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**Proceedings Paper:**

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# P 159 A pilot study to investigate respiratory ill-health in people living with HIV

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**Background**  
 Helping people living with HIV (PLWH) to maintain long-term health as they age is central to HIV care.

- Chronic lung disease (CLD) is recognised to be more common in PLWH<sup>1,2</sup>. UK data on CLD prevalence and phenotype in PLWH are limited, particularly in female, non-white, never smoking groups.
- Longitudinal studies of progression are lacking.

**Aims**  
 This is a pilot study to

- obtain preliminary data on CLD in key PLWH subgroups
- establish a simple scheme for monitoring lung health among PLWH for a future longitudinal study.

**Methods**  
 Cross-sectional convenience sampling of PLWH in routine clinics.

- Web-based questionnaire for self-reported
  - 'Usually having' cough, wheeze or phlegm (BOLD study<sup>3</sup>)
  - Medical Research Council (mMRC) Dyspnoea scale<sup>4</sup>;
  - St Georges Respiratory Questionnaire (SGRQ)<sup>5</sup>;
  - health related quality of life (EQ-5D-5L)<sup>6</sup>;
  - Smoking, inhaler use and past medical history.
- Spirometry
  - FEV<sub>1</sub> (Forced Expiratory Volume in 1 second) & FEV<sub>1</sub>/FVC (Forced Vital Capacity) z-scores derived from GLL equations.
- HIV data were collected from clinical records
- 50 HIV negative controls matched for smoking status
- Evaluation of suitability and acceptability of the measurements.

**Results**

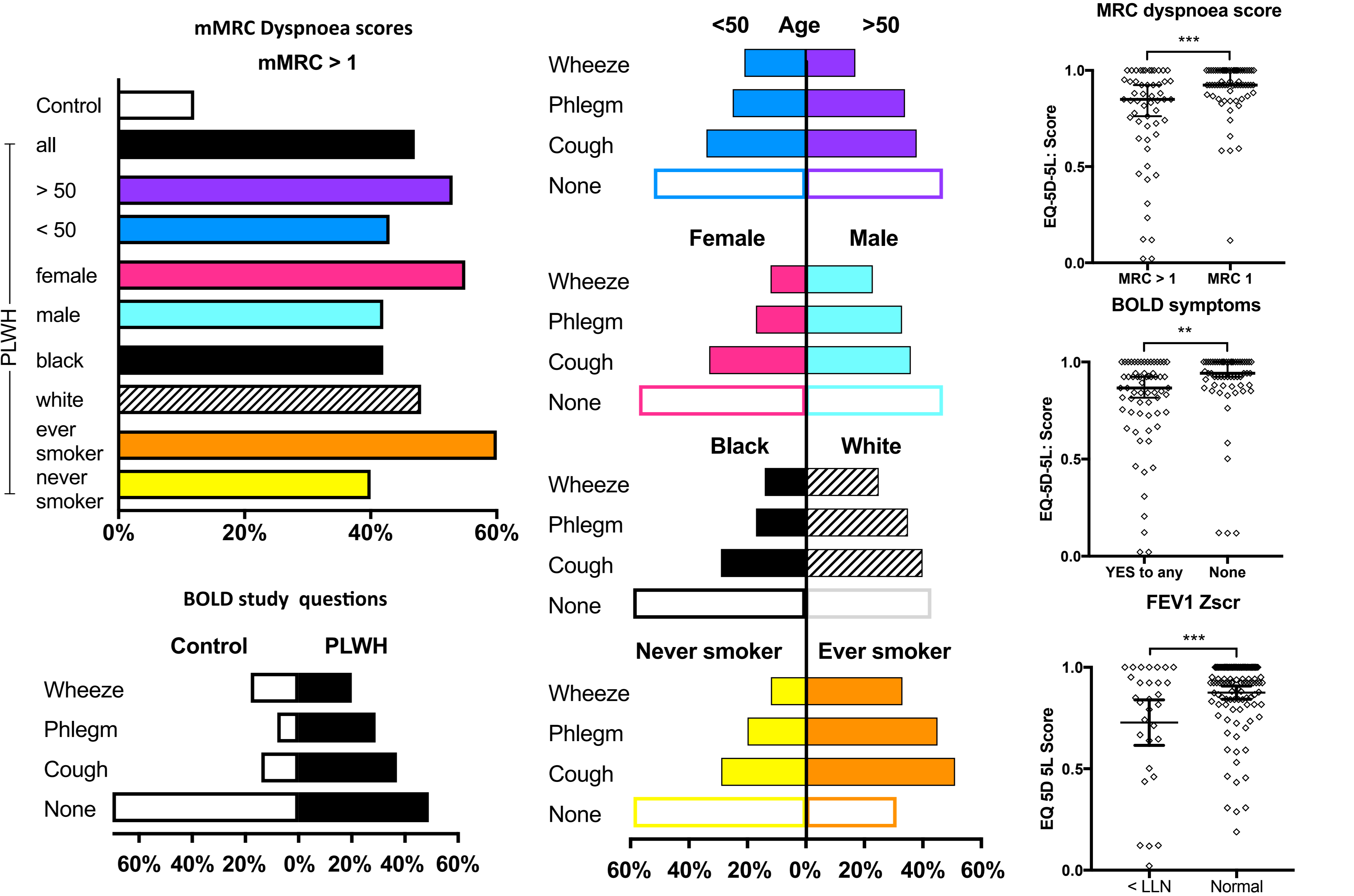
- >50% of PLWH approached were enrolled, ≤ 1 hour each
- Lack of time commonest reason for non participation

**Symptoms: mMRC, BOLD & EQ-5D-5L Health related Quality of Life**

- Breathlessness (mMRC 2-5) & usual wheeze, phlegm or cough more common in all PLWH groups.
- EQ-5D-5L scores and SGRQ ratings in PLWH correlated with mMRC, BOLD & FEV<sub>1</sub>

	PLWH		Control	
n	150		50	
Age <sup>1</sup>	46	40-53	37	26-47
Female	46	31%	25	50%
White	70	47%	38	75%
Black	65	44%	6	12%
Asian	4	3%	7	14%
Other*	9	6%		
Current smoker	31	22%	10	20%
Ex-smoker	18	13%	6	12%
Never Smoker	93	65%	34	68%
Passive smoker	9	6%	0	0%
Solid cooking fuel in childhood	64	45%	12	24%
VL undetectable	141	96%	-	-
Nadir CD4 <sup>§</sup>	186	35-336	-	-
Current CD4 <sup>§</sup>	620	448-801	-	-
Past CAP/TB/CAP	70	49%	8	16%
Adult asthma	22	15%	5	10%
CLD Diagnosis	20	14%	2	4%
Inhaler use	26	18%	4	8%

Data expressed n / % except <sup>¶</sup> = median / IQR \* Data missing for <10%. <sup>§</sup> cells/mm<sup>3</sup>

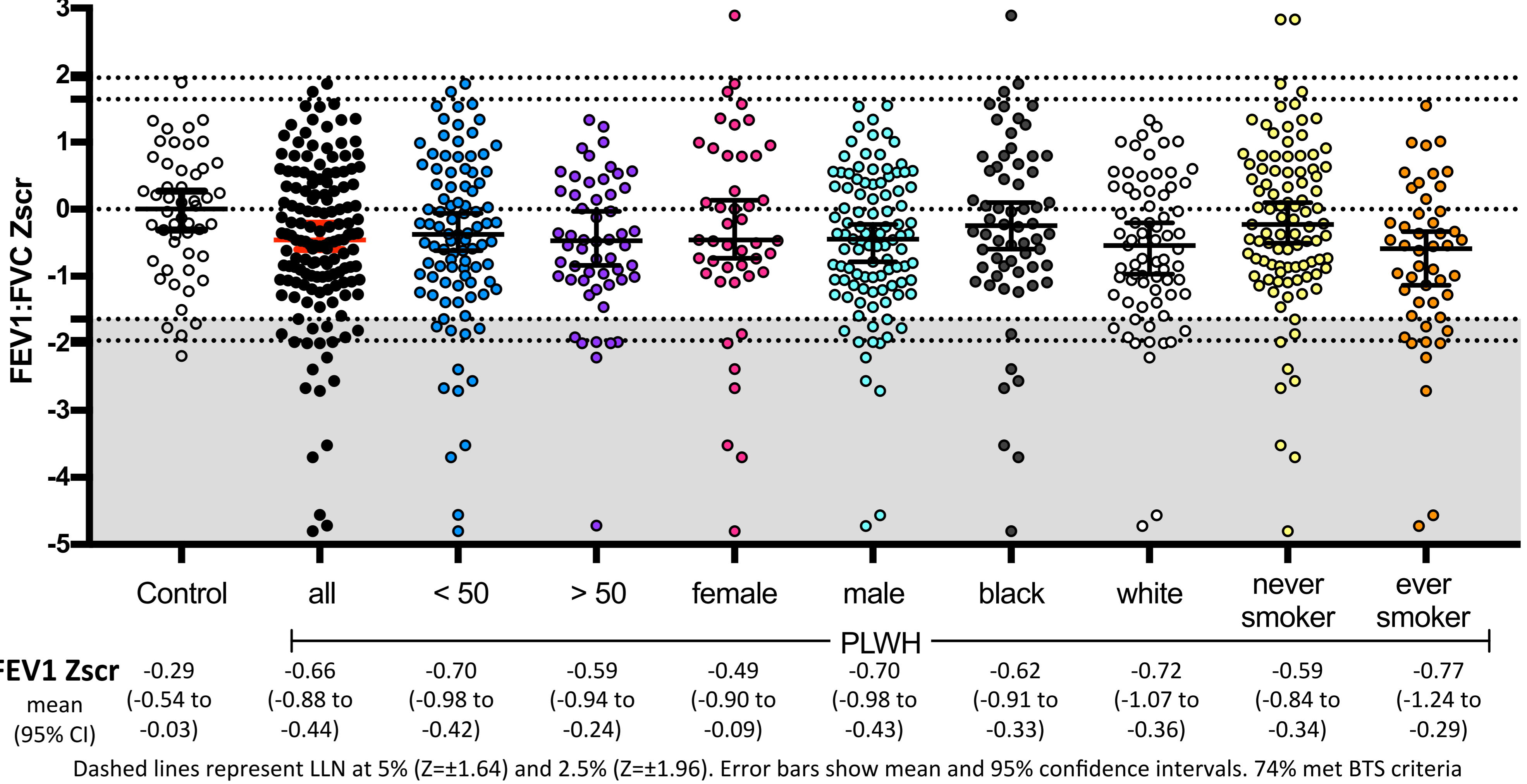
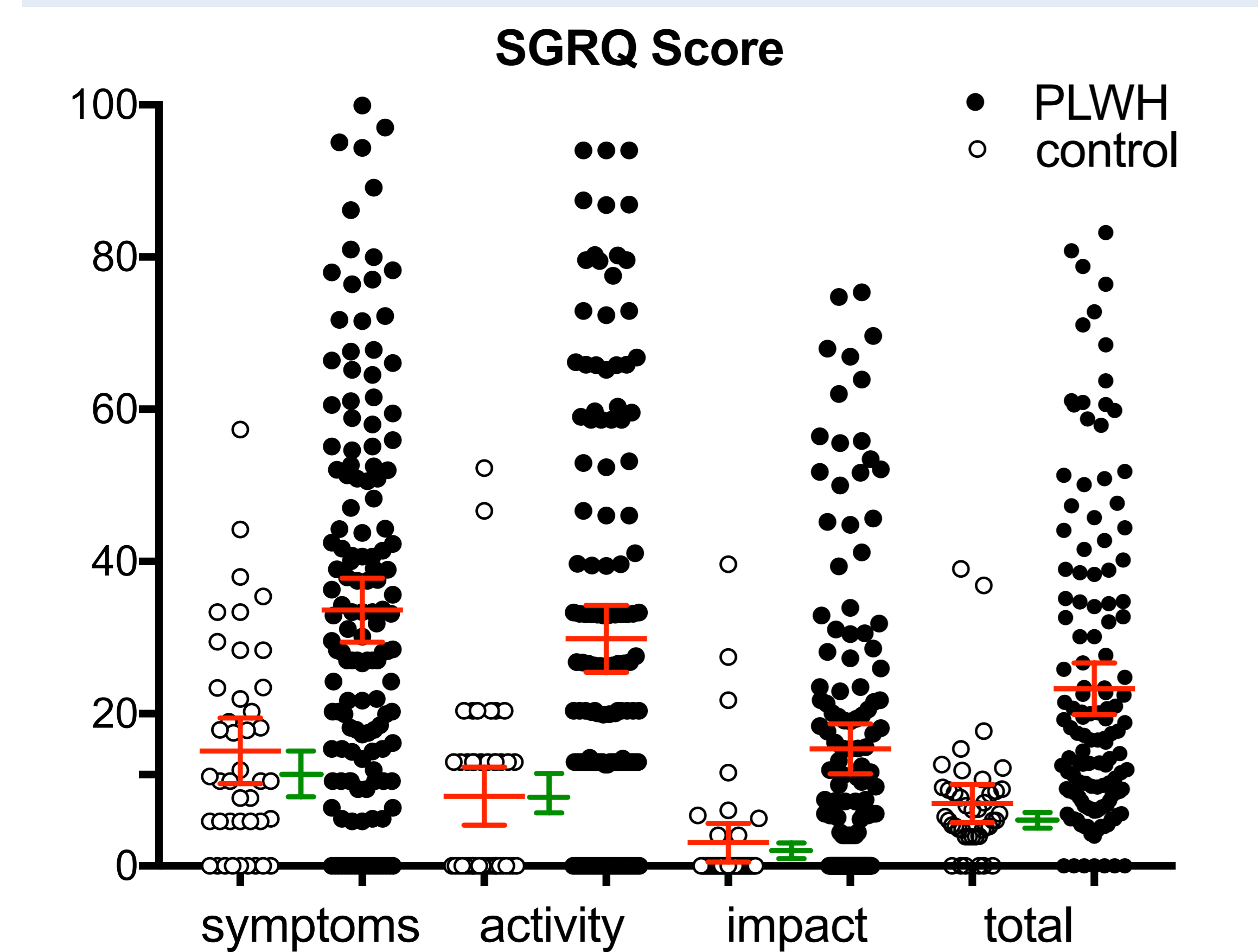


**Symptoms: SGRQ**

- PLWH found online survey acceptable. SGRQ needed more time and supervision than mMRC/BOLD/PMHx.
- SGRQ scores elevated in PLWH, as predicted in controls.

**Spirometry.**

- 21 PLWH (14%) vs 2 control (4%) met GOLD criteria for COPD.



St George's Respiratory Questionnaire component scores. Error bars show mean and 95% confidence interval for study groups (red) and quoted population norms (green).