Title: Comparison of modified Medical Research Council (mMRC) dyspnoea scale cut point $\geq 1$ with COPD assessment test (CAT) $\geq 10$ to differentiate low and high symptom COPD patients

Paul 15762 Jones pjones@sgul.ac.uk MD $^1$, Lukasz 15763 Adamek lukasz.p.adamek@gsk.com $^2$, Gilbert 15764 Nadeau gilbert.a.nadeau@gsk.com $^2$ and Norbert 15765 Banik norbert.n.banik@gsk.com $^3$. $^1$ Clinical Science, St. George's University, London, United Kingdom; $^2$ Respiratory Centre of Excellence, GlaxoSmithKline, Uxbridge, United Kingdom and $^3$ Biostatistics and Epidemiology, GlaxoSmithKline, Munich, Germany.

Body: The GOLD 2011 guidelines recommend categorising patients into: A: low risk, less symptoms; B: low risk, more symptoms; C: high risk, less symptoms; D: high risk, more symptoms. A CAT score $\geq 10$ or mMRC score $\geq 2$ are proposed for categorising symptoms. A recent analysis suggests that the mMRC places more severe patients in the 'less symptom' categories than the CAT (Adamek et al, ERS 2012). This analysis compared health status scores split by CAT $\geq 10$ or mMRC $\geq 1$, using St George's Respiratory Questionnaire (SGRQ) and short form health survey (SF-12) Physical Component (PC) scores, in a primary care population from the Health-Related Quality of Life in European COPD Study. Data from 1817 patients (mean [SD] FEV$_1$ 1.6 [0.6] L; age 64.9 [9.6] years; males 72%) were used. The CAT classified 17.2% of patients as low symptom (GOLD A+C) vs. 18.9% by mMRC. SGRQ scores in the mMRC low symptom groups were slightly higher than those classified by CAT. The distribution of low symptom patients into low risk and high risk categories differed.

The mMRC cut-point of $\geq 1$ identifies a group of low symptom patients who have similar health status to those classified by CAT but are not directly equivalent. The small differences in classification of patients using CAT or MRC $\geq 1$ may influence treatment in only a very small proportion of patients.