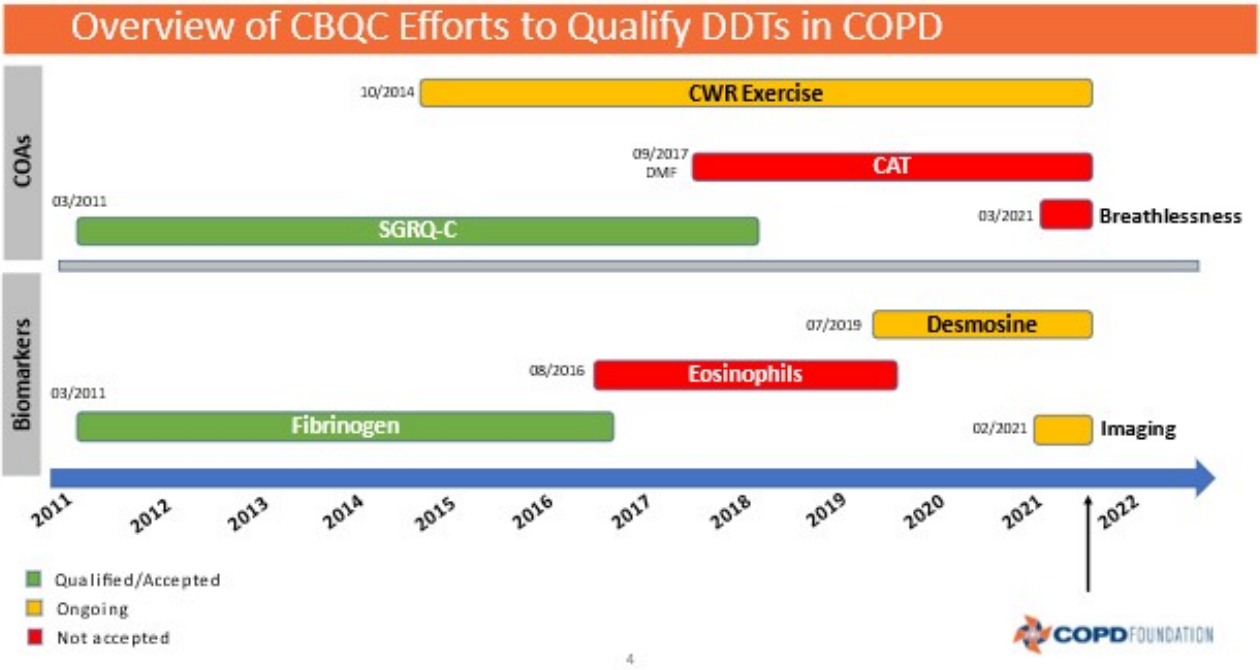
COPD FOUNDATION CBQC

Chronic Lung Disease Biomarker and Clinical Outcome Assessment Qualification Consortium

CBQC News 4th Quarter 2021

The CBQC is a collaborative public-private partnership, aiming to undertake regulatory qualification of biomarkers and clinical outcomes assessments to facilitate the development and approval of novel treatments for chronic lung diseases.



FDA Patient Listening Session held on October 8

Summary

Discussions in late 2020 with Janet Woodcock, MD, who at the time was the Director of the Center for Drug Evaluation and Research (CDER) and Peter Stein, MD, Director of the Office of New Drugs of the FDA led to a decision to convene a group of experts and patient advocates in 2021. A meeting was held on Oct. 8, 2021 with the goals of:

1) Sharing statements of people living with chronic lung diseases, focusing on patient-focused unmet medical needs
2) Proposing a "Concept of Interest" framework for progressing qualification of Clinical Outcome Assessments (COAs)
3) Discussing opportunities to efficiently and collaboratively advance important DDTs

Presenters included representatives of the COPD Foundation's Chronic Lung Disease Biomarker and Clinical Outcomes Assessment Qualification Consortium (CBQC) and, importantly, people living with chronic lung diseases. Also participating were senior-level representatives from several FDA divisions and functions. Approximately 250 other interested parties listened to the session via Zoom.

Ruth Tal-Singer, PhD reviewed CBQC progress and challenges. While one biomarker (Plasma Fibrinogen) and one COA (SGRQ) have been accepted, several other submitted packages have been rejected or are still in process. Dr. Alan Hamilton, co-leader of the Constant Work Rate Exercise Working Group proposed a framework for increasing efficiencies in the development of Clinical Outcome Assessments and applying it across chronic lung diseases.

Statements from seven people living with chronic lung diseases highlighted continuing unmet medical needs, particularly in the areas of breathlessness and the ability to be more active/carry out activities of daily living. Diagnosing early disease and the ability to follow disease progression using technology such as CT and other imaging methods is also important in new treatment development. One of the highlights from speaker Jan Cotton is noted below:

- FDA Patient Listening Session Meeting Slide Deck
- FDA Patient Listening Session Meeting Summary

To view the recording of the recap meeting, register using the link below. We will not use the registration information for any other purpose.

- FDA Patient Listening Session Recap Meeting

FDA comments were non-binding but they:
1) agreed there is a continued need for new Drug Development Tools,
2) commented that patient testimonies highlighting unmet medical needs provided valuable insight
3) expressed willingness to discuss ideas presented to collaboratively progress important biomarkers and COAs.
Opportunities to work together include publication of key scientific data to support the proposed measures, early collaboration for new development programs, addressing slow timelines, collaborative discussions on data requirements, and ensuring proposed endpoints measure what is important to patients.

Next steps include follow-up discussions for FDA on the CT Imaging, CWR Exercise, Breathlessness and CAT projects.

IMPACT
To keep the momentum going after the FDA Listening Session, we held our IMPACT 2021 event. This virtual lobby day gave us the platform to highlight the critical needs of our

community. We reached into 25 states with 35 unique house districts and 49 unique senate districts. One of our main policy priorities for IMPACT was asking Congress to urge the FDA to prioritize the review and qualification of drug development tools for COPD and other chronic lung conditions. From our constituent meetings, we garnered tremendous bi-partisan support and we're working on identifying Congressional Leaders to co-sponsor a letter to the FDA.

WORKING GROUP CORNER

CBQC Physical Activity Whitepaper Published in Journal of the COPD Foundation

Objectively Measured Physical Activity in Patients with COPD: Recommendations from an International Task Force on Physical Activity

The CBQC Physical Activity Working Group recently published a paper in *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation* entitled, "Objectively Measured Physical Activity in Patients with COPD: Recommendations from an International Task Force on Physical Activity." The manuscript was prepared by a team of experts in the field of COPD and physical activity monitoring.

In the paper, experts present an evidence based (often creating new data) suggestion to standardise the measurements of physical activity. This suggestion may well pave the way to an accepted methodology around physical activity monitoring. The team believes that this paper is timely and needed Currently, research groups all use their own methods making it difficult to compare outcomes.

According to Thierry Troosters, PhD, Department of Rehabilitation Sciences, KU Leuven–University of Leuven and Respiratory Division, University Hospitals Leuven, Leuven, Belgium, where the Working Group initially met to discuss the strategy and content, the paper summarizes the best practice in physical activity monitoring. "It offers researchers a blueprint to standard methodology that will ultimately allow researchers to better compare study results. To that end we "recycled" data from international study groups to provide the best possible evidence for the methodology proposed."

Dr. Troosters also noted that, "This multinational, multi-stakeholder consensus document, facilitated by the COPD foundation is of great help to the emerging field of directly monitoring the impact of COPD and the effect of interventions in real life, rather than in a laboratory situation."

We are so appreciative of the collaborative work this team completed over the past few

years, and hope that academic researchers and industry researchers will start using the proposed standard methodology and ultimately the regulators will accept unobtrusive real-life monitoring as a meaningful outcome for patients suffering from lung disease.

CBQC Imaging Paper Published in Radiology

Relationship between Emphysema Progression at CT and Mortality in Ever-Smokers: Results from the COPDGene and ECLIPSE Cohorts

The Imaging Working Group has submitted a Letter of Intent (deemed "Reviewable" by FDA in May 2021). This was highlighted as a high priority at the FDA Patient Listening Session.

Earlier this year, the team published a paper in *Radiology* describing the relationship between Emphysemsa Progression on CT and Mortality in Ever-Smokers, taken from the COPDGene and ECLIPSE cohorts. The analysis included a total of 5143 participants in COPDGene and 1549 participants in ECLIPSE.

The group concluded, "In ever-smokers with emphysema, emphysema progression at CT was associated with increased all-cause and respiratory mortality." This work supports the importance of developing drug development tools that support identification of emphysema and emphysema progression to support the evaluation of new therapies.

The associated editorial by Kyung Soo Lee, MD and Hye Yun Park, MD concludes that, "Ash et. al. demonstrated that additional emphysema progression information seen at CT can be a biomarker and can improve the performance of models that predict mortality that have been estimated mainly on other predictors, such as baseline and follow-up spirometry. In addition, they adopted the method for their emphysema scoring, volume-adjusted lung density histogram, and could accomplish and substantiate successfully the emphysema quantification."

REGULATORY CLIPS

FDA Biomarker Videos and Podcasts

The link directs you to several useful FDA videos and Podcasts describing the Biomarker Qualification process, including:

- About the FDA's Biomarker Qualification Program
- Making Biomarker Development Successful

- What are Biomarkers and Why are They Important
- What Do You Need to Consider When Qualifying a Biomarker?
- Biomarker Terminology: Speaking the Same Language
- How Biomarkers Can Improve the Drug Development Process
- Pathways for Using Biomarkers in Drug Development
- What Does Biomarker Qualification Do (and Not Do)?
- Opportunities to Engage with the FDA About Qualification During Biomarker Development
- The Biomarker Qualification Process
- The Role of Consortia

CBQC Current and Former Sponsors

The COPD Foundation would like to thank our current members for their commitment and continued support.

We would also like to thank our former members for all the support to get us to this point.

Interested in joining the CBQC?

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