

**Summer Training at
Lupin Limited
(April 20-June 1, 2012)**

**Study of Market Share of Different Combinations of Top
Selling Brands of Voglibose in Jaipur**

**By
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**Post Graduate Diploma in Pharmaceutical Management
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CERTIFICATE

This is to certify that **Mr. Sudhanshu Gorai**, student of PGDPM 2011-2013, has undergone Summer Training in **Lupin Limited, Jaipur** from April 17 to June 1, 2012. The title of the summer internship project was "*Study of Market Share of Different Combinations of Top Selling Brands of Voglibose in Jaipur.*"

The candidate carried out all the studies related to the summer training. His approach to the studies has been sincere, scientific and analytical.

This summer training as partial fulfilment of the course requirement is recommended for the award of Post Graduate Diploma in Pharmaceutical Management (PGDPM).

We wish him success in all future endeavours.

Dr. P. R. Sodani
Dean (Academic and Students Affairs)
IIHMR, Jaipur

Dr. Susmit Jain
Assistant Professor
IIHMR, Jaipur

ACKNOWLEDGEMENT

“Successful passage and outcome of every work comes with dedication, determination and team work. All these turn futile in the absence of visionary guidance.”

My sincere thanks to all those who have been the driving force behind the successful completion of my Internship. I take this opportunity to express my sincere gratitude to **Mr.Kulwinder Singh** (Regional Sales Manager-Lupin Fortia) and **Mr .Ankit Khandelwal** (Sales Executive) for his guidance and support during my internship. I am also thankful to all the doctors and pharmacists who willingly provided the relevant information for carrying out research in my internship.

I am thankful to **Dr.N K Gurbani**, Associate Dean (PG Pharma) for his guidance during my internship. I am also thankful to **Dr.Susmit Jain**, Assistant Professor and Mentor for his guidance throughout my internship.

Special thanks to **Mr. Dalbir Singh** (Placement Officer) for providing an opportunity of internship in Lupin Ltd.

Last but not least, I wish to thank my parents, other family members, friends and well wishers who were always a constant source of encouragement in my internship.

SUDHANSHU GORAI

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Executive summary

I worked on a project title **Determination of current market share of different combination of Voglibose in Jaipur**. Under this I surveyed various endocrinologists, diabetologists and consulting physicians of **Jaipur city**.

The objective was to find out the current market share of top selling brand of different combinations of Voglibose available in market.

The research design used was descriptive and the data collected was both primary and secondary in nature. The sample size consisted of **30 doctors** and **120 chemists** and a semi structured questionnaire was used to acquire the data.

Some of the important results were drawn out after the data analysis. A major proportion of doctors prefer to prescribe Voglistar of Mankind as hypoglycemic drug which is LUPIN`s competitor brand. It is found that Mankind is not only promoting its star product, but at the same time also promoting its star product with different composition in the same segment, which is adding to its revenue.

About Lupin

The company was named after the Lupin flower because of the inherent qualities of the flower and what it personifies and stands for. The Lupin flower is known to nourish the land, the very soil it grows in. The Lupin flower is also known to be tolerant of infertile soils and capable of pioneering change in barren and poor climes. The Lupin flower and bean pods have also long been used as food and sources of nourishment, thus protecting and nurturing life.

Lupin was founded in 1968¹ with the same vision, a company that would develop new pioneering drugs to combat, prevent and eradicate life-threatening diseases, by manufacturing drugs of the highest social priority, thus nurturing, protecting and enriching society, very much like the Lupin flower.

Vision

"An Innovation Led, Transnational Pharmaceutical Company"

Corporate overview

Headquartered in Mumbai, India, Lupin Limited today is an innovation led transnational pharmaceutical company producing a wide range of quality, affordable generic and branded formulations and APIs for the developed and developing markets of the world.

Lupin first gained recognition when it became one of the world's largest manufacturers of Tuberculosis drugs. The Company today has significant market share in key markets in the Cardiovascular (prils and statins), Diabetology, Asthma, Pediatrics, CNS, GI, Anti-Infective and NSAIDs therapy segments, not to mention global leadership positions in the Anti-TB and Cephalosporin segments. The Company's R&D endeavors have resulted in significant progress in its NCE program. The Company's foray into Advanced Drug Delivery Systems has resulted in the development of platform technologies that are being used to develop value-added generic pharmaceuticals. Lupin's world class manufacturing facilities, spread across India and Japan, have played a critical role in enabling the companies realize its global aspirations. Benchmarked to International standards, these facilities are approved by international regulatory agencies like US FDA, UK MHRA, Japan's MHLW, TGA Australia, WHO, and the MCC South Africa.

Lupin's drugs and products reach over 70 countries in the world. Today, Lupin has emerged as the 5th largest and the fastest growing Top 5 company in the U.S (by prescriptions), the only Asian company to achieve that distinction. The company is also the fastest growing, top 5 pharmaceutical players in India (ORG IMS) and the fastest growing top 10 Generic players in Japan and South Africa. (IMS), Today, Lupin also has the unique distinction of being the fastest growing top 10 Generics players in the two largest pharmaceutical markets of the world – The U.S (ranked 5th by prescriptions & growing at 52 %) and Japan (ranked 7th and growing

¹ Source: Company website

at23%).Lupin's Consolidated Revenues and Profit after Tax were Rs. 57,068 million and Rs. 8,626 million for FY 2010-11.

R & D

Lupin's Research and Development covers the following broad areas:

- Generics Research
 - Process Research
 - Pharmaceutical Research
- Advanced Drug Delivery Systems (ADDs) Research
- Intellectual Property Management
- Novel Drug Discovery and Development (NDDD)
- Biotechnology Research

Product Range

- Anti-allergy
- Anxiolytic
- Anti-asthma
- Anti-bacterial/fungal creams
- Cardiovascular
- Cephalosporin
- Anti-diabetic
- Gastro-intestinal
- Herbal
- Iron preparations
- Laxatives
- Anti-malarial
- Multi-vitamins
- NSAID
- OA/RA
- Anti-oxidants
- Quinolones
- Anti-TB
- Anti-viral

TABLE1-Lupin's products in various segments²

Product	Therapeutic range	Ranking
TONACT	CVS	3
GLUCONORM	Anti Diabetic	4
RABLET	Gastro Intestinal	2
RCINEX	Anti TB	1
RAMISTAR	CVS	2
AKT	Anti TB	1
CLOPITAB	CVS	3
L-CIN	Levofloxacin	1
TELEKAST	Anti-Asthma	3
BUDAMATE	Anti-Asthma	3

(Table 1:- Lupin's products in Various segments)

TABLE2-Lupin's growth in comparison with market (As per March 2011)³

Therapeutic segment	Lupin growth %	Market growth%
CVS	21%	18%
Anti-TB	10%	5%
Anti-asthma	28%	14%
Antibiotics+Cephalosporins Oral+Cephaic	1%	14%
Anti-Diabetic	81%	24%
Gastro-Intestinal	22%	17%
CNS	20%	17%
Gynaecology	86%	14%

(Table 2:- Lupin's growth in comparison with market)

² Source: Company website

³ Source: Company website

Diabetes

Diabetes (diabetes mellitus) is classed as a metabolism disorder. Metabolism refers to the way our bodies use digested food for energy and growth. Most of what we eat is broken down into glucose. Glucose is a form of sugar in the blood - it is the principal source of fuel for our bodies.

When our food is digested the glucose makes its way into our bloodstream. Our cells use the glucose for energy and growth. However, glucose cannot enter our cells without insulin being present - insulin makes it possible for our cells to take in the glucose.

Insulin is a hormone that is produced by the pancreas. After eating, the pancreas automatically releases an adequate quantity of insulin to move the glucose present in our blood into the cells, and lowers the blood sugar level.

A person with diabetes has a condition in which the quantity of glucose in the blood is too elevated (hyperglycemia). This is because the body either does not produce enough insulin, produces no insulin, or has cells that do not respond properly to the insulin the pancreas produces. This results in too much glucose building up in the blood. This excess blood glucose eventually passes out of the body in urine. So, even though the blood has plenty of glucose, the cells are not getting it for their essential energy and growth requirements.

Types of diabetes

- **Diabetes Type 1** - You produce no insulin at all.
- **Diabetes Type 2** - You don't produce enough insulin, or your insulin is not working properly.
- **Gestational Diabetes** - You develop diabetes just during your pregnancy

Diabetes Types 1 and 2 are chronic medical conditions - this means that they are persistent and perpetual. Gestational Diabetes usually resolves itself after the birth of the child.

Symptoms of Diabetes

People can often have diabetes and be completely unaware. The main reason for this is that the symptoms, when seen on their own, seem harmless. However, the earlier diabetes is diagnosed the greater the chances are that serious complications, which can result from having diabetes, can be avoided.

Most common diabetes symptoms:

- Frequent urination
- Disproportionate thirst
- Intense hunger
- Weight gain
- Unusual weight loss

- Increased fatigue
- Irritability
- Blurred vision
- Cuts and bruises don't heal properly or quickly
- More skin and/or yeast infections
- Itchy skin
- Gums are red and/or swollen - Gums pull away from teeth
- Frequent gum disease/infection
- Sexual dysfunction among men
- Numbness or tingling, especially in feet and hands

Type 1 diabetes

Type 1 diabetes is an autoimmune disease - the person's body has destroyed his/her own insulin-producing beta cells in the pancreas.

People with Diabetes Type 1 are unable to produce insulin. Most patients with Diabetes Type 1 developed the condition before the age of 40. Approximately 15% of all people with diabetes have Type 1.

Type 1 diabetes is fatal unless the patient regularly takes exogenous insulin. Some patients have had their beta cells replaced through a pancreas transplant and have managed to produce their own insulin again.

Type 1 diabetes is also known as juvenile diabetes or childhood diabetes. Although a large number of diabetes Type 1 patients become so during childhood, it can also develop after the age of 18. Developing Type 1 after the age of 40 is extremely rare.

Type 1, unlike Type 2, is not preventable. The majority of people who develop Type 1 are of normal weight and are otherwise healthy during onset. Exercise and diet cannot reverse Type 1. Quite simply, the person has lost his/her insulin-producing beta cells. Several clinical trials have attempted to find ways of preventing or slowing down the progress of Type 1, but so far with no proven success.

A C-peptide assay is a lab test that can tell whether somebody has Type 1 or Type 2. As external insulin has no C-peptide a lack of it would indicate Type 1. The test is only effective when ALL the endogenous insulin has left the body - this can take several months.

Type 2 diabetes

A person with diabetes type 2 either:

1. Does not produce enough insulin or
2. Suffers from 'insulin resistance'. This means that the insulin is not working properly.

The majority of people with Type 2 have developed the condition because they are overweight. Type 2 generally appears later on in life, compared to Type 1. Type 2 is the most common form of diabetes.

In the case of insulin resistance, the body is producing the insulin, but insulin sensitivity is reduced and it does not do the job as well as it should do. The glucose is not entering the body's cells properly, causing two problems:

1. A build-up of glucose in the blood.
2. The cells are not getting the glucose they need for energy and growth.

In the early stages of Type 2 insulin sensitivity is the main abnormality - also there are elevated levels of insulin in the blood. There are medications which can improve insulin sensitivity and reduce glucose production by the liver.

As the disease progresses the production of insulin is undermined, and the patient will often need to be given replacement insulin. Excess abdominal fat is much more likely to bring on Type 2 Diabetes than excess fat under the skin.

Many experts say that central obesity - fat concentrated around the waist in relation to abdominal organs - may make individuals more predisposed to develop Type 2 diabetes.

Central obesity does not include subcutaneous fat - fat under the skin. The fat around your waist - abdominal fat - secretes a group of hormones called adipokines. It is thought that adipokines may impair glucose tolerance.

The majority of people who develop diabetes Type 2 were overweight during the onset, while 55% of all Type 2 patients were obese during onset. Sometimes all the patient needs is to do more exercise, lose weight and eat fewer carbs.

It is not uncommon for people to achieve long-term satisfactory glucose control by doing more exercise, bringing down their bodyweight and cutting down on their dietary intake of carbohydrates.

However, despite these measures, the tendency towards insulin resistance will continue, so the patient must persist with his/her increased physical activity, monitored diet and bodyweight.

If the diabetes mellitus continues the patient will usually be prescribed orally administered anti-diabetic drugs. As a person with Type 2 does produce his/her own insulin, a combination of oral medicines will usually improve insulin production, regulate the release of glucose by the liver, and treat insulin resistance to some extent.

If the beta cells become further impaired the patient will eventually need insulin therapy in order to regulate glucose levels.

Voglibose (INN and USAN, trade name **Voglib**, marketed by Mascot Health Series) is an alpha-glucosidase inhibitor used for lowering post-prandial blood glucose levels in people with diabetes mellitus. Voglibose delays the absorption of glucose thereby reduces the risk of macrovascular complications. Voglibose is a research product of Takeda Pharma, a Japan based company.

Postprandial hyperglycemia (PPHG) is primarily due to first phase insulin secretion. Alpha glucosidase inhibitors delay glucose absorption at the intestine level and thereby prevent sudden surge of glucose after a meal.

There are three drugs which belong to this class, acarbose, miglitol and voglibose, of which voglibose is the newest. Voglibose scores over both acarbose and miglitol in terms of side effect profile. But acarbose has an edge over voglibose in terms of efficacy (FPG, PPHG, HBA_{1c}).

There are several trials supporting the use of voglibose in the management of PPHG. Also, it has been established that it is PPHG, not FPG, which is the marker of cardiovascular disorders associated with diabetes. So, controlling PPHG is imperative and voglibose is indicated for the management of PPHG.

Pharmacology

Volix, an alpha-glucosidase inhibitor, is a synthetic compound with potent and enduring therapeutic efficacies against disorders of sensory, motor and autonomic nerve systems due to diabetes mellitus. The drug was approved in Japan in 1994 for the treatment of diabetes, and it is under further investigation by Takeda for the treatment of impaired glucose tolerance. Alpha-glucosidase inhibitors are oral anti-diabetic drugs used for diabetes mellitus type 2 that work by preventing the digestion of complex carbohydrates (such as starch). Complex carbohydrates are normally converted into simple sugars (monosaccharides) which can be absorbed through the intestine. Hence, alpha-glucosidase inhibitors reduce the impact of complex carbohydrates on blood sugar.

Mechanism of Action

Alpha-glucosidase inhibitors are saccharides that act as competitive inhibitors of enzymes needed to digest carbohydrates: specifically alpha-glucosidase enzymes in the brush border of the small intestines. The membrane-bound intestinal alpha-glucosidases hydrolyze oligosaccharides, trisaccharides, and disaccharides to glucose and other monosaccharides in the small intestine. Acarbose also blocks pancreatic alpha-amylase in addition to inhibiting membrane-bound alpha-glucosidases. Pancreatic alpha-amylase hydrolyzes complex starches to oligosaccharides in the lumen of the small intestine. Inhibition of these enzyme systems reduces the rate of digestion of complex carbohydrates. Less glucose is absorbed because the carbohydrates are not broken down into glucose molecules. In diabetic patients, the short-term effect of these drugs therapies is to decrease current blood glucose levels: the long term effect is a small reduction in hemoglobin-A1c level.

Indication/Contraindication for use of Voglibose

- Improvement of postprandial hyperglycemia in diabetes mellitus when sufficient effect has not been obtained in patients who have been using oral hypoglycemic drugs or insulin preparations, in addition to dietary treatment and/ or exercise therapy
- severe ketosis or in a state of Diabetic coma or precoma, severe infections, before or after operation or with serious trauma, Hypersensitivity

Side Effects of Voglibose

Hypoglycemia, delay in digestion and absorption of disaccharides, abdominal pain and swelling, increased flatus, intestinal obstruction like symptoms, fulminant hepatitis, serious hepatic dysfunction with increased AST (GOT), ALT (GPT), LDH, gamma GTP or ALP, jaundice, diarrhea, loose stools, borborygmus, anorexia, nausea, vomiting, heartburn, anemia, numbness, edema, blurred vision, hot flushes, malaise, weakness hyperkalemia, increased serum amylase.

Dosage of Voglibose

Single dose of 0.2mg, given three times a day, just before each meal. If the effect is not sufficient enough, the single dose may be increased up to 0.3 mg, under close observation of the course of disease. Elderly: Since the elderly have a physiological hypofunction in general, the administration of Volibo should to be initiated at lower doses, (like single dose of 0.1mg).

Drug Interactions of Voglibose

Derivatives of sulfonamide, sulfonyleurea, biguanide derivatives, insulin preparations and agents improving insulin resistance causes hypoglycemia. Therefore, whenever voglibose is used in combination with these drugs, it should be initiated at a lower dose. Beta blockers, salicylic acid preparations, monoamine oxidase inhibitors, fibrate derivatives and warfarin, epinephrine, adrenocortical hormone, thyroid hormone, etc.

Precautions while prescribing Voglibose

- Hepatic dysfunction or renal dysfunction, elderly patients
- Pregnancy & Lactation.
- Chronic intestinal disease accompanied by a disturbance in digestion and absorption, voglibose may aggravate the pathological condition.

Administration

Should be taken with food. (Take just before meals)

Special Precautions

History of laparotomy or ileus. Roemheld's syndrome, stenosis, severe hepatic or renal impairment. Child <18 yr; elderly. Monitor LFT. Treat hypoglycaemic episodes with glucose (not with sucrose).

Storage

Oral: Store below 30°C

OBJECTIVES

1. Primary Objective:

To find out the market share of different combinations of top selling brands of voglibose in Jaipur.

2. Secondary Objective:

- To know the top brands of voglibose prescribed by doctors
- To know the top brands of voglibose available in market

RESEARCH METHODOLOGY

➤ **Title of the study**

Study of market share of different combinations of top selling brands of voglibose in jaipur

➤ **Type of research**

Descriptive research since it includes surveys and fact finding enquiries

➤ **Scope of the study**

The study was aimed to enumerate the sale of different combinations of voglibose by various pharmaceutical companies so as to analyse the scenario of present market share of voglibose.

➤ **Data Collection method**

The data collected was both primary and secondary in nature.

➤ **Primary Data**

It is collected for the first time and thus happens to be original in character. It was collected through means of a Structured questionnaire , targeted towards the doctors of specialities- Diabetologist, Endocrinologist & Consulting Physicians and Chemists. A structured questionnaire was designed covering close ended and open ended questions. Types of items in questions:

- a. Question related to preferences
- b. Question related to factors of consideration
- c. Question related to choice of brands
- d. Question related to most prescribed brands

➤ **Secondary Data**

It is the one that is already available. It was required to study the different combinations of voglibose and its pharmacology, disease profile and to study the company profile.

➤ **Methodology**

Rank ordering and Comparative Scaling Technique used to analyse the data obtained.

➤ **Research Design: Structured interview**

A mix of qualitative/quantitative questionnaire was designed with the objective of deriving the maximum information from doctors and chemists.

➤ **Sampling Characteristics:**

- **Target Specialities** – Diabetologist, Endocrinologist & Consulting Physicians.
- **Sampling Units** – Sampling units were the corporate hospitals at Jaipur, Clinics and Chemist shops.
- **Sample size** – 30 doctors and 120 chemists
- **Sampling techniques** - The sampling technique applied here is sampling without replacement. Sampling technique used here is simple random sampling.

DATA INTERPRETATION & ANALYSIS:-

East Jaipur

S.No	Name of doctor	Area	Prescribing brand
1	Dr. G.Devpura	SMS	Voglistar
2	Dr.B.S.Gupta	SMS	Voglitor
3	Dr.C.L.Naval	SMS	Starvog
4	Dr. Renu Sehgal	SMS	Vobose
5	Dr.S.K.Sharma	SMS	Vocarb
6	Dr. S.N. Sharma	SMS	Voglitor MF(M+V)
7	Dr. J.B. Gupta	SMS	VocarbMF (M+V)
8	Dr. Jitendra Gupta	SMS	Voglistar
9	Dr. Suresh Meena	SMS	Voglistar

(Table 3:- Doctors list of East Jaipur)

West Jaipur:-

S.No	Name of doctor	Area	Prescribing brand
1	Dr. L.C.Dhoka	Sodala	Voglistar
2	Dr.Anima Sharma	Civil Lines	Voglitor
3	Dr.Raman Sharma	Civil Lines	Starvog
4	Dr. Preeti Bhargav	Civil lines	Vobose
5	Dr.S.K.Sharma	Civil lines	Vocarb
6	Dr. Abhay Sharma	Civil lines	Voglitor MF(M+V)
7	Dr. V.R Kala	Civil lines	Vocarb MF (M+V)

(Table 4 :- Doctors list of West Jaipur)

North Jaipur:-

S.No	Name of doctor	Area	Prescribing brand
1	Dr. Sashi Paneekar	Banipark	Voglistar
2	Dr.Sanjay Mehndiratta	Shatrinagar	Voglitor
3	Dr.Sunil Dand	Shatrinagar	Starvog
4	Dr. Sandeep Garg	Banipark	Vobose
5	Dr.Anil Mathai	Banipark	Vocarb
6	Dr. Mithun Maalpani	Banipark	Voglitor MF(M+V)
7	Dr. Iqbal Farhan	Shatrinagar	Vocarb MF(M+V)

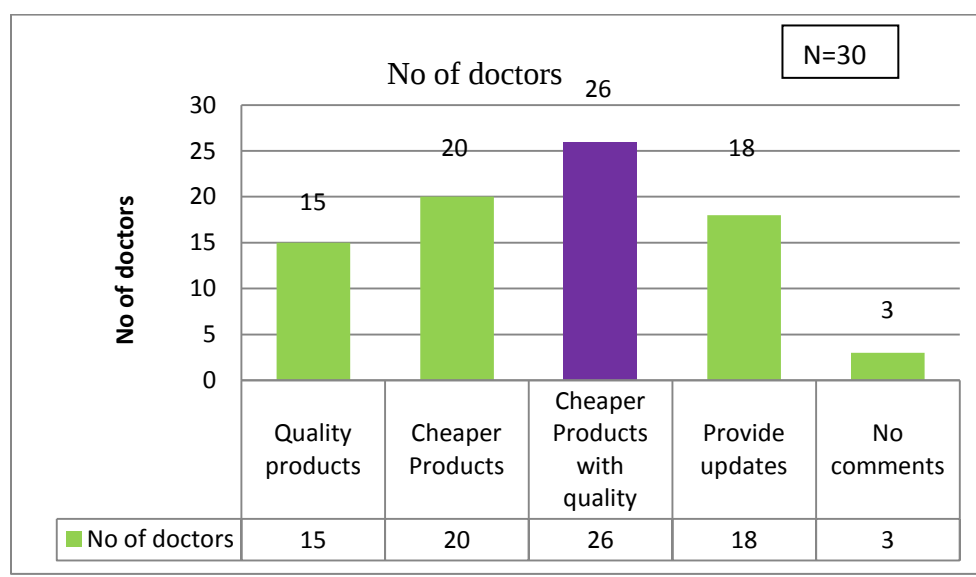
(Table 5 :-Doctors list of North Jaipur)

South Jaipur:-

S.No	Name of doctor	Area	Prescribing brand
1	Dr. Rajeev Patni	SDMH	Voglistar
2	Dr.Ajay Shah	SDMH	Voglitor
3	Dr.A. Banerjee	SDMH	Starvog
4	Dr. B.L.Chowdhary	Tonk Phatak	Vobose
5	Dr.Sailesh Lodha	Fortis Escort	Vocarb
6	Dr. Mithun Maalpani	Tonk Phatak	Voglitor MF(M+V)
7	Dr. B.K. Baakiwala	Tonk Phatak	Vocarb MF(M+V)

(Table 6:- Doctors list of South Jaipur)

Doctors expectations from Pharma companies

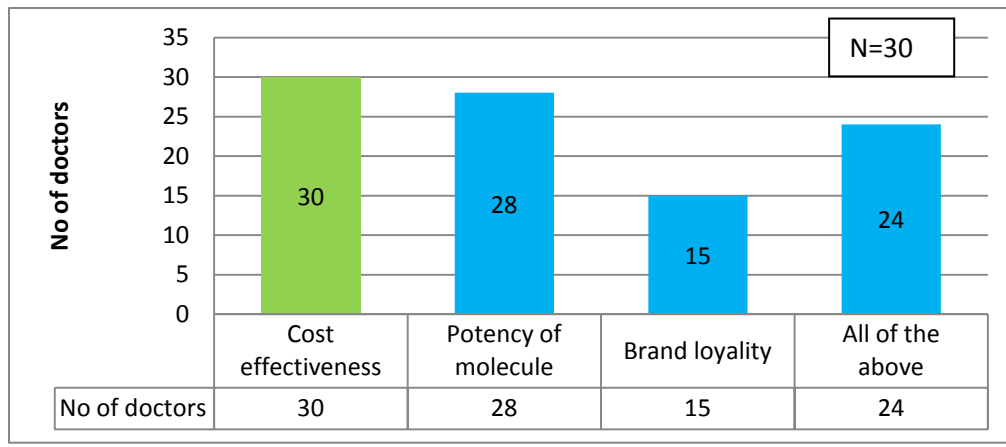


(Figure 1 :- Doctors expectations from Pharma companies)

Interpretation:-

Figure1depicts that a majority of doctors are expecting Cheaper but Quality product, from pharma companies. Some doctors around 24percent only emphasize over cheaper products, because of low affordability of the poor people, rather than this 73percent doctors expects from pharma company to keep them update regarding new products, around 18percent doctors still wants quality product, cost doesn't matters to them, and 4percent doctors refuses to give their comment regarding their expectation from pharma company. But maximum doctors want to prescribe the drug which is both cheaper and having greater quality so that patient will benefit.

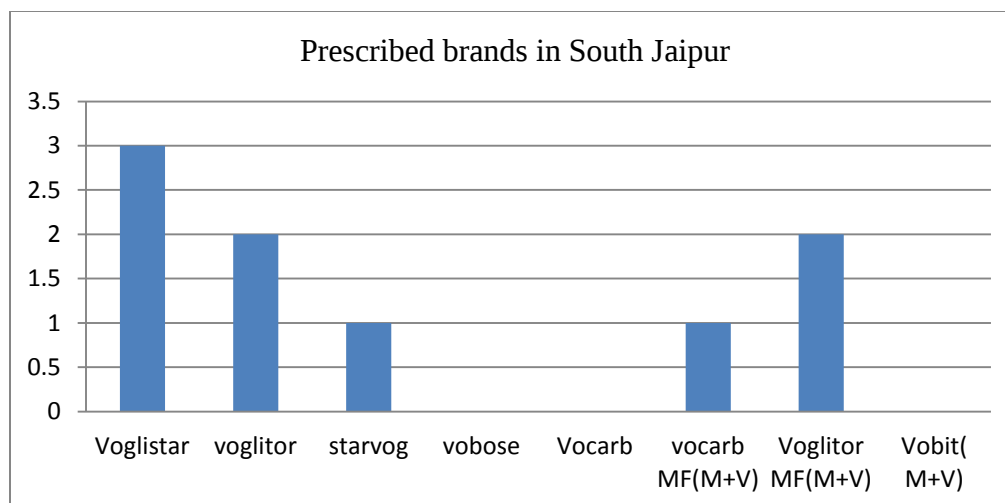
Doctor`s basis of prescribing the drug molecule



(Figure2 :- Doctor`s basis of prescribing the drug molecule)

Interpretation:-

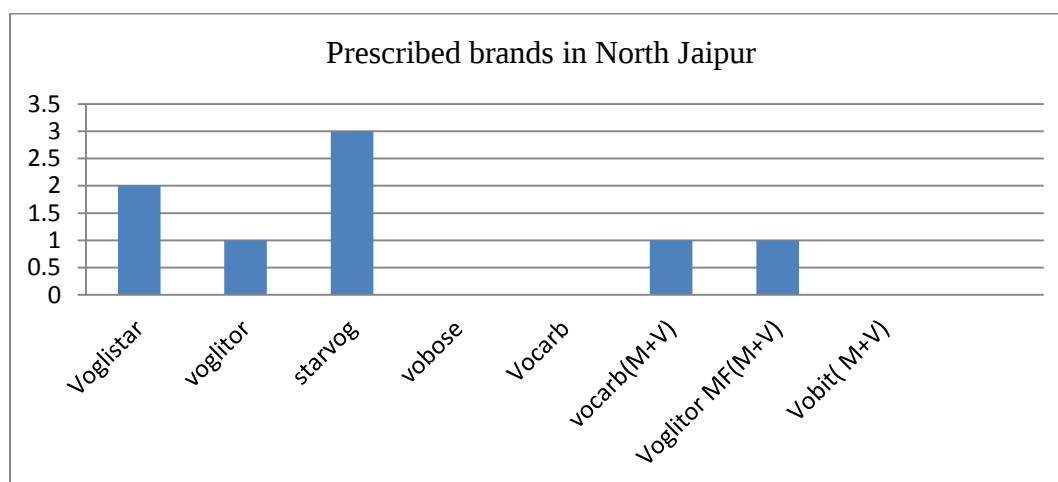
Figure 2 depicts the prescribing pattern of doctors to whom I surveyed. Almost 29 percent of doctors prescribe the molecule because of its potency, approximate 31 percent doctors in spite of looking for potent molecule also looks for cost effective drug, 15percent of doctors have faith over brand, and 25 percent prescribes any molecule because of all three reasons.



(Figure 3:- Prescribed brands in South Jaipur)

Interpretation:-

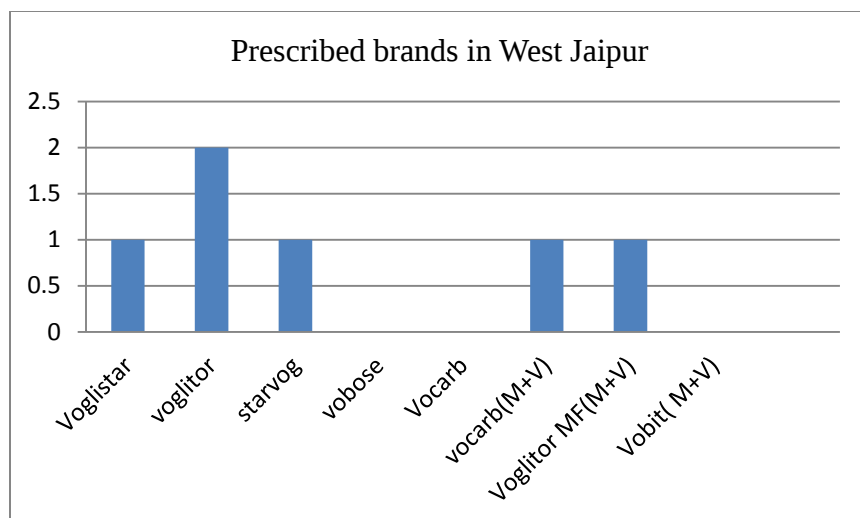
This figure depicts that in South Jaipur zone , 34% doctors prescribe Voglistar ,22 percent doctors prescribe Voglitor,11 percent doctors prescribe Starvog,11 percent doctors prescribe Vocab MF(M+V),22 percent doctors prescribe Voglitor MF(M+V).



(Figure 4:-Prescribed brands in North Jaipur)

Interpretation:-

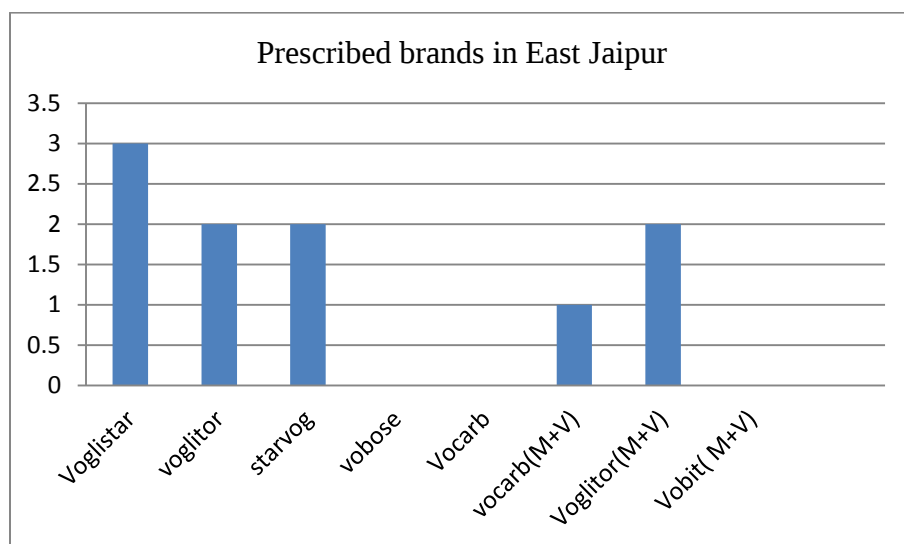
This figure depicts that in South Jaipur zone , 25% doctors prescribe Voglistar ,12 percent doctors prescribe Voglitor,37 percent doctors prescribe Starvog,13 percent doctors prescribe Vocab MF(M+V),13 percent doctors prescribe Voglitor MF(M+V).



(Figure 5 :-Prescribed brands in West Jaipur)

Interpretation:-

This figure depicts that in South Jaipur zone , 16% doctors prescribe Voglistar ,33 percent doctors prescribe Voglitor,17 percent doctors prescribe Starvog,17 percent doctors prescribe Vocab MF(M+V),17 percent doctors prescribe Voglitor MF(M+V).

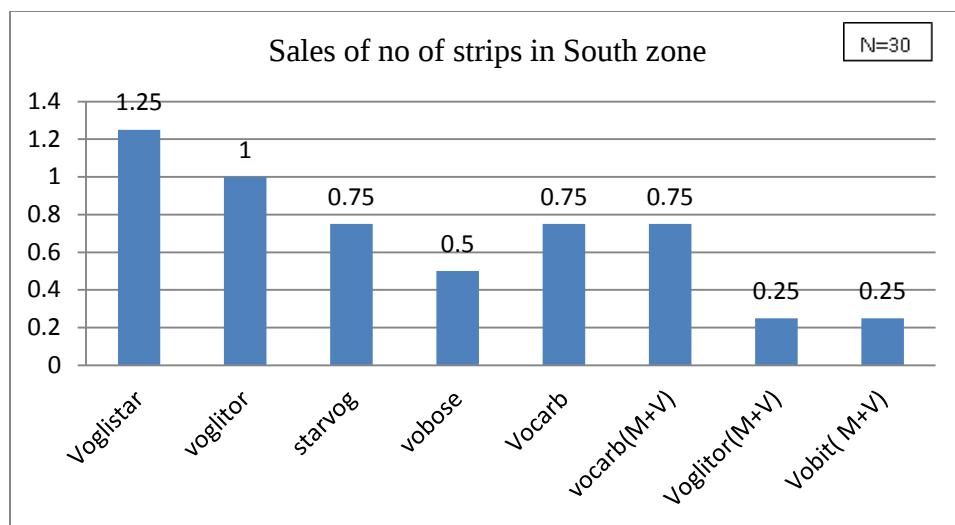


(Figure 6:- Prescribed brands in East Jaipur)

Interpretation:-

This figure depicts that in South Jaipur zone , 30% doctors prescribe Voglistar ,20 percent doctors prescribe Voglitor,20 percent doctors prescribe Starvog,10 percent doctors prescribe Vocab MF(V+M),20 percent doctors prescribe Voglitor MF(M+V).

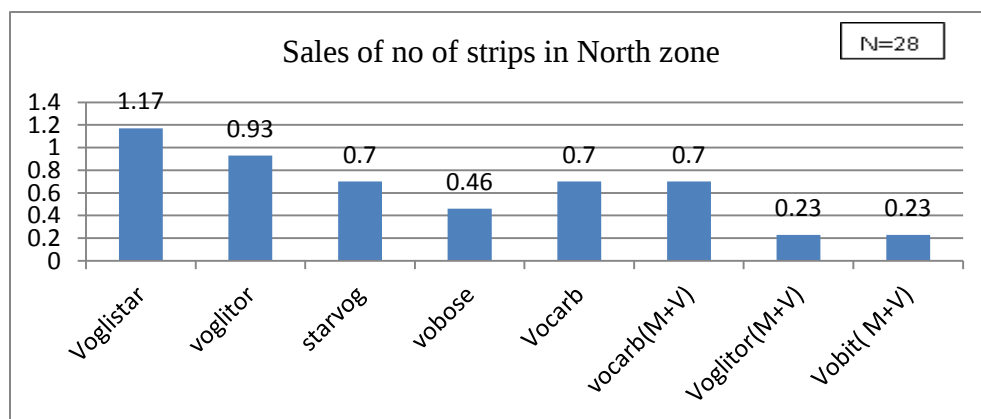
Sales of no of strips in different zones of Jaipur



(Figure 7 :- Sales of no of strips in South Zone)

Interpretation:-

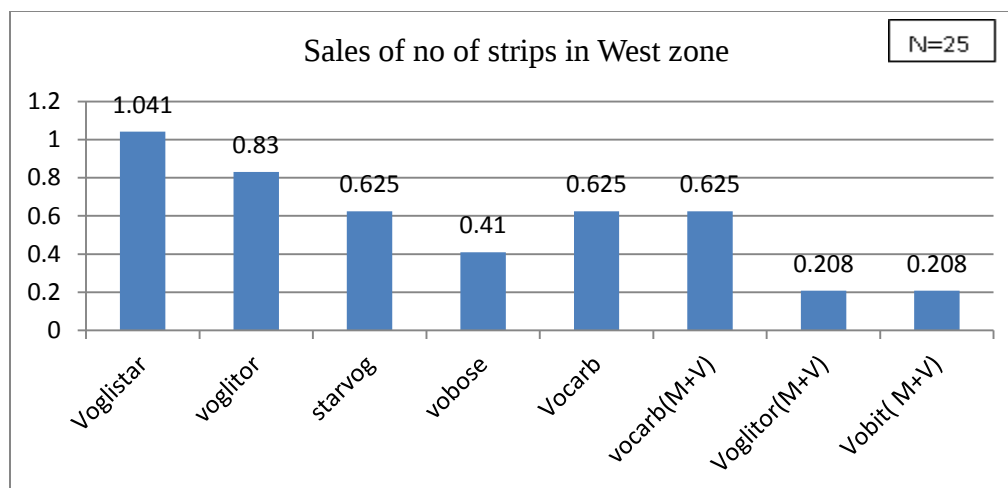
This figure shows the sales of average no of strips by chemist, in south zone. Almost 23 percent of Voglistar, 18 percent of Voglitor, 14 percent of Starvog, 9 percent of Vobose, 14 percent of Vocab, 14 percent of Vocab MF(M+V), 4 percent of Voglitor MF(M+V), 4 percent of Vobit(M+V) are sold by chemist in south Jaipur.



(Figure 8:- Sales of no of strips in North Zone)

Interpretation:-

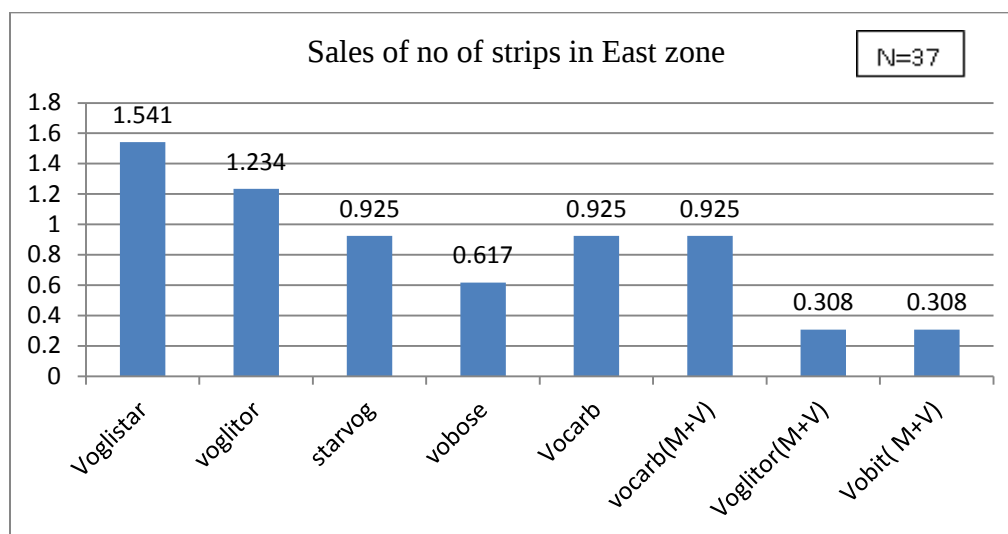
This figure shows the sales of average no of strips by chemist, in North zone. Almost 23 percent of Voglistar, 18 percent of Voglitor, 14 percent of starvog, 9 percent of Vobose, 14 percent of Vocab, 14 percent of Vocab MF(M+V), 4 percent of Voglitor MF(M+V), 4 percent of Vobit(M+V) are sold by chemist in south Jaipur.



(Figure 9:-Sales of no of strips in West Zone)

Interpretation:-

This Figure shows the sales of average no of strips by chemist, in North zone. Almost 23 percent of Voglistar, 18 percent of Voglitor, 14 percent of starvog, 9 percent of Vobose, 14 percent of Vocarb, 14 percent of Vocarb MF(M+V), 4 percent of Voglitor MF(M+V), 4 percent of Vobit(M+V) are sold by chemist in south Jaipur.

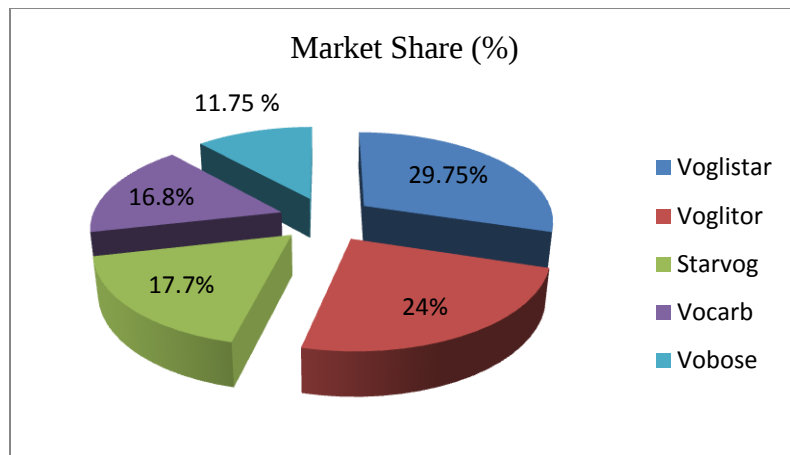


(Figure 10:- Sales of no of strips in East Jaipur)

Interpretation:-

This Figure shows the sales of average no of strips by chemist, in North zone. Almost 23 percent of Voglistar, 18 percent of Voglitor, 14 percent of starvog, 9 percent of Vobose, 14 percent of Vocarb, 14 percent of Vocarb MF(M+V), 4 percent of Voglitor MF(M+V), 4 percent of Vobit(M+V) are sold by chemist in south Jaipur.

Market share of different brands of voglibose

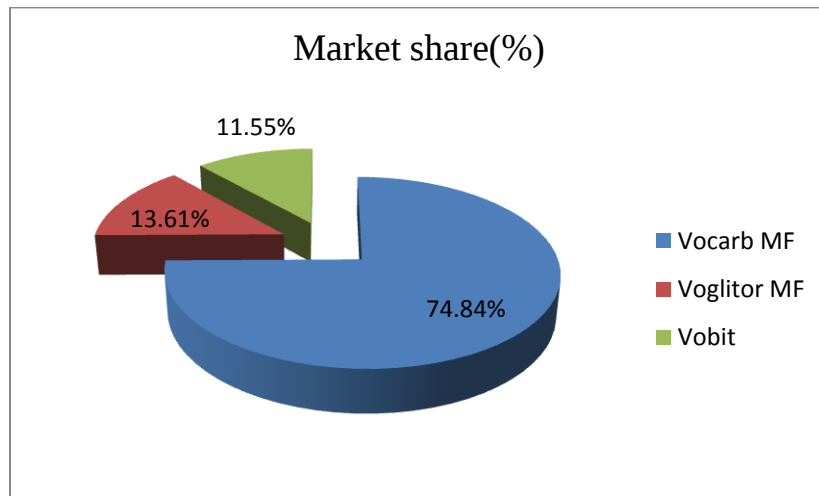


(Figure 11:- Market share of different brands of Voglibose)

Interpretation:-

This figure shows the data of market share of different brands of voglibose, in which Voglistar (Mankind) is having the highest market share.

Market share of Voglibose + Metformin brands



(Figure12 :- Market share of Voglibose+ Metformin brands)

Interpretation :-

This figure shows the data of market share of Voglibose + Metformin brands, in which Vocarb MF is having the highest market share.

Conclusion

For the organization a market survey was done and it is observed in a particular city, the major finding was that in anti diabetic segment LUPIN`s product (Vobit) has extremely low market share in the anti diabetic segment.

Mostly doctors use to prescribe Voglistar of Mankind and it is having the maximum market share as compared to other voglibose brands present in the market.

Recomemdation

- Emphasis should be paid to gain maximum sale and revenue.
- Another brand of same molecule with comparatively lesser price should be introduced and promoted equally.

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Questionnaire

“Market share of different combinations of top selling brands of Voglibose”

1 Personal Details

1.1 Name of Chemist: _____ 1.2 Contact no:

1.3 Address: _____

2 Survey Data

Voglibose, an alpha-glucosidase inhibitor, is used for lowering post-prandial blood glucose levels in people with diabetes mellitus. Voglibose is sold separately as a brand, and also in combination with metformin and glimepiride.

2.1 Please specify the **top selling brands of voglibose & its combinations** in terms of average **no. of strips sold / week**.

- a) _____ No. of strips sold/week _____
- b) _____ No. of strips sold/week _____
- c) _____ No. of strips sold/week _____
- d) _____ No. of strips sold/week _____
- e) _____ No. of strips sold/week _____

2.2 Please specify the brands of **voglibose & its combinations which are** mostly prescribed by the doctors?

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

2.3 Do doctor prefer substitution of unavailable brand with the available brand?

- a) Yes
- b) No

If Yes then which is the prior brand for substitution.

- a)
- b)

2.4. Do retailers prefer substitution of unavailable brand with available brand?

- a) Yes
- b) No

If Yes then which is the prior brand for substitution.

- a)
- b)

Questionnaire

“Market share of different combinations of top selling brands of Voglibose”

1 Personal Details

1.1 Name of Doctor: _____ 1.2 Contact no:

1.3 Address: _____

2 Survey Data

Voglibose, an alpha-glucosidase inhibitor, is used for lowering post-prandial blood glucose levels in people with diabetes mellitus. Voglibose is sold separately as a brand, and also in combination with metformin and glimepiride

2.1 Which brands of anti diabetic drug you prefer to prescribe the most among these combinations mentioned below?

S.No	Voglibose	Voglibose+Metformin	Voglibose+Metformin+Glimepiride	Rank

2.2 Why do you prefer these brands for prescriptions?

2.3 What do you expect from pharma companies?

2.4 Any specific service you like the most about pharma companies and any suggestions you would like to put in order to improve their services?

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