escalation, resulting in variability in care. This case series demonstrates that irAE colitis is a common problem that has implications for healthcare provision and care standardisation. Complete management and outcome data will be presented.

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PTU-030 RNA SEQUENCING OF COLORECTAL CANCER BIOSPECIMENS CHARACTERISES DIFFERENTIAL GENE EXPRESSION IN OLD AND YOUNG PATIENTS

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Introduction Incidence of colorectal cancer (CRC) increases with age, with older patients having a worse prognosis than younger patients. The underlying molecular features which lead to these age-related differences are unclear, but possible reasons include immune senescence or cellular senescence. Characterisation of differences in gene expression in cancers of older and younger patients, particularly genes driving the immune response to cancer, will contribute to our understanding of the differences between early- and late-presenting tumours and inform treatment strategies.

Methods RNA was extracted from tumour cells and lymph nodes from three cohorts of patients with rectal cancer (n=47), stage 2 CRC (n=72) and stage 3 CRC (n=69). For the stage 3 CRC cohort, RNA was extracted from the primary tumour. After RNA-Sequencing, differential gene expression data was generated between older and younger patients in the Stage 3 cohort, with 'old' patients being one standard deviation (SD) above the median, and 'young' patients one SD below the median (median=72 years). Results were validated with a second cohort of Stage 3 CRC samples (n=78).

Results In primary tumour samples from the stage 3 cohort, there were 581 genes differentially expressed between older and younger patients at p-adj <0.05, and 159 genes differentially expressed in metastatic lymph nodes between the two groups. In older patients, we found downregulation of the Oxidative Phosphorylation, MYC V1 and MYC V2 gene sets and, interestingly, downregulation of Unfolded Protein Response (UPR) genes. Under normal conditions, the UPR promotes apoptosis in conditions of prolonged cellular stress; downregulation of UPR genes may therefore enhance tumour survival by abrogating this response. Although downregulation of UPR genes may be a natural part of cellular senescence, this change might be exploited by late-presenting tumours.

Conclusions Our results have shown that there are detectable differences in tumour and lymph node gene expression between older and younger patients; such findings may further enhance age-dependent personalised therapy. We have chosen to focus on age-related differential gene expression, but differences between other tumour phenotypes may also be investigated and likely to further enhance our biological understanding of cancer biology.

PTU-031 THE WORLD ENDOSCOPY ORGANISATION CONSENSUS STATEMENTS ON POST-COLONOSCOPY AND POST-IMAGING COLORECTAL CANCER

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Introduction Colonoscopy is an imperfect tool. The term 'interval' cancer refers to cancers diagnosed after a colorectal screening examination or test in which no cancer was detected, and before the date of the next recommended exam. From a colonoscopy Quality Assurance perspective, that term is too restrictive, hence the term Post Colonoscopy Colorectal Cancer (PCCRC) was developed, to incorporate non-screening settings.

Methods Our goal was to provide a framework on terminology, identification, analysis and reporting of cancers appearing after a negative colonoscopy (PCCRCs) or computed tomographic colonography (Post-Imaging Colorectal Cancers/PICRCs). We based our methodology on the AGREE II tool. A team of gastroenterologists, pathologists, epidemiologists, a radiologist and a patient representative, formed a panel of 20 members. Following literature review, 402 articles provided background for statements, which were then subjected to anonymous voting (modified Delphi approach). The GRADE system was utilised to rate evidence.

Results The final output consists of 21 statements, providing guidance on key aspects of PCCRC/PICRC, namely:

1. Definitions/terminology (2 statements) (table 1)
2. Qualitative review of cases/aetiology attribution (8 statements) (figure 1)
3. Quantitative assessment/calculation of PCCRC rate (7 statements)
4. Non-colonoscopy imaging of the colon (4 statements)

The PCCRC rate is calculated as the number of PCCRCs divided by the total of the PCCRCs plus the number of detected cancers, expressed as a percentage.

A Root-Cause-Analysis checklist, as well as a checklist to assist Peer Review of PCCRC manuscripts have also been developed.