



# AMERICAN JOURNAL OF PHARMTECH RESEARCH

Journal home page: <http://www.ajptr.com/>

## To Study the Doctor's Perception While Prescribing Antibiotic- Cefixime With Reference To Macron Labs

Pooja Sharma<sup>1\*</sup>, Sudhinder Singh Chowhan<sup>1</sup>

*1. Department of Management, Nims University Rajasthan, Jaipur*

### ABSTRACT

This research is prepared is on “To Study the doctor’s perception while prescribing the antibiotic – cefixime in Mumbai, thane. This research paper has been presented based on my observation and experience gathered from field survey in macron lab. An organization has many divisions and departments but focus is given more on the level of brand strategy of the marketing department specially in the pharmaceutical industries due to the high competition. this survey evaluates knowledge, attitudes and perception of doctor about prescribing the antibiotic - cefixime. This study also helped to learn about Several factors influenced prescribing, including patients' expectations, severity and duration of infections. The result of the research is described in details in this report. After knowing the perception and brand image of the antibiotic cefixime a lot of finding came up. The research also consists of recommendations and conclusion according to my point of view which would improve the prescription of doctors towards the antibiotic (gramocef-o) which is manufactured by macron labs.

**Keywords:** Antibiotic, Perception, Patient, Doctor, Prescription, Brand Image.

\*Corresponding Author Email: [sudhichowhan@yahoo.com](mailto:sudhichowhan@yahoo.com)

Received 1 February 2020, Accepted 13 February 2020

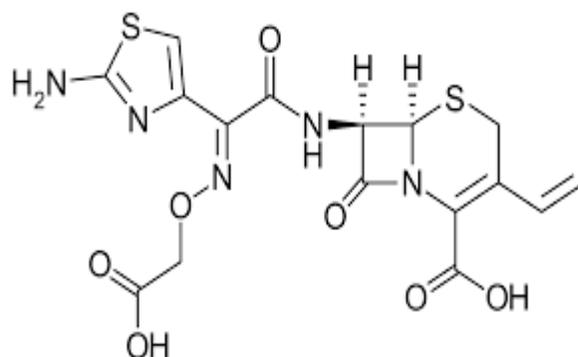
Please cite this article as: Sharma P *et al.*, To Study the Doctor’s Perception While Prescribing Antibiotic-Cefixime With Reference To Macron Labs. American Journal of PharmTech Research 2020.

## INTRODUCTION

In present scenario the pharmaceutical industries having the largest market across the world with new technological, marketing strategy and business environment. India tops the world in exporting generic medicines worth US\$ 11 billion and currently, the Indian pharmaceutical industry is one of the world's largest and most developed.

### Chemical structure of Cefixime

Cefixime is a third-generation cephalosporin antibiotic bearing vinyl and (2Z)-2-(2-amino-1,3-thiazol-4-yl)-2-[(carboxymethoxy)imino] acetamido groups at positions 3 and 7, respectively, of the cephem skeleton.



The survey on perception while prescribing medicine Anti-biotic (cefixime), somewhere Doctor prescribe cefixime alone or with the combination, according to the nature of treatment.

Cefixime is an antibiotic useful to treat a number of bacterial infections. This includes otitis media, strep throat, pneumonia, urinary tract infections, gonorrhea, and Lyme disease. For gonorrhea typically only one dose is required. In the United States it is a second line treatment to ceftriaxone for gonorrhea. It is taken by mouth.

Common side effects include diarrhea, abdominal pain, and nausea. Serious side effects may include allergic reactions and *Clostridium difficile* diarrhea.<sup>1</sup> It is not recommended in people with a history of a severe penicillin allergy. It appears to be relatively safe during Pregnancy

it is the third generation cephalosporin class of medication .it works by disrupting the bacteria's cell wall resulting in its death.

Clavulanic acid is a  $\beta$ -lactam drug that functions as a mechanism-based  $\beta$ -lactamase inhibitor. While not effective by itself as an antibiotic, when combined with penicillin-group antibiotics, it can overcome antibiotic resistance in bacteria that secrete  $\beta$ -lactamase, which otherwise inactivates most penicillins.

Although Clavulanic acid does have some degree of bacterial activity, its principal role is as a beta-lactamase inhibitor. Beta-lactam antibiotics, such as the penicillin and cephalosporins, act by disrupting the development of bacterial cells walls thus causing the disintegration of the bacteria. However, some bacteria acquire the genes to produce enzymes which inactivate this mode of action - so called beta-lactamases - drastically reducing the efficacy of this class of antibiotics.

Cefixime is found to be ineffective against bacteria which produces ESBL (Extended-Spectrum Beta-Lactamases) enzyme and resistance is seen in such types of bacteria. The combination of cefixime and clavulanic acid ( $\beta$ -lactamase inhibitor) provides a solution for treatment of Bacterial infection caused by beta lactam resistant pathogen but it is rarely given due to its side effects. Doctor's perception while prescribing a drug is depend on different factors like brand name, dosage form, patient's preference etc.

### **Research objective**

- To know Doctors perception about the cefixime.
- To educate patient and recommend the suggestive dosages for cefixime, which will improve treatment better.

### **Review of literature**

Deals with the review of the previous studies relevant to the doctor's perception Ashim Uddin Ahmed, Md. Humayun Kabir Chowdhury (august 2014) in their article "doctor's perception while prescribing multinational and domestic pharmaceutical products" reveal that Doctors can heavily influence drug purchase decisions by performing the roles of users (sometimes), influencer, gatekeepers and deciders, while patients perform the role of buyers and users.

Dr.Priyanka Patel and Amruta Pandit (September 2016 ) in their article doctor's perception on EMR states that the expertise of the medical practitioner's skill is vital to ensure quality treatment , it is also the use of medical technology and advancement that reap favorable results

GPs' perceptions of patient influence on prescribing by Fiona A Stevenson and Shiela M greenfield have explained in their article that the increase in the costs of general practice prescribing has been of concern for a number of years and has been tackled in different ways.

### **Research Gap**

Cefixime, Initially, general measures such as the introduction of prescription charges and a restricted list of drugs were used. Doctors' Perceptions towards Domestic and Multinational Pharmaceutical Products

### **Research methodology**

Visiting Doctors in various regions of South-Delhi with different specializations.

**Objective of the study:**

To take a comprehensive view and analyze the parameters affecting Doctors perception.

**Rationale of study:**

The purpose of this study is to assist Ranbaxy in promotion of SKIFI and know where they have to improve in their service toward Doctors and patients.

**Study Design:**

The study was done to know the perception of the Doctor, their attitude towards company's product.

**Sample Design:**

Collect primary data through exploratory research specifically field survey, by Visiting Doctors of varied kind of specialization.

**Tools of data collection:****Questionnaire:**

A questionnaire is a research instrument which consists of series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always true.

Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardized answers that make it simple to compile data.

**Sources of Data**

The sources of the data are as follows: -

Primary Data:-Internal data gathered from organization

Secondary Data: - Self-structured questionnaire and controlled observation by visiting the doctors.

**Hypothesis****Frequency of pharmaceutical sales representative visited the doctor for discussing the antibiotic – cefixime**

Many of the sales representative have been visited the doctor daily for their drug discussion. Some of them visited twice and thrice a week and a lesser number of sales representative visited once or never a week. This will effect the preference of the doctor while prescribing the drug , more visit will lead to increase the chances of doctor prescribing their drug .

**Which dosage form does the doctor prefer while prescribing cefixime antibiotic**

Most of the doctors prefer single those rather than the combined dose as its works better and faster if it is alone medicated.

So this factor also influenced the choice of the doctor for the prescription of the antibiotic that is cefixime.

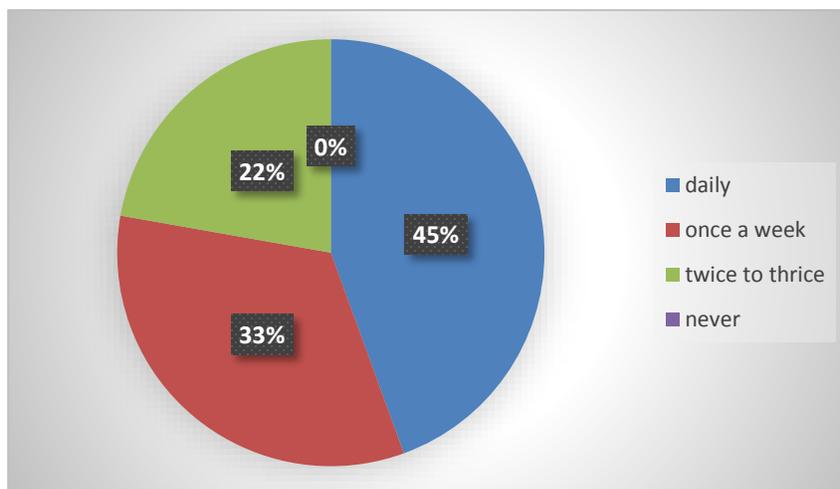
### Impact of brand

For the antibiotic cefixime cipla is the most preferred company which manufacture omnix drug as their brand name for this antibiotic Dr Reddy is second most preferred drug

Brand image always plays an important role for any product. doctor's perception is always influenced with the brand image as patient prefer brand drug.

### Data Analysis and Data Interpretation

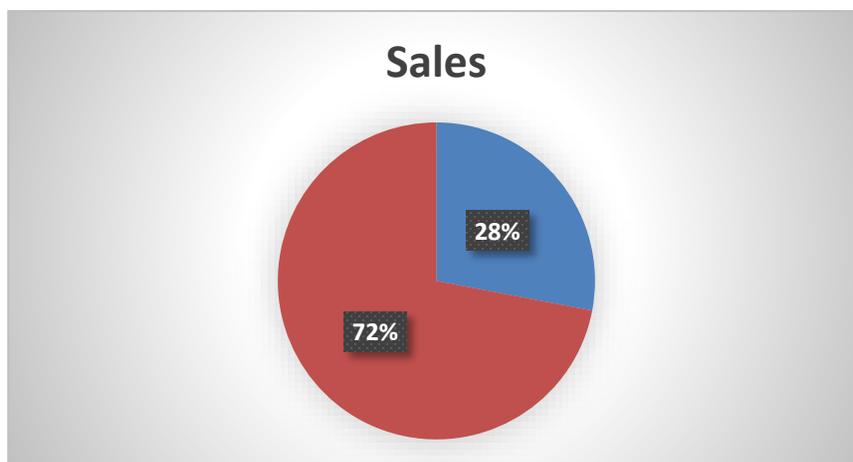
Frequency of pharmaceutical sales representative have been visited the doctor for discuss the antibiotic cefixime.



**Graph 1: Sales representative visiting doctor**

According to the above data, 45 % of the sales representative visited the doctor for discussion and 33% have visited it once a week, the chances of never are very rare

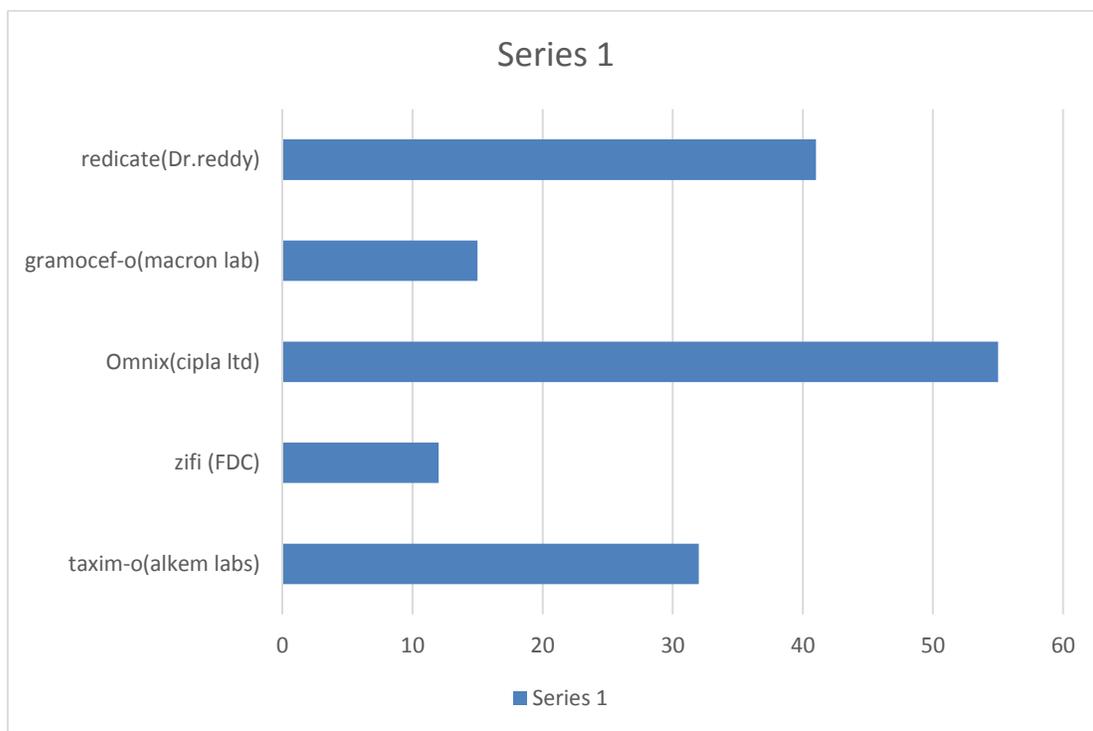
### Choice of dosage form



**Graph 2: Choice of dosage**

From the above the data it is clearly shown that, with reference to the above graph almost 72% Doctors use to prescribe Cefixime as a single dose. With a rare case or specific case 28% doctors use to prescribe Cefixime with the combination because it will lead to many serious side effects.

### Impact of the brand



**Graph 3: Impact of the brand**

As from the above data, Omnix drug of cipla is mostly preferred drug among the all After that radicate of Dr. Reddy is the second most choice of the drug for the infection.

### CONCLUSION

By analyzing the data we can conclude that:

1. 31% of pharmaceutical sales representation visit doctor's daily while 42% visit once in a week.
2. Average information about the anti-biotic is received by the sales representation.
3. 39% of doctor's prescribing behaviour is being influenced by pharmaceutical sales representatives.
4. 52% of doctor's prefer mixed dose form.
5. Cipla's omnix is the most preferred brand by doctors.

### REFERENCES

1. Bradley CP. Uncomfortable prescribing decisions: a critical incident study. Br Med J1992; 304: 294–296.

2. Webb S, Lloyd M. Prescribing and referral in general practice: a study of patients' expectations and doctors' actions. *Br J Gen Pract* 1994; 44: 165–169.
3. "cefixime". International Drug Price Indicator Guide. Retrieved 8 December 2016.
4. "WHO Model List of Essential Medicines (19th List)" (PDF). World Health Organization. April 2015. Archived (PDF) from the original on 13 December 2016. Retrieved 8 December 2016.

***AJPTR is***

- Peer-reviewed
- bimonthly
- Rapid publication

Submit your manuscript at: [editor@ajptr.com](mailto:editor@ajptr.com)

