

Small Cell Lung Cancer Working Group

14th Annual PRO Consortium Workshop – Silver Spring, MD – April 19-20, 2023



Background

Rationale for Small Cell Lung Cancer (SCLC) Working Group

- PRO Consortium member firms and FDA advisors identified SCLC as a priority area for the qualification of a PRO measure focused on disease symptoms to evaluate the clinical benefit of new therapies.
- As current therapies for limited and extensive stage SCLC are not curative, any new therapy should demonstrate meaningful relief from distressing disease-related symptoms; including standardized symptom outcome information in the product label would enable patients and providers to compare benefit among treatments.
- While reliable and responsive PRO measures exist for the assessment of lung cancer symptoms, none were developed specifically for SCLC or believed to have met the current regulatory expectations for supporting an FDA-approved labeling claim.
- With FDA qualification of the *Non-Small Cell Lung Cancer Symptom Assessment Questionnaire (NSCLC-SAQ)* in April 2018, the SCLC Working Group was convened to work toward FDA qualification of a patient-reported measure of SCLC symptom severity for use in assessing clinical benefit in SCLC treatment trials.

Goal of the SCLC Working Group

- To derive a concise PRO measure to assess the severity of patient-experienced symptoms in limited and extensive stage SCLC for use in clinical trials to support assessment of clinical benefit

Targeted Labeling Language

- Patients treated with [Drug X] reported a decrease in core SCLC symptom severity or a delay in the worsening of the core SCLC symptoms.
 - Decrease in symptom severity for patients who are symptomatic at baseline
 - Delayed symptom worsening or symptom onset for patients who are symptomatic or asymptomatic at baseline

Milestones

| Milestone | Expected Date | Completed Date |
|---|---------------|----------------|
| Letter of Intent submission for proposed SCLC symptom measure to FDA | | MAR 2020 |
| Acceptance of proposed SCLC symptom measure by FDA into the COA Qualification Program | | JUL 2020 |
| Completion of qualitative interviews to assess content validity of the proposed SCLC symptom measure in the target population | Q2 2023 | |
| Qualification Plan submission to FDA | TBD | |
| Full Qualification Package submission to FDA | TBD | |

Highlights

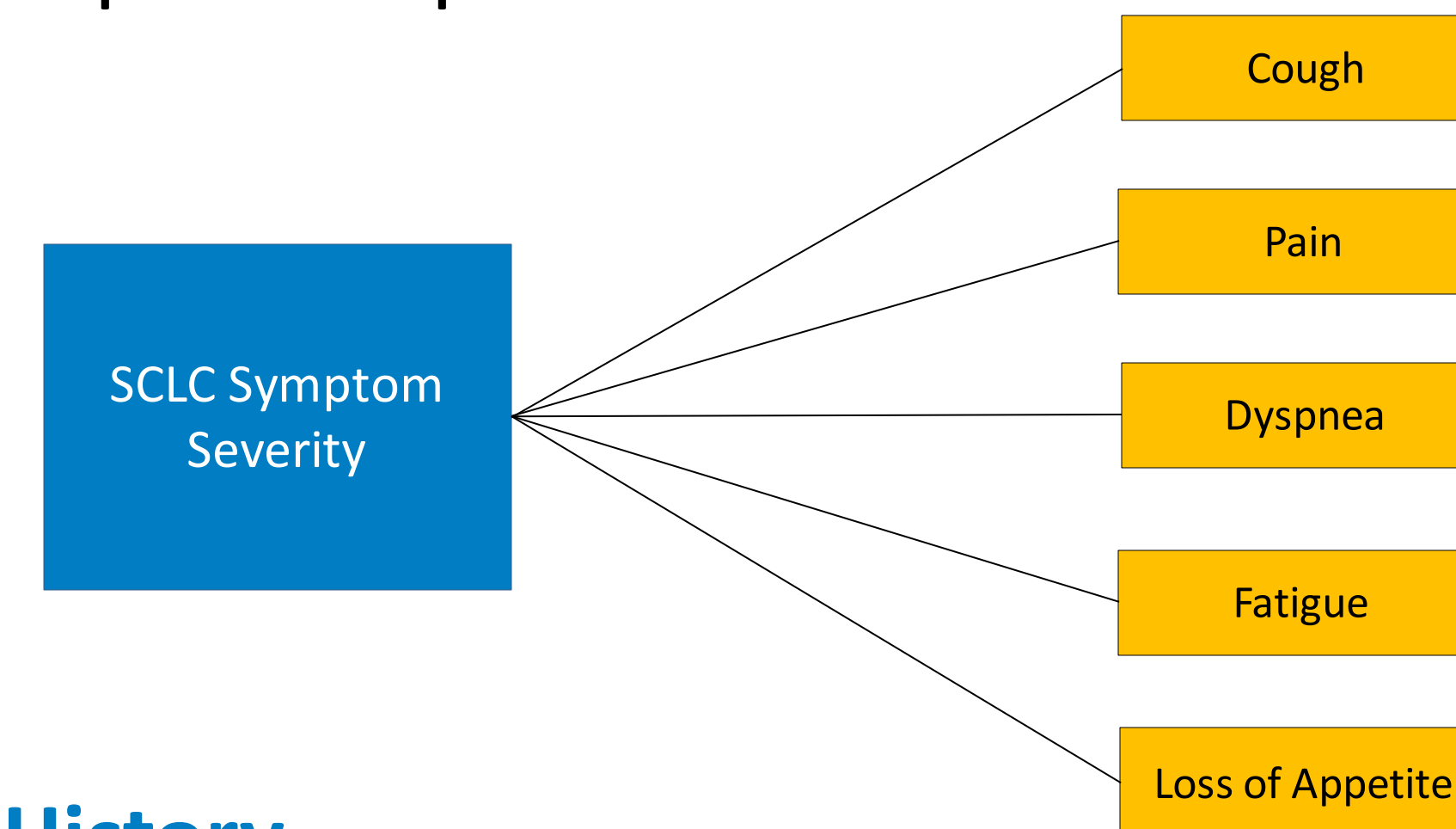
Example Endpoint Model for Treatment of SCLC

| Endpoint Hierarchy | Endpoint Concept(s) | Endpoint Type |
|--------------------|---|---------------|
| Primary | Progression-Free Survival (PFS) - Response Evaluation Criteria in Solid Tumors (RECIST) | Biomarker |
| | Overall Survival | |
| | Objective Response Rate (ORR) | |
| Secondary | Decrease in symptom severity for patients who are symptomatic at baseline | PRO |
| | Delayed symptom worsening or symptom onset for patients who are symptomatic or asymptomatic at baseline | PRO |

Target Population

- Persons 18 years of age and older with a clinician-confirmed diagnosis of limited or extensive stage SCLC and Eastern Cooperative Oncology Group (ECOG) performance status of 0 to 2, regardless of line of therapy being administered

Proposed Conceptual Framework



History

- The *Non-Small Cell Lung Cancer Symptom Assessment Questionnaire (NSCLC-SAQ)*, which was qualified by FDA for use in drug development for NSCLC, will serve as the basis for the proposed SCLC symptom measure.
- Modifications will be considered to optimize the measure for the new context of use.
- All 5 existing domains are anticipated to be retained, with the opportunity to explore any additional domains during upcoming qualitative interviews.
- Two sets of items (pain and fatigue), however, will be revisited to determine:
 - if a single overall pain item is more appropriate than the 2 separate pain items currently in the NSCLC-SAQ (pain in chest, pain in areas other than chest), and
 - whether one of the current fatigue items (low energy, tires easily) from the NSCLC-SAQ can be dropped due to redundancy as these items, although they both resonated with a high percentage of respondents (qualitatively), have been highly correlated (quantitatively) in previous research.
- These aspects will be evaluated in the planned qualitative interviews (and may be further explored in a subsequent quantitative pilot study) with individuals diagnosed with SCLC.

Working Group Activities

Completed Activities

- Two firms supporting the SCLC Working Group shared findings from their literature reviews and preliminary concept elicitation research conducted to identify SCLC symptoms for inclusion in a PRO measure in the target population.
 - Findings demonstrated that, similar to NSCLC, symptoms of cough, pain, shortness of breath, fatigue, and loss of appetite were important to individuals with SCLC.
 - This evidence is supportive of moving forward with the NSCLC-SAQ as a starting point for the PRO measure for SCLC treatment trials.
- Review of more recent literature (January 2016 to February 2021) was conducted to confirm the key concepts.
- OPEN Health developed a protocol for a qualitative study to confirm content validity of the derived measure in the target population.
- Advisory panel of 6 clinicians/patient advocates provided feedback on protocol in July 2021.
- Site recruitment began in September 2021 but has been slow due to the rare nature of the condition as well as ongoing impacts from COVID; therefore, in February 2022, the working group added patient panel-based recruitment as an additional strategy to identify eligible persons. Due to continued delays, another panel-based recruiter was added in January 2023.
- To date, 20 qualitative interviews have been completed.

Next Steps

- Complete qualitative interviews, with 30 participants total, to determine whether the 5 concepts/domains included in the proposed conceptual framework reflect the appropriate content (i.e., concept confirmation) and to evaluate the proposed SCLC symptom measure for its appropriateness within the target population:
 - Confirm core symptom concepts through brief concept elicitation exercise; and
 - Evaluate content validity of draft measure through cognitive interview questions
- Refine the proposed SCLC symptom measure in an iterative manner throughout the qualitative research, as appropriate
- Advisory panel will be asked to provide feedback during item refinement process
- Once SCLC symptom measure is refined, prepare and submit Qualification Plan to FDA

Working Group Participants

| Company/Organization | Representative |
|----------------------------------|---|
| Amgen | Gaurav Suri |
| AstraZeneca AB | Shannon Kummer, MS; Haylee Andrews, MPH |
| Boehringer Ingelheim | Maarten Voorhaar, MSc |
| Bristol Myers Squibb | Steven Blum, MBA, MA (Co-Chair) |
| Eli Lilly and Company | Nalin Payakachat, PhD; Rebecca Speck, PhD, MPH |
| EMD Serono | Vivek Pawar, PhD |
| Genentech/Roche | Peter Trask, PhD, MPH |
| GSK | Anna Cardellino, MPH |
| Janssen Global Services, LLC | John Fastenau, PhD, MPH |
| Jazz Pharmaceuticals | Wayne Su, MSc; Navit Naveh, MD |
| Merck Sharp & Dohme, LLC | Kelly McQuarrie, BSN; Josephine Norquist, MS |
| Novartis Pharmaceuticals | Sue Vallow, RPh, MBA, MA (Co-Chair); Denise Bury-Maynard, PhD, MPH |
| Nonmember Participant | Representative |
| LUNgevity | Bellinda King-Kallimanis, PhD |
| Research Partners | Research Team |
| OPEN Health (formerly Pharmerit) | Kelly McCarrier, MPH, PhD; Emily Evans, MPA; Laura DiGiovanni, MA; Rebecca Martinez, BS |
| Vector Psychometric Group, LLC | R. J. Wirth, PhD; Carrie Houts, PhD; Tracy Nishida, PhD |