Chronic Obstructive Pulmonary Disease | Decision Base | US | 2015

Treatment of chronic obstructive pulmonary disease (COPD) is dominated by bronchodilators, and polypharmacy is commonplace as patients’ COPD worsens. Although substantial opportunity exists for a disease-modifying therapy, development of new COPD therapies has focused instead on therapies that combine two bronchodilators in one inhaler. As the COPD marketplace becomes increasingly crowded with these fixed-dose combinations, emerging therapies will need to be clearly differentiated from competitors to experience substantial uptake.

Questions Answered in This Report:

- Improvement in lung function and reduction in exacerbations are key end points in clinical trials of experimental COPD agents. What are other clinical trial end points with which new therapies are evaluated? How do U.S. and European pulmonologists weight specific efficacy end points and other drug attributes in their prescribing decisions for COPD?

- Greater reduction in mortality and greater reduction in exacerbations are key areas of unmet need for COPD according to the insights of surveyed U.S. and European pulmonologists. Which therapies in development for COPD are poised to fulfill these needs? What clinical and/or regulatory challenges must drug developers overcome in order to capitalize on these areas of unmet need? What degree of improvement over currently available therapies do surveyed U.S. managed care organization pharmacy directors (MCO PDs) seek from new therapies on key clinical attributes for which surveyed physicians indicate there is high unmet need?

- Improvement in lung function and reduction in the frequency of exacerbations are key drivers of physicians’ prescribing decisions and/or are the focus of drug development for new COPD therapies. What trade-offs across these and other clinical attributes are U.S. pulmonologists willing to make when considering the use of emerging therapies for COPD? Based on the trade-offs in price and performance across key drug attributes that U.S. pulmonologists are willing to make, how do physician preference and prescribing likelihood vary across different target product profiles for COPD?

- Based on its clinical profile, vilanterol/umeclidinium (GlaxoSmithKline/Theravance’s Anoro) is the current clinical gold standard in our Drug Comparator Model. What attributes do thought leaders believe differentiate this therapy from competing current therapies and emerging therapies? Will any therapies in development challenge vilanterol/umeclidinium as the future gold standard in 2018 or 2023?
Scope:

Attributes included in conjoint analysis-based assessment of target product profiles for COPD:

- Improvement in trough forced expiratory volume in one second (FEV1) at six months (placebo-adjusted).
- Reduction in frequency of exacerbations over 52 weeks (% reduction, placebo-adjusted).
- Improvement in exercise endurance at six weeks (placebo-adjusted).
- Improvement in Transition Dyspnea Index focal score at six months (placebo-adjusted).
- Highest rate of cardiovascular-related death (% of patients).
- Dosing burden (formulation and frequency).
- Price/day.

Attributes included in assessment of U.S. payers’ receptivity to new therapies for COPD:

- Effect on lung function.
- Effect on frequency of exacerbations.
- Effect on exercise endurance.
- Dosing burden.

Physicians surveyed: 60 U.S. and 30 European pulmonologists.

Payers surveyed: 20 U.S. MCO PDs.

Comprehensive List of Therapies Included in Our Research and Modeling:

Current Therapies
- Tiotropium HandiHaler (Boehringer Ingelheim’s Spiriva HandiHaler)
- Tiotropium Respimat (Boehringer Ingelheim’s Spiriva Respimat)
- Salmeterol/fluticasone propionate (GlaxoSmithKline’s Advair/Seretide/Adoair)
- Olodaterol (Boehringer Ingelheim’s Striverdi)
- Vilaanterol/fluticasone furoate (GlaxoSmithKline/Theravance’s Breo/Relvar)
- Vilaanterol/umeclidinium (GlaxoSmithKline/Theravance’s Anoro)

Emerging Therapies
- Indacaterol/glycopyrronium (Novartis’s Ultibro)
- Olodaterol/tiotropium (Boehringer Ingelheim)
- Formoterol/aclidinium (AstraZeneca/Kyorin Pharmaceutical’s Duaklir)
- Formoterol/glycopyrronium (AstraZeneca)
Report Details

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