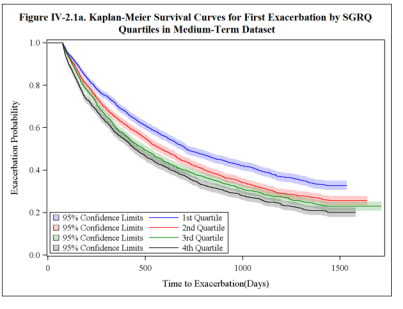
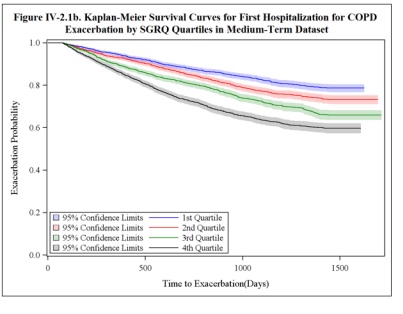
eTable 1. Description of Long-term Random Controlled Trials From the CBQC SGRQ Database

Study	Study Design	Study Population (N)	Definition of Exacerbation	Study Start Year	Follow-up period	Key reference (for study design)
Understanding Potential Long-Term Improvements in Function with Tiotropium (UPLIFT)	Multi-center, multi-national, randomized, double-blind, placebo-controlled, parallel-group clinical trial to compare outcomes in patients treated with tiotropium and patients treated with placebo	Moderate to severe COPD subjects ≥ 40 yrs old with post-bronchodilator. FEV_1 of <70% of the predicted value, post-bronc. FVC of < 0.7 and a smoking history of ≥10 pack yrs. (N=5993 randomized to treatment)	Increase or new onset of more than one of the following respiratory symptoms (cough, sputum, sputum purulence, wheezing, dyspnea) with duration of 3 or more days requiring treatment with antibiotics and/or systemic (oral, intramuscular or intravenous) steroids. Mild: treated at home without seeing a HCP Moderate: visited a HCP (e.g., home visit, visit to an OP facility or ED – but not requiring hospital admission) Severe: hospitalization (an ED stay >24 h considered hospitalization)	2003	4 years	Decramer M, Celli B, Tashkin DP, et al. Clinical trial design considerations in assessing long-term functional impacts of tiotropium in COPD: the UPLIFT trial. *COPD.* 2004;1:303-312.
Towards a Revolution in COPD Health (TORCH)	Multi-center, multi-national, randomized, double-blind, placebo-controlled, parallel-group study to determine the impact of salmeterol / fluticasone propionate (SFC) combination and the individual components on the survival of COPD patients study	Moderate to severe COPD subjects 40-80 yrs with ≥ 10 pack years (N~=6200 randomized to treatment)	Moderate: required treatment with systemic corticosteroids and/or antibiotics Severe: required hospitalization	2000	3 years	The TORCH Study Group. The TORCH (Towards a Revolution in COPD Health) survival study protocol. *Eur Respir J.* 2004; 24:206-210.
SCO40036: The Prevention of Chronic Obstructive Pulmonary Disease Exacerbations by Salmeterol/ Fluticasone Propionate or Tiotropium Bromide	Multicenter, randomized, double-blind, double dummy controlled trial	Patients aged 40 to 80 years, with a smoking history of ≥10 pack-years, a clinical history of COPD exacerbations, post bronchodilator FEV1 <50% predicted, reversibility ≤ 10% of predicted FEV1, and a score of 2 or more on the Modified Medical Research Council dyspnea scale. N = 812	The primary efficacy endpoint was the rate of health care utilization (HCU) exacerbations, defined as those that required treatment with oral corticosteroids and/or antibiotics or required hospitalization.	2003	2 years	Wedzicha W, et al. Prevention of COPD exacerbations with SFC or Tio. *Am J Respir Crit Care Med.* 2008;177:19-26.

eFigure 1. Kaplan-Meier Curves for Time to First Exacerbation by Quartile of Baseline SGRQ Score



e-figure 2: Kaplan-Meier Curves for Time to First Hospital Admission Due to Exacerbation By Quartile of Baseline SGRQ Score



e-figure 3. Kaplan-Meier Curves for Time to All-Cause Death by Quartile of Baseline SGRQ Score