Bellerophon Therapeutics

iNO-PF Cohort 2 Top-Line Data Call
December 17, 2019
Nasdaq: **BLPH**

Bellerophon THERAPEUTICS

Forward Looking Statements

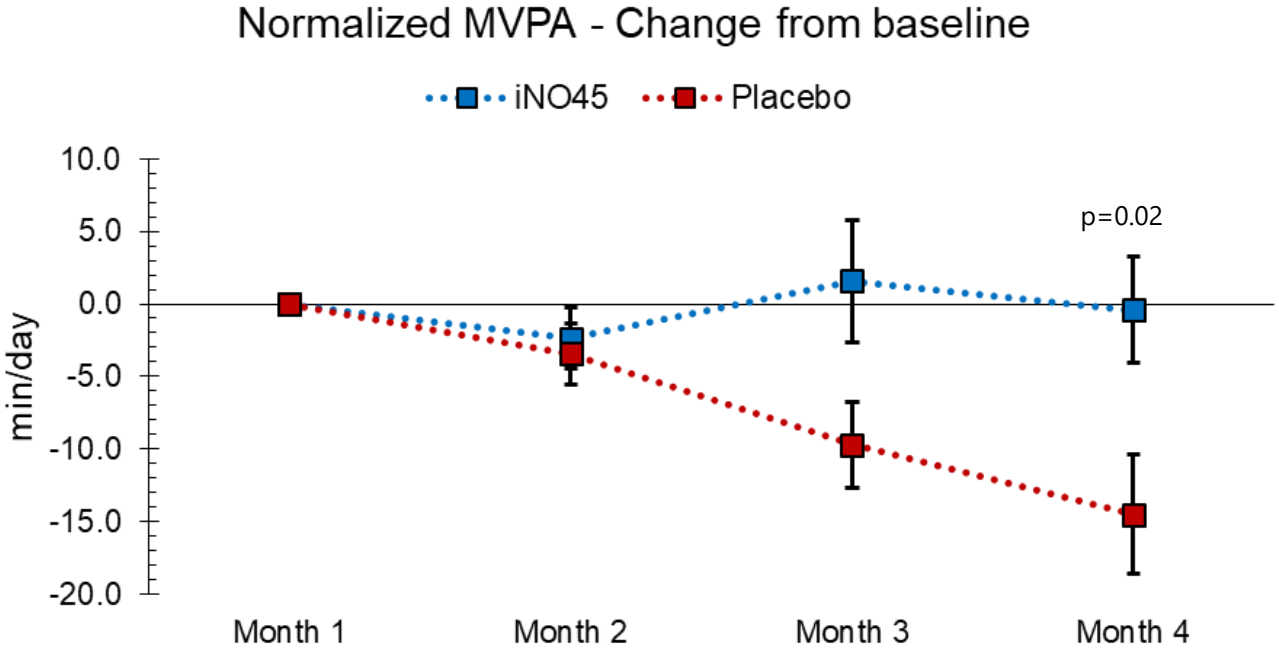
This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this presentation, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make due to a number of important factors, including risks and uncertainties relating to: the timing and outcomes of our ongoing and expected clinical trials for our product candidates; our ability to successfully develop, commercialize and market any of our product candidates; our ability to obtain, maintain and enforce intellectual property rights; competition; our reliance on third parties; our ability to obtain necessary financing; and those risk factors discussed in the “Risk Factors” section and elsewhere in our most recent Form 10-K and other periodic filings we make with the SEC.

All forward-looking statements contained in this presentation reflect our current views with respect to future events. We assume no obligation, except as required by applicable law, to update any forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

iNO-PF Cohort 2 Top-Line Results

- Statistically and clinically significant placebo corrected improvement of 14 minutes/day in MVPA
- Consistent and meaningful benefit in overall activity
- Clinically meaningful benefit in SGRQ and UCSD demonstrating improvement in quality of life and dyspnea
- Pulsed inhaled NO was safe and well-tolerated

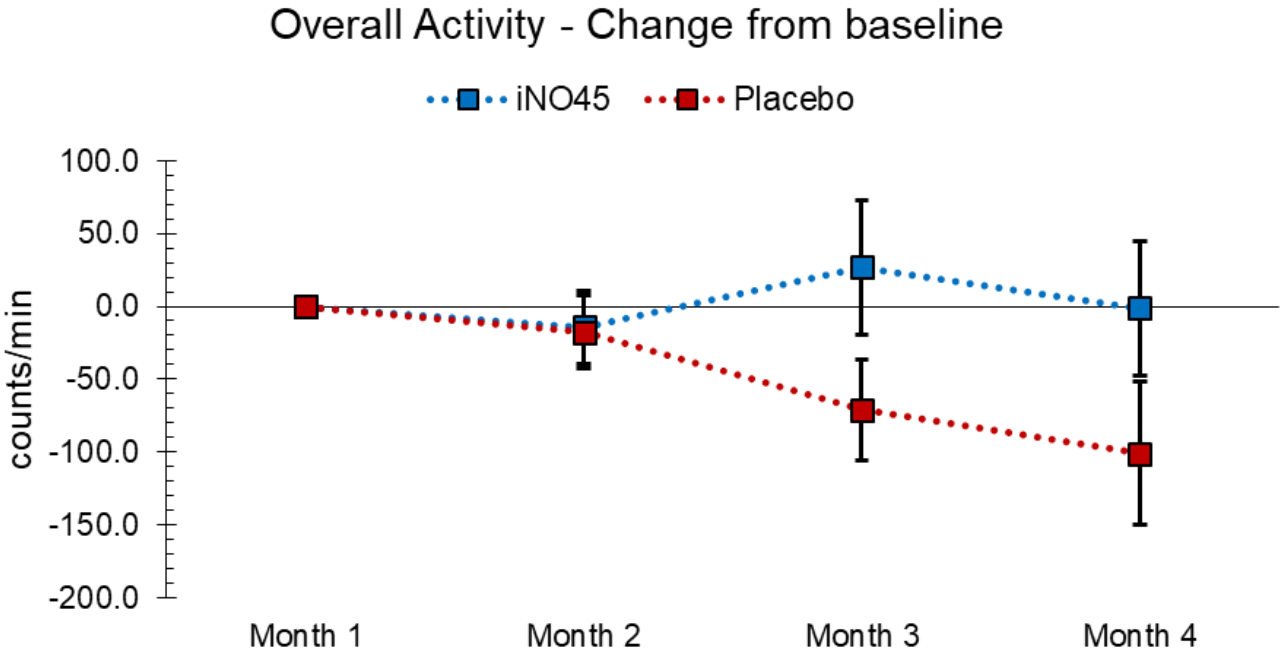
Statistically Significant Benefit Over Placebo Demonstrated in MVPA



- Placebo corrected improvement of 14 min/day at month 4
- Baseline: 74 min/day
- Primary endpoint for Phase 3 Cohort

- MVPA = moderate to vigorous physical activity
- Data points and error bars = mean and standard error
- Cohort 2: n=44; randomized 2:1

Consistent and Meaningful Benefit Exhibited in Overall Activity

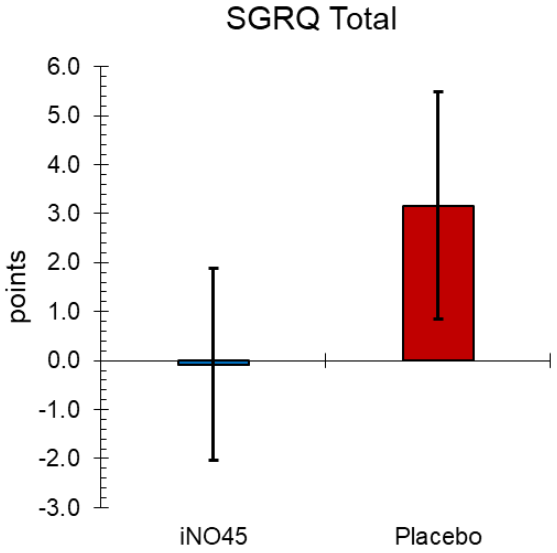


- Placebo corrected improvement of 100 counts/min at month 4
- Baseline: 1476 counts/min

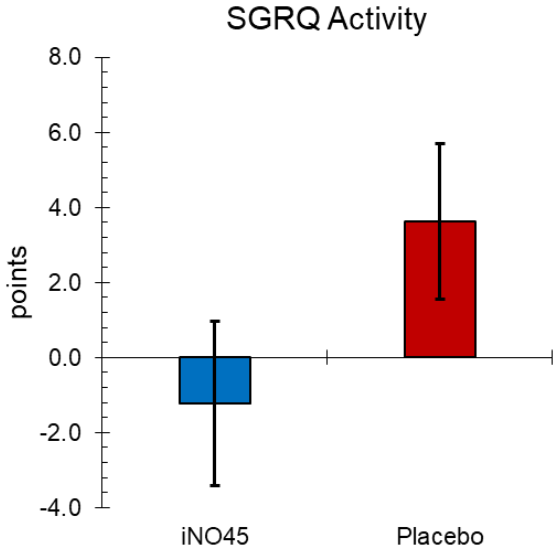
- Data points and error bars = mean and standard error
- Cohort 2: n=44; randomized 2:1

St. George's Respiratory Questionnaire (SGRQ) Indicates QOL Benefit in Multiple Measures

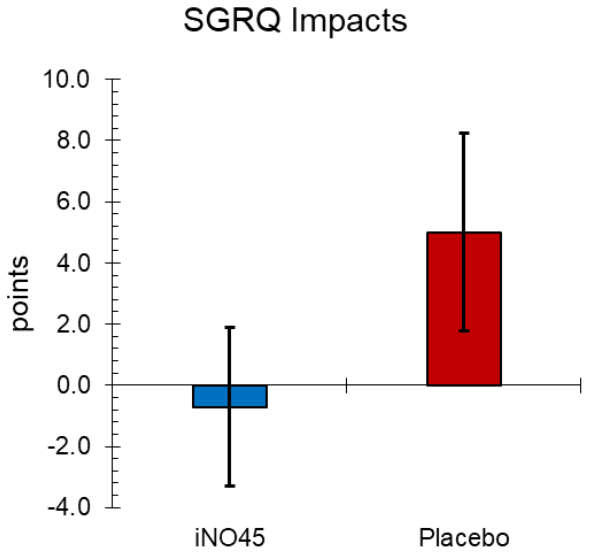
Increased score indicative of worsening



- Placebo corrected improvement of 3 points
- Measures health status and quality of life



- Placebo corrected improvement of 5 points
- Measures disturbances to patients' daily physical activity

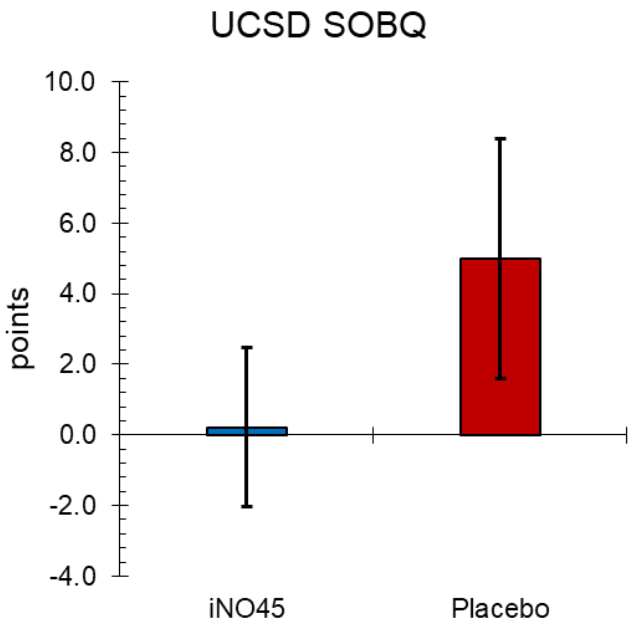


- Placebo corrected improvement of 6 points
- Measures psychological and social impact of the disease

- Data points and error bars = mean and standard error
- Change from baseline at month 4
- Cohort 2: n=44; randomized 2:1

UCSD Shortness of Breath Questionnaire (SOBQ) Indicates Benefit in Dyspnea

Increased score indicative of worsening



- Placebo corrected improvement of 5 points
- Measures shortness of breath while patients perform daily physical activity

- Data points and error bars = mean and standard error
- Change from baseline at month 4
- Cohort 2: n=44; randomized 2:1

Safety Summary

- Pulsed Inhaled Nitric Oxide was well-tolerated in Cohort 2
  - Incidence of AEs and SAEs was low in both active and placebo groups
  - AEs were generally non-serious with no observable trends
  - All SAEs were reported as unrelated to the study drug

	iNO 45 n=30	Placebo n=14
Total Adverse Events Reported	26 (0.87/subject)	9 (0.64/subject)
Total Serious Adverse Events Reported	5 (0.17/subject)	7 (0.50/subject)
Subjects with Serious Adverse Events	3 (10%)	3 (21.4%)
Deaths	0	0

Next Steps in PH-ILD

- Results from Cohort 2 support continuing program into Phase 3 with MVPA as primary endpoint

- Phase 3 initiation expected in 1Q2020 upon selection of dose and confirmation of trial size

- Company entered into $10M convertible financing facility with existing institutional investors, extending cash runway into 2021

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