

Research of China's COPD Market



- Current and future image of China's COPD market
- Comparison of Chinese and global COPD guidelines
- COPD management in China
- Needs for future COPD drug treatment products
- Activities of COPD drug makers in China

Part1	Part2
Secondary research about China's COPD market (30-to-40-page report)	Primary research conducted in China by SSRI & SSRI-China (over-100-page report)



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Background/Objectives

Chronic Obstructive Pulmonary Disease (COPD) is characterized by persistent airflow limitation that is usually progressive and associated with an enhanced chronic inflammatory response in the airways and the lung to noxious particles or gases (*Pocket Guide to COPD Diagnosis, Management, and Prevention* updated 2015). According to WHO, it is predicted to become the 3rd leading cause of death worldwide by 2030.

COPD in China, compared with the situation in Japan, US and EU, is not yet widely recognized by the general public, but it is gradually becoming a public concern due to the economy boost and the progression of air pollution.

This research is conducted by SSRI and SSRI-China and expected to be accepted as a guidance for market forecasting by approaches of digging out the current situation, the unmet needs in China's management, as well as finding out the degree of recognition to the upcoming products in development or un-launched yet.

Part1 Secondary Research

Table of contents

- China's COPD in general
 - Prevalence, patient population
 - Mortality rate
 - Risk factors
- COPD diagnosis & treatment (CHN vs. COLD)
 - Diagnosis
 - Problems of COPD diagnosis in China
 - COPD patient assessment
 - COPD drug treatment choices
 - Problems of COPD management in China
- Activities of COPD drug makers in China
 - AstraZeneca
 - GlaxoSmithKline
 - Boehringer Ingelheim
 - Novartis
 - MSD
 - Other pharmaceutical companies
- Movement of upcoming COPD drugs in China's market
- Others

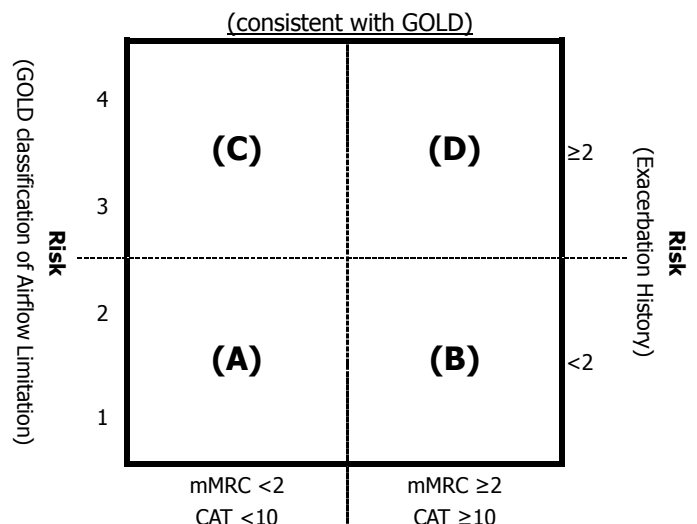
Upcoming COPD Drugs in China

Type	Generic Names
Long-acting β_2 Agonist (LABA)	Olodaterol
	Vilanterol
Long-acting Muscarinic Antagonist (LAMA)	Glycopyrronium
	Umeclidinium
	CODE: TD-4208 (generic name unknown)
LAMA/LABA Combination	Glycopyrronium + Indacaterol
	Umeclidinium + Vilanterol
	Tiotropium + Olodaterol
	Acclidinium + Formoterol
	Glycopyrronium + Formoterol
LABA/ICS Combination	Vilanterol + Fluticasone
	Formoterol + Budesonide
	Formoterol + Mometasone
	Formoterol + Fluticasone
LAMA/LABA/ICS Combination	Umeclidinium + Vilanterol + Fluticasone
	Glycopyrronium + Formoterol + Beclomethasone
PDE-4 Inhibitor	Roflumilast

Top 10 Causes of Death (China vs. worldwide)

	WHO (2012)	China (2012 by NHFPC)
1	Ischemic heart disease	Malignancy
2	Stroke	Heart disease
3	COPD	Cerebrovascular disease
4	Lower respiratory infections	Respiratory disease (incl. COPD)
5	Trachea bronchus, lung cancers	Injury or poisoning
6	HIV/AIDS	Endocrine, nutritional and metabolic diseases
7	Diarrhoeal diseases	Digestive system disease
8	Diabetes mellitus	Nervous system disease
9	Road injury	Genitourinary system disease
10	Hypertensive heart disease	Infectious disease (excl. pulmonary tuberculosis)

Combined Assessment of COPD in Chinese Guideline



Part2 Primary Research (Physician Survey)

Background

Based on the results by the secondary research in Part1, a primary survey featuring questions related to the present situation and evaluations of present COPD drug treatments and expectations of upcoming new drugs, was conducted among 200 physicians managing COPD in China's major cities (Tier1 and Tier 2 cities).

Region

- Tier-1 Cities: Beijing, Shanghai, Guangzhou
- Tier-2 Cities: Shenyang, Chengdu, Zhengzhou

Methodology

- Internet survey
 - *The URL of the questionnaire was sent to qualified respondents from telephone recruitment by email



Recruitment Criteria

- Facility type: Tier-3, Tier-2 hospitals
- Title: Chief director, Vice chief director, Doctor in-charge
- Clinical experience: 3 years or longer
- Department: Pulmonology, IM (Tier-2 hospitals only)
- Patient No.:
 - Monthly COPD pts ≥ 30 (Pulmonology)
 - Monthly COPD pts ≥ 10 (IM)

Questionnaire Outline

- Basic Information
 - Total pt No., COPD/asthma pt No.
 - Pt composition: age, gender, severity, insurance, source
 - Risk factors of COPD
- Measures for COPD diagnosis
- Drug treatments for COPD
 - Drug type being used, Rx%, brand name
 - Satisfaction with COPD drug treatment (both in general and by each drug type)
 - Important attributes of COPD drugs, satisfaction with important attributes
- New COPD drugs (under development or un-launched)
 - Recognition/expectation for each new drug
 - Ranking of expected new drug and reasons
- COPD patients in the future
 - Pt No. (treated by respondent and nationwide) in 5y, 10y
 - Important problems in future COPD management
 - Requests to drug makers
- Activities of drug makers (MRs)
 - Companies who visited in the latest month
 - Visits related to COPD/asthma
 - Important source of COPD information

Sample size*

n=200		T3 hospitals		T2 hospitals	
		Pulmonology		Pulmonology	
T1 Cities	Beijing	17	8	8	
	Shanghai	17	8	9	
	Guangzhou	16	8	8	
T2 Cities	Shenyang	17	2	8	
	Zhengzhou	17	6	5	
	Chengdu	16	9	8	
	Wuhan	-	9	4	
Total		100	100		

*Final sample size may differ according to data cleaning

Period

Mar. 2016 to Apr. 2016

Reference

Currently Launched Oversea COPD drugs in China (by April 2016)

	Generic Name	Brand name	Generic Name	Brand name
Steroid	Fluticasone	Flixotide	Budesonide	Pulmicort
	Methylprednisolone	Medrol	Beclometasone	Becotide
		Solu-Medrol		Clenil
SABA	Salbutamol	Ventolin	Terbutaline	Bricanyl
		Sai-Bi-Shu	Procaterol	Meptin
		Easyhaler Salbutamol		
LABA	Formoterol	Oxis Turbuhaler	Indacaterol	Onbrez
		Atock	Bambuterol	Bambec
	Salmeterol	Serevent Accuhaler	Tulobuterol	Amiaid
SAMA	Ipratropium	Atrovent		
LAMA	Tiotropium	Spiriva		
		Su-Le		
LABA/ICS	Formoterol + Budesonide	Symbicort Turbuhaler	Salmeterol + Beclometasone	Seretide/Advair
	Formoterol + Beclometasone	Foster		
SABA/SAMA	Ipratropium + Salbutamol	Combivent		
LTRA	Montelukast	Bai-San-Ping	Zafirlukast	Accolate
		Singulair		
Expectorant	Acetylcysteine	Fluimucil	Aminophylline + Methoxyphenamine + Noscapine + Chlorpheniramine maleate	Asmeton
		Mucosolvan		
	Ambroxol hydrochloride	Losolvan		
		Tan-Jing		

Information

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