliximab, adalimumab), vedolizumab or ustekinumab. Weight measurements were performed at weeks 0, 14, 30 and 54. Disease activity at these time points was assessed using the Harvey Bradshaw Index (HBI) for CD and Simple Clinical Colitis Activity Index (SCCAI) for UC. Remission was defined as HBI <4 or SCCAI 2. Changes in weight between baseline and each of the follow-up visits were modelled as a continuous variable and multivariate regression assessed the independent effect of therapeutic class on this outcome.

Results: Our study enrolled 314 patients (197 CD, 117 UC) initiating biologic therapy with 120 patients starting anti-TNF (38%), 140 patients started vedolizumab (45%) and 54 patients on ustekinumab (17%). All patients provided their weight and height at baseline; 261, 184 and 131 patients provided data on weight at week 14, week 30 and week 54, respectively. The mean baseline body weight was similar among all therapeutic classes. Patients initiating UST were more likely to have Crohn's disease (CD), have perianal involvement and have prior biologic exposure. From baseline, the weight significantly increased at week 14 with a mean of 0.36 kg (\pm 3.8kg, p = 0.004) and continued to increase compared with baseline with 0.96 kg (\pm 3.9kg, p < 0.001) and 1.29 kg (\pm 4.2kg, p < 0.001) at week 30 and 54, respectively (Figure 1). On univariate and multivariable analysis, no significant differences between any of the biologic therapies for weight gain was seen at any time point (weight gain anti-TNF: 0.31 kg, 1.06 kg, 1.33 kg; VDZ: 0.30 kg, 0.83 kg, 1.10 kg; UST: 0.63 kg, 1.21 kg, 2.31 kg at week 14, week 30, week 54, respectively) (Figure 2). Weight gain at week 14 was significantly higher in those with CD (+1.25 kg, 95% CI 0.19–2.30, p = 0.021) and being on steroids at baseline (+1.07kg, 95% CI 0.03–2.10, p = 0.043). Early weight gain predicted continued weight gain at week 54 (+0.48, 95% CI 0.21–0.74, p = 0.001). Neither clinical response to therapy nor disease activity parameters showed any statistical association with weight gain.





Figure 2.

Conclusion: There was no difference in weight gain between the different biologic therapeutic classes.

P491

De-escalation of dose-intensified anti-TNF therapy in IBD patients in sustained deep remission

I. Chu*1,2, R. Little1,2, M. Sparrow1,2, M. Ward1,2

¹Gastroenterology, Alfred Hospital- Alfred Health, Melbourne, Australia, ²Faculty of Medicine Nursing and Health Sciences, Monash University, Melbourne, Australia