MARKET ASSESMENT OF ANTIDIABETIC DRUGS

UNDER THE GUIDENCE OF
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ACKNOWLEDGEMENT

I take this opportunity with pride and enormous gratitude to thank those who have contributed to the successful completion of this endeavour.

First and foremost, let as thank the **ALMIGHTY GOD**, whose grace has been with as at each step of this project work.

I express my sincere gratitude to **DR. ASHOK PEEPLIWAL, ASSOCIATE PROFESSOR OF SPM OF IIHMR UNIVERSITY, JAIPUR** for providing mental support and inspiring guidelines, initiation and encouragement throughout for the successful completion of this work.

I also thank the entire faculty and non-teaching staff for their generous help.

Finally I thank and acknowledge my parents and friends for their love, prayers and constant support for the successful completion of this project.

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INTRODUCTION

- Diabetes Mellitus is a metabolic disorder in which blood sugar level remain high for a longer period of time and it is characterized by hyperglycaemia, glycosuria, hyperlipidaemia, negative nitrogen balance and sometimes ketonemia. Lack of insulin affects the metabolism of carbohydrate, protein and fat. Some symptoms are increased thirst, frequent urination, extreme hunger, unexplained weight loss, presence of ketones in the urine (ketones are a by product of the breakdown of muscle and fat that happens when there's not enough available insulin), fatigue, blurred vision. Two major types of Diabetes Mellitus are –

- **Type 1 Diabetes Mellitus** – Insulin dependent Diabetes Mellitus. It appears when more than 90% of β cells of pancreas are destroyed by an autoimmune process. The onset is acute and the peak incidence is around 15 years.
- **Type 2 Diabetes Mellitus** – Non insulin dependent Diabetes Mellitus. Overeating, obesity, underactivity and ageing are the main risk factors for Type 2 Diabetes Mellitus.

BACKGROUND AND RATIONALE

The market segment of Oral Antidiabetic drug is very competitive and fragmented and this poses many challenges for the stakeholders, therefore investigations are the need of the hour to derive better understanding and estimation of the market of Oral Antidiabetic. Diabetes is one of the strongest modifiable risk factors for kidney and eye disease . Treatment of Diabetes is constantly evolving in response to new evidence published every now and then and excess of new drugs are being added at a rapid pace. There is a shift observed in the choice of drugs prescribed especially due to their favourable effect on the reducing accompanying concomitant disorders . Older drugs are being replaced by new and more efficacious drugs with less side effects. Therefore, this study focuses on the estimation and growth of Oral antidiabetics in the market along with the analysis of new market entrants in the same category.

STUDY RATIONALE

As of 2015,415 million people had Diabetes with type 2 (90%). This represents 8.3% of adult population with equal rates in both women and men. As of 2014, the trends suggest that it is growing and it doubles the risk of early death from 2012 to 2015 , app. 1.5 million to 5.0 million deaths each year resulted for Diabetes. The global economic cost of Diabetes in 2014 was US$ 612 billion. In India more than 8.7% population between age group 20-70 are affected by Diabetes.

OBJECTIVE OF THE STUDY

1. To know the market of brands of Anti-Diabetic drugs.

2. To study the competitive landscape of Anti-Diabetic drugs.

RESEARCH METHODOLOGY

Research Design:

- **Study type:** Descriptive study
- **Data source:** Primary research
- **Data collection technique:** Survey
- **Data collection tool:** Questionnaire.

Sample Design:

- **Target population:** Dispensing Pharmacist
- **Sampling method:** Non-probability sampling
- **Sample size:** 100 Dispensing Pharmacist
- **Study Location:** Malda, West Bengal

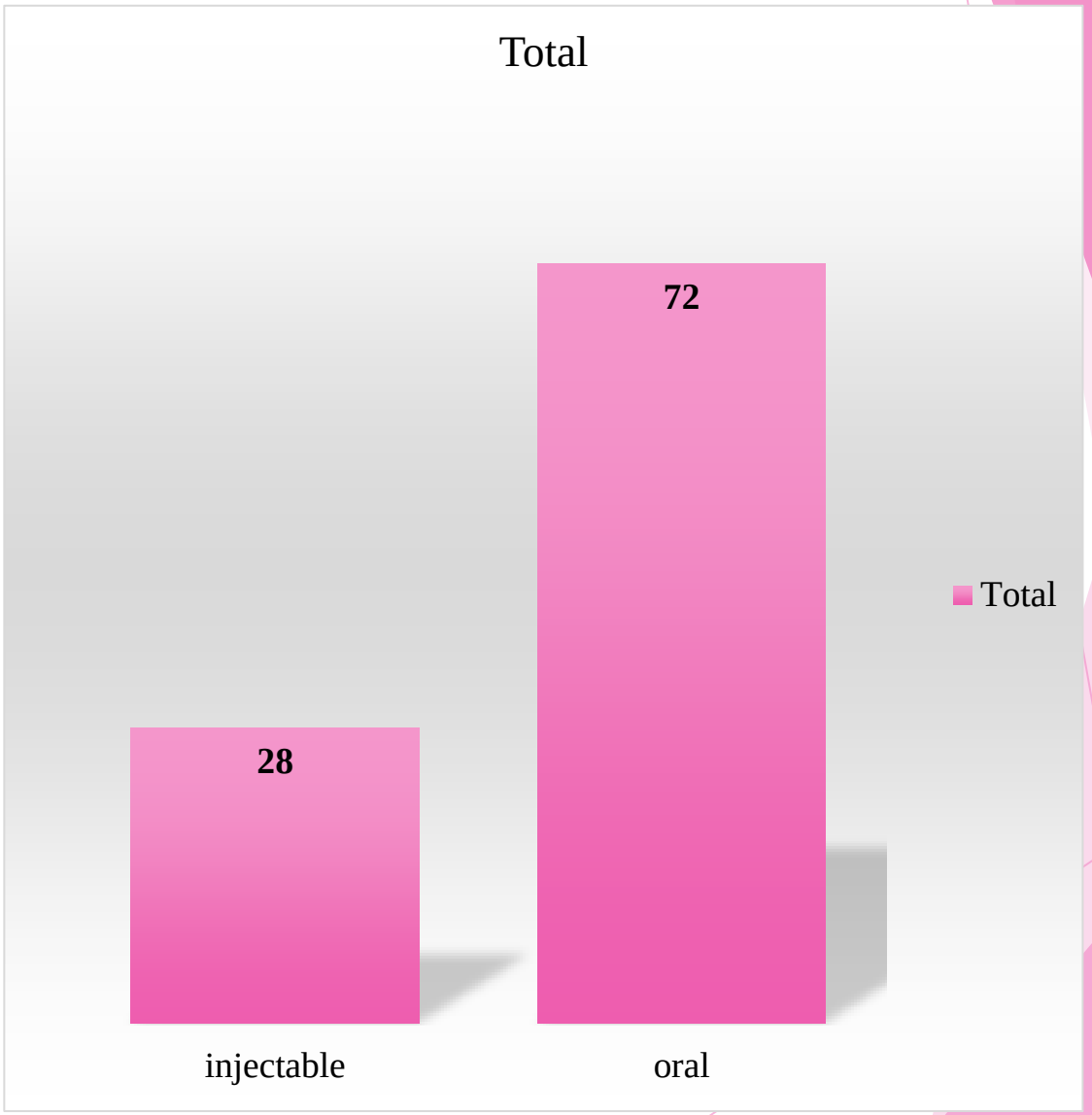
ETHICAL CONSIDERATION

The research was completed with appropriate research guidelines. Enough time was given to the respondent of the study so that they can depict their true view on research questions. Consent from the respondents was taken and appropriate permission was also ensured for the usage of their given data. The disclosure of respondent identity was based on their permission where if they are not willing to disclose identity, their identity was exhibited.

RESULT AND ANALYSIS

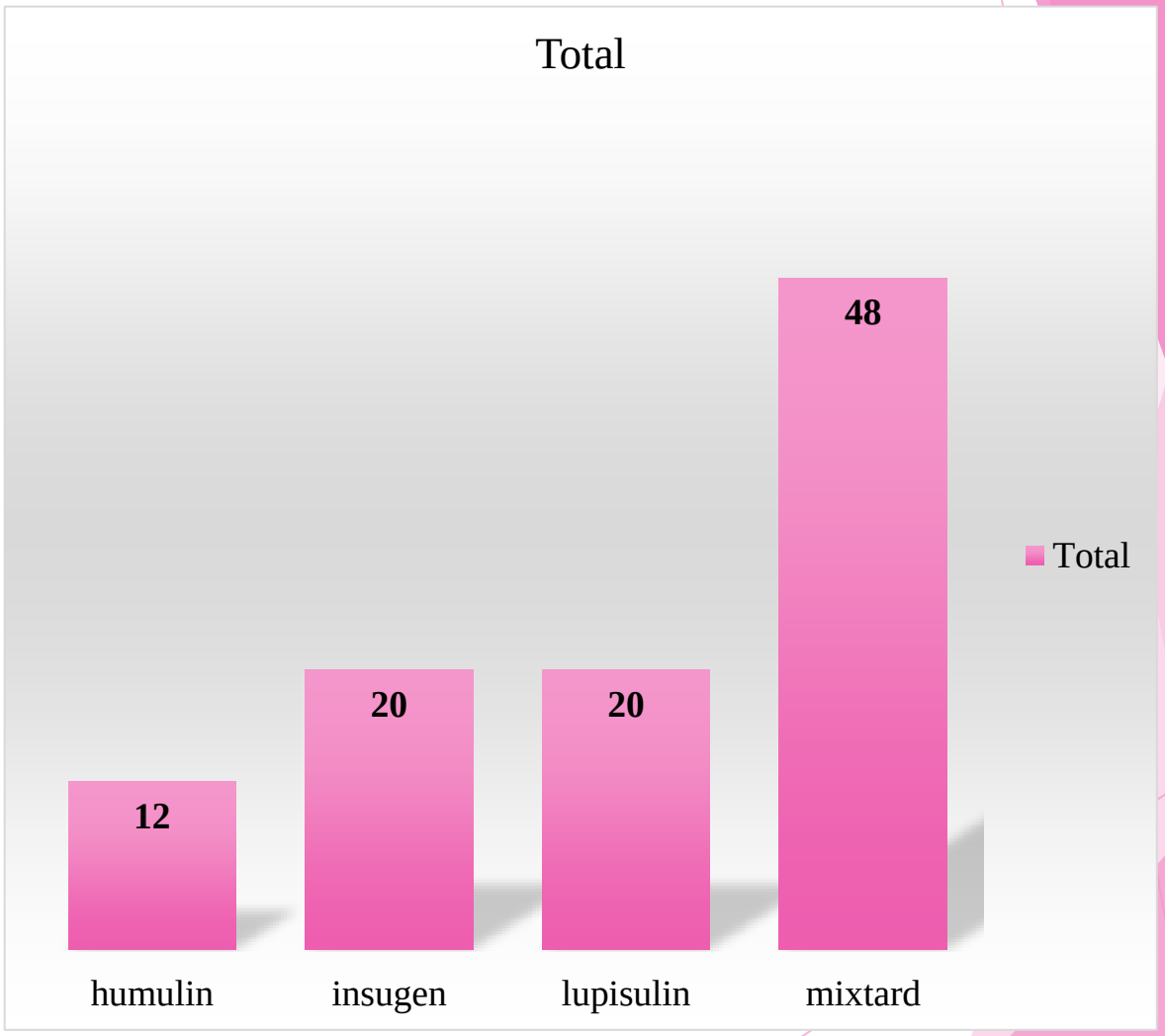
Type of Anti Diabetic drugs prescription comes more

In Malda Area of West Bengal, among my survey report, oral anti diabetic drugs are more prescribed than injectable drugs. 72% oral, whereas 28% injectable drugs are being prescribed.



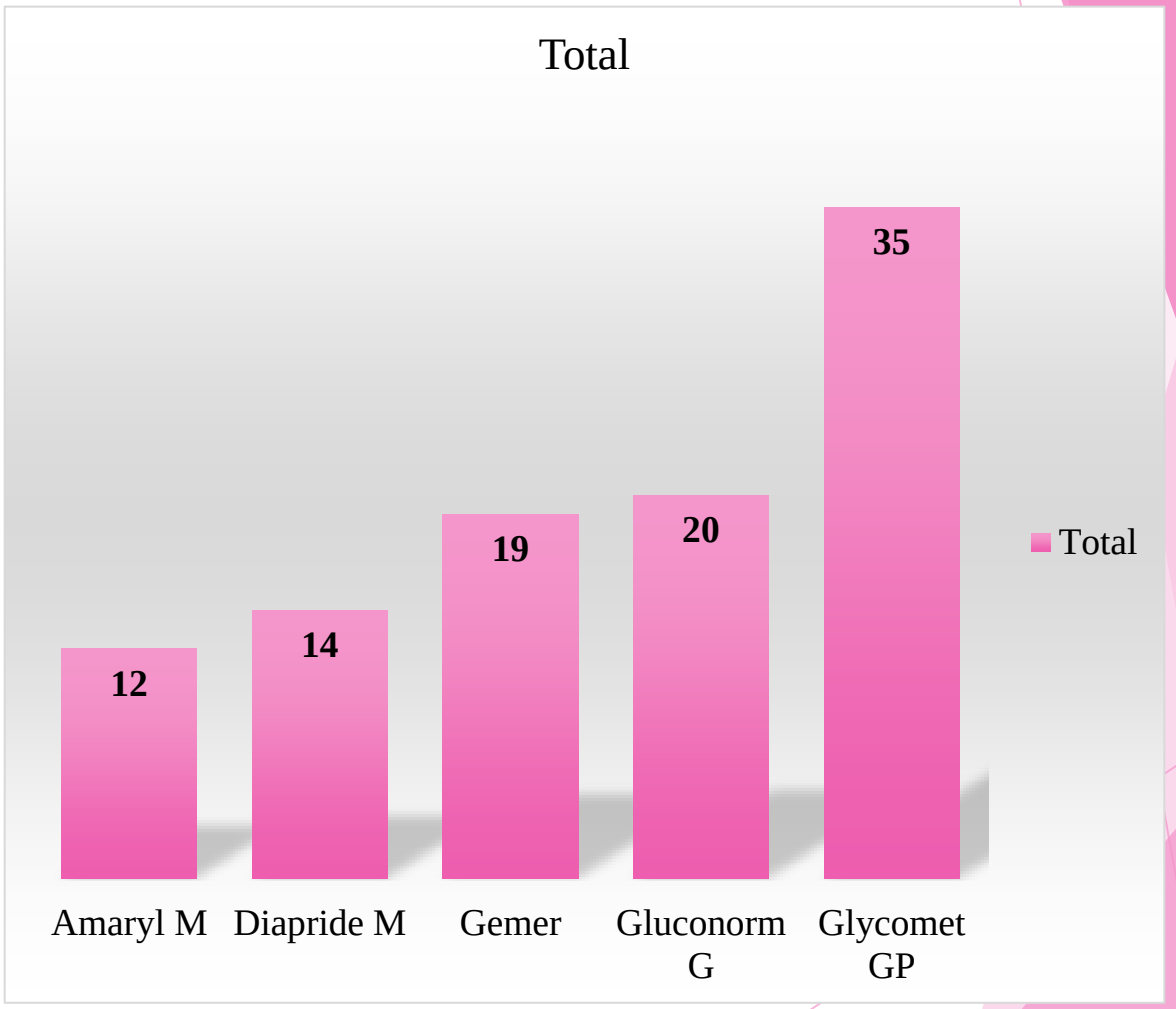
Most prescribed drugs among injectable anti diabetic drugs

Among injectable antidiabetics, Mixtard is mostly used injectable anti diabetics (48% i.e. almost half of the market). Lupisulin and Insugen are at the same position with 20% of the market each.



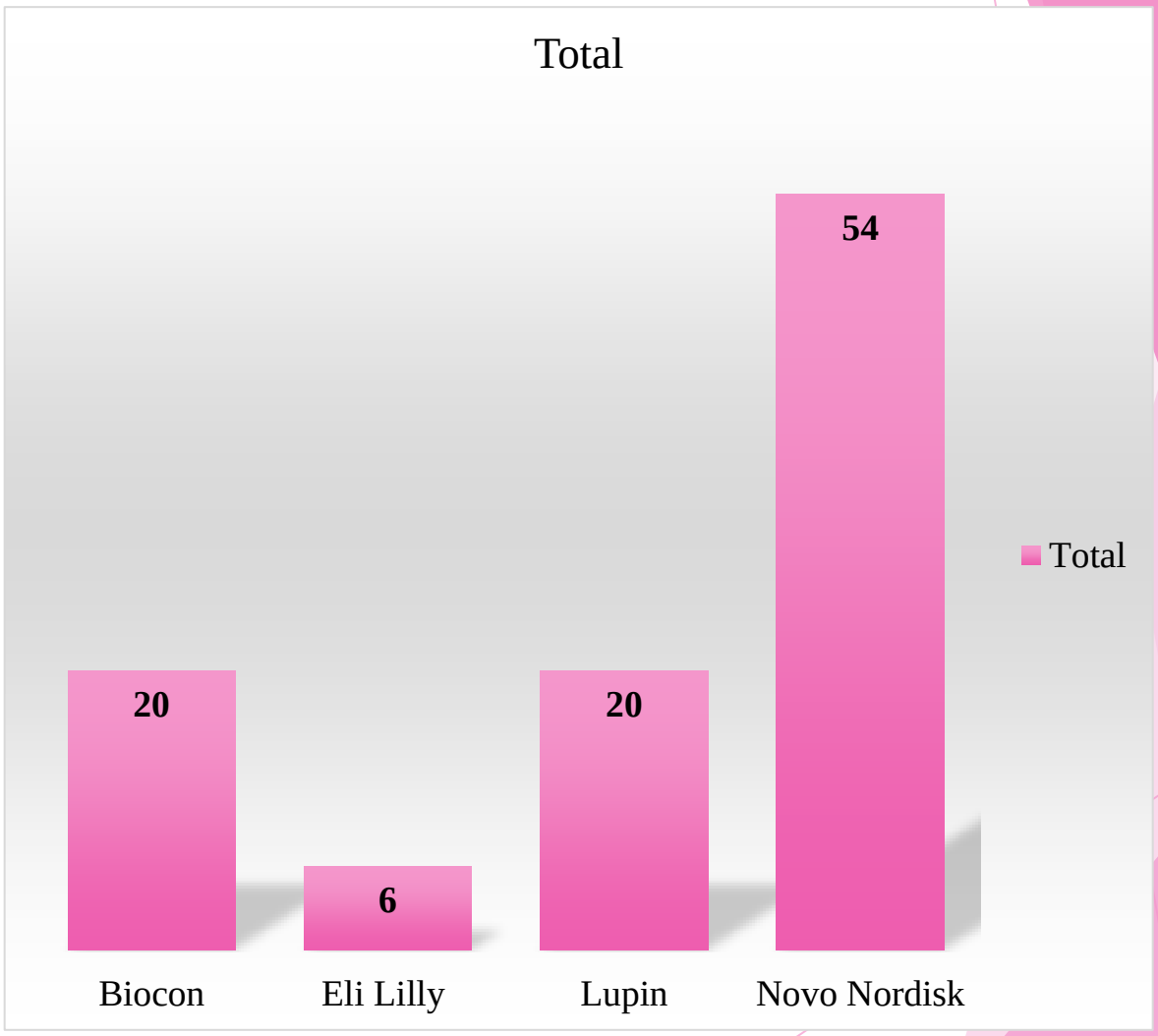
Most prescribed drugs among oral anti diabetic drugs

Among the oral anti diabetics, Glycomet GP is mostly prescribed oral anti diabetic drug (about 35%). Gluconorm G is at 2nd position and Gemer is at 3rd position with 19% of prescription.



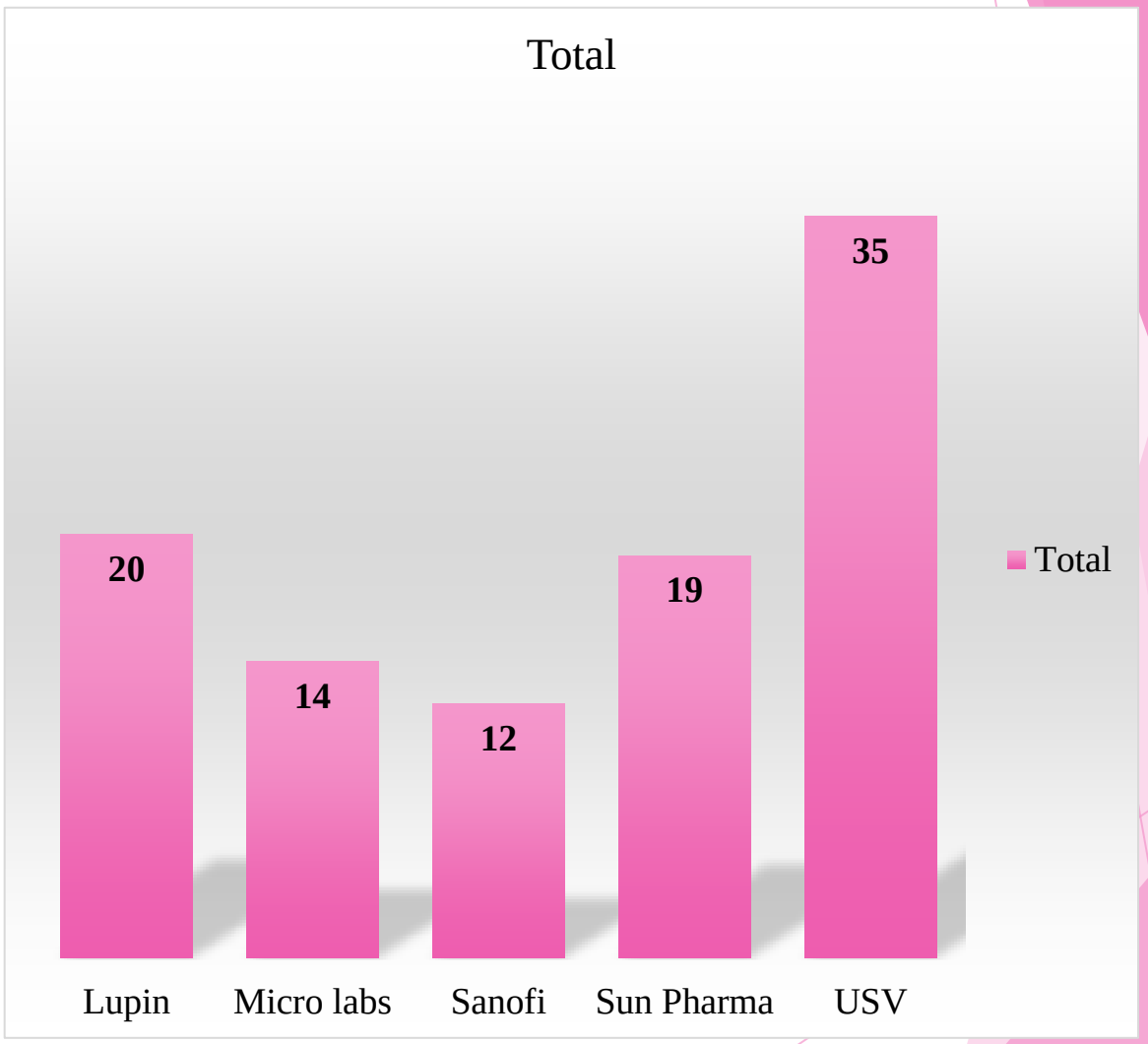
Market leader among injectable anti diabetic drug market

Among the injectable antidiabetics market, Novo Nordisk is the market leader with 54% of the market under their control followed by Biocon (20%) and Lupin (20%).



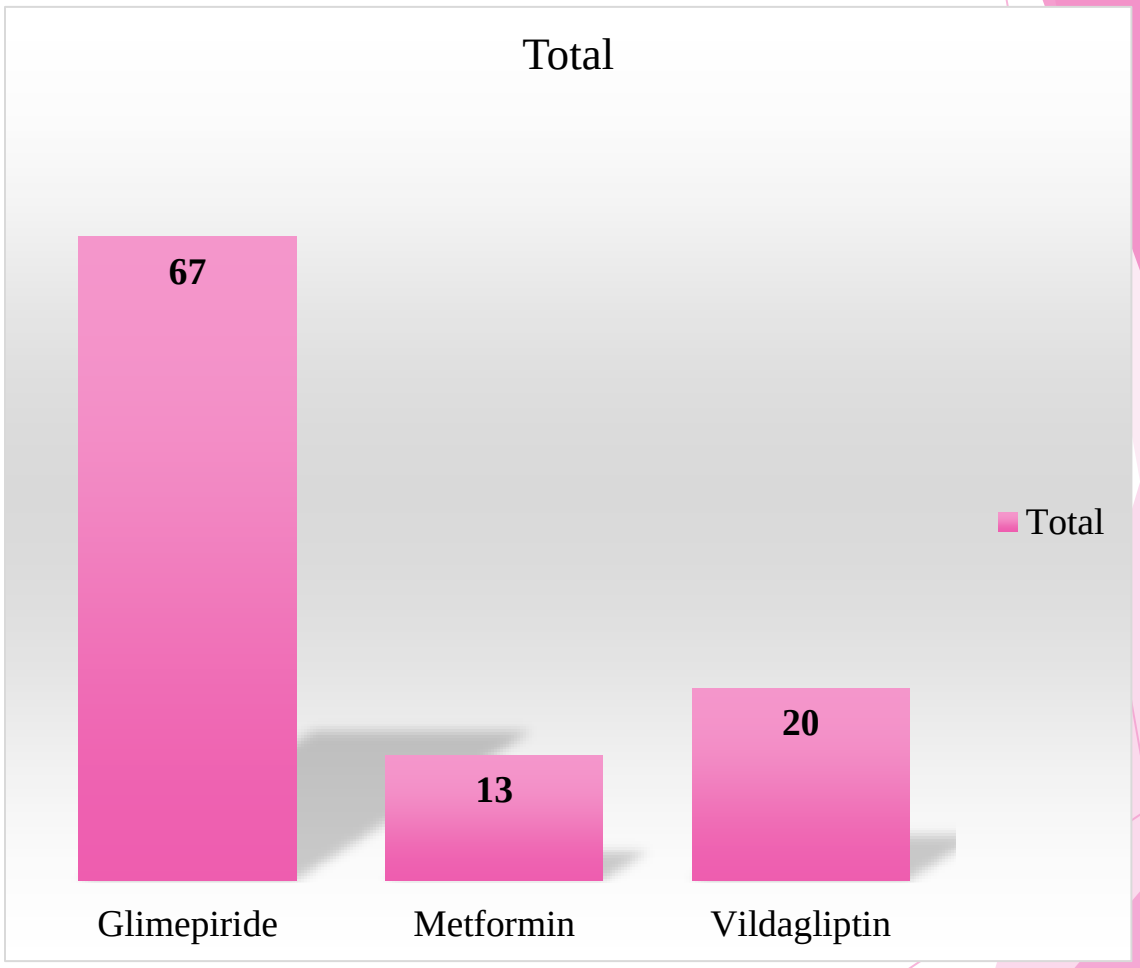
Market leader among oral anti diabetic drug market

Among oral antidiabetics market, USV is the market leader with 35% of market under its control followed by Lupin with 20% and Sun pharma with 19% of market under their control. Micro labs have 14% and Sanofi has 12% market.



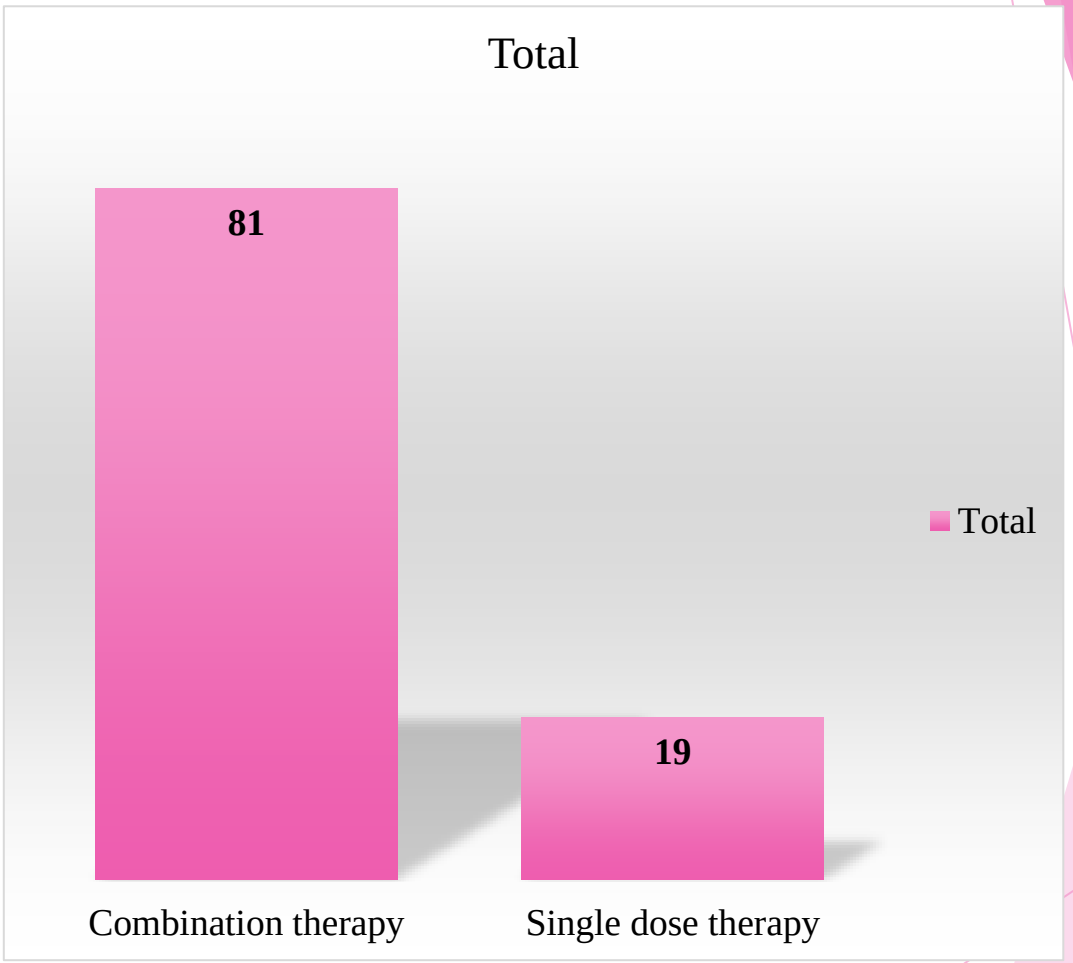
Most prescribed molecule among oral anti diabetic

Among the top molecules, Glimepiride is mostly prescribed molecule (about 67%) followed by Vildagliptin with 20% of prescription. And Metformin is with 13%.



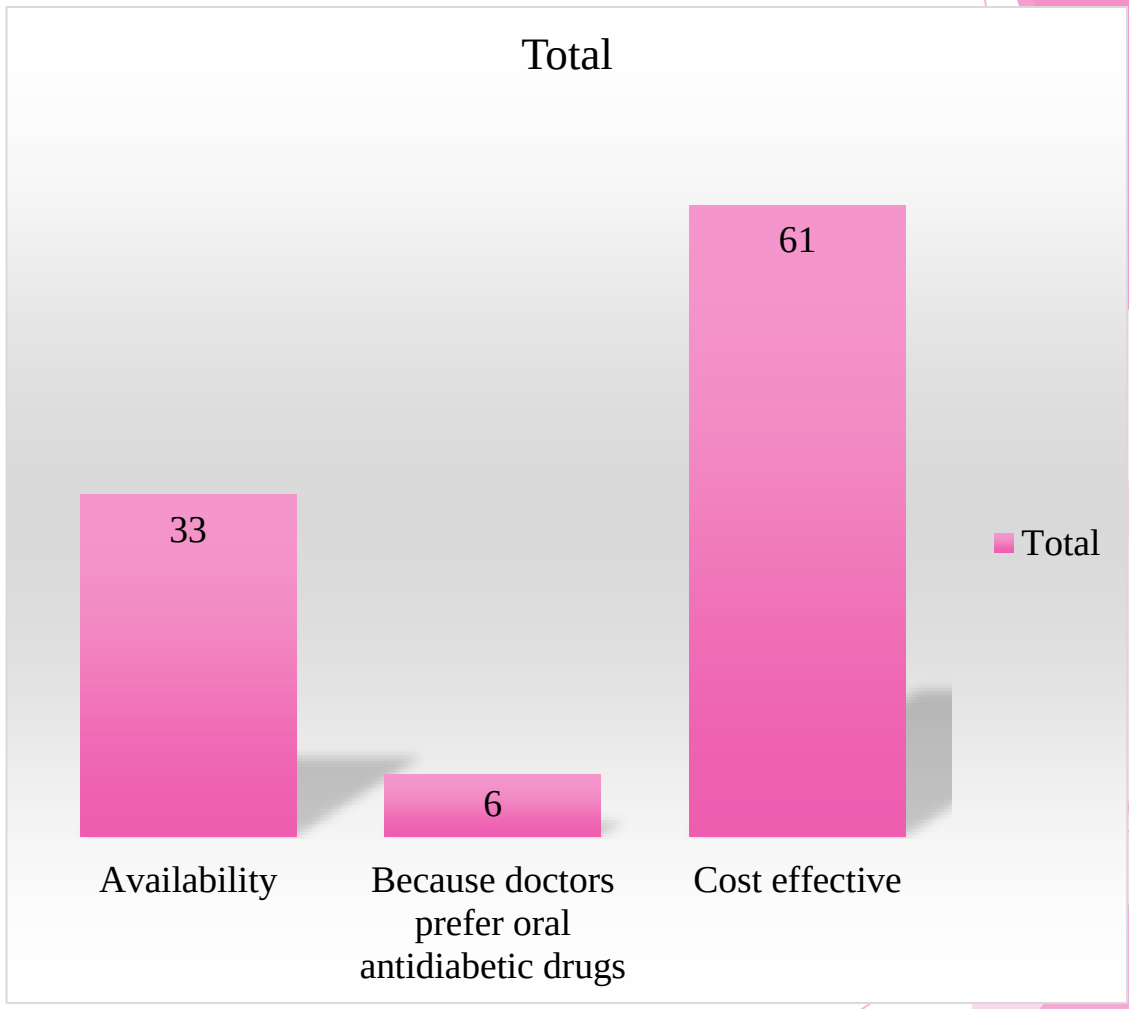
Most preferred therapy by the doctors

Combination therapy is most preferred by the doctors, around 81% doctors prefer combination therapy, as it is cost effective and people don’t miss the doses as well. In some cases, they need to use single dose therapy.



Reason for preferring oral anti diabetic drugs

Cost effectivity is the main reason for preferring the oral antidiabetics. Also, oral antidiabetics are easily available in the market.



CONCLUSION

From the above discussion it is noticed that oral antidiabetic drugs are more preferable that injectable drugs. Novo Nordisk is the market leader among injectable drugs company and USV in case of oral anti diabetic drugs. Glimepiride is mostly prescribed among oral anti diabetic drugs where as combination therapy is more preferable that single dose therapy. Because combination therapy is cost effective.

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