FLAME study shows superiority of Novartis’ Ultibro® Breezhaler® over Seretide® in reducing COPD exacerbations

- Ultibro® Breezhaler® met primary endpoint and demonstrated superiority to Seretide® in reducing COPD exacerbations during 52 weeks of treatment
- First large-scale study to confirm Ultibro Breezhaler is an effective steroid-free option that both reduces exacerbations and improves lung function in COPD patients with one or more exacerbations in the past year, compared to Seretide
- Full FLAME study results to be shared in 2016

Basel, November 17, 2015 – Novartis today announced positive first results from the Phase III FLAME head-to-head trial examining the rate of chronic obstructive pulmonary disease (COPD) exacerbations. Once-daily Ultibro® Breezhaler® (indacaterol/glycopyrronium) 110/50 mcg met its primary endpoint (non-inferiority) and furthermore demonstrated superiority to twice-daily Seretide® (salmeterol/fluticasone) 50/500 mcg in reducing the rate of all COPD exacerbations (mild/moderate/severe) over one year of treatment.

This finding is consistent with the earlier LANTERN trial and is now expanded to patients with at least one exacerbation in the previous year. The safety profiles of the two treatments were consistent with their known profiles, according to the initial FLAME results.

“Today’s FLAME study results provide clear further evidence that Ultibro Breezhaler is more effective than Seretide in reducing COPD exacerbations, events linked to significant patient suffering and more rapid progression of the disease,” said Vasant Narasimhan, Global Head of Development, Novartis Pharmaceuticals. “We believe FLAME challenges our historical reliance on inhaled corticosteroids and may support expanding the use of dual bronchodilators to both exacerbating and non-exacerbating COPD patients.”

The full FLAME study results, including data from further secondary endpoints, will be reported at an appropriate scientific forum in due course.

About FLAME
FLAME was a randomized, double-blind, parallel-group, non-inferiority, active-controlled 52-week study involving 3,362 COPD patients and conducted at 356 sites across 43 countries. The primary objective of the study was to demonstrate that Ultibro Breezhaler 110/50 mcg was non-inferior to salmeterol/fluticasone (SFC) 50/500 mcg in terms of rate of all COPD exacerbations (mild/moderate/severe) during 52 weeks of treatment.

Secondary endpoints for the study comparing Ultibro Breezhaler to SFC included superiority in terms of rate of all COPD exacerbations over the study duration and efficacy in terms of the following: time to first COPD exacerbation (mild/moderate/severe); rate and time to first moderate-to-severe COPD exacerbation;
lung function (trough FEV₁); health-related quality of life (as measured by the shortened version of the St George's Respiratory Questionnaire [SGRQ-C]); rescue medication use and safety¹.

FLAME is the last of 11 studies in the IGNITE Phase III clinical trial program exploring Ultibro Breezhaler for the treatment of COPD.

About Ultibro Breezhaler
Ultibro Breezhaler 110/50 mcg is a once-daily LABA*/LAMA† dual bronchodilator approved in the European Union (EU) as a maintenance bronchodilator treatment to relieve symptoms in adult patients with COPD². Clinical trials have shown that it offers statistically significant improvements in bronchodilation compared to treatments widely used as current standards of care, including SFC 50/500 mcg³-⁵ and open-label tiotropium (18 mcg). Ultibro Breezhaler is currently approved for use in over 70 countries worldwide, including countries within the EU and Latin America, Japan, Canada, Switzerland and Australia. In the U.S. the treatment is approved in a twice-daily formulation of indacaterol 27.5 mcg/glycopyrrolate 15.6 mcg, known as Utibron™ Neohaler®.

About the Novartis COPD portfolio
Novartis is committed to addressing the unmet medical needs of COPD patients and improving their quality of life by providing innovative medicines and devices. The Novartis COPD portfolio includes Ultibro Breezhaler (indacaterol/glycopyrronium bromide), Seebri® Breezhaler® (glycopyrronium bromide) and Onbrez® Breezhaler®/Arcapta™ Neohaler™ (indacaterol), which are all indicated as maintenance treatments for COPD patients. Glycopyrronium bromide was exclusively licensed to Novartis in April 2005 by Vectura and its co-development partner Sosei.

Novartis continues development of respiratory products for delivery via the low resistance Breezhaler® inhalation device, which makes it suitable for patients with different severities of airflow limitation⁶. The Breezhaler device allows patients to hear, feel and see that they have taken the full dose correctly⁵,⁶.

About COPD
Chronis obstructive pulmonary disease (COPD) affects an estimated 210 million people worldwide⁷ and is the third leading cause of death⁵. It is progressive (usually gets worse over time), and can be a life-threatening disease⁹,¹⁰. COPD makes it difficult to breathe, with symptoms that have a destructive impact on patients’ function (i.e. activity limitation, decreased mobility) and quality of life⁹,¹⁰. It is often considered to be a disease of later years but estimates suggest that 50% of those with COPD are now less than 65 years old, resulting in increases in absenteeism, premature retirement and reductions in workforce participation¹¹,¹².

Disclaimer
The foregoing release contains forward-looking statements that can be identified by words such as “to be shared,” “believe,” “may,” “will,” “exploring,” “committed,” “continues,” “suggest,” or similar terms, or by express or implied discussions regarding potential new indications or labeling for Ultibro Breezhaler, or regarding potential future revenues from Ultibro Breezhaler or any of the products in the Novartis COPD portfolio. You should not place undue reliance on these statements. Such forward-looking statements are based on the current beliefs and expectations of management regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that Ultibro Breezhaler will be submitted or approved for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that any of the products in the Novartis COPD portfolio will receive

¹ a long-acting beta₂-adrenergic agonist
² a long-acting muscarinic antagonist
additional regulatory approvals or become commercially successful in the future. In particular, management’s expectations regarding Ultibro Breezhaler or any of the other products in the Novartis COPD portfolio could be affected by, among other things, the uncertainties inherent in research and development, including unexpected clinical trial results and additional analysis of existing clinical data; unexpected regulatory actions or delays or government regulation generally; the company’s ability to obtain or maintain proprietary intellectual property protection; general economic and industry conditions; global trends toward health care cost containment, including ongoing pricing pressures; unexpected manufacturing or quality issues; unexpected safety issues, and other risks and factors referred to in Novartis AG’s current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

About Novartis

Novartis provides innovative healthcare solutions that address the evolving needs of patients and societies. Headquartered in Basel, Switzerland, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, eye care and cost-saving generic pharmaceuticals. Novartis is the only global company with leading positions in these areas. In 2014, the Group achieved net sales of USD 58.0 billion, while R&D throughout the Group amounted to approximately USD 9.9 billion (USD 9.6 billion excluding impairment and amortization charges). Novartis Group companies employ approximately 120,000 full-time-equivalent associates. Novartis products are available in more than 180 countries around the world. For more information, please visit http://www.novartis.com.

Novartis is on Twitter. Sign up to follow @Novartis at http://twitter.com/novartis.

References

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4. Vogelmeier C et al. Once-daily QVA149 provides clinically meaningful improvements in lung function and clinical outcomes. [ERS 2013 abstract 851178; Session 82; Date: September 8, 2013 Time: 12:50-14:40].
5. Banerji D et al. Dual bronchodilation with once-daily QVA149 improves dyspnea and health status and reduces symptoms and rescue medication use in patients with COPD: the IGNITE trials. [ERS 2013 abstract 851178; Session 82; Date: September 8, 2013 Time: 12:50-14:40].

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