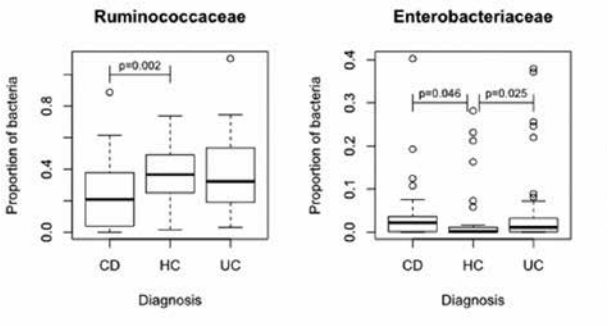

Abstract PWE-108 Figure 1

The inhibitory effect of IFX on ADAb detection was observed in both low and high level ADAb samples with ADAb only detectable in sample 2 i.e. as free, not complex form. Comparing expected with measured concentrations of IFX in the spiked samples indicated a difference in recovery between the low and high ADAb positive samples suggesting decreased availability of free IFX in the presence of ADAb.

Conclusion This study shows that the LISA-Tracker kit is not affected by tested interferents. Results from spiking experiments highlight the importance of measuring trough levels and also indicate that the presence of ADAb (detectable or undetectable) can limit the availability of free IFX, leading to sub-therapeutic levels.

LISA-Tracker is a simple, robust assay which has been implemented in our hospital and is routinely used as a personalised approach to prescribing and optimising anti-TNFα therapies in IBD.

Disclosure of Interest None Declared.

PWE-109 MEASUREMENT OF INFLIXIMAB AND ANTI-INFLIXIMAB ANTIBODIES - ANALYTICAL ASPECTS AND CLINICAL IMPLICATIONS

doi:10.1136/gutjnl-2013-304907.397

[1,*]N Unsworth, [1]Z Arkir, [2]P Irving, [2]M G Ward, [1]G Richards. *[1]Reference Chemistry, GSTS Pathology, Guy's and St. Thomas' NHS Trust; [2]Department of Gastroenterology, Guy's and St. Thomas' NHS Trust, London, UK*

Introduction Commercial assays for monitoring Infliximab (IFX) and anti-drug antibodies (ADAb) are currently available. The heterogeneity of these assays and lack of standardisation of ADAb may cause difficulties in interpretation, in particular comparing bridging ELISA and radioimmunoassay (RIA). Bridging ELISAs have high specificity but are more prone to inhibition by drug hence may underestimate ADAb, whereas false positive results can be seen with RIA.

Aims Evaluation of (i) the effect of common interferents in the LISA-Tracker Premium ELISA assay (Theradiag). (ii) the inhibitory effect of IFX on the detection of ADAb.

Methods The LISA-Tracker kit was used for the quantitative determination of free drug and ADAb by indirect and bridging assay principles respectively. The measurement range was 0.1 to 5 μg/mL for IFX and 10 to 200 ng/mL for ADAb (> 10 ng/mL considered positive).

Interference studies were carried out using samples with known levels of haemolysis, icterus, rheumatoid factor (RF) and paraprotein (IgG kappa = 17 g/L). All patients had no history of exposure to biologics. Samples were run neat and diluted with samples of known IFX and ADAb concentration to assess recovery.

Samples with known levels of ADAb were spiked with aqueous solutions of IFX (2.4, 1.2 and 0.3 μg/mL) at a ratio of 1:2. Predicted ADAb concentrations were calculated by sample dilution in drug-free diluent.

Results No interference was observed from haemolysis (up to 0.6 g/dL haemoglobin equivalent), icterus (up to 349 μmol/L bilirubin), RF (up to 885 U/mL) and paraprotein as confirmed by recoveries of 93–113% for drug and ADAb.

Spiking experiments

Abstract PWE-109 Table

	Sample 1			Sample 2		
Expected IFX μg/mL	Measured IFX μg/mL	Expected ADAb ng/mL	Measured ADAb ng/mL	Measured IFX μg/mL	Expected ADAb ng/mL	Measured ADAb ng/mL
1.6	1.9	53	< 10	1.3	176	< 10
0.8	0.7	53	< 10	0.5	176	< 10
0.2	< 0.1	53	< 10	< 0.1	176	12

PWE-110 ACCEPTANCE AND ADJUSTMENT IN A DISTRICT GENERAL COHORT OF INFLAMMATORY BOWEL DISEASE PATIENTS: FINDINGS AND IMPLICATIONS

doi:10.1136/gutjnl-2013-304907.398

[1,*]N Swart, [1]D Wellsted, [2]K Lithgo, [2]T Price, [2]M W Johnson. *[1]Centre for Lifespan and Chronic Illness Research, University of Hertfordshire, Hatfield; [2]Gastroenterology, Luton & Dunstable University Hospital, Luton, UK*

Introduction 'Acceptance' refers to the patient's willingness to engage with their illness. Poor acceptance implies the avoidance or denial of an illness and the accompanying somatic experiences. A lack of acceptance highlights an unwillingness to make the necessary behavioural changes that are required to manage a disease effectively (e.g. missing clinical appointments, medication adherence, bad diet, poor coping strategies). This can have serious ramifications for long-term conditions such as inflammatory bowel disease (IBD).

Objective To assess the prevalence of poor acceptance within our IBD patients.

Methods 2400 patients with IBD in the Luton & Dunstable catchment area were invited to participate in a web-based quality of life assessment, with the option to request a paper copy. Eligibility required patients to be between 18 and 90 years of age, with no serious learning difficulties or pre-existing mental disorders. The 7-item self-report "Acceptance and Adjustment Questionnaire" (AAQ-II; Bond *et al* 2011) was used. AAQ-II scoring ranges from 7 to 49. A bimodal distribution suggested two groups of patients (Good and Poor Acceptance) separated by a cut-off score of 18. Logistic regression was used to identify predictors of acceptance and adjustment.

Results 245 patients completed the assessment (43% male; mean age = 53, SD = 17). Approximately 37% of patients fell in the Poor Acceptance group. Significant predictors of Poor Acceptance were found in Anxiety, Depression, Emotional Illness Perception and Socio-Economic Deprivation. Anxiety levels were scored on a scale from 0 to 21 using the GAD-7. Depression levels were scored on a scale from 0 to 27 using the PHQ-9. Emotional Illness Perception on