

Supplemental material:

Supplemental methods

Review criteria

An electronic search of publications on PubMed from the time of the STRIDE systematic review (**Table 1**) up to March 31, 2018, was performed to assess accumulating evidence for the potential treatment targets of clinical factors, patient-reported outcomes (PROs), endoscopy, histology, imaging, and biomarkers (**Table 1**).

A systematic literature review was performed with search strings used for the STRIDE publication with minor modifications (12). Searches were limited to studies conducted in human subjects (except for imaging targets) and by language (English). Selection criteria for inclusion of relevant publications were studies conducted in patients with UC including placebo-controlled randomized clinical trials, interventional studies, observational studies, meta-analyses, and reviews. Case reports and studies performed in patients with cancer, neoplasia, and dysplasia were excluded.

Data extraction and analysis

Citations for each target were screened by 2 independent investigators (RU, LPB) for relevant studies. Selected studies for each target were reviewed by investigators, and curated lists of search outputs for each target are included in tabular form in

Supplementary Tables S1-S6.

Supplemental tables

Table S1: Search output for clinical targets and PROs

Table S2: Search output for QoL measures

Table S3: Search output for endoscopic targets

Table S4: Search output for histological targets

Table S5: Search output for imaging targets

Table S6: Search output for biomarkers

Supplementary Table S1: Search output for clinical targets and PROs

Authors	Title	Citation
Mohammed Vashist N, Samaan M, Mosli MH, et al.	Endoscopic scoring indices for evaluation of disease activity in ulcerative colitis.	Cochrane Database Syst Rev. 2018;1:CD011450.
Picco MF.	PiCaSSO: a predictive score for endoscopic findings in ulcerative colitis that sounds like art but is all science.	Gastrointest Endosc. 2017;86(6):1128-1130.
Puolanne AM, Kolho KL, Alfthan H, et al.	Rapid fecal calprotectin test and symptom index in monitoring the disease activity in colonic inflammatory bowel disease.	Dig Dis Sci. 2017;62(11):3123-3130.
Dubinsky MC.	Reviewing treatments and outcomes in the evolving landscape of ulcerative colitis.	Postgrad Med. 2017;129(5):538-553.
Allegretti JR, Barnes EL, Stevens B, et al.	Predictors of clinical response and remission at 1 year among a multicenter cohort of patients with inflammatory bowel disease treated with vedolizumab.	Dig Dis Sci. 2017;62(6):1590-1596.
Babic E, Bevanda M, Karin M, et al.	Correlation of clinical and endoscopic indices in IBD patients in University Clinical Hospital Mostar.	Psychiatr Danub. 2016 ;28(Suppl 2):242-246.
Sobrado CW, Sobrado LF.	Management of acute severe ulcerative colitis: a clinical update.	Arq Bras Cir Dig. 2016 ;29(3):201-205.
Lasch K, Liu S, Ursos L, et al.	Gastroenterologists' perceptions regarding ulcerative colitis and its management: results from a large-scale survey.	Adv Ther. 2016;33(10):1715-1727. Epub 2016 Aug 10.
Taleban S, Stewart KO, Li DK, et al.	Clinical activity and quality of life indices are valid across ulcerative colitis but not Crohn's disease phenotypes.	Dig Dis Sci. 2016;61(9):2627-2635.
Keil R, Wasserbauer M, Zadorova Z, et al.	Clinical monitoring: infliximab biosimilar CT-P13 in the treatment of Crohn's disease and ulcerative colitis.	Scand J Gastroenterol. 2016;51(9):1062-1068.
Brandse JF, Bennink RJ, van Eeden S, et al.	Performance of common disease activity markers as a reflection of inflammatory burden in ulcerative colitis.	Inflamm Bowel Dis. 2016;22(6):1384-1390.
Zenlea T, Yee EU, Rosenberg L, et al.	Histology grade is independently associated with relapse risk in patients with ulcerative colitis in clinical remission: a prospective study.	Am J Gastroenterol. 2016;111(5):685-690.
Morita Y, Bamba S, Takahashi K, et al.	Prediction of clinical and endoscopic responses to anti-tumor necrosis factor- α antibodies in ulcerative colitis.	Scand J Gastroenterol. 2016;51(8):934-941.
Van Deen WK, van der Meulen-de Jong AE, Parekh NK, et al.	Development and validation of an inflammatory bowel diseases monitoring index for use with mobile health technologies.	Clin Gastroenterol Hepatol. 2016;14(12):1742-1750.e7.
Pagnini C, Menasci F, Festa	Application of clinical indexes in ulcerative colitis patients in	Eur Rev Med Pharmacol Sci.

S, et al.	regular follow-up visit: correlation with endoscopic 'mucosal healing' and implication for management. Preliminary results.	2015;19(19):3674-3681.
Mosli MH, Feagan BG, Zou G, et al.	Development and validation of a histological index for UC.	Gut. 2017;66(1):50-58.
Marchal-Bressenot A, Salleron J, Boulagnon-Rombi C, et al.	Development and validation of the Nancy histological index for UC.	Gut. 2017;66(1):43-49.
Peyrin-Biroulet L, Panes J, Sandborn WJ, et al.	Defining disease severity in inflammatory bowel diseases: current and future directions.	Clin Gastroenterol Hepatol. 2016;14(3):348-354.e17.
Travis SP, Schnell D, Feagan BG, et al.	The impact of clinical information on the assessment of endoscopic activity: characteristics of the Ulcerative Colitis Endoscopic Index of Severity [UCEIS].	J Crohns Colitis. 2015;9(8):607-616.
Hindryckx P, Baert F, Hart A, et al.	Clinical trials in ulcerative colitis: a historical perspective.	J Crohns Colitis. 2015;9(7):580-588.
Bressler B, Marshall JK, Bernstein CN, et al.	Clinical practice guidelines for the medical management of nonhospitalized ulcerative colitis: the Toronto consensus.	Gastroenterology. 2015;148(5):1035-1058.e3.
Tabibian A, Tabibian JH, Beckman LJ, et al.	Predictors of health-related quality of life and adherence in Crohn's disease and ulcerative colitis: implications for clinical management.	Dig Dis Sci. 2015;60(5):1366-374.
Alrubaiy L, Cheung WY, Dodds P, et al.	Development of a short questionnaire to assess the quality of life in Crohn's disease and ulcerative colitis.	J Crohns Colitis. 2015;9(1):66-76.
Burri E, Beglinger C, von Felten S, et al.	Fecal calprotectin and the clinical activity index are both useful to monitor medical treatment in patients with ulcerative colitis.	Dig Dis Sci. 2015;60(2):485-491.
Tursi A.	Histologic healing in inflammatory bowel disease clinical practice: a reliable target?	Clin Gastroenterol Hepatol. 2015;13(6):1211-1212.
Walsh A, Palmer R, Travis S.	Mucosal healing as a target of therapy for colonic inflammatory bowel disease and methods to score disease activity.	Gastrointest Endosc Clin N Am. 2014;24(3):367-378.
Samaan MA, Mosli MH, Sandborn WJ, et al.	A systematic review of the measurement of endoscopic healing in ulcerative colitis clinical trials: recommendations and implications for future research.	Inflamm Bowel Dis. 2014;20(8):1465-1471.
Bewtra M, Brensinger CM, Tomov VT, et al.	An optimized patient-reported ulcerative colitis disease activity measure derived from the Mayo score and the simple clinical colitis activity index.	Inflamm Bowel Dis. 2014;20(6):1070-1078.
Leong RW, Huang T, Ko Y, et al.	Prospective validation study of the International Classification of Functioning, Disability and Health Score in Crohn's disease	J Crohns Colitis. 2014;8(10):1237-1245.

	and ulcerative colitis.	
Farkas K, Lakatos PL, Szucs M, et al.	Frequency and prognostic role of mucosal healing in patients with Crohn's disease and ulcerative colitis after one-year of biological therapy.	World J Gastroenterol. 2014;20(11):2995-3001.
Papi C, Aratari A.	Mucosal healing as a treatment for IBD?	Expert Rev Gastroenterol Hepatol. 2014;8(5):457-459.
Williet N, Sandborn WJ, Peyrin-Biroulet L.	Patient-reported outcomes as primary end points in clinical trials of inflammatory bowel disease.	Clin Gastroenterol Hepatol. 2014;12(8):1246-1256.e6.
Han W, Xu JM, Hu NZ, et al.	Early predictors of responses and clinical outcomes of corticosteroid treatment for severe ulcerative colitis.	Scand J Gastroenterol. 2014;49(4):424-433.
Mosli MH, Feagan BG, Sandborn WJ, et al.	Histologic evaluation of ulcerative colitis: a systematic review of disease activity indices.	Inflamm Bowel Dis. 2014;20(3):564-575.
Bouguen G, Levesque BG, Pola S, et al.	Feasibility of endoscopic assessment and treating to target to achieve mucosal healing in ulcerative colitis.	Inflamm Bowel Dis. 2014;20(2):231-239.
Walmsley RS, Casey P.	On the physician-completed and the patient-completed simple clinical colitis activity index (SCCAI).	J Crohns Colitis. 2013;7(11):930-931.
Zallot C, Peyrin-Biroulet L.	Deep remission in inflammatory bowel disease: looking beyond symptoms.	Curr Gastroenterol Rep. 2013;15(3):315.
Bennebroek Evertsz F, Nieuwkerk PT, Stokkers PC, et al.	The patient simple clinical colitis activity index (P-SCCAI) can detect ulcerative colitis (UC) disease activity in remission: a comparison of the P-SCCAI with clinician-based SCCAI and biological markers.	J Crohns Colitis. 2013;7(11):890-900.
O'Connor A, Ford AC.	Poor correlation between patient-reported and endoscopic components of the Mayo score in ulcerative colitis.	Gastroenterology. 2016;150(4):1037-1039.

Supplementary Table S2: Search output for QoL measures

Authors	Title	Citation
Calloway A, Dalal R, Beaulieu DB, et al.	Depressive symptoms predict anti-tumor necrosis factor therapy noncompliance in patients with inflammatory bowel disease.	Dig Dis Sci. 2017;62(12):3563-3567.
Lo B, Prosberg MV, Gluud LL, et al.	Systematic review and meta-analysis: assessment of factors affecting disability in inflammatory bowel disease and the reliability of the inflammatory bowel disease disability index.	Aliment Pharmacol Ther. 2018;47(1):6-15.
Toyonaga T, Kobayashi T, Nakano M, et al.	Usefulness of fecal calprotectin for the early prediction of short-term outcomes of remission-induction treatments in ulcerative colitis in comparison with two-item patient-reported outcome.	PLoS One. 2017;12(9):e0185131.
Chen XL, Zhong LH, Wen Y, et al.	Inflammatory bowel disease-specific health-related quality of life instruments: a systematic review of measurement properties.	Health Qual Life Outcomes. 2017;15(1):177.
Villoria A, Garcia V, Dosal A, et al.	Fatigue in out-patients with inflammatory bowel disease: prevalence and predictive factors.	PLoS One. 2017;12(7):e0181435.
Argollo M, Fiorino G, Hindryckx P, et al.	Novel therapeutic targets for inflammatory bowel disease.	J Autoimmun. 2017;85:103-116.
Alexakis C, Kumar S, Saxena S, et al.	Systematic review with meta-analysis: the impact of a depressive state on disease course in adult inflammatory bowel disease.	Aliment Pharmacol Ther. 2017;46(3):225-235.
Zullo S, Jambaulikar G, Rustgi A, et al.	Risk factors for vitamin D deficiency and impact of repletion in a tertiary care inflammatory bowel disease population.	Dig Dis Sci. 2017;62(8):2072-2078.
Nikolaus S, Schreiber S, Siegmund B, et al.	Patient education in a 14-month randomised trial fails to improve adherence in ulcerative colitis: influence of demographic and clinical parameters on non-adherence.	J Crohns Colitis. 2017;11(9):1052-1062.
Daperno M, Comberlato M, Bossa F, et al.	Training programs on endoscopic scoring systems for inflammatory bowel disease lead to a significant increase in interobserver agreement among community gastroenterologists.	J Crohns Colitis. 2017;11(5):556-561.
Rubin DT, Dubinsky MC, Martino S, et al.	Communication between physicians and patients with ulcerative colitis: reflections and insights from a qualitative	Inflamm Bowel Dis. 2017;23(4):494-501.

	study of in-office patient-physician visits.	
Abraham BP, Ahmed T, Ali T.	Inflammatory bowel disease: pathophysiology and current therapeutic approaches.	Handb Exp Pharmacol. 2017;239:115-146.
Yoon JY, Shin JE, Park SH, et al.	Disability due to inflammatory bowel disease is correlated with drug compliance, disease activity, and quality of life.	Gut Liver. 2017;11(3):370-376.
Ruan J, Chen Y, Zhou Y.	Development and validation of a questionnaire to assess the quality of life in patients with inflammatory bowel disease in mainland China.	Inflamm Bowel Dis. 2017;23(3):431-439.
Velonias G, Conway G, Andrews E, et al.	Older age- and health-related quality of life in inflammatory bowel diseases.	Inflamm Bowel Dis. 2017;23(2):283-288.
Boal Carvalho P, Cotter J.	Mucosal healing in ulcerative colitis: a comprehensive review.	Drugs. 2017;77(2):159-173.
Sonnenberg E, Siegmund B.	Ulcerative colitis.	Digestion. 2016;94(4):181-185.
van Gennep S, Sahami S, Buskens CJ, et al.	Comparison of health-related quality of life and disability in ulcerative colitis patients following restorative proctocolectomy with ileal pouch-anal anastomosis versus anti-tumor necrosis factor therapy.	Eur J Gastroenterol Hepatol. 2017;29(3):338-344.
Lundgren D, Rutegard J, Eklof V, et al.	Patients with longstanding ulcerative colitis in remission do not have more irritable bowel syndrome-like symptoms than controls.	BMC Gastroenterol. 2016;16(1):139.
Feagan BG, Patel H, Colombel JF, et al.	Effects of vedolizumab on health-related quality of life in patients with ulcerative colitis: results from the randomised GEMINI 1 trial.	Aliment Pharmacol Ther. 2017;45(2):264-275.
Huppertz-Hauss G, Hoivik ML, Jelsness-Jørgensen LP, et al.	Fatigue in a population-based cohort of patients with inflammatory bowel disease 20 years after diagnosis: the IBSEN study.	Scand J Gastroenterol. 2017;52(3):351-358. Erratum in: Scand J Gastroenterol. 2017;52(5):i.
Jackson KL, Stocchi L, Duraes L, et al.	Long-term outcomes in indeterminate colitis patients undergoing ileal pouch-anal anastomosis: function, quality of life, and complications.	J Gastrointest Surg. 2017;21(1):56-61.
Grimstad T, Norheim KB.	Fatigue in inflammatory bowel disease.	Tidsskr Nor Laegeforen. 2016;136(20):1721-1724.
Bojic D, Bodger K, Travis S.	Patient reported outcome measures (PROMs) in inflammatory bowel disease: new data.	J Crohns Colitis. 2017;11(suppl_2):S576-S585.
Whitehead L.	The impact of biological interventions for ulcerative colitis on health-related quality of life.	Am J Nurs. 2016;116(11):21.
Panes J, Jairath V, Levesque	Advances in use of endoscopy, radiology, and biomarkers	Gastroenterology. 2017;152(2):362-

BG.	to monitor inflammatory bowel diseases.	373.e3.
Jonefjall B, Ohman L, Simren M, et al.	IBS-like symptoms in patients with ulcerative colitis in deep remission are associated with increased levels of serum cytokines and poor psychological well-being.	Inflamm Bowel Dis. 2016;22(11):2630-2640.
Anderson AJ, Click B, Ramos-Rivers C, et al.	Development of an inflammatory bowel disease research registry derived from observational electronic health record data for comprehensive clinical phenotyping.	Dig Dis Sci. 2016;61(11):3236-3245.
Peyrin-Biroulet L, Gower-Rousseau C.	The IBD disability index should become a major secondary endpoint in clinical practice and in clinical trials.	J Crohns Colitis. 2016;10(12):1375-1377.
Colombel JF, Keir ME, Scherl A, et al.	Discrepancies between patient-reported outcomes, and endoscopic and histological appearance in UC.	Gut. 2017;66(12):2063-2068.
Walsh AJ, Bryant RV, Travis SP.	Current best practice for disease activity assessment in IBD.	Nat Rev Gastroenterol Hepatol. 2016;13(10):567-579.
Graff LA, Sexton KA, Walker JR, et al.	Validating a measure of patient self-efficacy in disease self-management using a population-based IBD cohort: the IBD Self-efficacy Scale.	Inflamm Bowel Dis. 2016;22(9):2165-2172.
Lasch K, Liu S, Ursos L, et al.	Gastroenterologists' perceptions regarding ulcerative colitis and its management: results from a large-scale survey.	Adv Ther. 2016;33(10):1715-1727.
Huppertz-Hauss G, Lie Hoivik M, Jelsness-Jorgensen LP, et al.	Health-related quality of life in patients with inflammatory bowel disease 20 years after diagnosis: results from the Ibsen study.	Inflamm Bowel Dis. 2016;22(7):1679-1687.
Gracie DJ, Williams CJ, Sood R, et al.	Negative effects on psychological health and quality of life of genuine irritable bowel syndrome-type symptoms in patients with inflammatory bowel disease.	Clin Gastroenterol Hepatol. 2017;15(3):376-384.e5.
Larsen L, Drewes AM, Fallingborg J, et al.	Touch screens as a tool in patient care in the ibd outpatient clinic.	Scand J Gastroenterol. 2016;51(9):1106-1110.
Taleban S, Stewart KO, Li DK, et al.	Clinical activity and quality of life indices are valid across ulcerative colitis but not Crohn's disease phenotypes.	Dig Dis Sci. 2016;61(9):2627-2635.
Gauss A, Geib T, Hinz U, et al.	Quality of life is related to fecal calprotectin concentrations in colonic Crohn disease and ulcerative colitis, but not in ileal Crohn disease.	Medicine (Baltimore). 2016;95(16):e3477.
Peyrin-Biroulet L, Van Assche G, Sturm A, et al.	Treatment satisfaction, preferences and perception gaps between patients and physicians in the ulcerative colitis CARES study: a real world-based study.	Dig Liver Dis. 2016;48(6):601-607.
Chung AE, Sandler RS, Long MD, et al.	Harnessing person-generated health data to accelerate patient-centered outcomes research: the Crohn's and	J Am Med Inform Assoc. 2016;23(3):485-490.

	Colitis Foundation of America PCORnet Patient Powered Research Network (CCFA Partners).	
Conley S, Redeker N.	A systematic review of self-management interventions for inflammatory bowel disease.	J Nurs Scholarsh. 2016;48(2):118-127.
Gower-Rousseau C, Sarter H, Savoye G, et al.	Validation of the Inflammatory Bowel Disease Disability Index in a population-based cohort.	Gut. 2017;66(4):588-596.
Pedersen N.	EHealth: self-management in inflammatory bowel disease and in irritable bowel syndrome using novel constant-care web applications. EHealth by constant-care in IBD and IBS.	Dan Med J. 2015;62(12):B5168.
Farrell D, McCarthy G, Savage E.	Self-reported symptom burden in individuals with inflammatory bowel disease.	J Crohns Colitis. 2016 ;10(3):315-322.
Van Deen WK, van der Meulende Jong AE, Parekh NK, et al.	Development and validation of an inflammatory bowel diseases monitoring index for use with mobile health technologies.	Clin Gastroenterol Hepatol. 2016;14(12):1742-1750.e7.
Hussey M, Mc Garrigle R, Kennedy U, et al.	Long-term assessment of clinical response to adalimumab therapy in refractory ulcerative colitis.	Eur J Gastroenterol Hepatol. 2016;28(2):217-221.
Bryant RV, Costello SP, Andrews JM.	Editorial: untangling symptoms from mucosal healing in UC—a note of caution for patient-reported outcomes.	Aliment Pharmacol Ther. 2015;42(11-12):1327-1328.
Kim MC, Jung YS, Song YS, et al.	Factors associated with anxiety and depression in Korean patients with inactive inflammatory bowel disease.	Gut Liver. 2016 ;10(3):399-405.
Norton C, Dibley LB, Hart A, et al.	Faecal incontinence intervention study (FINS): self-management booklet information with or without nurse support to improve continence in people with inflammatory bowel disease: study protocol for a randomized controlled trial.	Trials. 2015;16:444.
LeBlanc K, Mosli MH, Parker CE, et al.	The impact of biological interventions for ulcerative colitis on health-related quality of life.	Cochrane Database Syst Rev. 2015;(9):CD008655.
Jairath V, Khanna R, Zou GY, et al.	Development of interim patient-reported outcome measures for the assessment of ulcerative colitis disease activity in clinical trials.	Aliment Pharmacol Ther. 2015;42(10):1200-1210.
Jharap B, Sandborn WJ, Reinisch W, et al.	Randomised clinical study: discrepancies between patient-reported outcomes and endoscopic appearance in moderate to severe ulcerative colitis.	Aliment Pharmacol Ther. 2015;42(9):1082-1092.
Peyrin-Biroulet L, Sandborn W, Sands BE, et al.	Selecting Therapeutic Targets in Inflammatory Bowel Disease (STRIDE): determining therapeutic goals for treat-to-target.	Am J Gastroenterol. 2015;110(9):1324-1338.

DeFilippis EM, Tabani S, Warren RU, et al.	Exercise and self-reported limitations in patients with inflammatory bowel disease.	Dig Dis Sci. 2016;61(1):215-220.
Leso V, Ricciardi W, Iavicoli I.	Occupational risk factors in inflammatory bowel disease.	Eur Rev Med Pharmacol Sci. 2015;19(15):2838-2851.
Trindade IA, Ferreira C, Pinto-Gouveia J.	Ulcerative colitis symptomatology and depression: the exacerbator role of maladaptive psychological processes.	Dig Dis Sci. 2015;60(12):3756-3763.
Peyrin-Biroulet L, Panes J, Sandborn WJ, et al.	Defining disease severity in inflammatory bowel diseases: current and future directions.	Clin Gastroenterol Hepatol. 2016;14(3):348-354.e17.
Steinhart AH, Fernandes A.	Clinical practice guidelines for the medical management of nonhospitalized ulcerative colitis: the patient perspective.	Can J Gastroenterol Hepatol. 2015;29(6):294-296.
Siegel CA, Lofland JH, Naim A, et al.	Novel statistical approach to determine inflammatory bowel disease: patients' perspectives on shared decision making.	Patient. 2016;9(1):79-89.
Theede K, Kiszka-Kanowitz M, Nordgaard-Lassen I, et al.	The impact of endoscopic inflammation and mucosal healing on health-related quality of life in ulcerative colitis patients.	J Crohns Colitis. 2015;9(8):625-632.
Multone E, Vader JP, Mottet C, et al.	Characteristics of non-responders to self-reported questionnaires in a large inflammatory bowel disease cohort study.	Scand J Gastroenterol. 2015;50(11):1348-1356.
Zheng K, Zhang S, Wang C, et al.	Health-related quality of life in Chinese patients with mild and moderately active ulcerative colitis.	PLoS One. 2015;10(4):e0124211.
Hindryckx P, Baert F, Hart A, et al.	Clinical trials in ulcerative colitis: a historical perspective.	J Crohns Colitis. 2015;9(7):580-588.
Matsumoto T, Yanai S, Toya Y, et al.	Internet-orientated assessment of QOL and actual treatment status in Japanese patients with inflammatory bowel disease: the 3I survey.	J Crohns Colitis. 2015;9(6):477-482.
Cross RK, Jambaulikar G, Langenberg P, et al.	TELEmedicine for Patients with Inflammatory Bowel Disease (TELE-IBD): design and implementation of randomized clinical trial.	Contemp Clin Trials. 2015;42:132-144.
Kawalec P, Malinowski KP.	Indirect health costs in ulcerative colitis and Crohn's disease: a systematic review and meta-analysis.	Expert Rev Pharmacoecon Outcomes Res. 2015;15(2):253-266.
Alrubaiy L, Rikaby I, Dodds P, et al.	Systematic review of health-related quality of life measures for inflammatory bowel disease.	J Crohns Colitis. 2015;9(3):284-292.
van der Have M, Fidder HH, Leenders M, et al.	Self-reported disability in patients with inflammatory bowel disease largely determined by disease activity and illness perceptions.	Inflamm Bowel Dis. 2015;21(2):369-377.
Huppertz-Hauss G, Hoivik ML,	Health-related quality of life in inflammatory bowel disease	Inflamm Bowel Dis. 2015;21(2):337-

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Tabibian A, Tabibian JH, Beckman LJ, et al.	Predictors of health-related quality of life and adherence in Crohn's disease and ulcerative colitis: implications for clinical management.	Dig Dis Sci. 2015;60(5):1366-1374.
Raczkowska A, Lawinski M, Gradowska A, et al.	Quality of life considering patients with chronic inflammatory bowel diseases - natural and parenteral nutrition.	Pol Przegl Chir. 2014;86(9):410-417.
Dias CC, Rodrigues PP, da Costa-Pereira A, et al.	Clinical predictors of colectomy in patients with ulcerative colitis: systematic review and meta-analysis of cohort studies.	J Crohns Colitis. 2015;9(2):156-163.
Alrubaiy L, Cheung WY, Dodds P, et al.	Development of a short questionnaire to assess the quality of life in Crohn's disease and ulcerative colitis.	J Crohns Colitis. 2015;9(1):66-76.
Sales-Campos H, Basso PJ, Alves VB, et al.	Classical and recent advances in the treatment of inflammatory bowel diseases.	Braz J Med Biol Res. 2015;48(2):96-107.
Aguas Peris M, Del Hoyo J, Bebia P, et al.	Telemedicine in inflammatory bowel disease: opportunities and approaches.	Inflamm Bowel Dis. 2015;21(2):392-399.
Xu J, Lin H, Feng X, et al.	Different therapeutic approaches on quality of life in patients with inflammatory bowel disease.	BMC Gastroenterol. 2014;14:199.
Magalhaes J, Castro FD, Carvalho PB, et al.	Quality of life in patients with inflammatory bowel disease: importance of clinical, demographic and psychosocial factors.	Arq Gastroenterol. 2014 ;51(3):192-197.
Horst S, Chao A, Rosen M, et al.	Treatment with immunosuppressive therapy may improve depressive symptoms in patients with inflammatory bowel disease.	Dig Dis Sci. 2015;60(2):465-470.
Varni JW, Bendo CB, Nurko S, et al.	Health-related quality of life in pediatric patients with functional and organic gastrointestinal diseases.	J Pediatr. 2015;166(1):85-90.
Busch K, Sonnenberg A, Bansback N.	Impact of inflammatory bowel disease on disability.	Curr Gastroenterol Rep. 2014;16(10):414.
Feuerstein JD, Cheifetz AS.	Ulcerative colitis: epidemiology, diagnosis, and management.	Mayo Clin Proc. 2014;89(11):1553-1563.
Yarlas A, Yen L, Hodgkins P.	The relationship among multiple patient-reported outcomes measures for patients with ulcerative colitis receiving treatment with MMX [®] formulated delayed-release mesalamine.	Qual Life Res. 2015;24(3):671-683.
Pellino G, Sciaudone G,	Fatigue in inflammatory bowel diseases: relationship with	Int J Surg. 2014;12(Suppl 2):S60-

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Agostini A, Moretti M, Calabrese C, et al.	Attachment and quality of life in patients with inflammatory bowel disease.	Int J Colorectal Dis. 2014;29(10):1291-1296.
Busch K, da Silva SA, Holton M, et al.	Sick leave and disability pension in inflammatory bowel disease: a systematic review.	J Crohns Colitis. 2014;8(11):1362-1377.
Bezzio C, Furfaro F, de Franchis R, et al.	Ulcerative colitis: current pharmacotherapy and future directions.	Expert Opin Pharmacother. 2014;15(12):1659-1670.
Hueppe A, Langbrandtner J, Raspe H.	Inviting patients with inflammatory bowel disease to active involvement in their own care: a randomized controlled trial.	Inflamm Bowel Dis. 2014;20(6):1057-1069.
Panes J, O'Connor M, Peyrin-Biroulet L, et al.	Improving quality of care in inflammatory bowel disease: what changes can be made today?	J Crohns Colitis. 2014;8(9):919-926.
Yoo S, Jung YS, Park JH, et al.	Fatigue severity and factors associated with high fatigue levels in Korean patients with inflammatory bowel disease.	Gut Liver. 2014;8(2):148-153.
Pica R, Cassieri C, Pronio AM, et al.	Quality of life in ulcerative colitis patients treated medically versus patients undergoing surgery.	Eur Rev Med Pharmacol Sci. 2014;18(5):693-698.
Leong RW, Huang T, Ko Y, et al.	Prospective validation study of the International Classification of Functioning, Disability and Health Score in Crohn's disease and ulcerative colitis.	J Crohns Colitis. 2014;8(10):1237-1245.
Lönnfors S, Vermeire S, Greco M, et al.	IBD and health-related quality of life—discovering the true impact.	J Crohns Colitis. 2014;8(10):1281-1286.
O'Connor A, Moss AC.	Current and emerging maintenance therapies for ulcerative colitis.	Expert Rev Gastroenterol Hepatol. 2014;8(4):359-368.
Casellas F, Vicens DG, Menendez SR, et al.	Patients' perceptions, attitudes, and experiences about the management of mild-to-moderate ulcerative colitis.	J Crohns Colitis. 2014;8(9):1097-1107.
Cohen BL, Zoega H, Shah SA, et al.	Fatigue is highly associated with poor health-related quality of life, disability and depression in newly-diagnosed patients with inflammatory bowel disease, independent of disease activity.	Aliment Pharmacol Ther. 2014;39(8):811-822.
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Supplementary Table S3: Search output for endoscopic targets

Authors	Title	Citation
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Supplementary Table S4: Search output for histological targets

Authors	Title	Details
Lobaton T, De Vos M.	Editorial: infliximab trough levels and histological healing in ulcerative colitis-a step towards personalised biologic therapy.	Aliment Pharmacol Ther. 2018;47(6):855-856.
Michalopoulos G, Vrakas S, Makris K, et al.	Association of sleep quality and mucosal healing in patients with inflammatory bowel disease in clinical remission.	Ann Gastroenterol. 2018;31(2):211-216.
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Saxena AP, Limdi JK, Farraye FA.	Zeroing in on endoscopic and histologic mucosal healing to reduce the risk of colorectal neoplasia in inflammatory bowel disease.	Gastrointest Endosc. 2017;86(6):1012-1014.
Colombel JF, Keir ME, Scherl A, et al.	Discrepancies between patient-reported outcomes, and endoscopic and histological appearance in UC.	Gut. 2017;66(12):2063-2068.
Ponte A, Pinho R, Fernandes S, et al.	Impact of histological and endoscopic remissions on clinical recurrence and recurrence-free time in ulcerative colitis.	Inflamm Bowel Dis. 2017;23(12):2238-2244.
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Supplementary Table S5: Search output for imaging targets

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Supplementary Table S6: Search output for biomarkers

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