Abstract PTU-054 Figure 1 EOS Baseline and end of follow-up period

Conclusions Despite a high rate of symptom improvement, in only a small minority did the eos/hpf count fall below the diagnostic level. Normalisation of endoscopic appearance was also less common than has been reported.

It has been proposed that persistent eosinophilia leads to fibrotic tissue remodelling and disease progression. Longer term studies with larger cohorts are needed to confirm this hypothesis. Until then it will remain unclear whether more aggressive intervention is indicated in asymptomatic patients.

PTU-055 COMPARATIVE COST-EFFECTIVENESS OF GASTROESOPHAGEAL REFLUX DISEASE (GORD) CENTRIC AND POPULATION BASED BARRETT'S OESOPHAGUS (BO) SCREENING

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Introduction With the development of minimally invasive tests for BO, the prospect of population screening (all adults age ≥ 50) instead of targeted screening (white, male, age ≥ 50 , GORD) has arisen. We aimed to evaluate the comparative cost effectiveness of current tests utilising recently published data on prevalence, accuracy, screening uptake, and costs.

Methods Decision analytic methods were conducted using Markov Modeling. The simulation compared six screening strategies to no screening: sedated OGD (sOGD, Cytosponge with TFF3 biomarker, Sponge on String (SoS) with methylated DNA markers, breath testing (E-Nose), hospital-based transnasal endoscopy (hTNE), and mobile unit-based transnasal endoscopy (mTNE). The model simulated a hypothetical cohort of 100,000 individuals aged ≥ 50 followed up for 40 years. sOGD was used as a confirmatory test of positive findings for all other diagnostic tests. Mean costs (direct as well as indirect costs resulting from missed or false positive diagnoses and low test uptake) were calculated for each strategy. Quality of life outcomes were based on quality adjusted life years (QALYs).

Results Screening (GORD centric and population) was associated with small gains in QALYs compared to no screening (table 1). Under the general population analysis, mean costs ranged from \$120 (mTNE) to \$554 (E-Nose). While mTNE

was the dominant strategy, both the Cytosponge and SoS tests had the lowest incremental cost effectiveness ratios (ICERs) (table 1). Under the GORD centric screening analysis, mean costs ranged from \$212 (mTNE) to \$768 (E-Nose). Cytosponge, SoS, hTNE, and mTNE were all dominant strategies compared to no screening. Out of those, mTNE was the least costly and most effective strategy. The E Nose test had the highest ICER primarily due to lower accuracy estimates.

Conclusions While mTNE was the dominant strategy for both screening scenarios, this technique is not widely utilised and has been only evaluated in one centre. The Cytosponge and SoS strategies had very favourable ICERs in both strategies and may make population based BO screening regardless of GORD status feasible.

Abstract PTU-055 Table 1 Main results of the simulation models

Population screening (adults, age ≥ 50)			
	Cost \$	QALY	ICER \$
sOGD	413	39.6227	52,000
Cytosponge	166	39.6216	3,333
SoS	175	39.6221	5,000
hTNE	218	39.6207	21,667
mTNE	120	39.6207	Dominant
E-Nose	554	39.6226	81,837
No screening	153	39.6177	NA
GORD centric screening (white men ≥ 50 with chronic reflux)			
	Cost \$	QALY	ICER \$
sOGD	486	39.336	26,078
Cytosponge	280	39.3365	Dominant
SoS	313	39.3379	Dominant
hTNE	310	39.338	Dominant
mTNE	212	39.338	Dominant
E-Nose	768	39.3325	259,375
No screening	353	39.3309	NA

PTU-056 GENERALIST VS SPECIALIST: DOES DEDICATED ENDOSCOPY IN BARRETT'S OESOPHAGUS YIELD IMPROVED ADHERENCE TO BSG GUIDANCE?

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Introduction Barrett's oesophagus (BO) is a premalignant precursor of oesophageal adenocarcinoma (OAC).¹ With yearly progression seen in 0.3-0.6/100 patients, a robust surveillance strategy is crucial.¹ The *British Society of Gastroenterology (BSG) 2013* guidance recommends the use of two techniques for reviewing non-dysplastic BO: (1) Prague Classification and (2) Seattle Biopsy Protocol.² A retrospective analysis (2014–2015) at a large teaching hospital showed correct use of 'Prague Classification' and 'Seattle Biopsy Protocol' to be 32% and 42%, respectively. Subsequently, recommendations to introduce specialist (operators with BO interest who are highly familiar with BSG guidance) endoscopy as well as improving the general familiarity with the BSG guidance were proposed. This study aimed to evaluate (1) overall compliance to guidance for both techniques, (2) differences between specialist and generalist operators, and (3) availability of specialist endoscopy.