

**Summer Training at
Cipla Limited, Jaipur
(May 15- June 23, 2012)**

**Market Research of MONTELUKAST+LEVOCITRIZINE in the
Treatment of Allergic Rhinitis**

**By
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**Under the guidance of
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**Post Graduate Diploma in Pharmaceutical Management
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**Institute of Health Management Research,
Jaipur
2012**

**INSTITUTE OF HEALTH
MANAGEMENT RESEARCH**

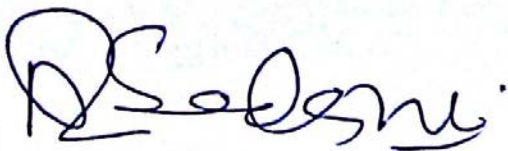
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Certificate

This is to certify that Mr. Shreeram Sharma from Institute of Health Management Research, Jaipur has undergone Summer Training in Cipla limited, Jaipur from 15th May, 2012 to 23rd June, 2012.

The candidate himself carried out the project. His approach to the study has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement is recommended for the award of post graduate diploma in health and hospital management.

I wish him success in all his future endeavors.



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To Whom So Ever It May Concern

This is to certify that Mr. Shriram Sharma pursuing Post Graduate Diploma in Pharmaceutical Management (PGDPM) from Indian Institute of Health Management Research, Jaipur has successfully completed his project with us from 15th May 2012 to 23rd June 2012. He has undergone the project title of "Market Research of Montelukast+Levocetirizine in the treatment of Allergic Rhinitis"

The candidate has successfully carried out the study assigned to him and his analysis report was found to be satisfactory.

I wish him success in all futures endeavors.

Regards



Kushagra Mathur

Sales Manager

Cipla Ltd.

Jaipur

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I sincerely thank the staff of the Cipla Ltd, Jaipur, for their kind co-operation and surely appreciate their eagerness to learn things.

I have great pleasure in expressing my sincere gratitude towards my mentor Professor Vijay Pratap Raghuvanshi, Indian Institute of health management Research. Who has always been a source a source of encouragement, innovative ideas and inspirations for me since the beginning up to the completion of this work.

Shreeram Sharma

INTRODUCTION TO SUBJECT

Introduction

Allergic rhinitis is a collection of symptoms, mostly in the nose and eyes, which occur when you breathe in something you, are allergic to, such as dust, dander, insect venom, or pollen.

Causes

An allergen is something that triggers an allergy. When a person with allergic rhinitis breathes in an allergen such as pollen or dust, the body releases chemicals, including histamine. This causes allergy symptoms.

Hay fever involves an allergic reaction to pollen. (A similar reaction occurs with allergy to mold, animal dander, dust, and similar allergens that you breathe in.)

The pollens that cause hay fever vary from person to person and from area to area. Tiny, hard to see pollens more often cause hay fever. Examples of plants that cause hay fever include:

- Trees
- Grasses
- Ragweed

The amount of pollen in the air can affect whether hay fever symptoms develop. Hot, dry, windy days are more likely to have increased amounts of pollen in the air. On cool, damp, rainy days most pollen is washed to the ground.

Sign and Symptoms

- Itchy nose,
- Problems and smell
- Runny nose
- Sneezing
- Sore Throat

Diagnosis

The health care provider will perform a physical exam and ask you questions about your symptoms. Your history of symptoms is important in diagnosing allergic rhinitis. You will be asked whether your symptoms vary by time of day or season, and exposure to pets or other allergens.

If your doctor determines you cannot have skin testing, special blood tests may help with the diagnosis. These tests can measure the levels of allergy-related substances, especially one called immunoglobulin E (IgE).

A complete blood count (CBC) test called the eosinophil white blood cell count may also help diagnose allergies.

Treatment

➤ Antihistamines

Antihistamines work well for treating allergy symptoms, especially when symptoms do not happen very often or do not last very long.

- Antihistamines taken by mouth can relieve mild to moderate symptoms, but many can cause sleepiness. Some may be bought over the counter, without a prescription. Talk to your doctor before giving these medicines to a child, as they may affect learning.
- Newer antihistamines cause little or no sleepiness. Some are available over the counter. They usually do not interfere with learning. These medications include loratidine (Claritin), fexofenadine (Allegra), and cetirizine (Zyrtec). Other antihistamines are available by prescription.

➤ Corticosteroid

- Nasal corticosteroid sprays are the most effective treatment for allergic rhinitis.
- They work best when used nonstop, but they can also be helpful when used for shorter periods of time.

➤ Decongestant

Decongestants may also be helpful for reducing symptoms such as nasal congestion.

COMPANY PROFILE

Introduction

Cipla Limited is a prominent Indian pharmaceutical company, best-known outside its home country for manufacturing low-cost anti-AIDS drugs for HIV-positive patients in developing countries. It has played a similarly prominent role in expanding access to drugs to fight influenza, respiratory disease and cancer. Cipla makes drugs to treat cardiovascular disease, arthritis, diabetes, weight control, depression and many other health conditions, and its products are distributed in virtually every country of the world.

Cipla has always emphasized self-reliance and the right of all people to health and access to medicine, regardless of their economic circumstances or where in the world they happen to live. The company has become well-known internationally for its dedication to working according to these values and prioritizing a socially-conscious approach to its operations, and that for over 75 years.

Apart from its presence in the Indian market, Cipla also has an export market and regularly exports to more than 185 countries in all corners of the world.

Cipla cooperates with other enterprises in areas such as consulting, commissioning, engineering, project appraisal, quality control, know-how transfer, support, and plant supply.

History

Khawaja Abdul Hamied, the founder of Cipla, was born on October 31, 1898. The fire of nationalism was kindled in him when he was 15 as he witnessed a wanton act of colonial highhandedness. The fire was to blaze within him right through his life.

In 1935, he set up The Chemical, Industrial & Pharmaceutical Laboratories, which came to be popularly known as Cipla. He gave the company all his patent and proprietary formulas for several drugs and medicines, without charging any royalty. On August 17, 1935, Cipla was registered as a public limited company with an authorised capital of Rs 6 lakhs.

In 1944, the company bought the premises at Bombay Central and decided to put up a "first class modern pharmaceutical works and laboratory." It was also decided to acquire land and buildings at Vikhroli. With severe import restrictions hampering production, the company decided to commence manufacturing the basic chemicals required for pharmaceuticals.

In 1946, Cipla's product for hypertension, *Serpinoïd*, was exported to the American Roland Corporation, to the tune of Rs 8 lakhs. Five years later, the company entered into an agreement with a Swiss firm for manufacturing foromycene.

Struggle against HIV/AIDS in the developing world

Cipla is the world's largest manufacturer of antiretroviral drugs (ARVs) to fight HIV/AIDS, as measured by units produced and distributed (multinational brand-name drugs are much more expensive, so in money terms Cipla medicines are probably somewhere down the list). Roughly 40 percent of HIV/AIDS patients undergoing antiretroviral therapy worldwide take Cipla drugs.

In February, 2001, Cipla stunned the HIV/AIDS and public health communities by announcing it would make its triple cocktail of antiretroviral drugs available in developing countries for \$350 per patient per year, a tiny fraction of the prices prevailing internationally at the time.

Cipla also pioneered a three-in-one tablet called *Triomune* containing a fixed-dose combination (FDC) of three ARVs (Lamivudine, stavudine and Nevirapine), something difficult elsewhere because the three patents were held by different companies. Another popular fixed-dose combination is produced under the name Duovir-N. This contains Lamivudine, Zidovudine and Nevirapine. Cipla manufactures generic versions of many of the most commonly prescribed anti-retroviral medication in the market, and is a highly capable manufacturer in its own right. This innovation made ARVs far more accessible and easy-to-take for patients everywhere, but particularly in poor- and middle-income countries, where the vast majority of people on anti-retroviral therapy (ART) now take such combination pills.

Cipla was among the first companies to register AIDS drugs under the US relief program PEPFAR. It has also been a major supplier of ARVs to the Clinton Foundation's HIV/AIDS Initiative, which has negotiated low-cost drug supplies for numerous developing countries.

Antiflu and Virena

In December 2008, Cipla won a court case in India allowing it to manufacture a cheaper generic version of Oseltamivir, marketed by Hoffmann-La Roche (Roche) under the trade name Tamiflu, under the Cipla tradename Antiflu. In May 2009, Cipla won approval from the World Health Organisation certifying that its drug Antiflu was as effective as Tamiflu, and Antiflu is included in the World Health Organisation list of prequalified medicinal products.

Cipla announced that Oseltamivir 75 mg capsules marketed as `Antiflu` by the company has been included in the World Health Organization (WHO) list of prequalified medicinal products (PMP).

Oseltamivir is indicated for use in the treatment of influenza A (H1N1) infection commonly known as swine flu.

Cipla also produces a generic version of zanamivir, marketed by Glaxo under the trade name Relenza, under the Cipla tradename Virena

.

Cancer Medication

In May 2012, Cipla made headlines worldwide by slashing prices on several cancer drugs previously priced far out of reach to the vast majority of the world's population (cancer drugs are generally the most expensive category of pharmaceutical). The Wall Street Journal quoted Cipla chairperson Yusuf Hamied as saying: "We had taken the lead to provide affordable medicine for AIDS and I think the time has now come -- 10 years later -- when we do a similar thing for cancer." The revised prices averaged roughly 75% less than the previous ones and Hamied announced plans to similarly reduce prices on the full range of cancer drugs made by Cipla. The move was expected to prompt significant price drops from other producers, providing access to medicine and saving many millions of cancer patient's unnecessary suffering and/or death.

OBJECTIVES OF STUDY

Primary Objective

- To evaluate the present status of demand, consumption pattern and competitor position of Motelukast+Levocitrizine combination in allergic rhinitis.

Secondary objective

- To study the perception of doctors regarding combination of Motelukast+Levocitrizine in allergic rhinitis.
- To understand the prescription pattern in allergic rhinitis.

METHODOLOGY

Research Design

➤ **Type Of Research Design**

The market survey undertaken is an example of a descriptive research since the overall research design is rigid and pre-planned all throughout our study.

➤ **Research Tool**

Structured Questionnaire is used and framed in a way so as to derive maximum information from the chemist of medical shop regarding market position of Montelukast+Levocetirizine and questionnaire is also prepared for doctors regarding their perception about this combination.

➤ **Data Collection Method**

- **Primary Data Collection**

Data was collected through means of a structured questionnaire. The structured questionnaire was designed covering only open ended and questions.

It was aimed to derive maximum information from the Chemist and Doctors.

- **Secondary Data Collection**

Data was also collected through Drug Today regarding all brands of Montelukast and Levocetirizine combination.

➤ **Sampling Units**

Sampling units were the-

- Govt. and private pharmacies of Jaipur and
- Doctors of Jaipur.

➤ **Sample Size**

50 Medical Shops and 70 doctors

➤ **Time Period of Project**

30 Days

➤ **Sampling Technique**

Simple Random Sampling

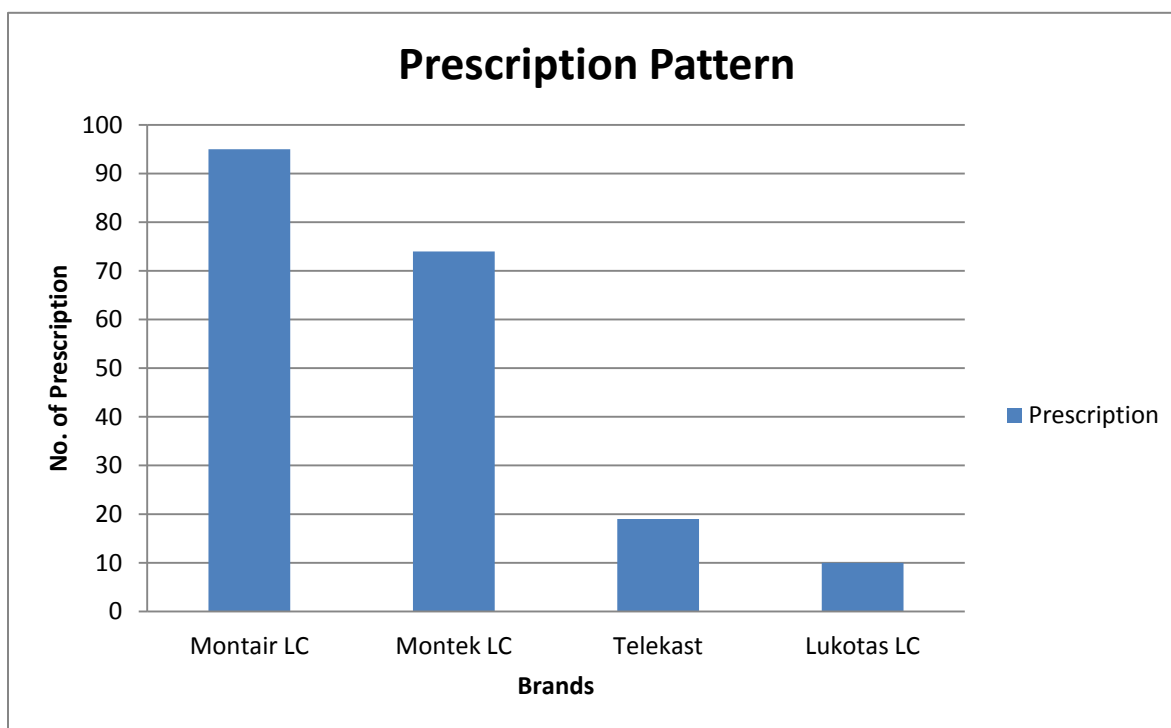
➤ **Data Analysis Technique**

The data was compiled and analyzed in the Microsoft Excel.

ANALYSIS

Table-1

BRANDS	PRESCRIPTION
Montair LC	95
Montek LC	74
Telekast	19
Lukotas LC	10

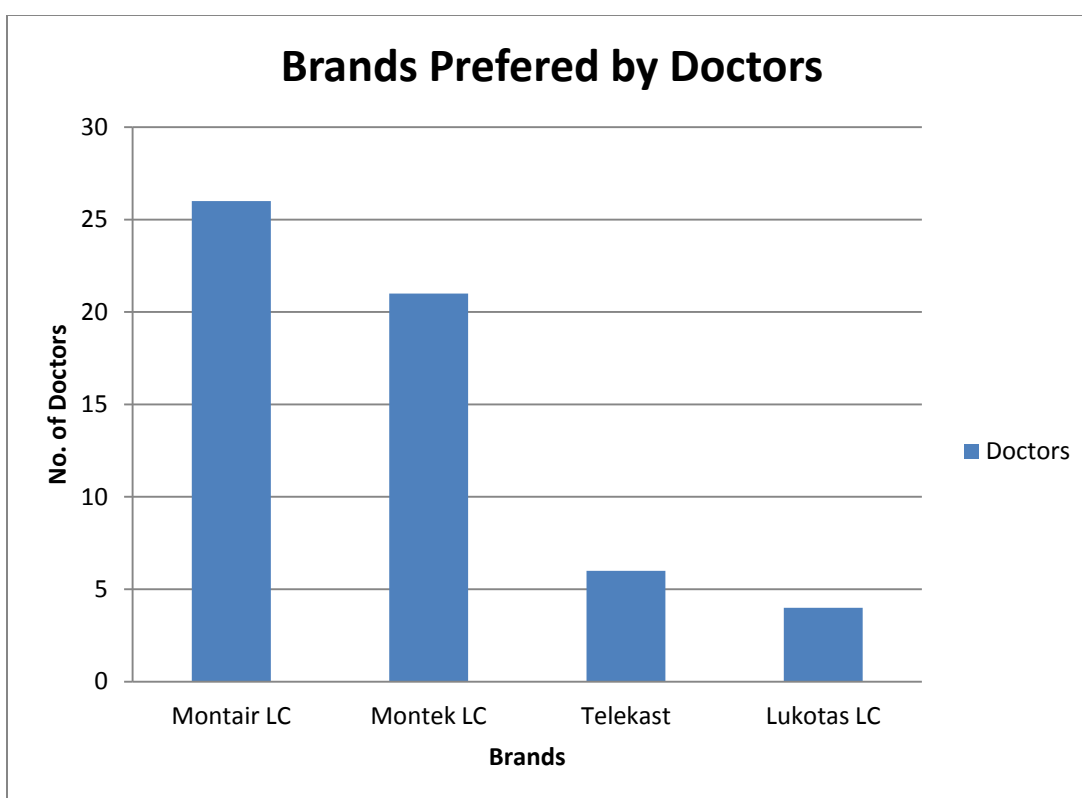


Interpretation

Highest selling brand of Motelukast+Levocitizine combination among doctors is Montair LC (Cipla). 95 prescription of Montair LC are prescribed by doctors in a month but Montek LC (Sun Pharma) is also prescribed by doctors which is main competitor of Montair LC otherwise remaining brands of this combination are very less prescribed by doctors.

Table-2

BRANDS	DOCTORS
Montair LC	26
Montek LC	21
Telekast	6
Lukotas LC	4
Total	57

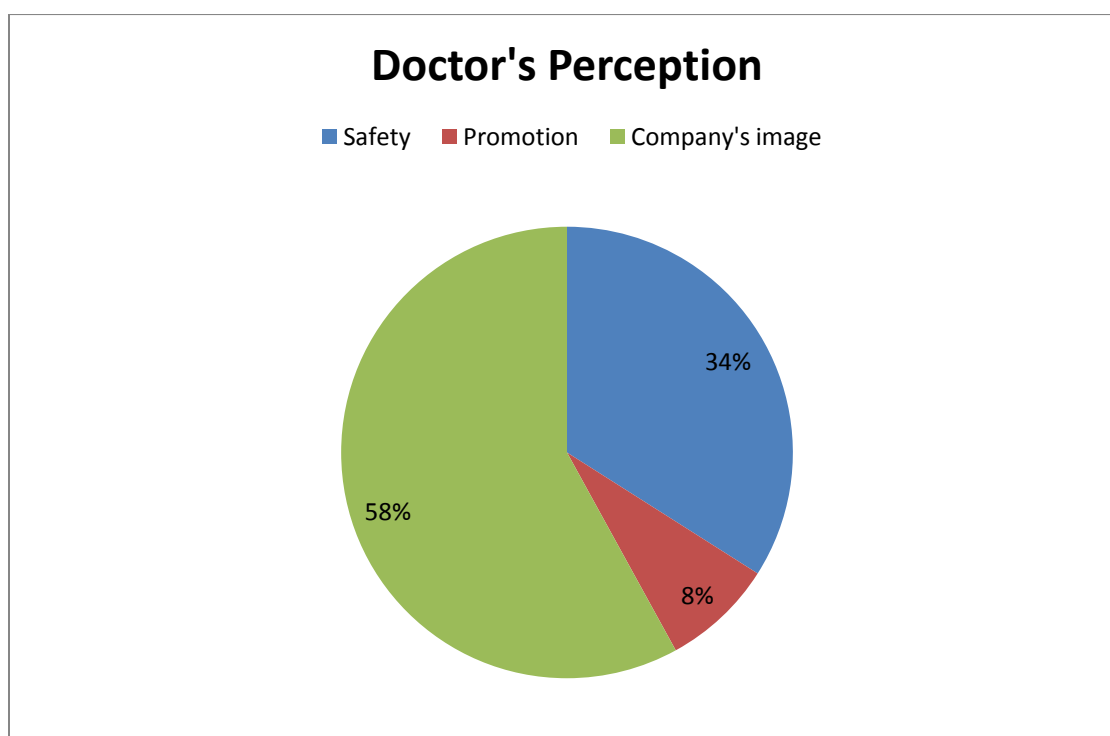


Interpretation

Among doctors Montair LC (Cipla) is most preferred brand. Most of the market is captured by only 2 brands but there are other brands which are also prescribed by doctors but there market share is very less.

Table-3

CATEGORY	PERCENT	DOCTORS
Safety	34%	9
Company's Image	58%	15
Promotion	8%	2
Total	100%	26

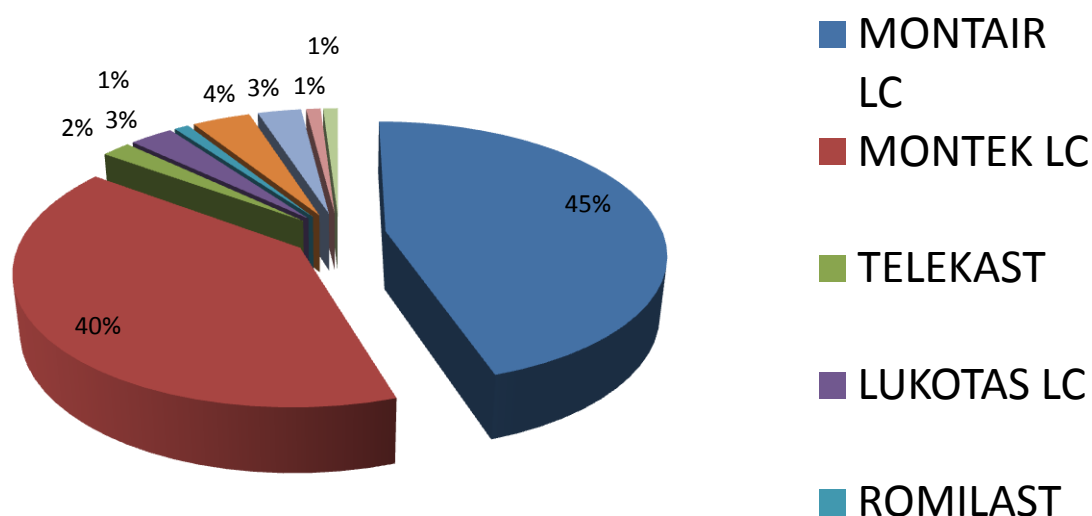


Interpretation

Doctors who prescribed Montair LC of cipla in which 58% of doctors preferred this brand because of company's image and 34% prescribed it because of its safety and less no. of doctors prescribed this brand because of promotion so company's image is major factor in prescribing Montair LC.

Table-4

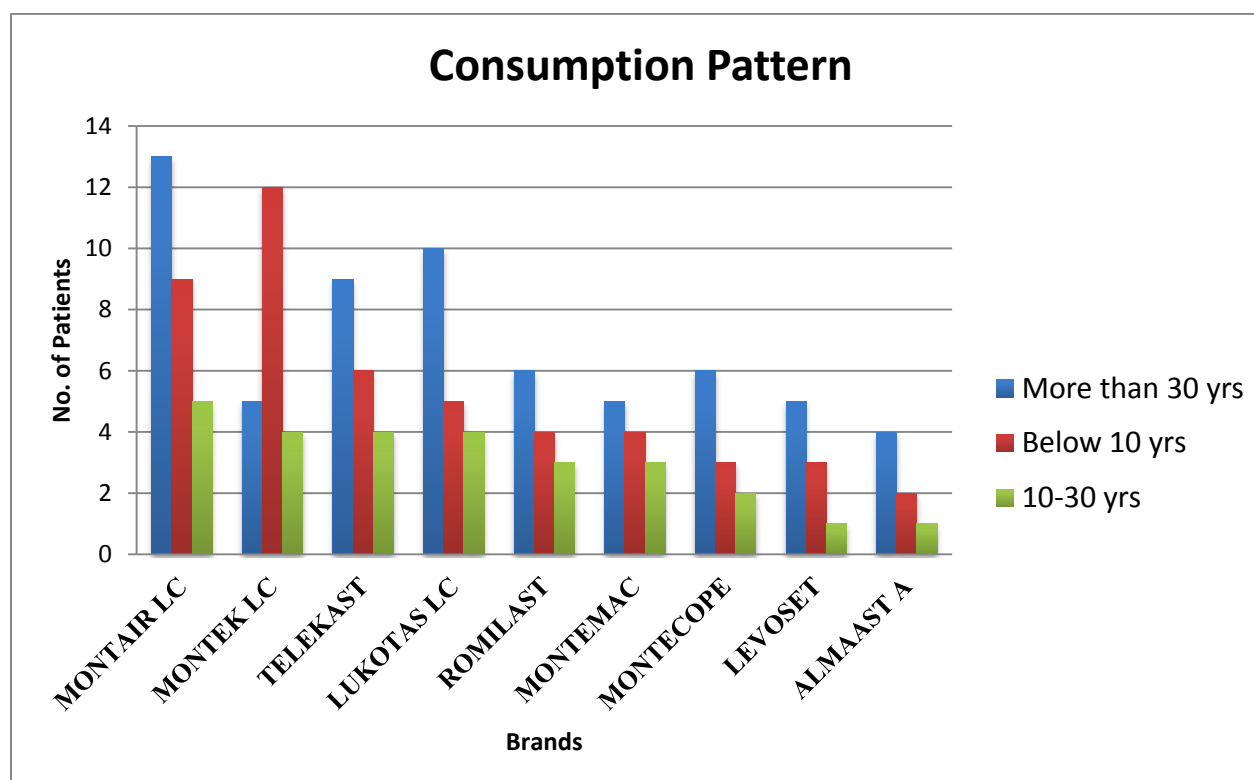
BRANDS	AVAILABILITY
MONTAIR LC	45
MONTEK LC	40
TELEKAST	2
LUKOTAS LC	3
ROMILAST	1
MONTEMAC	4
MONTECOPE	3
LEVOSET	1
ALMAAST A	1

Availability of Brands at Medical Store**Interpretation**

According to this data Montair LC of cipla is the most available brand of this combination at medical store and Montek LC is second most available brand. Whole market is captured by two major company brands otherwise other company brands are very less available at medical store.

Table-5

BRANDS	MORE THAN 30 YEARS	BELOW 10 YEARS	10-30 YEARS
MONTAIR LC	13	9	5
MONTEK LC	5	12	4
TELEKAST	9	6	4
LUKOTAS LC	10	5	4
ROMILAST	6	4	3
MONTEMAC	5	4	3
MONTECOPE	6	3	2
LEVOSET	5	3	1
ALMAAST A	4	2	1

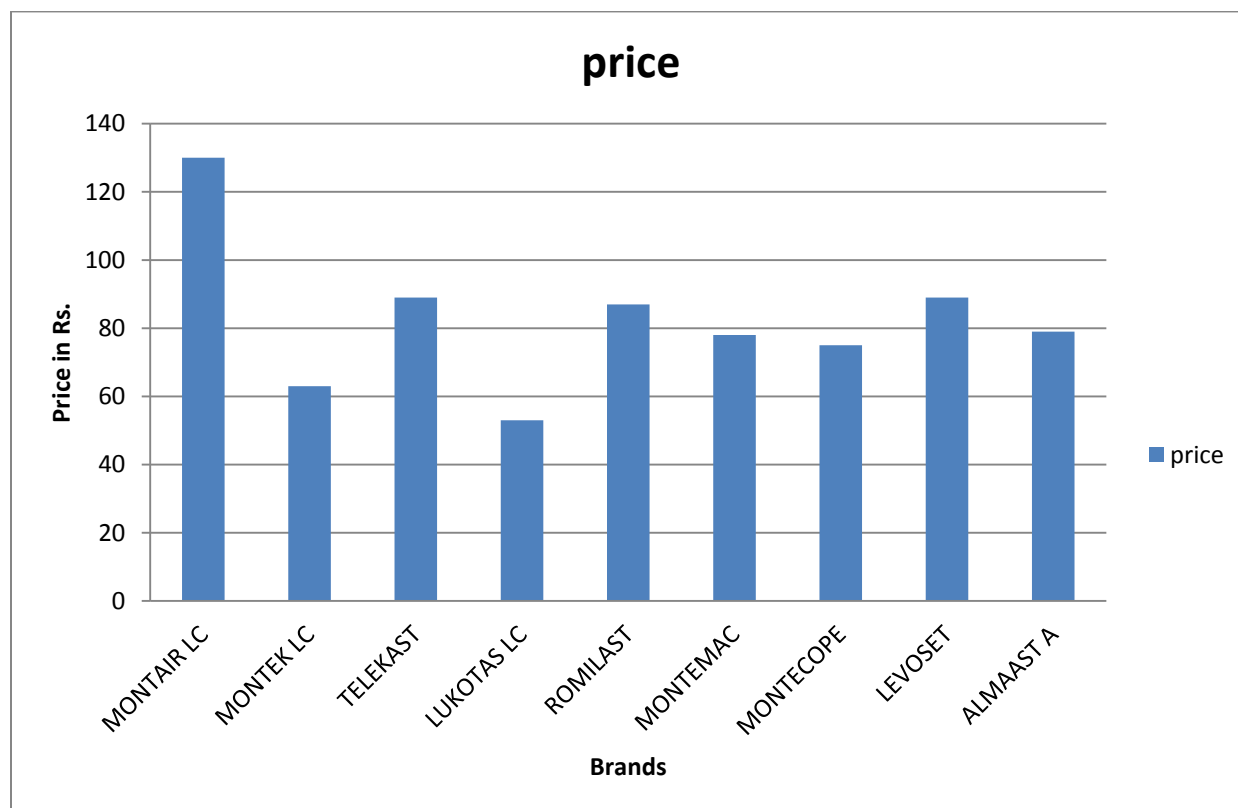


Interpretation

According to this data patient having age more than 30 years are biggest consumer of this combination and then comes patients having age group below 10 years.

Table-6

BRANDS	PRICE
MONTAIR LC	130
MONTEK LC	63
TELEKAST	89
LUKOTAS LC	53
ROMILAST	87
MONTEMAC	78
MONTECOPE	75
LEVOSET	89
ALMAAST A	79

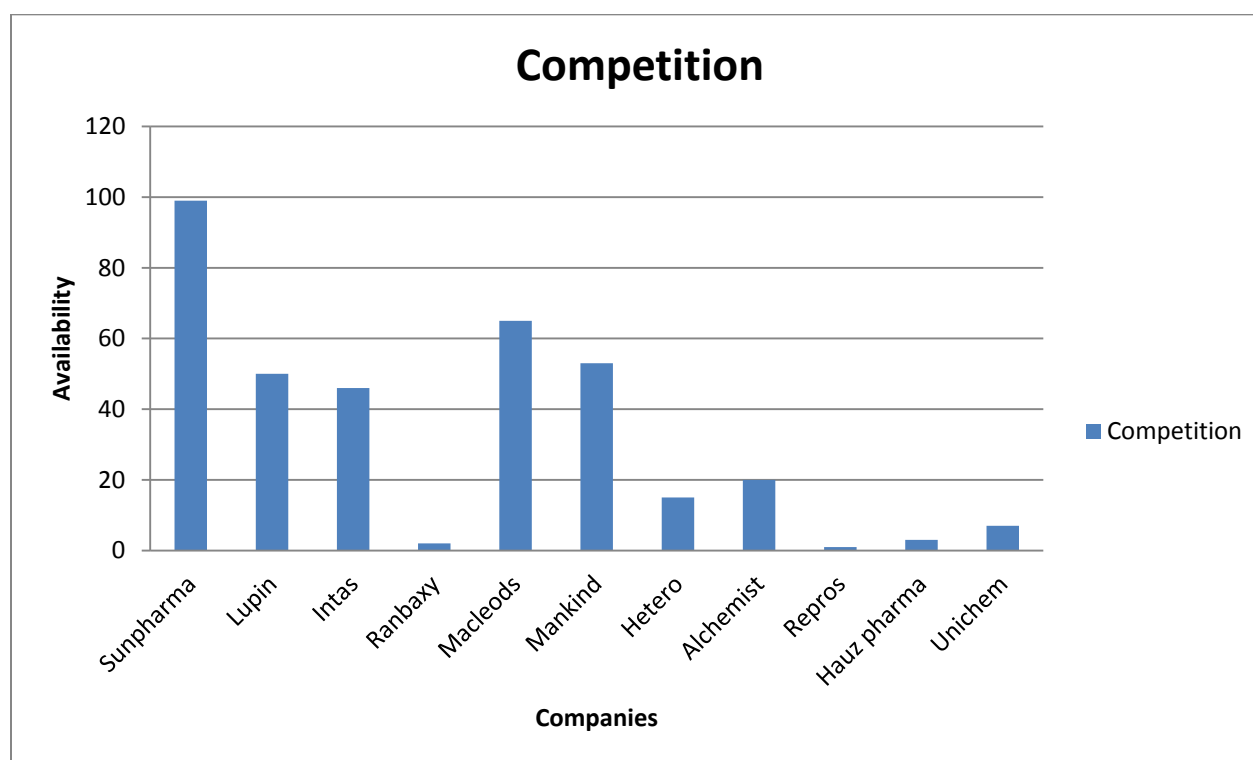


Interpretation

Among all brands of this combination Montair LC has the higher price but despite of the fact it is highest selling brand of this combination and less price variation in other brands of this combination.

Table-7

COMPANY	COMPETITION
Sunpharma	99
Lupin	50
Intas	46
Ranbaxy	2
Macleods	65
Mankind	53
Hetero	15
Alchemist	20
Repros	1
Hauz pharma	3
Unichem	7

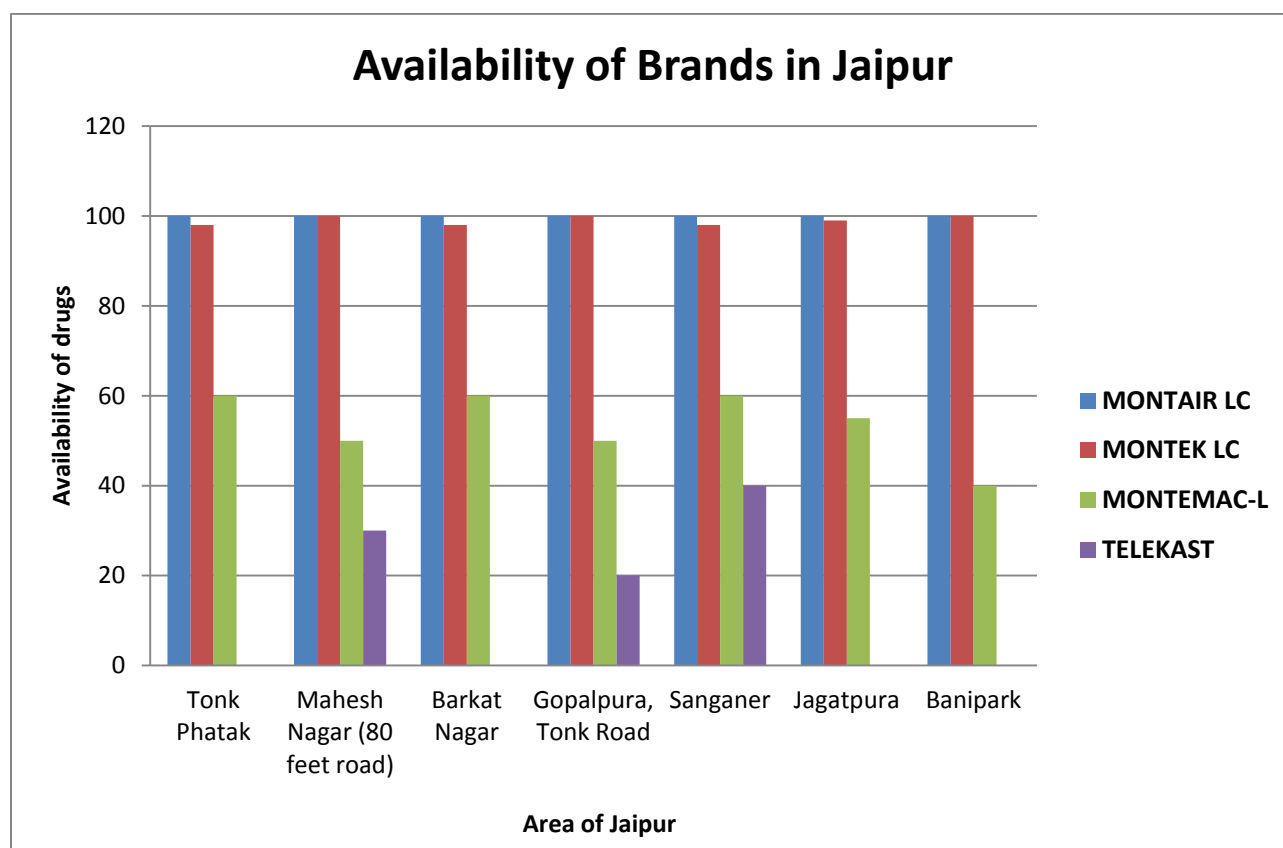


Interpretation

Among different brands of this combination in market Montek LC of Sun pharma is the biggest competitor of Montair LC as compared to other brands. As far as other brands are concerned only 2 or 3 brands are giving little bit of competition.

Table-8

LOCATION	MONTAIR LC	MONTEK LC	MONTEMAC-L	TELECAST
Tonk Phatak	100	98	60	
Mahesh Nagar (80 feet road)	100	100	50	30
Barkat Nagar	100	98	60	
Gopalpura, Tonk Road	100	100	50	20
Sanganer	100	98	60	40
Jagatpura	100	99	55	
Banipark	100	100	40	



Interpretation

According to this data Montair LC is the most available brands in selected area and it is the leader of this combination and Montek LC is the second highest brand in Jaipur and other brands are very less as compared to these 2 brands.

FINDINGS

- ❖ Market research of Montelukast+Levocetirizine combination emerge a very clear picture that Cipla's major brand MONTAIR LC is dominant in the market. The reason behind its success is that its market promotional strategies are so strong that it becomes the market leader.
- ❖ Majority of chemist or medical shop contain MONTAIR LC. Into the survey of different zones it is found that majority of stock is cover with Allergy rhinitis segment.
- ❖ Other companies & their brands are also trying to penetrating the Allergy rhinitis segment because it is found that there market strategies are as much strong as Cipla. Those companies are Sunpharma (MONTEK LC), Macleods(MONTEMAC LC), Lupin (TELEKAST).
- ❖ Another aspect is that the different zones like Tonk phatak, Mahesh nagar, Barket nagar, Gopalpura, Sanganer & Bani park consist of majority of common brands like MONTAIR LC & MONTEK LC.
- ❖ Other brands are also available in this segment like MONTEMAC, MONTA SG, LAVETA, MONTECOPE, MONOXIL LC, MONTEKIND, LUKOTAS etc but there market strategy is not much strong as Cipla & Sunpharma.
- ❖ So finally in the segment of Allergy rhinitis Cipla is the only company that leading the market & its brand MONTAIR LC is positively or clearly dominant the market.

SUGGESTIONS

- ◆ After analysis of report it is suggested that Cipla is the market leader & its brands are dominant in market. But on the other hand Sunpharma also in the race that continuously give neck to neck competition to Cipla but by reducing the price of Montair LC the competition gap between Cipla and Sun pharma can be enhanced.
- ◆ To maintain its market value, Cipla has to maintain its present position in the market as well as apply new market strategies & promotional strategies, so that it always keep itself a step ahead.
- ◆ Periodically market research & market survey are very essential for Cipla, because it not only provide the other competing companies status & their brands but also tells about the running position of its own.
- ◆ Another important aspect is that Cipla has to concentrate on its pricing policies, promotional strategies & market analysis to maintain its status.

ANNEXURE

QUESTIONNAIRE FOR CHEMIST

Q1. How many prescriptions you received in a day regarding to Allergy Rhinitis?

Q2. Which age group of people approach to you?

Q3. In which Dosage form the MONTELUKAST+LEVOCITRIZINE combination is available?

Q4. Which Brands prescribed by doctor & you carry? (Chemist View)

Q5. Which company is Dominant in Mon.+Levo. Combination?

Q6. Which brand is mostly avail/preferred in Mon.+Levo combination?

Q7. Which company provided the most attractive scheme/offers to you?

Q8. What are the different prices of different brands of company?

Q9. What are those factors that responsible for highest sales of a Brand? (chemist view)

Q10. Which type of discount is mostly provided by companies on bulk purchasing to you?

QUESTIONNAIRE FOR DOCTORS

Q1. How many patients come across at your clinic for treatment of Allergic rhinitis?

.....

Q2. Which age group of people approach to you?

.....

Q3. Do you prescribe MONTELUKAST+LEVOCITRIZINE combination in your prescription?

.....

Q4. Do you prescribe MONTELUKAST+LEVOCITRIZINE combination of MONTAIR LC of Cipla?

.....

Q5. Why you prescribe MONTAIR LC of Cipla?

.....

Q6. Do you prescribe other brands of this combination?

.....

COMPANY & ITS BRANDS

Company Name	Brands
Cipla	MONTAIR LC MONTAIR LC KIT REDIA-R
Sun pharma	MONTEK LC MONTEK LC KIT
Lupin	TELEKAST-L
Intas	LUKOTAS LC
Ranbaxy	ROMILAST
Macleods	MONTEMAC
Mankind	MONTECOPE-L MONTEKIND
Hetero	LEVOSET M KIT
Alchemist	ALMAAST-A
Repros	LCZ MONT
Hauz pharma	RHINOKAST-L RHINOKAST –L KID
Unichem	LE-ZYNCET
Alembic	LAVETA
Astrageneca	RHINOMAX

REFERENCE

1. Tramont EC, Hoover DL. General or Non-specific Host Defense Mechanisms. In: Mandell GL, Dolin R, Bennet JE (eds).

Principles and Practice of Infectious Diseases. New York: Churchill Livingstone Inc., 1995. p.30.

2. Moellering RC. Principles of Anti-infective Therapy. In: Mandell GL, Dolin R, Bennet JE (eds). Principles and Practice of

Infectious Diseases. Broadway, New York, NY: Churchill Livingstone Inc., 1995. p.199.

3. Yee-Cabahug L, Espiritu-Quiza M. The defervescence period of commonly used antibiotics for typhoid fever, urinary tract

infection, and pneumonia in Cebu Velez General Hospital. Phil J Internal Med 1998; 36:283-288.

4. Hook EW: Salmonella Species (including Typhoid Fever). In: Mandell GL, Dolin R, Bennet JE (eds). Principles and Practice of

Infectious Diseases. Broadway, New York, NY: Churchill Livingstone Inc., 1990. p.1700.

5. Aseron CR, Bande MW, Guzman AR, Picazo EA. Chloramphenicol vs co-trimoxazole for typhoid fever revisited Phil J Internal

Med 1988; 26(3):189-196.

6. Limson, BM. Short course quinolone therapy of typhoid fever in developing countries. Drugs 1995; 49(suppl 2):136.

7. Alam MM, Haq SA, Das KK, et al. Efficacy of ciprofloxacin in enteric fever: comparison of treatment duration in sensitive and

multidrug resistant salmonella. Am J Trop Med Hyg 1995; 53:306.

8. ElRamli A. Chloramphenicol in treatment of typhoid fever. Lancet 1950; 1:618.

9. Todd, PA, Benfield P. Amoxicillin/clavulanic acid. An update of its antibacterial activity, pharmacokinetic properties, and

therapeutic use. Drugs 1990; 39(2):264.

10. Ballow CH, Amsden GW. Azithromycin: the first azalide antibiotic. Ann Pharmacother 1992; 26:1253.