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# Update from 2010 (standard operating procedure): protocol for the 2024 British Society of Gastroenterology Guidelines on colorectal surveillance in inflammatory bowel disease

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## ABSTRACT

**Introduction** The evolving landscape of inflammatory bowel disease (IBD) necessitates refining colonoscopic surveillance guidelines. This study outlines methodology adopted by the British Society of Gastroenterology (BSG) Guideline Development Group (GDG) for updating IBD colorectal surveillance guidelines.

**Methods and analysis** The 'Grading of Recommendations, Assessment, Development and Evaluation' (GRADE) approach, as outlined in the GRADE handbook, was employed. Thematic questions were formulated using either the 'patient, intervention, comparison and outcome' format or the 'current state of knowledge, area of interest, potential impact and suggestions from experts in the field' format. The evidence review process included systematic reviews assessed using appropriate appraisal tools. An extensive list of potential outcomes was compiled from literature and expert consultations and then ranked by GDG members. The top outcomes were identified for evidence synthesis in three key areas: utility of surveillance in IBD, quality of bowel preparation and use of advanced imaging techniques in colonoscopy for IBD. Risk thresholding exercises determined specific risk levels for different surveillance strategies and intervals. This approach enabled the GDG to establish precise thresholds for interventions based on relative and absolute risk assessments, directly informing the stratification of surveillance recommendations. Significance of effect sizes (small, moderate, large) will guide the final GRADE assessment of the evidence.

**Ethics and dissemination** Ethics approval is not applicable. By integrating clinical expertise, patient experiences and innovative methodologies like risk thresholding, we aim to deliver actionable recommendations for IBD colorectal surveillance. This protocol, complementing the main guidelines, offers GDGs, clinical trialists and practitioners a framework to inform future research and enhance patient care and outcomes.

### WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Patients with colonic inflammatory bowel disease (IBD) have an elevated risk of dysplasia and colorectal cancer (CRC), though this has decreased over time.

⇒ Limited evidence on surveillance strategies, biomarker use and dysplasia management, along with advancements in endoscopy and personalised care, highlights the need for updated guidelines and further research.

### WHAT THIS STUDY ADDS

⇒ The Grading of Recommendations, Assessment, Development and Evaluation methodology guides the development of IBD surveillance guidelines, focusing on outcome selection and risk thresholds. A diverse expert group ensures a comprehensive and evidence-based approach.

### HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Updated guidelines will provide clear recommendations for dysplasia and CRC surveillance in IBD, potentially influencing policy and standardising resource-efficient strategies.

⇒ The focus on outcome selection and risk thresholds may inform future research and study design, advancing IBD surveillance and treatment.

## INTRODUCTION

Inflammatory bowel disease (IBD), comprising ulcerative colitis (UC), Crohn's disease (CD) and IBD-unclassified (IBD-U), is a chronic and debilitating condition affecting a significant portion of the population worldwide, and its prevalence continues to rise. The worldwide prevalence of IBD increased from an estimated 3.32 million cases in 1990 to 4.90 million cases in 2019, marking a 47.45% increase over this period.[1] One of the major long-term complications of IBD is the increased risk of colorectal cancer (CRC), particularly in patients with long-standing and extensive colonic disease. Dysplasia, a precancerous condition, plays a crucial role in the progression to CRC in most IBD patients. Early detection of CRC and management of dysplasia are essential for improving patient outcomes and reducing the burden of CRC in this vulnerable population.[2]

The British Society of Gastroenterology (BSG) has been at the forefront of providing evidence-based clinical guidelines for the management of various gastrointestinal disorders, including IBD. As medical knowledge and technologies continue to advance, there is an increasing need to revisit and update existing guidelines to ensure that healthcare professionals have access to the most current and accurate recommendations.

In 2010, the BSG published formal guidance on this subject.[3] In 2019, the BSG IBD guidelines provided further concise guidance on this topic (pages 70–71 and Box 11), consolidating the BSG 2010 guidelines with the North American SCENIC 2015 (Surveillance for Colorectal Endoscopic Neoplasia Detection and Management in Inflammatory Bowel Disease Patients: International Consensus Recommendations) guidelines.[3–5] However, it did not initiate new systematic reviews or voting. This guideline, therefore, will represent a formal update of the 2010 guideline while also incorporating updates from the 2019 position. It aims to be co-published alongside the primary BSG 2024 IBD guidelines.[6]

This document serves as a protocol, outlining the technical review methods and a broader set of operating procedures that have been prospectively agreed to develop the updated guidelines. It comprehensively covers the multidisciplinary approaches employed in contemporary clinical practice. The final guideline will feature the official recommendations of the BSG Guideline Development Group (GDG) on aspects of colonoscopic surveillance for IBD patients. It is designed to support patients and professionals across various treatment settings and, as such, will be presented systematically and transparently in accordance with the best international methods guidance. The prospective publication of this document aligns with the high-quality standards being upheld throughout the process.[7]

## METHODS AND ANALYSIS

The production of this guideline adheres to the procedures outlined in the 'Grading of Recommendations, Assessment, Development and Evaluation' (GRADE) approach, as detailed in the GRADE handbook, and supported by the WHO handbook for guideline development.[8 9] These resources provide comprehensive methods for every aspect of the guideline development process. The team will employ the GIN-McMaster guideline development checklist, an 18-point process map, to support each of these steps within a GRADE-compliant guideline development process.[10 11]

### Organisation, planning and training

In July 2023, members of the BSG IBD surveillance GDG held their inaugural meeting. The framework for its development was established, with technical review responsibilities assigned to a team at the Biomedical Evidence Synthesis and Translation research unit at the University of Central Lancashire, Preston (MG, VS), in collaboration with the team at the Translational Gastroenterology Unit, Nuffield Department of Medicine, Oxford (JE, GN). This team will oversee tasks such as searches, table creation and result synthesis. The joint guideline chairs will consist of a content and field expert (JE) and will be accompanied by a lead GRADE methodologist as co-chair (MG), who will have a non-voting role, as per GRADE procedures.[12] Administrative support will be available from both host Higher Education Institutions of the co-chairs, as well as access to a Cochrane expert information specialist arranged through these institutions.

### Guideline development group (GDG) membership

The GDG is composed of members from BSG, including general and specialist endoscopists, gastroenterologists specialising in IBD, a nurse endoscopist, an IBD nurse specialist, specialist gastrointestinal pathologists, an IBD surgeon, a trainee representative, and patient and IBD stakeholder representatives, from across the UK. All members of the GDG will have voting rights within the GDG, while the methodological chair and methodological core team will remain a non-voting members.

GDG members were selected following criteria set by the BSG's Clinical Services and Standards Committee (CSSC), ensuring representation of a wide range of expertise, experience, views and skillsets with appropriate consideration for diversity, equity and inclusion. The planned group was submitted to CSSC for confirmation of meeting BSG criteria prior to the first working group meeting. The guideline development process adheres to the Appraisal of Guidelines for Research and Evaluation II principles of transparency, rigour and inclusion.[13] Furthermore, BSG guidelines are accredited by NICE (National institute for health and care excellence), reflecting adherence to these high standards. The selection process was based on the CSSC criteria to ensure decisions were made through a structured approach, rather than solely by the chair.

All members of the team will be invited to be co-authors of the full guideline. They will be committed to maintaining the confidentiality of open discussions and

debates within the guideline process, as well as the confidentiality of the guideline's content before publication. Conflict of interest declarations were required from all members and will be reviewed throughout the process to maintain transparency and prevent bias.

### Guideline development group (GDG priority setting and identifying target audience

A key consideration involves prioritising stakeholders' perspectives concerning specific clinical or patient factors. To address this, the GDG members have been selected with significant national and international expertise in developing guidelines within the topic area. The inclusion of patients on the team is essential to ensure a wide range of viewpoints are represented. Patient perspectives and preferences play a central role in guideline development. The updated guidelines will prioritise patient-centred care, considering the individual needs, values and expectations of IBD patients in dysplasia surveillance decisions.

The team convened in July 2023, using previous guidelines as a foundation to identify broad thematic questions. The starting list of questions covered under six broad themes are detailed in online supplemental file 1. A final consensus list of thematic questions will be agreed on before the technical review phase. This process will refine the questions into the PICO format, which will guide the review of relevant trials and observational data as described below. For certain questions that do not align with this format, we will use the Current state of knowledge, Area of interest, Potential impact and suggestion from experts in the field (CAPS) formulation to transition from justification-based PICO questions to more descriptive or clarification questions.[14]

It is important to note that the PICOs and CAPS presented in the online supplemental file 1 are not final. They represent the initial framework developed primarily from the statements and questions in the BSG 2010 guidelines and the SCENIC 2015 statement that will be further developed and refined during the guideline development process, allowing for the inclusion of new evidence and additional areas of interest.[3 4] The GDG remains flexible throughout the process to ensure comprehensive coverage of all relevant issues.

### Stages of process

The following fundamental procedures will govern the main stages of the guideline development:

- The prospective publishing of a guideline protocol and technical summary protocol in an open access journal (this manuscript).
- Prospective agreement of thresholds for risk and methods for stratifying these risk categories, prior to production of technical review output.[15 16]
- The completion of a detailed, methodologically rigorous technical review which will include GRADE summary of findings for all outcomes and preparation of evidence to decision (ETD) frameworks for PICO questions to support the GDG decision-making, as well as detailed narrative evidence summaries for other questions.[17]
- A face-to-face summit of the GDG to discuss the evidence within the ETD and summaries. This will be followed by anonymous voting and further discussion to reach a consensus on items with disagreements.
- The publication of a concise main guideline that summarises key recommendations, the certainty of underpinning evidence and the strength of the recommendations, all within the main published journal output.
- An accompanying patient and public focused decision-making aid version of the guideline to support practical and autonomous coproduction of treatment plans.

This series of outputs offers systematic, high quality and high utility output for all our audiences.

### Patient, intervention, comparison and outcome (PICO) question generation

The generation of questions will be guided by the GRADE guidelines.[18]

Key areas of focus for refinement of all PICO questions will be considered by the GDG. These core elements of refinement around PICO questions and their specific application will be presented in draft form to the GDG and all feedback considered, with the final list below:

- Multiple intervention arms will be considered. To allow consideration of non-placebo comparators and standard therapies, network meta-analysis will be deployed in key targeted areas, as decided by the GDG and when sufficient volume of similar studies exist. Subgroup analyses will be performed for outcome measures in the case of different comparator groups, given that heterogeneity and sufficient volume of studies exists. This is expected to be limited within the scope of the guideline.
- Any context of surveillance with patients suffering from either ulcerative colitis, colonic Crohn's disease or IBD-unclassified will be considered. Patients with microscopic colitis and isolated small bowel Crohn's disease will not be included.

### Threshold and risk stratification prospective agreement

In addressing the thematic focus on factors influencing surveillance decisions in IBD, we synthesised evidence to support risk stratification and to inform targeted surveillance recommendations. The GDG adopted a structured approach, combining published guidelines with the collective expertise of its members to establish consensus and set appropriate thresholds.[19]

#### Risk stratification methodology

The GDG employed online questionnaires (JotForm) to determine the risk thresholds for CRC in IBD patients compared with the general population. These thresholds define the risk levels at which surveillance becomes

**Table 1** Risk thresholding for surveillance frequency categorisation

| | Small mean (SD) | Moderate mean (SD) | Large mean (SD) |
|---|---|---|---|
| **Risk threshold points at which the transition occurs from trivial to small risk, small to moderate risk and moderate to large risk for patients who have entered the surveillance pathway with colonoscopy** | | | |
| **Relative risk** | 1.7 (0.5) | 3 (1.3) | 5.2 (3.1) |
| **Absolute risk** | 3.6% (2.9) | 6.9% (4.4) | 14.4 (9.1) |

necessary.[20] Based on relative and absolute risks, the GDG suggested frequency intervals for surveillance, categorising patients into low, medium and high-risk groups for developing IBD-associated advanced colorectal neoplasia.

### Outcome selection and ranking

An extensive list of potential outcomes was compiled from the literature and expert consultations. GDG members ranked their top seven outcomes in order of importance. These rankings were used to calculate a cumulative score to identify the most critical outcomes for evidence synthesis in the following thematic areas:

1. Utility of surveillance in IBD.
2. Quality of bowel preparation in IBD colonoscopy.
3. Use of advanced imaging techniques in colonoscopy for IBD.

### Risk thresholding and effect size determination

Additional risk thresholding exercises were conducted focusing on colonoscopic modalities and the quality of bowel preparation. These exercises were designed to determine the significance of effect sizes (small, moderate, large) as perceived by GDG members, based on randomised controlled trial (RCT) data. This process is essential for the final GRADE assessment of the evidence.

The GDG established an average relative risk (RR) of 1.5 (SD 0.4) for CRC in IBD compared with the general population as a criterion for considering colonoscopic surveillance. The outcomes selected, along with results from the risk thresholding, are detailed in tables 1 and 2 and box 1. Additional information, including response rates and median and IQR values for each question, is provided in the online supplemental file 2.

The risk thresholding exercise was conducted anonymously among GDG members; however, members were not required to vote and were recommended to voted only on areas where they felt comfortable that they had sufficient expertise to contribute. The results, presented in the online supplemental file 2, revealed variability

**Table 2** Outcomes and risk thresholds for quality of bowel preparation and use of colonoscopic modalities (advanced imaging techniques) in IBD

| | Small mean (SD) | Moderate mean (SD) | Large mean (SD) |
|---|---|---|---|
| Quality of bowel preparation | | | |
| Preparation quality (using validated scores) | 6.7% (3) | 12.7% (7.7) | 23.5% (14.7) |
| Adenoma/polyp detection rates | 3.9% (2.8) | 7.2% (4.4) | 12.3% (7.5) |
| Patient tolerability to take/complete the bowel prep | 5.6% (2.9) | 11.2% (7.4) | 18.8% (11.6) |
| Patients with serious adverse events only | 2.4% (1.3) | 4% (2.8) | 6.4% (5.2) |
| Caecal intubation rates | 3.5% (1.5) | 6.9% (3.6) | 10.8% (5.4) |
| Patient acceptability/willingness to repeat | 4.9% (2.8) | 10.7% (7.2) | 17.4% (11.4) |
| Patient withdrawals due to adverse events | 3.6% (2.5) | 5.1% (3.2) | 9.3% (8) |
| Colonoscopic modalities (advanced imaging techniques) in IBD | | | |
| Detection of dysplastic lesions (as per Vienna classification: indefinite for dysplasia, low-grade dysplasia, high-grade dysplasia or invasive neoplasia at histological examination) | 3.3% (2.4) | 5.8% (3) | 11.2% (7.1) |
| Yield of any dysplasia from targeted biopsies (per patient) | 3.4% (2.9) | 6.7% (5) | 10.9% (7.5) |
| Yield of any dysplasia from random biopsies (per patient) | 3.5% (4.8) | 6.2% (7.2) | 10% (10.2) |
| Patients with serious adverse events | 2.6% (2.5) | 5.1% (4.7) | 8.4% (7.1) |
| Detection of any lesions in patients (neoplastic lesions detected, that is, dysplastic+serrated and/or non-neoplastic-endoscopic findings with no evidence of dysplasia or invasive neoplasia at histology) | 4.1% (2.2) | 7.9% (4.4) | 15.1% (12.4) |
| Patient acceptability/willingness to repeat | 3.7% (2.4) | 6.1% (4.9) | 9.6% (7.5) |
| Patient withdrawals due to adverse events | 3.1% (2.5) | 5.5% (4.8) | 8.6% (7.4) |

IBD, inflammatory bowel disease.

**Box 1 Outcomes selected for utility of colonoscopic surveillance in inflammatory bowel disease**

Colorectal cancer (CRC) detection
Death/survival related to CRC
Tumour stage (early/late) detection of CRC
Patients with serious adverse events only
Rates of missed CRCs
Rates of colectomy/surgical resections
Adherence to surveillance by healthcare professional

in responses, as indicated by wide SD in some areas—a reflection of the diverse clinical practices represented. While this is a limitation, it also marks progress in standardising risk assessment. Achieving tighter confidence intervals may require a larger group of international experts and stakeholders, a goal for potential future collaborations beyond the current guideline update.

This approach ensures that the synthesis of evidence does not lead to biased decision-making based on the strength or magnitude of the results. Instead, the evidence will be interpreted within the context of the a priori framework.

This approach is innovative for such a guideline but is built on the method used to establish thresholds within GRADE guidelines.[15]

## Evidence selection

### Types of studies

We will include all published, unpublished and ongoing RCTs that compare interventions with other active interventions, standard therapy, placebo or no therapy. Studies that do not report any of the outcome measures of interest will be excluded. In the case of diagnostic test accuracy questions or epidemiological questions we will also consider observational studies.

### Types of participants

Adult patients >18 years of age with a diagnosis of either ulcerative colitis, colonic Crohn's disease, or IBD-unclassified defined by conventional clinical, endoscopic and histologic criteria who would be considered eligible for surveillance, based solely on the duration and extent of disease.

### Types of outcome measures

Both dichotomous and continuous outcomes will be considered, as per the appropriate questions.

## Search methods for identification of studies

### Electronic searches

We will use a search strategy designed and checked by an information specialist with Cochrane expertise (online supplemental file 3)

We will search: the Cochrane Central Register of Controlled Trials (CENTRAL) (via Ovid EBMR) (inception to present); MEDLINE (via Ovid) (1946 to present); Embase (via Ovid) (1974 to present); PsycINFO (via Ovid) (1987 to present); AMED (via Ovid) (Allied and Complementary Medicine) (1985 to present); and CINAHL (via EBSCO) (Cumulative Index to Nursing and Allied Health Literature) (1984 to present).

We will place no restrictions on language of publication.

Searches will be produced for each of the specific PICO and non-PICO/CAPS-based questions to appropriately include studies.

A three-phase approach will be employed for searching for studies.

1. Systematic reviews will be included. Potential will be assessed using the Assessment of Multiple Systematic Reviews (AMSTAR 2) tool.[21] When multiple reviews are found on the same topic, the highest rated review will be included. Assessors in pairs will determine if the AMSTAR rated reviews are of sufficient quality to be included, with consensus on ratings reached by a third assessor. If these studies are not up to date (completed within the last 18 months) or if any additional studies are identified in the broader search or from rejected systematic reviews, they will be incorporated, and the meta-analysis will be rerun to update the results. In cases where risk of bias or GRADE ratings are not included as needed, they will be addressed using the approach mentioned below. Cochrane systematic reviews will be given priority for inclusion, subject to the same conditions of updating analyses to encompass all relevant studies.
2. If appropriate for the question, RCTs that assess the interventions of interest will be included for consideration. Phase 1 studies will not be included. Only randomised trials will be included; quasi-randomised or non-randomised studies will not be considered. These studies will be extracted and analysed in accordance with the methods outlined below and, when applicable, combined with the systematic reviews mentioned earlier. Quality assessment of all RCTs will be conducted using the risk of bias tool.
3. If appropriate for the question, other observational study designs will be considered. These will be assessed using the Risk Of Bias In Non-randomised Studies - of Interventions tool for risk of bias or diagnostic test accuracy using the Quality Assessment of Diagnostic Accuracy Studies (QUADAS-2) tool.[22 23]

## Data collection and analysis

We will carry out data collection and analysis according to the methods recommended in the Cochrane Handbook for Systematic Reviews of Interventions.[24]

## Selection of studies

Two or more authors will independently review the titles and abstracts identified through the literature search, excluding studies that, based on their titles and abstracts, are not relevant. All reviews will be conducted in duplicate independently, and any disagreements will be resolved through consensus with a third author. Full reports of studies deemed potentially eligible will be obtained.

These reviewers will independently assess the full texts for inclusion in the review, and any disagreements will again be resolved through discussion with a third author. We will document the studies excluded at this or subsequent stages, along with the primary reason for their exclusion.

In cases where there are multiple publications for a given study, we will compile the reports of the same study.

### Data extraction and management

Authors will independently perform data extraction using piloted data extraction forms. We will extract the following data from the included studies:

- Study setting: country and number of trial centres.
- Methods: study design, total study duration and date.
- Participant characteristics: age, sociodemographics, ethnicity, diagnostic criteria and total number of participants.
- Eligibility criteria: inclusion and exclusion criteria.
- Intervention and comparator.
- Outcomes: outcome definition, unit of measurement and time of collection.
- Results: number of participants allocated to each group, missing participants and sample size.
- Funding source.

### Assessment of risk of bias in included studies

Risk of bias in the included RCT studies will be independently assessed by two or more authors, based on the criteria outlined in the Cochrane Handbook for Systematic Reviews of Interventions.[24] Where feasible, we will contact lead authors of included studies to determine the true risk of bias.

We will assess the following 'risk of bias' domains:

- Sequence generation (selection bias).
- Allocation concealment (selection bias).
- Blinding of participants and personnel (performance bias).
- Blinding of outcome assessment (detection bias).
- Incomplete outcome data (attrition bias).
- Selective reporting (reporting bias).
- Other biases such as imbalance in participants' baseline characteristics.

The studies will be judged to be at low, high or unclear risk of bias for each domain assessed, based on the guidance in the Cochrane Handbook for Systematic Reviews of Interventions.[24]

After data extraction, the review authors will compare the extracted data, discussing and resolving any discrepancies before transfer of data into the 'Characteristics of included studies tables.

For diagnostic accuracy studies, the QUADAS tool will be used with the following items considered[25] :

1. Representative spectrum.
2. Acceptable reference standard.
3. Acceptable delay between tests.
4. Partial verification avoided.
5. Differential verification avoided.
6. Incorporation avoided.
7. Index test results blinded.
8. Reference standard results blinded.
9. Relevant clinical information.
10. Uninterpretable results reported.
11. Withdrawals explained.

### Measures of treatment effect

We will express treatment effect as RRs with corresponding 95% CIs for dichotomous outcomes, and mean difference (MD) with 95% CI for continuous outcomes. Where endpoint and change score were both reported, we will use endpoint scores for data analysis. However, if the studies assessed the same continuous outcome in different ways, we would estimate the treatment effect using the standardised mean difference (SMD).[24]

### Unit of analysis issues

The unit of analysis will be the participants. In studies comparing more than two intervention groups, we intend to perform multiple pairwise comparisons between all possible pairs of intervention groups. To prevent double counting, we will evenly distribute shared intervention groups among these comparisons. For dichotomous outcomes, we plan to divide both the number of events and the total number of participants. For continuous outcomes, we will only divide the total number of participants, keeping the means and SDs unchanged.

Cross-over studies will be included in quantitative analysis only if data are reported separately for before and after the cross-over, using pre-cross-over data exclusively. We do not anticipate encountering any cluster RCTs; however, if such trials are identified, we will only use their data if the authors have employed appropriate statistical methods to account for the clustering effect. In a sensitivity analysis, we will also exclude cluster RCTs to evaluate their impact on the results.

### Dealing with missing data

In instances of missing data or studies that have not reported data in sufficient detail, we will proactively reach out to study authors. We will make efforts to estimate missing SDs using appropriate statistical tools and calculators available within Review Manager 5 if the studies have reported standard errors (Review Manager 2020). Studies that do not provide measures of variance will be considered at high risk of reporting bias.

### Assessment of heterogeneity

We will assess the included studies to evaluate their homogeneity in terms of participants, intervention, comparator and outcome. To assess statistical heterogeneity, we will use a $\chi^2$ test with a significance level set at $p<0.1$ to indicate the presence of heterogeneity. Inconsistency will be quantified and expressed through the $I^2$ statistic. We will interpret the thresholds as follows:[24]

- 0% to 40%: might not be important.

- 30% to 60%: may represent moderate heterogeneity.
- 50% to 90%; may represent substantial heterogeneity.
- 75% to 100%: considerable heterogeneity.

### Assessment of reporting biases

Most reporting biases can be mitigated using an inclusive search strategy. We intend to explore the possibility of publication bias by employing a funnel plot when we have 10 or more studies available for analysis. The extent of publication bias will be assessed through visual examination of funnel plot asymmetry.

Additionally, we will test funnel plot asymmetry by conducting a linear regression of the intervention effect estimate against its SE, applying weighting based on the inverse of the variance of the intervention effect estimate.[26]

### Data synthesis

To summarise the characteristics of the included studies, we will initially conduct a narrative synthesis encompassing all of them. Subsequently, we will perform a meta-analysis if two or more studies have assessed similar populations, interventions and outcomes. We plan to analyse studies involving children, adults and different sub-intervention types separately.

We will use Review Manager 5 (Review Manager 2020) for our data synthesis. The random-effects model will be used to combine study data. Effect estimates from studies reporting data in a similar manner will be pooled in the meta-analysis. For dichotomous outcomes, we will pool RRs, whereas for continuous outcomes, we will pool MDs or SMDs. These results will be presented alongside 95% CIs.

In cases where conducting a meta-analysis is not feasible, typically due to variations in data reporting, we will provide a narrative summary of the included studies.

### Subgroup analysis and investigation of heterogeneity

If we identify heterogeneity, we will investigate possible causes and address them using the methods described in the Cochrane Handbook for Systematic Reviews of Interventions.[24] We plan to undertake subgroup analyses of potential effect modifiers if sufficient data were available.

### Sensitivity analysis

We plan to conduct a sensitivity analysis focused on the primary outcome of treatment success to assess the robustness of our review findings concerning decisions made during the review process. This analysis will involve excluding studies with a high or unclear risk of bias from our analyses. In instances where data analyses include studies with both reported and estimated SDs, we will exclude studies with estimated SDs to examine the impact on our review's findings. Furthermore, we will explore whether the choice of model (fixed-effect vs random-effects) influences the results. In cases of unexplained heterogeneity, we will perform a targeted investigation of key factors within any outlier studies to better understand and potentially define the source of this heterogeneity.

### Summary of findings and assessment of the certainty of the evidence

We will present our primary outcomes results in 'Summary of findings' tables for all forms of studies. For PICO questions, we will export to GRADEpro GDT software for quality assessment (GRADEpro GDT).[27] Based on risk of bias, inconsistency, imprecision, indirectness and publication bias, we will grade the quality of the evidence for each outcome as high, moderate, low or very low. This will use the targeted and outcome specific thresholds to support imprecision judgements. These ratings have been defined as follows:

- High: further research is very unlikely to change our confidence in the estimate of effect.
- Moderate: further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
- Low: further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
- Very low: any estimate of effect is very uncertain.

We will justify all decisions to downgrade the quality of studies using footnotes and make comments to aid the reader's understanding of the review where necessary.

### Thresholds of treatment effect

When comparing two interventions or approaches, all RRs will be supplemented with absolute risk difference and appropriate confidence intervals of absolute effects. These will be categorised according to the thresholds that have been defined by the GDG to aid interpretation of the clinical significance of the finding.

### Development of recommendations

The complete technical summary will be provided to voting members after conducting an updated search to incorporate any new studies and integrate them into the existing evidence. The data and GRADE summary of findings tables will be incorporated into ETD frameworks,[28] facilitating the consideration of key factors to inform decision-making.

In cases where evidence is limited, we will provide recommendations using the GRADE 'expert evidence approach'.[29] For questions that do not follow the PICO format but are descriptive in nature, we will present a narrative summary to support best practice statements or similar formulations.

A face-to-face meeting will be convened to thoroughly discuss, explore and critically evaluate the components of the completed technical review and the ETD frameworks. When clear agreement is reached, recommendations will be prepared, followed by anonymous voting to confirm consensus. In instances of disagreement, the ETD framework will guide the voting process and help identify the underlying reasons for such disagreement. The team will then meet to discuss these findings and endeavour to formulate any relevant consensus recommendations.

Any unresolved disagreements will also be included in the guideline discussion.

Voting will be based on a clear GRADE statement with accompanying justification and implementation statements, along with magnitude and certainty data. The votes will be dichotomous (Yes or No) and must reach 75% agreement to approve the item. If an agreement is not reached, further discussion will be conducted, amendments made, and both the original and amended statements will be voted on sequentially. If neither attains 75%, the discussion will be temporarily halted and resumed later in the day to allow time for reflection. The team will gather and refocus the evidence, followed by another round of discussion.

Good practice and narrative items will be discussed, refined and a broad consensus reached, but formal voting will not be conducted.

The non-voting team will refine these recommendations into a final list, ensuring that the strength of the recommendations aligns with the presented evidence and the views of the GDG, in accordance with GRADE recommendation guidance. The final proposals will be agreed on by consensus, with the strength of agreement, certainty of evidence and strength of recommendations all clearly presented. The synthesised recommendations will be prepared in a guideline that adheres to BSG and journal publication standards. The ETD frameworks will be made available as supplementary material, and the technical evidence will be published in full as accompanying outputs to support the primary guidance.

## Areas of future research

During the development of this guideline, we will identify key areas in need of further research that will facilitate future priority setting partnerships.

## Ethics and dissemination

Ethics approval is not applicable. By integrating clinical expertise, patient experiences and innovative methodologies like risk thresholding, we aim to deliver actionable recommendations for IBD colorectal surveillance. This protocol, complementing the main guidelines, offers GDGs, clinical trialists and practitioners a framework to inform future research and enhance patient care and outcomes.

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PICO/PECO and CAPS for individual questions:

**I. Working group – Epidemiology (Lead - Chris Lamb)**

1. What is the current incidence and prevalence of CRC in inflammatory bowel disease (IBD), population based

**Research question** - In individuals diagnosed with inflammatory bowel disease (IBD), what is the current incidence and prevalence of colorectal cancer (CRC) based on population-based studies?

**Population (P):** Adult patients (18 years or older)
**Exposure (E):** Diagnosis of IBD (ulcerative colitis or colonic Crohn's disease or IBD – unclassified) defined by conventional clinical, endoscopic, and histologic criteria.
**Comparison (C):** A control group of individuals without IBD
**Outcome (O):**

1. **Incidence of CRC:** Assess the rate of new CRC cases diagnosed during surveillance colonoscopy in patients with ulcerative colitis or colonic Crohn's disease. How does the incidence rate compare to the non-IBD population?
2. **CRC related mortality**

**Other considerations to put it in context for the guidelines:**

1. **UK Situation:** Gather and present data specific to the current prevalence and incidence of CRC in patients with IBD undergoing surveillance colonoscopy in the UK.
2. **EDI Patient Characteristics:** Explore whether there are any disparities related to ethnicity, gender, or other social determinants of health (EDI) that may influence CRC prevalence and incidence in this population.
3. **International Data:** Provide a comparative analysis by incorporating international data to offer a broader perspective and identify potential regional variations in CRC rates among IBD patients undergoing surveillance colonoscopy.

2. Does colonoscopic surveillance in IBD prevent death from CRC, or CRC (PICO based on the Cochrane review)

**Research question** - In individuals diagnosed with inflammatory bowel disease (IBD), does colonoscopy surveillance, compared to no surveillance, prevent death from colorectal cancer (CRC) or reduce the incidence of CRC?

**Population (P):** Adult patients aged 18 years or older with a confirmed diagnosis of IBD (ulcerative colitis or colonic Crohn's disease or IBD – unclassified) defined by conventional clinical, endoscopic, and histologic criteria.
**Intervention (I):** Any form of endoscopic surveillance aimed at early detection of CRC in patients with IBD.
**Comparison (C):** A control group of patients with IBD who have not undergone surveillance for CRC.
**Outcome (O): Primary Outcomes:**

1. **Comparative Rates of CRC Diagnosis:** Evaluate and compare the rates of CRC diagnosis between the surveillance group (patients with IBD who underwent surveillance) and the non-surveillance group (patients with IBD who did not undergo surveillance).

**Secondary Outcomes:**

1. **Proportion of Patients Who Died from CRC:** Determine and compare the proportion of patients in both groups who died from CRC.
2. **Tumour Stage (Early or Late):** Assess and compare the tumour stage at the time of CRC diagnosis in both groups according to the TNM staging system.

3: PCCRC in IBD – measurement, reporting and reduction

**Research question** – What is the PCCRC rate in patients undergoing colonoscopy for inflammatory bowel disease?

**Population (P):** All adult patients with IBD
**Exposure (E):** Adult patients with follow up for 6-36 months who had a “clear” index colonoscopy
**Comparison (C):** Adult patients with IBD outcomes at index colonoscopy
**Outcome (O):**
1. PCCRC rate as per World Endoscopy Organization (WEO) methodology
2. Root- cause analysis of PCCRCs in patients with IBD

4: Organisation of an IBD surveillance programme

**Research question**: What should a good IBD surveillance programme look like?

**Current State of Knowledge:** What is the current state of knowledge regarding the organisation of IBD surveillance programs, including patient selection, surveillance modalities, timing, and coordination of care?
**Area of Interest:** What emerging trends, gaps, or novel approaches exist in the organisation of IBD surveillance programs, as identified by recent research and clinical practice?
**Potential Impact:** What potential impact do different organisational strategies for IBD surveillance programs have on patient outcomes, healthcare resource utilization, and the early detection of complications, such as dysplasia or colorectal cancer?
**Suggestions from Experts in the Field:** Based on the collective expertise and recommendations of experts in the field of IBD management and surveillance, what key strategies or considerations should be emphasised in the organisation of IBD surveillance programmes to optimise patient care and outcomes?
**Endoscopist:** Who should be undertaking IBD surveillance. Are there a minimum number of procedures they should undertake per year? What Key Performance Indices should their performance be benchmarked against?

**II. Working group – Risk stratification (Lead – Shahida Din)**

1 & 2: When should surveillance be started and stopped

**Research question** - In adult patients diagnosed with IBD, what are the optimal strategies or criteria for initiating and discontinuing CRC surveillance, and how do these strategies impact CRC incidence, stage at diagnosis, survival rates, complications, quality-adjusted life years (QALYs), cost-effectiveness, and patient preferences and satisfaction?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria
**Intervention (I):** Initiation and continuation of CRC surveillance in IBD patients. This includes determining the appropriate timing to start surveillance and when it should be discontinued.
**Comparison (C):** Comparing different strategies or criteria for initiating and discontinuing surveillance in IBD patients. This may involve comparing age-specific recommendations, disease duration, disease severity, family history, genetic factors, or other relevant criteria.
**Outcome (O):**

1. CRC incidence: Evaluate the incidence of CRC in IBD patients based on different initiation and discontinuation strategies.
2. Stage of CRC at diagnosis: Assess whether the timing of surveillance initiation or discontinuation affects the stage at which CRC is diagnosed.
3. Survival rates: Compare the survival rates of IBD patients with CRC based on different surveillance timing strategies.
4. Defining age limits for commencement and discontinuation of surveillance: Determine if there are upper or lower age limits outside which health benefits do not favour the use of surveillance.
5. Comorbidity: What comorbidity/functional status should influence a decision to start or discontinue surveillance?

Additional outcomes:

1. Complications and adverse events: Evaluate any adverse events or complications related to surveillance procedures.
2. Quality-adjusted life years (QALYs): Assess the impact of different surveillance timing strategies on the quality-adjusted life years gained by IBD patients.
3. Cost-effectiveness: Examine the cost-effectiveness of various initiation and discontinuation strategies, considering healthcare resource utilization and patient outcomes.

4. Patient preferences and satisfaction: Consider the preferences and satisfaction of IBD patients regarding the timing of surveillance initiation and discontinuation.

3: What are the risk factors for colitis associated CRC (multiple)

**Research question** - In adult patients diagnosed with IBD, what are the risk factors associated with the development of colorectal cancer (CRC), and how do these risk factors, including the severity and progression of IBD, family history, duration and extent of inflammation, medication effects, lifestyle and environmental factors, genetic factors, and their interactions, influence the incidence of CACRC?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria
**Intervention (I):** Identification and evaluation of potential risk factors associated with the development of CRC.
**Comparison (C):** Comparing individuals with identified risk factors to those without or assessing the impact of varying levels of exposure to these risk factors.
**Outcome (O):**

1. **Incidence of CRC:** Assess the risk factors' association with the development of CRC and quantify the incidence of CRC in individuals with IBD exposed to these risk factors.

Risk factors to be considered:

1. **Severity and Progression of IBD:** Evaluate whether certain risk factors are associated with more severe or poorly controlled IBD and whether this correlates with an increased risk of CRC.
2. **Family History:** Investigate the impact of a family history of CRC as a risk factor for CACRC development in individuals with IBD.
3. **Duration and Extent of Inflammation:** Examine how the duration and extent of inflammation in the colon and rectum, as influenced by risk factors, affect the risk of CRC.
4. **Lifestyle and Environmental Factors:** Explore how diet, smoking, physical activity, and other lifestyle and environmental factors contribute to the risk of CRC in individuals with IBD.
5. **Genetic Factors:** Investigate the influence of genetic factors and mutations on CRC risk in individuals with IBD.
6. **Interaction of Risk Factors:** Assess whether the combination of multiple risk factors increases the risk of CACRC beyond that of individual factors.

7. **Pathogenesis:** What molecular mechanisms drive neoplasia in IBD and how does this differ to non-IBD dysplasia-malignancy molecular pathways?

3a: Impact of chemoprevention for IBD assessment

**Research question** - In adult patients diagnosed with IBD, what is the impact of chemopreventive agents or strategies on the incidence of CRC, adverse events, quality of life, cost-effectiveness, duration of chemoprevention, and potential subgroup variations, compared to individuals with IBD who do not receive chemopreventive interventions?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria.
**Intervention (I):** The use of chemopreventive agents aimed at reducing the risk of dysplasia or CRC in individuals with IBD.
**Comparison (C):** A control group of individuals with IBD who do not receive chemopreventive interventions
**Outcome (O):**

1. Definition of chemopreventative agents: Determine what medical therapies have chemopreventative properties and what the mechanism of this is (suppression of inflammation vs other)? Is there an adjunctive role of 5ASA if mucosal inflammation is controlled by an advanced therapy? Linked to this, can 5ASA be discontinued if mucosal healing induced with an advanced therapy?
2. Incidence of CRC: Determine and compare the incidence of CRC in individuals with IBD who receive chemopreventive interventions (intervention group) and those who do not (control group).
3. Adverse Events: Assess and compare the occurrence of adverse events or side effects associated with the use of chemopreventive agents or strategies in individuals with IBD.
4. Quality of Life: Evaluate the impact of chemoprevention on the quality of life and well-being of individuals with IBD, including physical, psychological, and social aspects.
5. Duration of Chemoprevention: Examine the duration of chemoprevention required to achieve and maintain a reduction in the risk of dysplasia or CRC in individuals with IBD.
6. Subgroup Analysis: If applicable, conduct subgroup analyses based on factors such as the type of IBD (ulcerative colitis vs. colonic Crohn's disease), age, and disease severity.

4: Who should / should not receive surveillance

**Research question** - In adult patients diagnosed with IBD, what are the criteria or guidelines used to determine which individuals should undergo surveillance for colorectal cancer (CRC), and how do these criteria impact CRC incidence, surveillance adherence, cost-effectiveness, patient outcomes, quality of life, and complications?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria
**Intervention (I):** Identification and evaluation of criteria or guidelines used to determine which individuals with IBD should undergo surveillance for CRC.
**Comparison (C):** Comparing individuals who meet the criteria for surveillance to those who do not or assessing different sets of criteria for surveillance eligibility.
**Outcome (O):**

1. **Colorectal Cancer Incidence:** Evaluate the effectiveness of the criteria in identifying individuals at higher risk of developing CRC and quantify the incidence of CRC in individuals who meet the criteria for surveillance.
2. **Surveillance Adherence:** Assess the adherence of healthcare providers and individuals with IBD to the recommended surveillance criteria.
3. **Cost-Effectiveness:** Analyse the cost-effectiveness of surveillance based on the selected criteria, considering healthcare resource utilization and patient outcomes.
4. **Patient Outcomes:** Evaluate the impact of adherence to surveillance criteria on patient outcomes, including early detection of CRC, stage at diagnosis, and survival rates.
5. **Quality of Life:** Consider the effect of surveillance on the quality of life and psychological well-being of individuals with IBD.
6. **Complications and Adverse Events:** Investigate any adverse events or complications associated with surveillance procedures and whether these risks are justified by the benefits.
7. **Defining age limits for commencement and discontinuation of surveillance:** Determine if there are upper or lower age limits outside which health benefits do not favour the use of surveillance.
8. **Comorbidity:** What comorbidity/functional status should influence a decision to start or discontinue surveillance?

5: Role of biomarkers pre-dysplasia detection to guide surveillance and colectomy risk

**Research question** - In patients with IBD, what is the current state of knowledge and emerging trends in the use of biomarkers for pre-dysplasia detection, surveillance, and assessing colectomy risk, and what potential impact do these biomarkers have on early detection, risk stratification, and clinical decision-making, as well as expert recommendations for prioritising biomarkers and methodologies in these contexts?

**Current State of Knowledge:** What is the current state of knowledge regarding the use of biomarkers in pre-dysplasia detection to guide surveillance and assess colectomy risk in patients with IBD?

**Area of Interest:** What emerging biomarkers, trends, or research findings exist in the context of pre-dysplasia detection, surveillance, and the assessment of colectomy risk in IBD, as highlighted by recent studies and clinical experiences?

**Potential Impact:** What potential impact do biomarkers play in early detection, risk stratification, and clinical decision-making for patients with IBD, particularly in terms of guiding surveillance strategies and determining the necessity of colectomy?

**Suggestions from Experts in the Field:** Drawing from the expertise and insights of experts in the field of IBD and biomarker research, what key biomarkers, methodologies, or approaches should be prioritised to enhance pre-dysplasia detection, surveillance, and the assessment of colectomy risk in IBD patients, ultimately improving patient outcomes?

Not tackled this in any detail as presume may have been done so already by Ibrahim and Simon but gastroenterologists will be keen to know the evidence/lack of evidence around use of FIT here.

**III. Working group – Colonoscopy (Lead – Ana Wilson)**

1. Bowel prep for IBD colonoscopy

**Research question:** In adult patients diagnosed with IBD, does the choice of bowel preparation method or strategy impact preparation quality, repeatability of endoscopy, tolerability, patient experience, and safety, compared to standard bowel preparation practices, when undergoing colonoscopy?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria, who are undergoing colonoscopy.
**Intervention (I):** Evaluation of different types or strategies of bowel preparation used before colonoscopy in individuals with IBD.
**Comparison (C):** Comparing various bowel preparation types or strategies, if there are sufficient studies with distinct methods to support a comparison or assessing the effectiveness of a particular type/strategy against standard bowel preparation practices.
**Outcome (O):**

1. **Preparation Quality:** Assess the effectiveness of bowel preparation in achieving optimal visualisation of the colon to identify dysplasia or cancer during surveillance colonoscopy.
2. **Repeatability of Endoscopy:** Evaluate whether the choice of bowel preparation impacts the ability to perform repeated or follow-up colonoscopies, especially for long-term surveillance in IBD.
3. **Tolerability:** Examine the tolerability of different bowel preparation regimens, including patient comfort and compliance.
4. **Patient Experience:** Investigate the patient experience, satisfaction, and acceptability of various bowel preparation methods or strategies.
5. **Safety:** Assess the safety profile of different bowel preparation approaches, including the occurrence of adverse events or complications.

2 &3 . Use of standard vs high definition colonoscopes & Use of chromoendoscopy (dye or virtual) versus white light or other techniques e.g. Endocuff, FUSE, AFI (network meta-analysis)

**Research question** - In adult patients diagnosed with IBD, what is the relative effectiveness of different colonoscopy modalities (standard vs. high-definition colonoscopes and chromoendoscopy vs. white light or other techniques) for dysplasia detection, serrated lesion detection,

sensitivity and specificity, procedure-related complications, patient experience and tolerability, and cost-effectiveness during surveillance colonoscopy?

**Population (P):** Adult patients diagnosed with IBD (diagnosis of ulcerative colitis or colonic Crohn's disease or IBD - unclassified) defined by conventional clinical, endoscopic, and histologic criteria, who are undergoing colonoscopy.

**Interventions (I) and (C):**

1. **Comparison Group 1 (I1):** Use of standard definition colonoscopes for surveillance.
    - **Comparison Group 2 (I2):** Use of high definition colonoscopes for surveillance.
2. **Comparison Group 3 (I3):** Use of chromoendoscopy (dye-based or virtual) for surveillance.
    - **Comparison Group 4 (I4):** Use of white light endoscopy or other techniques (e.g., Endocuff, FUSE, AFI) for surveillance.

**{NOTE:** SD left in to help make case that HD is now standard of care in IBD; however, we might do a separate analysis looking at HD white light versus other modalities. Working group to decide whether to include devices no longer available e.g. AFI / FUSE – if not to be explicit about leaving out]

**Outcome (O):**

1. **Dysplasia Detection:** Evaluate the effectiveness of each surveillance modality in detecting dysplasia.
2. **Serrated lesions detection**
3. **Sensitivity and Specificity:** Examine the sensitivity and specificity of each modality for detecting dysplaisa.
4. **Procedure-related Complications:** Investigate the occurrence of procedure-related complications or adverse events associated with each surveillance modality.
5. **Patient Experience and Tolerability:** Assess patient experience, satisfaction, and tolerability of the different surveillance techniques, including factors such as discomfort or pain during the procedure.
6. **Cost-effectiveness:** Analyse the cost-effectiveness of each modality, considering the resources required for surveillance and potential savings from early neoplasia detection.

**IV. Working group – Pathology (Lead – Adrian Bateman)**

1. Use of non-targeted biopsies to detect invisible or non-conventional dysplasia
   - What is the role of biopsies around suspicious lesions?

**Research question** - In the context of IBD surveillance, what is use of non-targeted biopsies for identifying invisible or unconventional dysplasia, and what is the potential impact of incorporating non-targeted biopsies on improving the sensitivity and specificity of dysplasia detection, clinical decision-making, and patient outcomes? NOTE: this should include taking biopsies around detected suspected neoplastic lesions

**Current State of Knowledge:** What is the current state of knowledge regarding the utilisation of non-targeted biopsies for the detection of invisible or non-conventional dysplasia in the context of inflammatory bowel disease (IBD) surveillance?
**Area of Interest:** What recent developments, emerging techniques, or novel approaches exist in the use of non-targeted biopsies for identifying invisible or unconventional dysplasia in IBD patients, as highlighted by recent research and clinical experiences?
**Potential Impact:** What potential impact does the incorporation of non-targeted biopsies have on improving the sensitivity and specificity of dysplasia detection in IBD surveillance, and how does it influence clinical decision-making and patient outcomes?
**Suggestions from Experts in the Field:** Based on the collective expertise and recommendations of experts in the field of IBD surveillance and pathology, what key considerations, methodologies, or advancements should be emphasised when implementing non-targeted biopsies to enhance the detection of invisible or unconventional dysplasia in IBD patients?

2. What is the role of serrated lesions and serrated epithelial change?

**Research question** - In the context of IBD and colorectal cancer risk assessment, what is the role of serrated lesions and serrated epithelial changes, their potential impact on risk assessment, prevention, early detection, clinical management, and patient outcomes?

**Current State of Knowledge:** What is the current state of knowledge regarding the role of serrated lesions and serrated epithelial changes in the context of IBD and colorectal cancer risk?
**Area of Interest:** What emerging findings, recent developments, or evolving perspectives exist in our understanding of serrated lesions and serrated epithelial changes, as highlighted by contemporary research, clinical observations, and advancements in diagnostic techniques?

**Potential Impact:** What potential impact do serrated lesions and serrated epithelial changes have on colorectal cancer risk assessment, prevention, early detection, and clinical management, and how can this knowledge enhance patient outcomes?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in gastrointestinal pathology, oncology, and related fields, what key considerations, diagnostic criteria, and research directions should be emphasised to further elucidate the role of serrated lesions and serrated epithelial changes in clinical practice and research?

3. Role of non-conventional dysplasia / Harpaz classification

Research question - In the context of IBD, what is the role of identification, clinical significance, and management of non-conventional dysplasia, and how does this recognition impact clinical decision-making, patient outcomes, and the development of more effective management strategies for IBD?
**Current State of Knowledge:** What is the current state of knowledge regarding the role of non-conventional dysplasia in IBD, including its identification, clinical significance, and management strategies?
**Area of Interest:** What recent research findings, emerging diagnostic methods, or novel insights exist related to non-conventional dysplasia, as highlighted by contemporary studies, clinical experiences, and evolving perspectives?
**Potential Impact:** What potential impact does the recognition and understanding of non-conventional dysplasia have on clinical decision-making, patient outcomes, and the development of more effective management strategies for IBD?
**Suggestions from Experts in the Field:** Based on the collective expertise and recommendations of experts , what key considerations, diagnostic criteria, and research avenues should be prioritised to enhance our understanding and management of non-conventional dysplasia in clinical practice?

**V. Working group – Surveillance (Lead – Misha Kabir)**

**1. Management of dysplasia:**

**1a) Endoscopic**

**1b) Recommendation for consideration of colectomy**

**Research question -** In individuals with IBD, what is management of dysplasia, including endoscopic approaches (1a) and recommendations for consideration of colectomy (1b), their potential impact on patient outcomes?

**Current State of Knowledge:** What is the current state of knowledge regarding the management of dysplasia in individuals with IBD, including the available treatment modalities, surveillance strategies, and outcomes?
**Area of Interest:** What recent advances, evolving treatment approaches, or novel insights exist in the management of dysplasia in IBD, as highlighted by contemporary research, clinical experiences, and advancements in therapeutic options?
**Potential Impact:** What potential impact does the optimisation of dysplasia management in IBD have on patient outcomes, including the prevention of colorectal cancer, improved quality of life, and reduction of complications?
**Suggestions from Experts in the Field:** Drawing from the expertise and recommendations of experts in the field of IBD, gastroenterology, and colorectal surgery, what key considerations, treatment algorithms, and research directions should be emphasised to enhance the management of dysplasia in individuals with IBD?

**2. Role of biomarkers post-dysplasia detection to guide surveillance and colectomy risk**

**Research question -** In individuals with IBD who have had dysplasia detected, what is the use of biomarkers to guide post-dysplasia surveillance, assess colectomy risk, and inform clinical decision-making?

**Current State of Knowledge:** What is the current state of knowledge regarding the utilisation of biomarkers post-dysplasia detection to guide surveillance and assess colectomy risk in individuals with IBD?
**Area of Interest:** What emerging trends, recent advancements, or evolving strategies exist in the use of biomarkers after dysplasia detection in IBD patients, as highlighted by contemporary research, clinical experiences, and developments in biomarker technology?

**Potential Impact:** What potential impact do biomarkers play in post-dysplasia surveillance, risk stratification for colectomy, and clinical decision-making, and how can their implementation influence patient outcomes and the prevention of colorectal cancer in IBD?
**Suggestions from Experts in the Field:** Based on the expertise and insights of experts in IBD, biomarker research, and gastroenterology, what key biomarkers, methodologies, or approaches should be emphasised in post-dysplasia surveillance and colectomy risk assessment for individuals with IBD?

**3. Follow up after dysplasia: Low grade or High grade**

**Research Question -** In individuals with IBD who have been diagnosed with dysplasia, whether low grade or high grade, what is potential impact of various follow-up strategies on patient outcomes, including colorectal cancer prevention, timely intervention, and quality of life improvement?

**Current State of Knowledge:** What is the current state of knowledge regarding the optimal follow-up strategies after the detection of dysplasia, whether low grade or high grade, in individuals with IBD?
**Area of Interest:** What recent research findings, evolving clinical guidelines, or emerging approaches exist in the follow-up care for individuals with IBD who have been diagnosed with low-grade or high-grade dysplasia, as highlighted by contemporary studies, clinical experiences, and advancements in surveillance techniques?
**Potential Impact:** What potential impact do different follow-up strategies have on patient outcomes, including the prevention of colorectal cancer, timely intervention, and improvement in quality of life for individuals with IBD who have dysplasia?
**Suggestions from Experts in the Field:** Based on the expertise and insights of experts in IBD, gastroenterology, and colorectal surgery, what key considerations, follow-up algorithms, and research directions should be emphasised to optimise the follow-up care for individuals with IBD who have been diagnosed with dysplasia, whether low grade or high grade?

**4. Follow up after dysplasia polypoid vs non-polypoid vs invisible**

**Research Question –** In individuals with IBD who have been diagnosed with dysplasia in various forms (polypoid, non-polypoid, invisible), what is the potential impact of different follow-up strategies on patient outcomes, including colorectal cancer prevention, timely intervention, and quality of life improvement?

**Current State of Knowledge:** What is the current state of knowledge regarding the optimal follow-up strategies after the detection of dysplasia in different forms (polypoid, non-polypoid, invisible) in individuals with IBD?

**Area of Interest:** What recent research findings, evolving clinical guidelines, or emerging approaches exist in the follow-up care for individuals with IBD who have been diagnosed with dysplasia in various forms, including polypoid, non-polypoid, and invisible dysplasia, as highlighted by contemporary studies, clinical experiences, and advancements in surveillance techniques?
**Potential Impact:** What potential impact do different follow-up strategies have on patient outcomes, including the prevention of colorectal cancer, timely intervention, and the improvement in the quality of life for individuals with IBD who have dysplasia in diverse forms?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in IBD, gastroenterology, pathology, and colorectal surgery, what key considerations, follow-up algorithms, and research directions should be emphasised to optimise the follow-up care for individuals with IBD who have been diagnosed with dysplasia, whether it's polypoid, non-polypoid, or invisible?

**5. Surveillance pouch* / surveillance retained rectum / retained colon**

**Research question –** In individuals who have undergone pouch surgery or retained rectum surgery as part of their treatment for IBD, what is potential impact of different surveillance strategies on patient outcomes, including early detection of complications, prevention of pouchitis or proctitis, and overall improvement in the quality of life?

**Current State of Knowledge:** What is the current state of knowledge regarding the optimal surveillance strategies for individuals who have undergone pouch surgery or retained rectum surgery as part of their treatment for IBD?
**Area of Interest:** What recent research findings, evolving clinical guidelines, or emerging surveillance approaches exist for monitoring individuals with pouches or retained rectums following surgical interventions for IBD, as highlighted by contemporary studies, clinical experiences, and advancements in surveillance techniques?
**Potential Impact:** What potential impact do different surveillance strategies have on patient outcomes, including the early detection of complications, prevention of pouchitis or proctitis, and the overall improvement in the quality of life for individuals with pouches or retained rectums?
**Suggestions from Experts in the Field:** Based on the expertise and insights of experts in IBD, colorectal surgery, and gastroenterology, what key considerations, surveillance protocols, and research directions should be emphasised to optimise the monitoring and care of individuals with pouches or retained rectums following surgical interventions for IBD?

**VI. Working group – Training, EDI, Sustainability (Lead – Marietta Iacucci)**

**1. Quality in IBD colonoscopy and KPIs**

**Current State of Knowledge:** What is the current state of knowledge regarding the assessment and enhancement of the quality of colonoscopy procedures specifically designed for individuals with IBD?
**Area of Interest:** What recent research findings, clinical guidelines, or innovative approaches exist for measuring and improving the quality of IBD colonoscopy, particularly through the development and utilisation of key performance indicators (KPIs), as highlighted by contemporary studies, clinical experiences, and advancements in endoscopic techniques?
**Potential Impact:** What potential impact do well-defined KPIs and enhanced quality measures have on the accuracy of diagnosis, surveillance effectiveness, and overall patient outcomes for individuals with IBD undergoing colonoscopy?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in gastroenterology, endoscopy, and quality improvement, what key considerations, KPIs, and research directions should be emphasised to ensure high-quality IBD colonoscopy practices and maximise the benefits for patients?

**2. Training in IBD colonoscopy surveillance**

**Current State of Knowledge:** What is the current state of knowledge regarding the training methods, strategies, and standards for healthcare professionals, particularly gastroenterologists and endoscopists, in IBD colonoscopy surveillance?
**Area of Interest:** What recent developments, innovative approaches, or evolving educational techniques exist for training healthcare professionals in the specialised field of IBD colonoscopy surveillance, as highlighted by contemporary education programs, clinical experiences, and advancements in endoscopic training?
**Potential Impact:** What potential impact does effective training in IBD colonoscopy surveillance have on the quality of care, the accuracy of surveillance, and the prevention of complications, such as dysplasia or colorectal cancer, for individuals with IBD?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in gastroenterology, endoscopy, medical education, and IBD management, what key considerations, training methodologies, and research directions should be emphasized to ensure healthcare professionals are adequately trained in IBD colonoscopy surveillance to benefit patient care?

**3. Sustainability in IBD surveillance endoscopy (green endoscopy)**

**Current State of Knowledge:** What is the current state of knowledge regarding sustainable and environmentally friendly practices, often referred to as "green endoscopy," in the context of IBD surveillance endoscopy?
**Area of Interest:** What recent innovations, emerging technologies, or novel approaches exist for making IBD surveillance endoscopy more sustainable and eco-friendly, as highlighted by contemporary studies, clinical experiences, and environmental impact assessments?
**Potential Impact:** What potential impact do sustainable practices in IBD surveillance endoscopy have on reducing carbon footprints, minimising resource consumption, and contributing to environmentally responsible healthcare delivery, while maintaining the quality of patient care?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in gastroenterology, endoscopy, and environmental sustainability, what key considerations, sustainable strategies, and research directions should be emphasised to promote green endoscopy practices in the context of IBD surveillance?

**4. Extra: Tolerability and quality of endoscopy based on EDI factors, clinical – scope technique, unit factors etc.**

**Current State of Knowledge:** What is the current state of knowledge regarding the impact of various factors, such as health disparities (EDI factors), clinical factors, scope technique, and unit-related factors, on the tolerability and quality of endoscopy procedures?
**Area of Interest:** What recent research findings, clinical insights, or innovative techniques exist for optimising the tolerability and quality of endoscopy, particularly considering the influence of health disparities, clinical variables, scope technique, and unit-specific factors, as highlighted by contemporary studies, patient experiences, and healthcare unit practices?
**Potential Impact:** What potential impact do these factors have on patient experiences, procedural outcomes, and the overall quality of endoscopy procedures, and how can this knowledge be used to enhance patient care and satisfaction while maintaining procedural effectiveness?
**Suggestions from Experts in the Field:** Drawing upon the expertise and insights of experts in gastroenterology, endoscopy, healthcare disparities, and patient experience, what key considerations, strategies, and research directions should be emphasised to optimise the tolerability and quality of endoscopy procedures across diverse patient populations and clinical settings?

**2. Cost effectiveness (not a formal Health Economic review)**

**Research Questions:** What evidence is there that colonoscopic surveillance for inflammatory bowel disease is cost-effective compared to no surveillance?

**Supplementary Material: British Society of Gastroenterology Guidelines On Colorectal Surveillance In Inflammatory Bowel Disease: An Update From 2010 (Standard Operating Procedure)**

**Risk Thresholding and Effect Size Determination**

***CRC risk in IBD compared to general population for considering colonoscopic surveillance***

*Please specify the relative risk level (ranging from 1.01 to infinity) above the general population that you believe should prompt the initiation of colonoscopic surveillance in patients with IBD.*

*Total responses – 16*

Mean – 1.5 (SD - 0.4)
Median – 1.2 (IQR – 1.2-1.6)

***Surveillance Frequency categorisation***

*1. Relative risk cut-offs*

*Please specify the relative risk cut-off (ranging from 1.01 -infinity) that you would consider before concluding that the risk category is changing from trivial-risk (population-based surveillance) to small-risk of developing advanced colorectal neoplasia i.e. triggering 3 yearly surveillance?*

Total responses – 13

Mean – 1.7 (SD – 0.5)
Median – 1.8 (IQR – 1.5-2)

*Please specify the relative risk cut-off (ranging from 1.01 -infinity) that you would consider before concluding that the risk category is changing from small-risk to moderate-risk category of developing advanced colorectal neoplasia i.e. triggering annual surveillance?*

Total responses – 13

Mean – 3 (SD – 1.3)
Median – 3 (IQR – 1.8-3.5)

*Please specify the relative risk cut-off (ranging from 1.01 -infinity) that you would consider before concluding that the risk category is changing from medium-risk to large-risk category of developing advanced colorectal neoplasia i.e. triggering a discussion of colectomy?*

Total responses – 13

Mean – 5.2 (SD – 3.1)
Median – 5 (IQR – 2-6)

*2. Absolute percentage cut-offs*

*Please specify the absolute percentage change, ranging from 0.01 to 100, that would lead you to conclude that the risk category is transitioning from trivial to small risk of developing advanced colorectal neoplasia at 5 years i.e., intermediate-risk category i.e., triggering 3 yearly surveillance?*

Total responses – 13

Mean – 3.6 (SD – 2.9)
Median – 2 (IQR – 2-5)

*Please specify the absolute percentage change, ranging from 0.01 to 100, that would lead you to conclude that the risk category is transitioning from small to medium risk of developing advanced colorectal neoplasia at 5 years i.e., higher-risk category triggering annual surveillance?*

Total responses – 13

Mean – 6.9 (SD – 4.4)
Median – 5 (IQR - 5-10)

*Please specify the absolute percentage change, ranging from 0.01 to 100, that would lead you to conclude that the risk category is transitioning from medium to large risk of developing advanced colorectal neoplasia at 5 years i.e., very high-risk category i.e., triggering discussion of colectomy?*

Total responses – 13

Mean – 14.4 (SD – 9.1)
Median – 10 (IQR - 10-20)

***Bowel Prep in IBD Colonoscopy***

***1. OUTCOME: Preparation Quality***

*Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on Preparation Quality (using validated scores), please specify the absolute percentage change (ranging from 0.1 -100%) in people who had a successful bowel prep that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?*

*Total responses – 16*

Mean – 6.7 (SD – 3)
Median – 5 (IQR – 5-10)

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on Preparation Quality (using validated scores), please specify the absolute percentage change (ranging from 0.1 -100%) in people who had a successful bowel prep that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 17*

Mean – 12.7 (SD 7.7)
Median – 10 (IQR – 7-20)

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on Preparation Quality (using validated scores), please specify the absolute percentage change (ranging from 0.1 -100%) in people who had a successful bowel prep that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 17*

Mean – 23.5 (SD – 14.7)
Median – 20 (IQR 15-30)

***2. OUTCOME:*** **Adenomas/polyps detected**

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on adenomas/polyps detected, please specify the absolute percentage change (ranging from 0.1 -100%) in people that have adenomas/polyps detected that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 17*

Mean – 3.9 (SD -2.8)
Median – 5 (IQR 2-5)

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on adenomas/polyps detected, please specify the absolute percentage change (ranging from 0.1 -100%) in people that have adenomas/polyps detected that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 17*

Mean – 7.2 (SD 4.4)
Median – 5 (IQR – 4-10)

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on adenomas/polyps detected, please specify the absolute percentage change (ranging from 0.1 -100%) in people that have adenomas/polyps detected that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 17*

Mean – 12.3 (SD – 7.5)
Median – 9 (IQR- 7-20)

***3. OUTCOME: Tolerate* the regimen**

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on Patient tolerability to take/complete the bowel prep, please specify the absolute percentage change (ranging from 0.1 -100%) in people who tolerate the regimen that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 16*

Mean – 5.6 (SD – 2.9)
Median – 5 (IQR 4.5-6.2)

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on Patient tolerability to take/complete the bowel prep, please specify the absolute percentage change (ranging from 0.1 -100%) in people who tolerate the regimen that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 16*

Mean – 11.2 (SD – 7.4)
Median – 9 (IQR 6.75-12.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient tolerability to take/complete the bowel prep, please specify the absolute percentage change (ranging from 0.1 -100%) in people who tolerate the regimen that you

would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 16*

Mean – 18.8 (SD – 11.6)
Median – 13.5 (IQR 10-26.2)

***4. OUTCOME:* serious adverse events**

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 16*

Mean – 2.4 (SD – 1.4)
Median – 2 (IQR 1.2-3)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 16*

Mean – 4 (SD – 2.8)
Median – 3.5 (IQR 2-5.3)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 16*

Mean – 6.4 (SD – 5.1)
Median – 5 (IQR 2-9.7)

***5. OUTCOME: Caecum successfully intubated***

*Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Caecal intubation rates, please specify the absolute percentage change (ranging from 0.1 -100%) in the number of people that had their caecum successfully intubated that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?*

*Total responses – 16*

Mean – 3.5 (SD – 1.5)
Median – 3 (IQR – 2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Caecal intubation rates, please specify the absolute percentage change (ranging from 0.1 -100%) in the number of people that had their caecum successfully intubated that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 16*

Mean – 6.9 (SD – 3.6)
Median – 5.5 (IQR 4-10)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Caecal intubation rates, please specify the absolute percentage change (ranging from 0.1 -100%) in the number of people that had their caecum successfully intubated that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 16*

Mean – 10.8 (SD 5.4)
Median – 9.5 (IQR – 6.7-15)

***6. OUTCOME:*** **willingness to repeat the regimen**

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient acceptability / willingness to repeat, please specify the absolute percentage change (ranging from 0.1 -100%) in people who were willing to repeat the regimen that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 16*

Mean – 4.9 (SD – 2.8)
Median – 5 (IQR 3-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient acceptability / willingness to repeat, please specify the absolute percentage change (ranging from 0.1 -100%) in people who were willing to repeat the regimen that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 16*

Mean – 10.7 (SD – 7.2)
Median – 9 (IQR 5-11.2)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient acceptability / willingness to repeat, please specify the absolute percentage change (ranging from 0.1 -100%) in people who were willing to repeat the regimen that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 16*

Mean – 17.4 (SD – 11.4)
Median – 11 (IQR 10-20)

***7. OUTCOME:*** **withdrawals due to adverse events**

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people who withdraw due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 16*

Mean – 3.6 (SD 2.5)
Median – 3 (IQR 2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people who withdraw due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 16*

Mean – 5.1 (SD – 3.2)
Median – 5 (IQR 2.5-7.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in people who withdraw due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 16*

Mean – 9.3 (SD – 8)
Median – 8.5 (IQR 3-10.5)

***Colonoscopy modalities/techniques IBD Colonoscopy***

***Outcome 1: Detection of dysplastic lesions (as per Vienna classification - indefinite for dysplasia, low-grade dysplasia, high-grade dysplasia, or invasive neoplasia at histological examination)***

*Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on dysplasia detection rate, please specify the absolute percentage change (ranging from 0.1 -100%) in rates of detection of patients with dysplastic lesions that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?*

*Total responses – 15*

Mean – 3.3 (SD – 2.4)
Median – 2 (IQR – 2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on dysplasia detection rate, please specify the absolute percentage change (ranging from 0.1 -100%) in rates of detection of patients with dysplastic lesions that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 5.8 (SD 3)
Median – 4.5 (IQR – 4-9.2)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on dysplasia detection rate, please specify the absolute percentage change (ranging from 0.1 -100%) in rates of detection of patients with dysplastic lesions that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 11.2 (SD – 7.1)
Median – 10 (IQR 8-15)

***Outcome 2: Yield of any dysplasia from targeted biopsies***

*Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Yield of any dysplasia from targeted biopsies, please specify the absolute percentage change(ranging from 0.1 -100%) in patients with at least one dysplastic lesion from targeted biopsies that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?*

*Total responses – 15*

Mean – 3.4 (SD – 2.9)
Median – 2 (IQR – 2-3.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Yield of any dysplasia from targeted biopsies, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with at least one dysplastic lesion from targeted biopsies that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 6.7 (SD – 5)
Median – 5 (IQR 4-8)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Yield of any dysplasia from targeted biopsies, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with at least one dysplastic lesion from targeted biopsies that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 10.9 (SD 7.5)
Median – 8 (IQR – 7-12.5)

***Outcome 3: Yield of dysplasia from random biopsies if taken during the procedure***

Comparing intervention, A to intervention B for endoscopic surveillance in IBD with emphasis on yield of dysplasia from random biopsies if taken during the procedure, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with at least one dysplastic lesion from random biopsies (if taken during the procedure) that you would

consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 15*

Mean – 3.5 (SD – 4.8)
Median – 2 (IQR 1-3.7)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on yield of dysplasia from random biopsies if taken during the procedure, please specify the absolute percentage change (ranging from 0.1 -100%)in patients with at least one dysplastic lesion from random biopsies (if taken during the procedure) that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 6.2 (SD – 7.2)
Median – 4 (IQR 2-7.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on yield of dysplasia from random biopsies if taken during the procedure, please specify the absolute percentage change(ranging from 0.1 -100%) in patients with at least one dysplastic lesion from random biopsies (if taken during the procedure) that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 10 (SD – 10.2)
Median – 6 (IQR 4-12.5)

***Outcome 4: Patients with serious adverse events***

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 15*

Mean – 2.6 (SD – 2.5)
Median – 2 (IQR 1-3)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change

(ranging from 0.1 -100%) in patients with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 5.1 (SD – 4.7)
Median – 4.5 (IQR 2.2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with serious adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with serious adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 8.4 (SD – 7.1)
Median – 8.5 (IQR 3.2-10)

***Outcome 5: Detection of any lesions in patients (neoplastic lesions detected i.e. dysplastic + serrated and/or non-neoplastic-endoscopic findings with no evidence of dysplasia or invasive neoplasia at histology)***

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Detection of any lesions, please specify the absolute percentage change(ranging from 0.1 -100%) in patients detected with any lesion that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 15*

Mean – 4.1 (SD – 2.2)
Median – 4 (IQR 2.2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Detection of any lesions, please specify the absolute percentage change (ranging from 0.1 -100%) in patients detected with any lesion that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 7.9 (SD – 4.4)
Median – 8 (IQR 4-10)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Detection of any lesions, please specify the absolute percentage change(ranging from 0.1 -100%) in patients detected with any lesion that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 15.1 (SD – 12.4)
Median – 12 (IQR 6.5-18.7)

***Outcome 6: Patients with any adverse events***

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with adverse events, please specify the absolute percentage change(ranging from 0.1 -100%) in patients with adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 15*

Mean – 3.7 (SD 2.4)
Median – 4 (IQR 2-5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 6.1 (SD – 4.9)
Median – 5 (IQR 2.5-8)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patients with adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in patients with adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 9.6 (SD – 7.5)
Median – 8 (IQR 5-11)

***Outcome 7: Patient withdrawals due to adverse events***

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in Patient withdrawals due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from trivial to small?

*Total responses – 15*

Mean – 3.1 (SD - 2.5)
Median – 2 (IQR 1.2-4.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in Patient withdrawals due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from small to medium?

*Total responses – 15*

Mean – 5.5 (SD 4.8)
Median – 5 (IQR – 2-5.5)

Comparing intervention A to intervention B for endoscopic surveillance in IBD with emphasis on Patient withdrawals due to adverse events, please specify the absolute percentage change (ranging from 0.1 -100%) in Patient withdrawals due to adverse events that you would consider before concluding that the effect is changing (increasing or decreasing) from medium to large?

*Total responses – 15*

Mean – 8.6 (SD – 7.4)
Median – 6 (IQR- 3-10)

**Searches:**

Search Report: Strategies for Detecting Colon Cancer in Patients with Inflammatory Bowel Disease

**Search date: 11th September 2023**
**Number of results: 9425**
**Duplicates removed: 1682**
**Records to screen: 7734**

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CENTRAL
Issue 8 of 12, August 2023
Date Run: 11/09/2023 02:59:26
#1 ([mh "Inflammatory Bowel Disease"] OR Crohn* OR Ulcerative Colitis OR IBD OR Inflammatory Bowel Disease*) AND (Colon OR Colorectal OR Rectal) AND (Cancer* OR Neoplas* OR Dysplasia) AND (Detect* OR Screen* OR Diagnos* OR Assess* OR Surveillance) with Cochrane Library publication date, in Trials

ClinicalTrials.gov
Classic Interface
**Advanced Search**
***Condition or disease:*** (Crohn OR Ulcerative Colitis OR IBD OR Inflammatory Bowel Disease) AND (Colon Cancer OR Colorectal Cancer OR Rectal Cancer OR Colon Dysplasia OR Colorectal Dysplasia OR Rectal Dysplasia)
***Other terms:*** Detection OR Screening OR Diagnosis OR Assessment OR Surveillance

Embase via Ovid SP
Database: Embase <1974 to 2023 September 08>
1 exp Inflammatory Bowel Disease/ or (Crohn* or Ulcerative Colitis* or IBD or Inflammatory Bowel Disease*).mp. (241336)
2 (Colon or Colorectal or Rectal).mp. (831257)
3 (Cancer* or Neoplas* or Dysplasia).mp. (4993938)
4 (Detect* or Screen* or Diagnos* or Assess* or Surveillance).mp. (15712633)
5 and/1-4 (16015)
6 limit 5 to medline (791)
7 5 not 6 (15224)
8 limit 7 to dc=20160920-20230908 (7095)
9 limit 7 to dd=20160920-20230908 (3485)
10 8 or 9 (7104)
11 (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset$1).ti. and animal experiment/ (1219722)
12 Animal experiment/ not (human experiment/ or human/) (2561951)
13 11 or 12 (2630003)
14 10 not 13 (6773)

MEDLINE via Ovid SP
Database: Ovid MEDLINE(R) ALL <1946 to September 08, 2023>
1 exp Inflammatory Bowel Disease/ or (Crohn* or Ulcerative Colitis* or IBD or Inflammatory Bowel Disease*).mp. (140530)
2 (Colon or Colorectal or Rectal).mp. (490013)
3 (Cancer* or Neoplas* or Dysplasia).mp. (4120072)
4 (Detect* or Screen* or Diagnos* or Assess* or Surveillance).mp. (11357535)
5 and/1-4 (6355)
6 limit 5 to ed=20160920-20230908 (1776)
7 limit 5 to dt=20160920-20230908 (2072)
8 6 or 7 (2283)
9 exp Animals/ not Humans.sh. (5153293)
10 8 not 9 (2188)
WHO ICTRP
(Crohn OR Ulcerative Colitis OR IBD OR Inflammatory Bowel Disease) AND (Colon Cancer OR Colorectal Cancer OR Rectal Cancer OR Colon Dysplasia OR Colorectal Dysplasia OR Rectal Dysplasia) AND (Detection OR Screening OR Diagnosis OR Assessment OR Surveillance)
33 records for 33 trials found

Search Report: Bowel Preparation for Colonoscopy in Inflammatory Bowel Disease

**Search date: 7th September 2023**
**Number of results: 2818**
**Duplicates removed: 738**
**Records to screen: 2080**

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CENTRAL
Issue 8 of 12, August 2023
Date Run: 07/09/2023 14:50:02
#1 [mh Colonoscopy] OR [mh Sigmoidoscopy] OR [mh Endoscopy] OR (Colonoscop* OR Coloscop* OR Sigmoidoscop* OR Sigmoideoscop* or Endoscop*):ti,ab,kw53128
#2 [mh Cathartics] OR [mh Anthraquinones] OR [mh Citrates] OR [mh Laxatives] OR [mh "Organometallic Compounds"] OR [mh "Organometallic Compounds"] OR [mh "Polyethylene Glycols"] OR [mh Phosphates] OR (((Bowel* OR Colon* OR Intestin* OR Gut) near/2 (Preparat* OR Clean* OR Lavage* OR Evacuant* OR Purgat*)) OR "2 (Ethylmercurithio)Benzoxazole 5 Carboxylate Sodium" or "Bis(Tributyltin) Oxide" or "1 Isopropoxygermatrane" or "4 Aminophenylmercuric Acetate" or "4 Chloromercuribenzoic Acid" or "4 Hydroxy 3 Methoxyphenylethylene Glycol Sulfate" or "4-Chloromercuribenzenesulfonate" or Acetphenolisatin or Acidulated Phosphate Fluoride or Actilax or Agar or Agarol or Alkylmercury Compound* or Aloe Emodin or Aloe Vera or Aloin or Alum Compound* or Aminomethoxypolyethylene Glycol* or Ammonium Sulfate or Amprolium or Anthracenedione* or Anthraquinone* or Antimony Potassium Tartrate or Antimony Sodium Gluconate or Apatites or Aqueous Nap or Arsanilic Acid or Arsenamide or Arsenates or Arsenazo III or Arsenicals or Arsenites or Arsphenamine or Ascorbic Acid* or Auranofin or Aurothioglucose or Aurothioglycanide or Barium Sulfate or Bevenopran or Bisacodyl or Buckthorn or Budotitane or Butyltin or Butyltin Derivative or Cacodylic Acid or Calcium Citrate or Calcium Phosphates or Calcium Pyrophosphate or Calcium Sulfate or Carbonyl Iron or Carboplatin or Carboxyethylgermanium Sesquioxide or Carboxymethylcellulose or Casanthranol or Cascara or Castor Oil or Cathartic* or Cephulac or Cetomacrogol or Chenodeoxycholic Acid or Chlormerodrin or Chloromercuribenzenesulfonic Acid or Chloromercuribenzoates or Chloromercurinitrophenols or Cholac or Chronulac or Cialit or Cilac or Citrate* or Citric Acid* or Citroma or Citrus Acida or Codanthramer or Codanthrusate or Colocynth Extract or Colyte or Constilac or Copper Sulfate or Cotton Seed Oil or Dantron or Dibasic Nap or Dibutyltin or Diethyl Sulfate or Diethylzinc or Dimethyl Sulfate or Diphosphates or Disaccharide or Disodium Hydrogen Phosphate or Docusate Calcium or Docusate Sodium or Dodecyl Sulfate or Dodecylsulfate Ammonium or Dolcanatide or Dulcolax or Duphalac or Durapatite or Elobixibat or Emetine or Emodin or Enema or Enulose or Etasulfate Sodium or Ethylmercuric Chloride or Ethylmercury Compound* or Ethylmercury Derivative or Ferric Compound* or Ferrocene or Ferroquine or Ferrous Compound* or Fleet or Forlax or Fortans or Gadolinium DTPA or Generlac or Glycerol or Glycolax or Gold Sodium Thiomalate or Golitely or Golytely or Grignard Reagent or Halflytely or Hemiacidrin or Heptalac or Hydrogel or Hydroxyapatites or Hydroxymercuribenzoates or Hydroxymercuribenzoic Acid or Idrolax or Inositol Hexasulfate or Iron Carbonyl Compound* or Iron Compound* or Iron Dextran Complex or Isocitrates or Ispagula or Karaya Gum or Kristalose or Lactitol or Lactulose or Laxative* or Linaclotide or Liquid Paraffin or Lubiprostone or Macrogol* or Magnesium Citrate* or Magnesium Hydroxide or Magnesium Oxide* or Magnesium Sulfate* or Maneb or Melarsoprol or Meralluride or Merbromin or Mercaptomerin or Mercuderamide or Mercumatilin or Mercuribenzoates or Mercuribenzoic Acid Derivative or Mercurobutol or Merethoxylline or Mersalyl or Methylcyclopentadienylmanganese Tricarbonyl or Methylmercuric Chloride or Methylmercury or Methylsamidorphan or "Milk of Magnesia" or Miralax or Mitoxantrone or Monobasic Nap or Movicol or Moviprep or Nap Tablet* or Nonoxynol or Normacol or Nulitely or Nulytely or Octoxynol or Organogermanium Compound* or Organogold Compound* or Organolead Compound* or Organolithium Compound* or Organomercury Compound* or Organometallic Compound* or Organometallic Compound* or Organoplatinum Compound* or Organotechnetium Compound* or Organotin Compound* or Organotin Compound* or Organotin Compound* or Osmoprep or Osmotic or Oxyphenisatin Acetate or Oxyphenisatine or "P Azobenzenearsonate" or "P Chloromercuribenzoic Acid" or PEG or "PEG 3350 SD" or "PEG ELS" or Phenolphthalein* or Phenylmercuric Acetate or Phenylmercuric Borate or Phenylmercuric Nitrate or Phenylmercury Compound* or Phenylmercury Derivative or Phosphate* or Phosphoramides or Picolax or Picoline* or Picosulfate Sodium or Plecanatide or "PMF 100" or Poloxalene or Poloxamer or Polycarbophil or Polyethylene Glycol* or Polyhydroxyethyl Methacrylate or Polyoxyethylene Derivative* or Polyoxyethylene Glycol* or Polyphosphates or Polysorbates or Potassium Chloride* or Potassium Citrate or Potassium Sulfate* or Prepopik or Psyllium or Pyridoxal or Pyridoxamine or Pyridoxine or Recanaclotide or

Renacid or Rhein or Roxarsone or Ruthenocene Derivative or Salbutamol Sulfate or Salicylamide Sulfate or Senna Extract or Sennoside or Senokot or Sestamibi or "SF PEG ELS" or Sodium Bicarbonate* or Sodium Chloride* or Sodium Dihydrogen Phosphate or Sodium Phosphate* or Sodium Picosulfate* or Sodium Picosulphate* or Sodium Sulfate* or Sorbitol or Spirogermanium or Struvite or Suclear or Sucralfate* or Sulfate* or Sulphate* or Suprep or "Technetium 99m" or "Technetium Tc 99m" or Tetradecyl Sulfate Sodium or Tetraethyl Lead or Tetraethyllead or Tetramethyllead or Thimerosal or Thiomersal or Thiosulfates or Titanocene or Transipeg or Trialkyltin Compound* or Tributyltin or Triethyllead or Triethyltin or Trilyte or Trimethyltin or Triphenyltin or Urea Stibamine or Visicol or "Vitamin B 6" or "Vitamin B6" or Zinc Sulfate or Zineb or Zirconocene):ti,ab,kw 94825

#3 [mh "Inflammatory Bowel Diseases"] OR (Inflammatory Bowel Disease* OR Crohn* OR Ulcerative Colitis OR Ulcerative Colorectitis OR Ulcerative Proctocolitis OR Ulcerative Enteritis OR Regional Enteritis OR IBD).mp. 33438

#4 #1 AND #2 AND #3 in Trials 633

ClinicalTrials.gov
Classic Interface
**Advanced Search**
Search #1
***Condition or disease:*** Inflammatory Bowel OR Crohn OR Ulcerative Colitis
***Study type:*** Interventional Studies (Clinical Trials)
***Intervention/treatment:*** Preparation OR Cleansing OR Lavage OR Purgation
84 Studies found
Search #2
***Condition or disease:*** Inflammatory Bowel OR Crohn OR Ulcerative Colitis
***Study type:*** Interventional Studies (Clinical Trials)
***Other terms:*** Preparation OR Cleansing OR Lavage OR Purgation
133 Studies found

Embase via Ovid SP
Database: Embase <1980 to 2023 Week 35>
1 Randomized controlled trial/ or Controlled clinical study/ or randomization/ or intermethod comparison/ or double blind procedure/ or human experiment/ or (random$ or placebo or (open adj label) or ((double or single or doubly or singly) adj (blind or blinded or blindly)) or parallel group$1 or crossover or cross over or ((assign$ or match or matched or allocation) adj5 (alternate or group$1 or intervention$1 or patient$1 or subject$1 or participant$1)) or assigned or allocated or (controlled adj7 (study or design or trial)) or volunteer or volunteers).ti,ab. or (compare or compared or comparison or trial).ti. or ((evaluated or evaluate or evaluating or assessed or assess) and (compare or compared or comparing or comparison)).ab. (6221090)
2 (random$ adj sampl$ adj7 ("cross section$" or questionnaire$1 or survey$ or database$1)).ti,ab. not (comparative study/ or controlled study/ or randomi?ed controlled.ti,ab. or randomly assigned.ti,ab.) (9483)
3 Cross-sectional study/ not (randomized controlled trial/ or controlled clinical study/ or controlled study/ or (randomi?ed controlled or control group$1).ti,ab.) (359189)
4 (((case adj control$) and random$) not randomi?ed controlled).ti,ab. (21421)
5 (Systematic review not (trial or study)).ti. (257153)
6 (nonrandom$ not random$).ti,ab. (18634)
7 ("Random field$" or (random cluster adj3 sampl$)).ti,ab. (4492)
8 (review.ab. and review.pt.) not trial.ti. (1123793)
9 "we searched".ab. and (review.ti. or review.pt.) (48947)
10 ("update review" or (databases adj4 searched)).ab. (62044)
11 (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset$1).ti. and animal experiment/ (1163730)
12 Animal experiment/ not (human experiment/ or human/) (2416368)
13 or/2-12 (4182900)
14 1 not 13 (5485506)
15 Colonoscopy/ or Sigmoidoscopy/ or Endoscopy/ or (Colonoscop* or Coloscop* or Sigmoidoscop* or Sigmoideoscop* or Endoscop*).mp. (594510)
16 Laxative/ or 8 Quinolinol Sulfate Plus Acetic Acid Plus Glycerol Plus Ricinoleic Acid/ or Acetic Acid Plus Disodium Hydrogen Phosphate Plus Gluconate Sodium Plus Magnesium Chloride Plus Potassium Chloride Plus Potassium Dihydrogen Phosphate Plus Sodium Chloride/ or Acetphenolisatin/ or Acetphenolisatin Plus Carboxymethylcellulose Plus Docusate Sodium/ or Acetphenolisatin Plus Docusate Sodium/ or Agar/ or Agarol/ or Aloe Emodin/ or Aloin/ or Aloin Plus Bile Extract Plus Cascara/ or Aluminum Hydroxide Plus Dicycloverine Plus Magnesium Oxide Plus Methylcellulose/ or Aluminum Hydroxide Plus Magnesium Hydroxide Plus Pipethanate Plus Scopolamine Methyl Nitrate/ or Balsam Peru Plus Castor Oil Plus Trypsin/

or Bevenopran/ or Bicarbonate Plus Bisacodyl Plus Macrogol 3350 Plus Potassium Chloride Plus Sodium Chloride/ or Bicarbonate Plus Calcium Chloride Plus Disodium Hydrogen Phosphate Plus Glucose Plus Magnesium Sulfate Plus Potassium Chloride Plus Sodium Chloride/ or Bisacodyl/ or Bisacodyl Tannex/ or Calcium Carbonate Plus Famotidine Plus Magnesium Hydroxide/ or Carboxymethylcellulose/ or Carboxymethylcellulose Plus Magnesium Hydroxide/ or Casanthranol Plus Docusate Sodium/ or Casanthranol Plus Poloxamer/ or Cascara/ or Cascara Sagrada/ or Cascara Salax/ or Castor Oil/ or Citric Acid Plus Magnesium Oxide Plus Picosulfate Sodium/ or Citric Acid Plus Magnesium Oxide Plus Sodium Carbonate/ or Codanthramer/ or Codanthrusate/ or Colocynth Extract/ or Colyte/ or Cotton Seed Oil/ or Dantron/ or Dantron Plus Docusate Calcium/ or Dipotassium Hydrogen Phosphate Plus Glucose Plus Lactate Sodium Plus Magnesium Chloride Plus Potassium Chloride Plus Sodium Chloride Plus Sodium Dihydrogen Phosphate/ or Disodium Hydrogen Phosphate/ or Disodium Hydrogen Phosphate Plus Methenamine Mandelate/ or Disodium Hydrogen Phosphate Plus Sodium Dihydrogen Phosphate/ or Docusate Calcium/ or Docusate Sodium/ or Docusate Sodium Plus Methylcellulose/ or Docusate Sodium Plus Phenolphthalein/ or Docusate Sodium Plus Senna Extract/ or Dolcanatide/ or Elobixibat/ or Emodin/ or Glucose Plus Lactate Potassium Plus Potassium Chloride Plus Sodium Chloride Plus Sodium Dihydrogen Phosphate/ or Glucose Plus Lactate Sodium Plus Magnesium Chloride Plus Potassium Chloride Plus Potassium Dihydrogen Phosphate Plus Sodium Dihydrogen Phosphate/ or Glycerol/ or Ispagula/ or Karaya Gum/ or Lactitol/ or Lactulose/ or Linaclotide/ or Liquid Paraffin/ or Lubiprostone/ or Macrogol 3350/ or Macrogol 4000/ or Magnesium Citrate/ or Magnesium Hydroxide/ or Magnesium Oxide/ or Magnesium Sulfate/ or Magnesium Sulfate Plus Potassium Chloride Plus Potassium Dihydrogen Phosphate Plus Sodium Chloride Plus Sodium Dihydrogen Phosphate/ or Magnesium Sulfate Plus Potassium Sulfate Plus Sodium Sulfate/ or Mannitol Plus Sorbitol/ or Methylsamidorphan/ or Moviprep/ or Neomycin Plus Polycarbophil Plus Thihexinol/ or Normacol/ or Oxyphenisatine/ or Phenolphthalein/ or Picosulfate Sodium/ or Plecanatide/ or Poloxamer/ or Polycarbophil/ or Polycarbophil Calcium/ or Polycarbophil Plus Thihexinol/ or Potassium Dihydrogen Phosphate Plus Sodium Dihydrogen Phosphate/ or Potassium Sulfate/ or Recanaclotide/ or Rhein/ or Rhein Anthrone/ or Senna Extract/ or Sennoside/ or Sennoside A/ or Sennoside B/ or Senokot/ or Sodium Dihydrogen Phosphate/ or Sodium Sulfate/ or Sorbitol/ or Organometallic Compound/ or Ascorbic Acid Plus Carbonyl Iron Plus Cyanocobalamin Plus Folic Acid/ or Aurothioglycanide/ or Budotitane/ or Carbonyl Iron/ or Diethylzinc/ or Ferrocene/ or Ferrocene Derivative/ or Ferroquine/ or Grignard Reagent/ or Methylcyclopentadienylmanganese Tricarbonyl/ or Organogermanium Compound/ or Organogold Compound/ or Organolead Compound/ or Organolithium Compound/ or Organomercury Compound/ or Organotin Compound/ or Ruthenocene Derivative/ or Titanocene/ or Titanocene Dichloride/ or Urea Stibamine/ or Zirconocene/ or Organogermanium Compound/ or 1 Isopropoxygermatrane/ or Carboxyethylgermanium Sesquioxide/ or Spirogermanium/ or Organolead Compound/ or Tetraethyllead/ or Tetramethyllead/ or Triethyllead/ or Organomercury Compound/ or "2 (Ethylmercurithio)Benzoxazole 5 Carboxylate Sodium"/ or 4 Aminophenylmercuric Acetate/ or 4 Chloromercuribenzoic Acid/ or Betaine Plus Mersalyl Plus Theophylline/ or Boric Acid Plus Macrogol Tert Dodecyl Thioether Plus Phenylmercuric Acetate/ or Chlormerodrin/ or Chloromercuribenzenesulfonic Acid/ or Ethylmercuric Chloride/ or Ethylmercury Derivative/ or Hydroxymercuribenzoic Acid/ or Meralluride/ or Merbromin/ or Mercaptomerin/ or Mercuderamide/ or Mercumatilin/ or Mercuribenzoic Acid Derivative/ or Mercurobutol/ or Merethoxylline/ or Merethoxylline Plus Theophylline/ or Mersalyl/ or Mersalyl Plus Theophylline/ or Methylmercuric Chloride/ or Methylmercury/ or Methylmercury Derivative/ or Phenylmercuric Acetate/ or Phenylmercuric Borate/ or Phenylmercuric Nitrate/ or Phenylmercury Derivative/ or Thiomersal/ or Organotin Compound/ or "Bis(Tributyltin) Oxide"/ or Butyltin/ or Butyltin Derivative/ or Dibutyltin/ or Dibutyltin Dichloride/ or Tributyltin/ or Tributyltin Chloride/ or Triethyltin/ or Trimethyltin/ or Triphenyltin/ or Triphenyltin Acetate/ or Triphenyltin Chloride/ or Triphenyltin Fluoride/ or Triphenyltin Hydroxide/ or Picoline Derivative/ or Macrogol Derivative/ or Phosphate/ or Sulfate/ or 4 Hydroxy 3 Methoxyphenylethylene Glycol Sulfate/ or Diethyl Sulfate/ or Dimethyl Sulfate/ or Dodecyl Sulfate/ or Dodecyl Sulfate Sodium/ or Dodecylsulfate Ammonium/ or Etasulfate Sodium/ or Etasulfate Sodium Plus Potassium Iodide/ or Inositol Hexasulfate/ or Salbutamol Sulfate/ or Salicylamide Sulfate/ or Tetradecyl Sulfate Sodium/ or (((Bowel* or Colon* or Intestin* or Gut) adj3 (Preparat* or Clean* or Lavage* or Evacuant* or Purgati*)) or "2

(Ethylmercurithio)Benzoxazole 5 Carboxylate Sodium" or "Bis(Tributyltin) Oxide" or "1 Isopropoxygermatrane" or "4 Aminophenylmercuric Acetate" or "4 Chloromercuribenzoic Acid" or "4 Hydroxy 3 Methoxyphenylethylene Glycol Sulfate" or "4-Chloromercuribenzenesulfonate" or Acetphenolisatin or Acidulated Phosphate Fluoride or Actilax or Agar or Agarol or Alkylmercury Compound* or Aloe Emodin or Aloe Vera or Aloin or Alum Compound* or Aminomethoxypolyethylene Glycol* or Ammonium Sulfate or Amprolium or Anthracenedione* or Anthraquinone* or Antimony Potassium Tartrate or Antimony Sodium Gluconate or Apatites or Aqueous Nap or Arsanilic Acid or Arsenamide or Arsenates or Arsenazo III or Arsenicals or Arsenites or Arsphenamine or Ascorbic Acid* or Auranofin or Aurothioglucose or Aurothioglycanide or Barium Sulfate or Bevenopran or Bisacodyl or Buckthorn or Budotitane or Butyltin or Butyltin Derivative or Cacodylic Acid or Calcium Citrate or Calcium Phosphates or Calcium Pyrophosphate or Calcium Sulfate or Carbonyl Iron or Carboplatin or Carboxyethylgermanium Sesquioxide or Carboxymethylcellulose or Casanthranol or Cascara or Castor Oil or Cathartic* or Cephulac or Cetomacrogol or Chenodeoxycholic Acid or Chlormerodrin or Chloromercuribenzenesulfonic Acid or Chloromercuribenzoates or Chloromercurinitrophenols or Cholac or Chronulac or Cialit or Cilac or Citrate* or Citric Acid* or Citroma or Citrus Acida or Codanthramer or Codanthrusate or Colocynth Extract or Colyte or Constilac or Copper Sulfate or Cotton Seed Oil or Dantron or Dibasic Nap or Dibutyltin or Diethyl Sulfate or Diethylzinc or Dimethyl Sulfate or Diphosphates or Disaccharide or Disodium Hydrogen Phosphate or Docusate Calcium or Docusate Sodium or Dodecyl Sulfate or Dodecylsulfate Ammonium or Dolcanatide or Dulcolax or Duphalac or Durapatite or Elobixibat or Emetine or Emodin or Enema or Enulose or Etasulfate Sodium or Ethylmercuric Chloride or Ethylmercury Compound* or Ethylmercury Derivative or Ferric Compound* or Ferrocene or Ferroquine or Ferrous Compound* or Fleet or Forlax or Fortans or Gadolinium DTPA or Generlac or Glycerol or Glycolax or Gold Sodium Thiomalate or Golitely or Golytely or Grignard Reagent or Halflytely or Hemiacidrin or Heptalac or Hydrogel or Hydroxyapatites or Hydroxymercuribenzoates or Hydroxymercuribenzoic Acid or Idrolax or Inositol Hexasulfate or Iron Carbonyl Compound* or Iron Compound* or Iron Dextran Complex or Isocitrates or Ispagula or Karaya Gum or Kristalose or Lactitol or Lactulose or Laxative* or Linaclotide or Liquid Paraffin or Lubiprostone or Macrogol* or Magnesium Citrate* or Magnesium Hydroxide or Magnesium Oxide* or Magnesium Sulfate* or Maneb or Melarsoprol or Meralluride or Merbromin or Mercaptomerin or Mercuderamide or Mercumatilin or Mercuribenzoates or Mercuribenzoic Acid Derivative or Mercurobutol or Merethoxylline or Mersalyl or Methylcyclopentadienylmanganese Tricarbonyl or Methylmercuric Chloride or Methylmercury or Methylsamidorphan or "Milk of Magnesia" or Miralax or Mitoxantrone or Monobasic Nap or Movicol or Moviprep or Nap Tablet* or Nonoxynol or Normacol or Nulitely or Nulytely or Octoxynol or Organogermanium Compound* or Organogold Compound* or Organolead Compound* or Organolithium Compound* or Organomercury Compound* or Organometallic Compound* or Organometallic Compound* or Organoplatinum Compound* or Organotechnetium Compound* or Organotin Compound* or Organotin Compound* or Organotin Compound* or Osmoprep or Osmotic or Oxyphenisatin Acetate or Oxyphenisatine or "P Azobenzenearsonate" or "P Chloromercuribenzoic Acid" or PEG or "PEG 3350 SD" or "PEG ELS" or Phenolphthalein* or Phenylmercuric Acetate or Phenylmercuric Borate or Phenylmercuric Nitrate or Phenylmercury Compound* or Phenylmercury Derivative or Phosphate* or Phosphoramides or Picolax or Picoline* or Picosulfate Sodium or Plecanatide or "PMF 100" or Poloxalene or Poloxamer or Polycarbophil or Polyethylene Glycol* or Polyhydroxyethyl Methacrylate or Polyoxyethylene Derivative* or Polyoxyethylene Glycol* or Polyphosphates or Polysorbates or Potassium Chloride* or Potassium Citrate or Potassium Sulfate* or Prepopik or Psyllium or Pyridoxal or Pyridoxamine or Pyridoxine or Recanaclotide or Renacid or Rhein or Roxarsone or Ruthenocene Derivative or Salbutamol Sulfate or Salicylamide Sulfate or Senna Extract or Sennoside or Senokot or Sestamibi or "SF PEG ELS" or Sodium Bicarbonate* or Sodium Chloride* or Sodium Dihydrogen Phosphate or Sodium Phosphate* or Sodium Picosulfate* or Sodium Picosulphate* or Sodium Sulfate* or Sorbitol or Spirogermanium or Struvite or Suclear or Sucralfate* or Sulfate* or Sulphate* or Suprep or "Technetium 99m" or "Technetium Tc 99m" or Tetradecyl Sulfate Sodium or Tetraethyl Lead or Tetraethyllead or Tetramethyllead or Thimerosal or Thiomersal or Thiosulfates or Titanocene or Transipeg or Trialkyltin Compound* or Tributyltin or Triethyllead or

Triethyltin or Trilyte or Trimethyltin or Triphenyltin or Urea Stibamine or Visicol or "Vitamin B 6" or "Vitamin B6" or Zinc Sulfate or Zineb or Zirconocene).mp. (2100164)
17 exp inflammatory bowel disease/ or (inflammatory bowel disease* or crohn* or ulcerative colitis or ulcerative colorectitis or ulcerative proctocolitis or ulcerative enteritis or regional enteritis or IBD).mp. (236169)
18 and/14-17 (1467)

MEDLINE via Ovid SP
Database: Ovid MEDLINE(R) ALL <1946 to September 06, 2023>
1 Colonoscopy/ or Sigmoidoscopy/ or Endoscopy/ or (Colonoscop* or Coloscop* or Sigmoidoscop* or Sigmoideoscop* or Endoscop*).mp. (326873)
2 exp Cathartics/ or exp Anthraquinones/ or exp Citrates/ or exp Laxatives/ or exp Organometallic Compounds/ or exp Picolines/ or exp Polyethylene Glycols/ or exp Phosphates/ or (((Bowel* or Colon* or Intestin* or Gut) adj3 (Preparat* or Clean* or Lavage* or Evacuant* or Purgati*)) or "2 (Ethylmercurithio)Benzoxazole 5 Carboxylate Sodium" or "Bis(Tributyltin) Oxide" or "1 Isopropoxygermatrane" or "4 Aminophenylmercuric Acetate" or "4 Chloromercuribenzoic Acid" or "4 Hydroxy 3 Methoxyphenylethylene Glycol Sulfate" or "4-Chloromercuribenzenesulfonate" or Acetphenolisatin or Acidulated Phosphate Fluoride or Actilax or Agar or Agarol or Alkylmercury Compound* or Aloe Emodin or Aloe Vera or Aloin or Alum Compound* or Aminomethoxypolyethylene Glycol* or Ammonium Sulfate or Amprolium or Anthracenedione* or Anthraquinone* or Antimony Potassium Tartrate or Antimony Sodium Gluconate or Apatites or Aqueous Nap or Arsanilic Acid or Arsenamide or Arsenates or Arsenazo III or Arsenicals or Arsenites or Arsphenamine or Ascorbic Acid* or Auranofin or Aurothioglucose or Aurothioglycanide or Barium Sulfate or Bevenopran or Bisacodyl or Buckthorn or Budotitane or Butyltin or Butyltin Derivative or Cacodylic Acid or Calcium Citrate or Calcium Phosphates or Calcium Pyrophosphate or Calcium Sulfate or Carbonyl Iron or Carboplatin or Carboxyethylgermanium Sesquioxide or Carboxymethylcellulose or Casanthranol or Cascara or Castor Oil or Cathartic* or Cephulac or Cetomacrogol or Chenodeoxycholic Acid or Chlormerodrin or Chloromercuribenzenesulfonic Acid or Chloromercuribenzoates or Chloromercurinitrophenols or Cholac or Chronulac or Cialit or Cilac or Citrate* or Citric Acid* or Citroma or Citrus Acida or Codanthramer or Codanthrusate or Colocynth Extract or Colyte or Constilac or Copper Sulfate or Cotton Seed Oil or Dantron or Dibasic Nap or Dibutyltin or Diethyl Sulfate or Diethylzinc or Dimethyl Sulfate or Diphosphates or Disaccharide or Disodium Hydrogen Phosphate or Docusate Calcium or Docusate Sodium or Dodecyl Sulfate or Dodecylsulfate Ammonium or Dolcanatide or Dulcolax or Duphalac or Durapatite or Elobixibat or Emetine or Emodin or Enema or Enulose or Etasulfate Sodium or Ethylmercuric Chloride or Ethylmercury Compound* or Ethylmercury Derivative or Ferric Compound* or Ferrocene or Ferroquine or Ferrous Compound* or Fleet or Forlax or Fortans or Gadolinium DTPA or Generlac or Glycerol or Glycolax or Gold Sodium Thiomalate or Golitely or Golytely or Grignard Reagent or Halflytely or Hemiacidrin or Heptalac or Hydrogel or Hydroxyapatites or Hydroxymercuribenzoates or Hydroxymercuribenzoic Acid or Idrolax or Inositol Hexasulfate or Iron Carbonyl Compound* or Iron Compound* or Iron Dextran Complex or Isocitrates or Ispagula or Karaya Gum or Kristalose or Lactitol or Lactulose or Laxative* or Linaclotide or Liquid Paraffin or Lubiprostone or Macrogol* or Magnesium Citrate* or Magnesium Hydroxide or Magnesium Oxide* or Magnesium Sulfate* or Maneb or Melarsoprol or Meralluride or Merbromin or Mercaptomerin or Mercuderamide or Mercumatilin or Mercuribenzoates or Mercuribenzoic Acid Derivative or Mercurobutol or Merethoxylline or Mersalyl or Methylcyclopentadienylmanganese Tricarbonyl or Methylmercuric Chloride or Methylmercury or Methylsamidorphan or "Milk of Magnesia" or Miralax or Mitoxantrone or Monobasic Nap or Movicol or Moviprep or Nap Tablet* or Nonoxynol or Normacol or Nulitely or Nulytely or Octoxynol or Organogermanium Compound* or Organogold Compound* or Organolead Compound* or Organolithium Compound* or Organomercury Compound* or Organometallic Compound* or Organometallic Compound* or Organoplatinum Compound* or Organotechnetium Compound* or Organotin Compound* or Organotin Compound* or Organotin Compound* or Osmoprep or Osmotic or Oxyphenisatin Acetate or Oxyphenisatine or "P Azobenzenearsonate" or "P Chloromercuribenzoic Acid" or PEG or "PEG 3350 SD" or "PEG ELS" or

Phenolphthalein* or Phenylmercuric Acetate or Phenylmercuric Borate or Phenylmercuric Nitrate or Phenylmercury Compound* or Phenylmercury Derivative or Phosphate* or Phosphoramides or Picolax or Picoline* or Picosulfate Sodium or Plecanatide or "PMF 100" or Poloxalene or Poloxamer or Polycarbophil or Polyethylene Glycol* or Polyhydroxyethyl Methacrylate or Polyoxyethylene Derivative* or Polyoxyethylene Glycol* or Polyphosphates or Polysorbates or Potassium Chloride* or Potassium Citrate or Potassium Sulfate* or Prepopik or Psyllium or Pyridoxal or Pyridoxamine or Pyridoxine or Recanaclotide or Renacid or Rhein or Roxarsone or Ruthenocene Derivative or Salbutamol Sulfate or Salicylamide Sulfate or Senna Extract or Sennoside or Senokot or Sestamibi or "SF PEG ELS" or Sodium Bicarbonate* or Sodium Chloride* or Sodium Dihydrogen Phosphate or Sodium Phosphate* or Sodium Picosulfate* or Sodium Picosulphate* or Sodium Sulfate* or Sorbitol or Spirogermanium or Struvite or Suclear or Sucralfate* or Sulfate* or Sulphate* or Suprep or "Technetium 99m" or "Technetium Tc 99m" or Tetradecyl Sulfate Sodium or Tetraethyl Lead or Tetraethyllead or Tetramethyllead or Thimerosal or Thiomersal or Thiosulfates or Titanocene or Transipeg or Trialkyltin Compound* or Tributyltin or Triethyllead or Triethyltin or Trilyte or Trimethyltin or Triphenyltin or Urea Stibamine or Visicol or "Vitamin B 6" or "Vitamin B6" or Zinc Sulfate or Zineb or Zirconocene).mp. (1509837)
3 exp Inflammatory Bowel Diseases/ or (Inflammatory Bowel Disease* or Crohn* or Ulcerative Colitis or Ulcerative Colorectitis or Ulcerative Proctocolitis or Ulcerative Enteritis or Regional Enteritis or IBD).mp. (140601)
4 ((Randomized Controlled Trial or Controlled Clinical Trial).pt. or (Randomi?ed or Placebo or Randomly or Trial or Groups).ab. or Drug Therapy.fs.) not (exp Animals/ not Humans.sh.) (5037138)
5 and/1-4 (424)

WHO ICTRP
(Inflammatory Bowel OR Crohn OR Ulcerative Colitis) AND (Preparation OR Cleansing OR Lavage OR Purgation)
83 records for 77 trials

Cost effectiveness:

**Database: Embase <1974 to 2024 February 28>, Ovid MEDLINE(R) ALL <1946 to February 28, 2024>**
**Search Strategy:**

**1** exp Inflammatory Bowel Disease/ or (Crohn* or Ulcerative Colitis* or IBD or Inflammatory Bowel Disease*).mp. (393574)
**2** (Colon or Colorectal or Rectal).mp. (1352832)
**3** (Cancer* or Neoplas* or Dysplasia).mp. (9334511)
**4** (Detect* or Screen* or Diagnos* or Assess* or Surveillance).mp. (27748692)
**5** and/1-4 (22971)
**6** (cost or costs or cost-analysis or cost-effectiveness or cost-utility analysis or cost-benefit analysts or quality adjusted life years or QALYs).mp. (2118467)
**7** exp "Costs and Cost Analysis"/ (683269)
**8** 5 and (6 or 7) (1109)
**9** remove duplicates from 8 (916)
**10** limit 9 to english language (882)
**11** conference abstract.pt. (5063003)
**12** conference review.pt. (15659)
**13** 10 not (11 or 12) (584)
**14** limit 13 to yr="2014 - 2024" (294)