Endpoints for Drug Development in Heart Failure

Great Room, White Oak Campus, FDA
July 26, 2019

The U.S. Food & Drug Administration (FDA) is convening experts in heart failure research and clinical trials from the regulatory, academic, and drug development communities to discuss issues related to endpoints in heart failure drug development. Following a recently published draft guidance, "Treatment for Heart Failure: Endpoints for Drug Development", FDA is specifically interested in soliciting feedback regarding four high-priority topics:

1. Identify endpoints related to symptoms or physical function of clinical importance, including an approach to quantifying hospitalization;
2. Understanding when the nature, magnitude and clinical importance of an endpoint may justify deferral or omission of outcomes studies;
3. Identify the risk of mortality that should be ruled out in outcome studies and whether the acceptable upper bound should be influenced by a drug's demonstrated benefit and risk;
4. Discuss the pros and cons of capturing all-cause events vs. cause-specific events, and the need for adjudication of events.

8:30 am **Registration opens**

9:00 am **Welcome and overview, Background** (10m)

- Ellis Unger

9:10 am **Opening Remarks** (5m)

- Norman Stockbridge

9:15 am **<u>Part I: Endpoints related to symptoms or physical function of clinical importance in HF</u>**
Moderator: JoAnn Lindenfeld (75 m)

QOL, symptoms, PRO's (15 min)
Eldrin Lewis

Functional Endpoints: 6MW, accelerometer, new technologies (15 min)
Bill Abraham

Quantifying Hospitalization? (15 min)
John Teerlink

Reactants and Panel Discussion (30 min):

- Panelist – Mary N. Walsh
- Panelist – Paul Heidenreich
- Panelist – Patients– Skype in Reiss Tatum (LVAD), Cynthia Chauhan (HFpEF)

- Panelist – Biykem Bozkurt

10:30 am **Break** (15m)

10:45 am **<u>Part II: Mortality and Outcomes</u>** (85 m)
Moderator: Chris O'Connor

When would deferral or omission of outcomes studies be justified? (20 min)
Scott Solomon

What is the risk of mortality that should be ruled out? (20 min)
John McMurray

Reactants and Panel Discussion (45 min):

- Panelist - Michael Felker
- Panelist - Javed Butler
- Panelist - Marvin Konstam
- Panelist – Lynne Stevenson
- Panelist – Patient – Rhonda Monroe
- Panelist - Norman Stockbridge

12:05 pm **Lunch** (60 m)

1:10 pm **<u>Part III: All-cause vs. cause-specific events, Adjudication</u>**
Moderator: Clyde Yancy (60 min)

Should all-cause or cause-specific events be used? (15 min)
JoAnn Lindenfeld

Should the FDA require adjudication of cause-specific events? (15 min)
Michael Bristow

Reactants and Panel Discussion (30 min):

- Panelist – Inder Anand
- Panelist – Christopher O'Connor
- Panelist – Peter Carson
- Panelist – John Teerlink

2:10 pm **Open Audience Feedback** (75 min)

The audience is invited to share remarks and outstanding questions regarding the day's discussion and FDA's draft guidance "Treatment of Heart Failure: Endpoints for Drug Development".

3:30 pm **Closing Remarks and Adjournment**