diarrhoea resolved transiently. However, following TCR clustering based on temporal trajectories, a significant increase in relative abundance of specific clonotypes was observed at the end of FMT cycle 2 when CDI recurred. Temporal clustering analyses also revealed clonotypes which strongly decreased or increased over time in concomitance with positive response to FMT, suggesting an association with CDI progression and remission.

Conclusions This is the first attempt to assess the potential of TCR repertoire profiling as a prognostic tool for assessing clinical outcomes of FMT in severe or fulminant CDI and of evaluating the role that specific T cell clonotypes may play in mediating FMT efficacy.

P308 EXPLORATORY STUDY OF URINARY PEPTIDE MARKERS IN COLORECTAL CANCER AND LINKAGE TO HISTOPATHOLOGY

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Introduction Colorectal cancer (CRC) is common and symptoms are often vague and non-specific. Superior methods of risk stratification are required. This study explored proteomic CRC markers released from the tumour site into the periphery (blood and urine). This work could contribute to a novel multi-parametric diagnostic test for accurate and easy-to-use diagnosis and monitoring of CRC.

Methods Capillary electrophoresis mass spectrometry (CE-MS) was used to perform proteomic profiling and to search for CRC-specific peptide fragments in blood and urine samples of CRC cases and normal controls. Based on the terminal amino acid sequence motifs, proteases responsible for CRC peptide marker cleavage were predicted and validated by immunohistochemistry (IHC) of CRC and normal colonic tissue sections.

Results Six CRC peptide markers were identified in both urine and blood; many others possess sequence overlap (table 1). These peptides belong to the interstitial collagen chains α-1(I), α-1(III) and α-2(I), but also to fibrinogen α, apolipoprotein A-I, uromodulin and gelsolin. Protease prediction revealed 13 proteases in urine and 17 in blood potentially involved in CRC pathology. Of these, 12 were predicted to be associated with both urinary and plasma CRC peptide markers. Meprin 1α (MEP1A) was selected as a proof-of-concept candidate at the cancer tissue site. Using IHC, MEP1A identified at strong intensity (Allred score 3) in 75% of the tumour tissues versus 38% of the adjacent normal tissue ($z=1.069$ $p\geq0.2$), and was seen at the advancing margin of the tumour.

Conclusions We have previously shown the role of FGF7 in the tumour microenviroment and in this exploratory study has shown the existence of peptide markers for CRC in plasma and urine. Increased MEP1A expression was shown in CRC tissue and suggests a link with more aggressive tumour pathology. Findings supports published literature on MEP1A and provides a platform for further proteomic studies on the significance of MEP1A and other extracellular matrix degrading proteases in CRC.

CE-MS and sequence characteristics of CRC peptide marker candidates that showed significant differences in their distribution between CRC cases and controls.

P309 OUR BOWEL CLEANSING SERVICE EVALUATION DOES NOT SUPPORT SWITCH FROM MOVIPREP TO PLENVU

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Background and Aims Bowel cleansing (prep) is usually the most demanding and yet important aspect in colonoscopy. Adequate prep is prerequisite for complete, accurate and comfortable colonoscopy. Polyethylene glycol based agents have been deemed the safest category of prep. Moviprep has been the 1st line cleansing agent for patients attending for screening colonoscopy in the North of Tyne Bowel Screening Centre. Recently we have attempted to use Plenvu in some patients as it has less volume (0.5 vs 1 litre) and a different flavour to Moviprep. However it costs more. 6 colonoscopists perform procedures in 4 sites. We had limited supply of Plenvu so we decided to do a 'real-world' service evaluation to determine if the smaller volume would lead to:

1. Comparable bowel cleansing
2. Reduction in proportion of patients unable to complete ingestion of cleansing agent

Method Patients due screening colonoscopy were given either Plenvu or Moviprep. The colonoscopists were blinded to the cleansing agent until after they had scored the effect of cleansing using the Boston bowel preparation scale (BBPS) after the procedure. Completion of ingestion of agent, patient

Abstract P308 Table 1 CE-MS profiling Amino acid sequence and protein information in urine in plasma

MS mass [Da]	CE-time [min]	MS mass [Da]	CE-time [min]	Sequence	Protein
1016.45	25.79	1016.44	25.88	777-ApGDKGESGPS-787	COL1A1
1200.54	25.03	1200.54	24.82	709-KGDAGApGApGSQG-722	COL1A1
1693.76	23.48	1693.77	23.69	222-PpGPpGKNGDDGEAGKpG-239	COL1A1
1732.77	28.18	1732.77	28.42	605-WVGTGASEAEKTGAQEL-621	GSN
1737.78	23.73	1737.77	23.77	585-NDGAPGKNGERGGpGGpGp-604	COL3A1
1737.78	31.00	1737.77	30.85	541-TGSpGSpGPDGKTGPpGPAG-560	COL1A1
4638.10	25.78	4638.09	25.70	—	n.i.
6236.91	21.07	6236.84	20.95	—	n.i.