ABC Inc. Case Study

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Case Study

ABC INC. is a small Bio-Pharma company and is preparing for the launch of its first drug in Type-2 Diabetes Market.

Diabetes Market is segmented in a Product Class and Families based on their molecular composition. The patient is prescribeda drug from a particular class based on various factors like Age, Stage of disease etc. The client is launching their drug in GLP1 class and considers products within GLP1 and SGLT class as their key competitor.

ABC INC. contacted D Cube to help them understand the current market scenario in the diabetes market to prepare for a successful launch. Few Business Questions they are particularly interested in but asked D Cube to not restrict to only these questions.

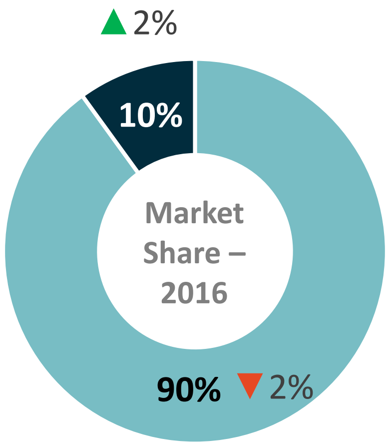
1. Branded vs Generic Market Scenario
2. How the market share of various Product classes and Product families has evolved in the past two years?
3. Identify products which have shown growth , decline or are stable with respect to their sales.
4. Assess the performance of specially GLP1 class as well products within it
5. Annual Cost of therapy of Drugs within GLP1 and SGLT class

Branded products held 90% of the market share despite accounting for less than 40% of the TRx prescriptions in that period

- In 2016, 90% of the TRx MBS was dominated by branded products, after a 2% drop since the previous year
- On average, branded products were ~16x times as expensive as their generic counterparts
- *Metformin/SU* was the primary product class in the generic market – forming 90% of the share

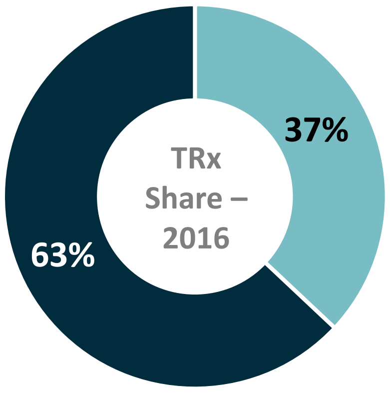
Branded vs Generic Market Share

Market Share – TRx MBS



% of Market Share

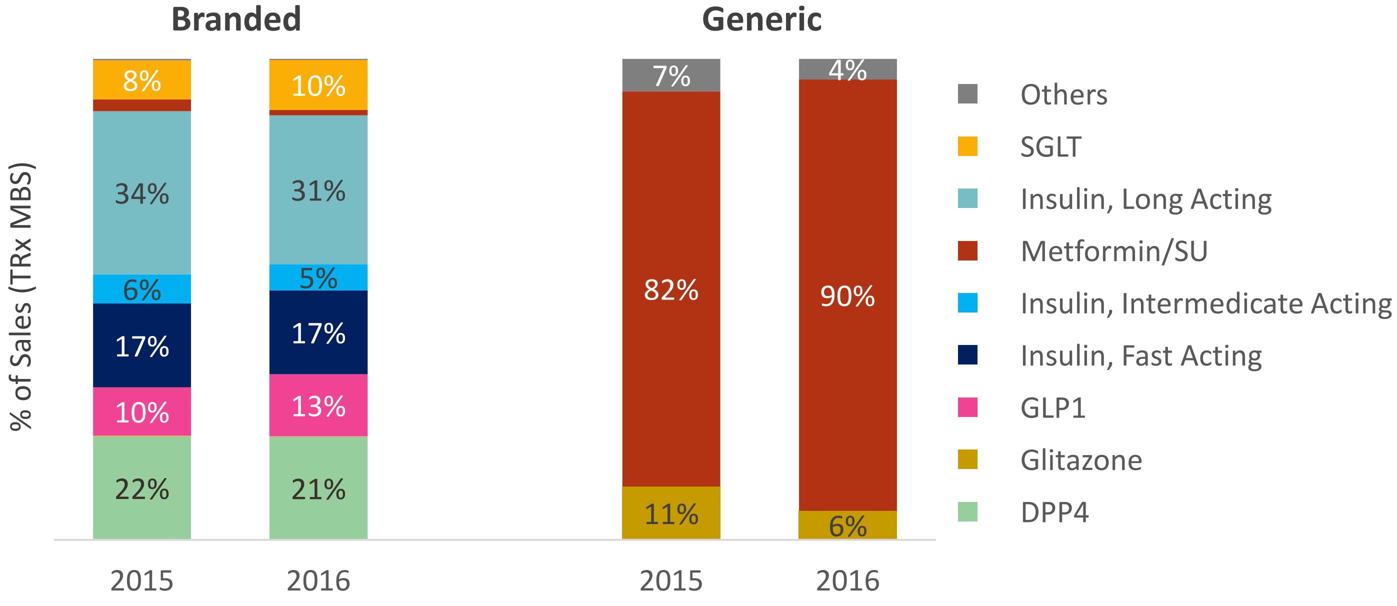
Market Share – TRx Prescriptions



% of TRx Prescriptions

Generic Products

Branded Products



	Branded 2015	Branded 2016	Generic 2015	Generic 2016
Average Drug Cost (USD)	$525	$569	$25	$36

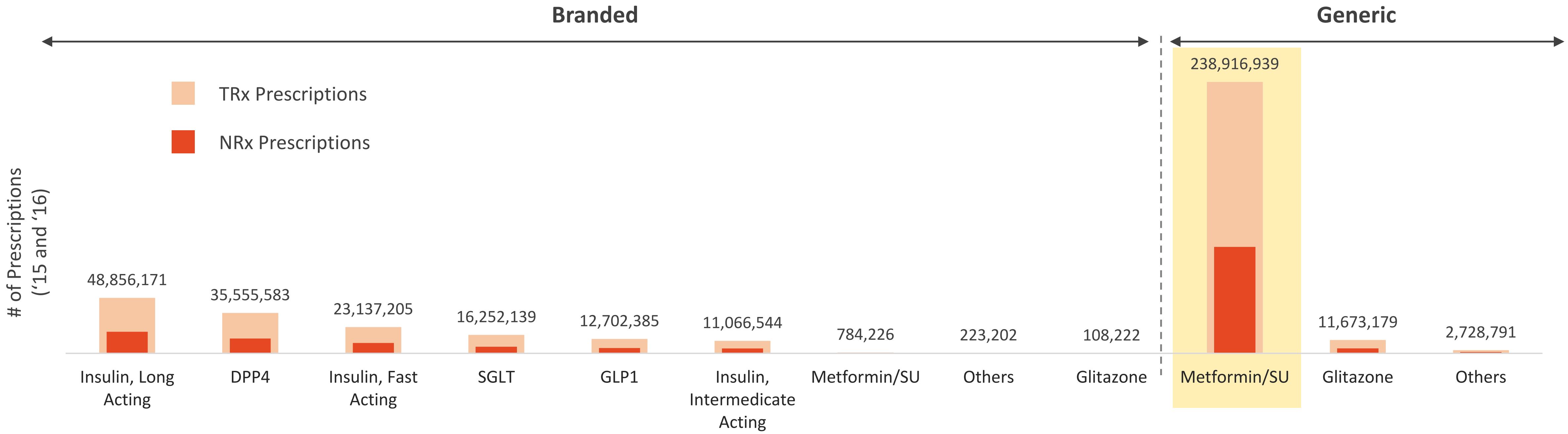
▲▼ Change in % values in 2016 from 2015

In the '15 and '16 time period, *generic Metformin/SU* TRx accounted for more prescriptions than the total TRx prescriptions in the branded landscape; close to 40% of all the prescriptions were new drug prescriptions

- *Metformin/SU* was the most prescribed product class in the type-2 diabetes market in the years '15 and '16.
- In the branded landscape, *Insulin, long acting*, was the most prescribed product class accounting for 1/3rd of the TRx prescriptions followed by *DPP4* (22%) and *Insulin, fast acting* (17%)

Branded vs Generic Market (TRx Prescriptions)

2015 and 2016



	Insulin, Long Acting	DPP4	Insulin, Fast Acting	SGLT	GLP1	Insulin, Intermedicate Acting	Metformin/SU	Others	Glitazone	Metformin/SU (Generic)	Glitazone (Generic)	Others (Generic)
NRx as a share of TRx*	39%	37%	39%	35%	38%	38%	35%	37%	36%	39%	37%	40%

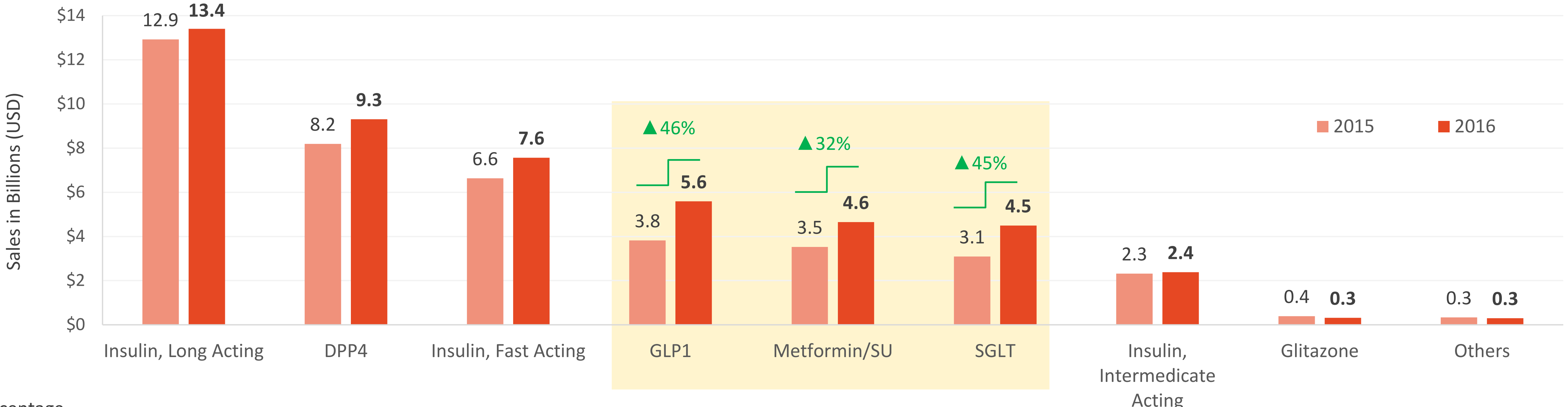
* NRx = New drug prescription | TRx = NRx + Refills

GLP1, *SGLT*, and *Metformin/SU* product classes showed the highest % change in sales from 2015 to '16 while *Glitazone* sales dropped significantly

- GLP1 and SGLT product classes saw the highest percentage growth (about 45%) in TRx MBS from the preceding year; sales have increased roughly from ~7 bn USD to 10 bn USD

Product Classes – TRx MBS USD

2015 and 2016



Percentage Change in Sales (YoY)									
	4%	14%	14%	46%	32%	45%	3%	-20%	-9%

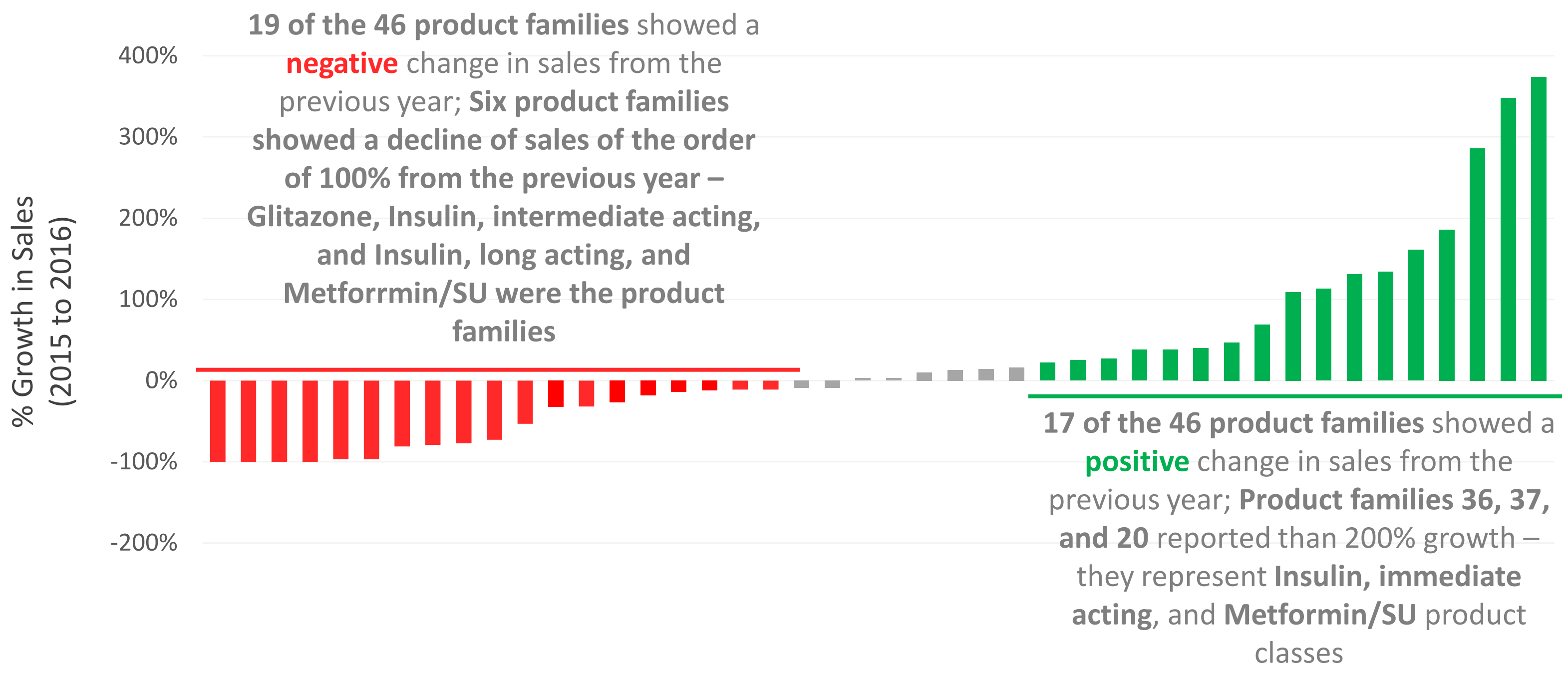
▲▼ Change in % values in 2016 from 2015

Close to 37% of the product families reported a positive sales growth since 2015 while 40% showed a decline, and the rest 23% reported consistent sales with respect to the previous year

- Product families comprising branded *Metformin/SU*, and *branded Insulin, immediate acting*, showed the highest growth change since the previous year
- 10 product families (23% of the total product families) showed little or no changes in their sales growth from 2015

Product Family – Sales Growth*

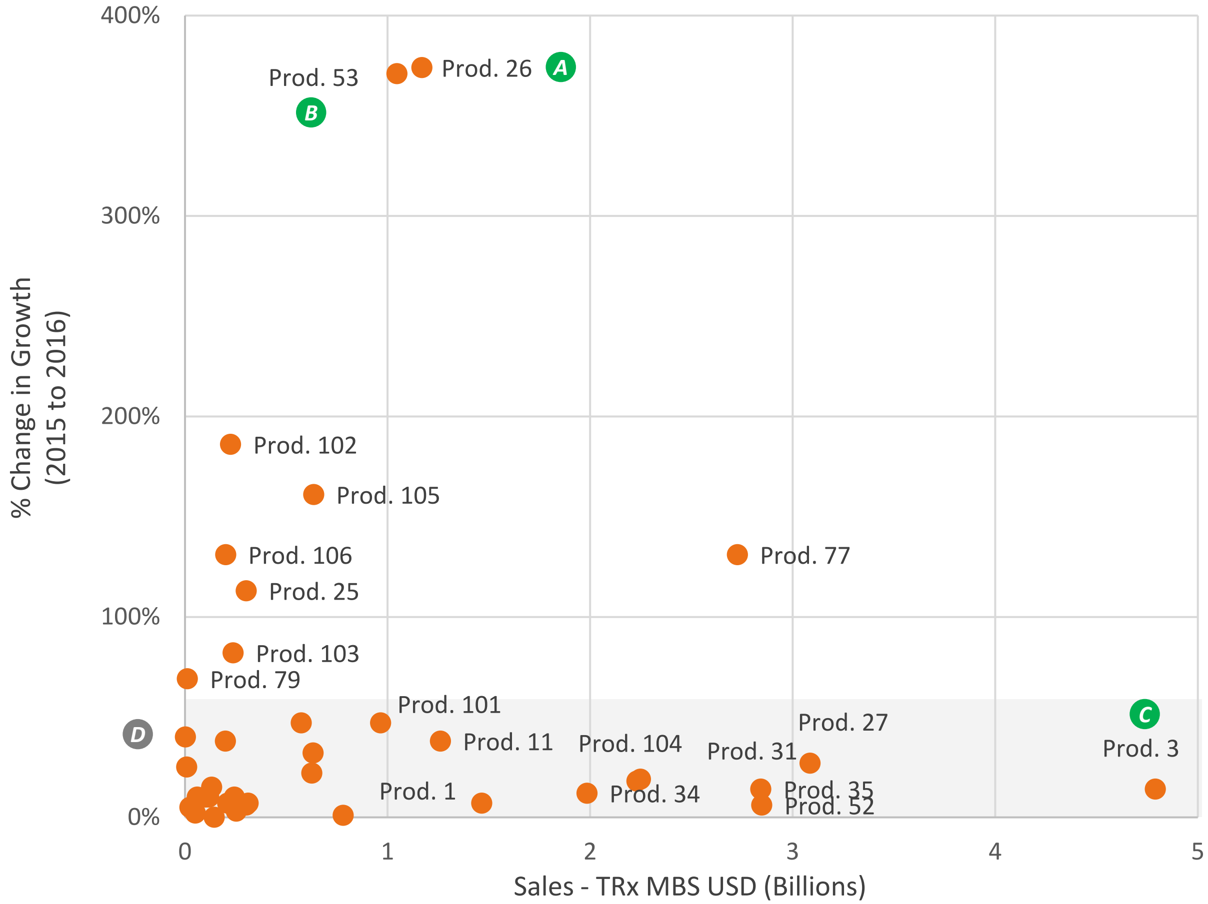
Change from 2015



Seven products showed growth in sales more than 100% in 2016; Products 26 and 53 were two of the best performing products in terms of sales

Growing & Stable: TRx MBS vs Sales Growth

TRx MBS USD in 2016 vs Change in growth from 2015



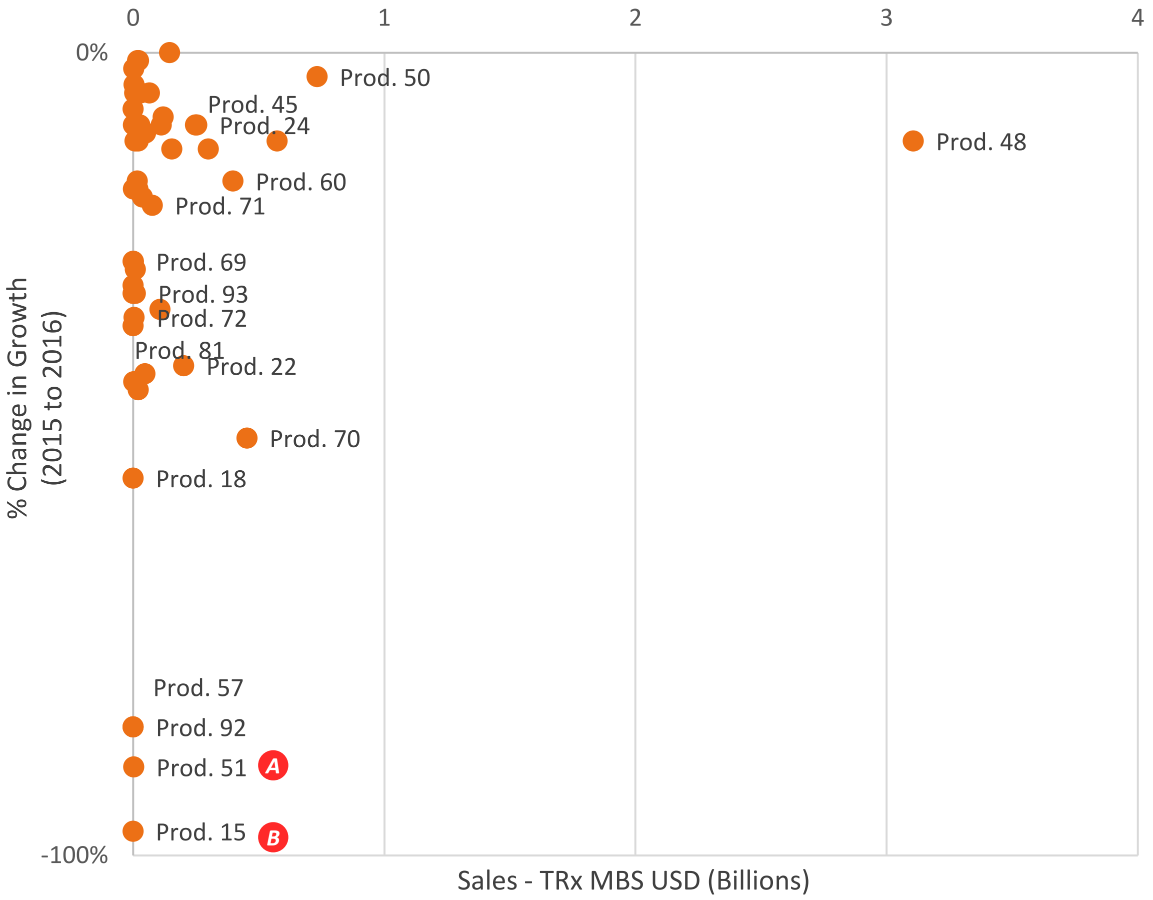
Code	Description
A	**Product 26: Branded, *GLP1*, Product Family 20** Product 26 showed the highest YoY sales growth (374%) since 2015.
B	**Product 53: Branded, *Insulin, Long acting*, Product Family 31** Product 53 showed the second highest YoY sales growth of ~370%
C	**Product 77: Generic, *Metformin/SU*, Product Family 44** One of the best performing products w.r.t sales since 2015
D	**22 products fall in this zone of 0% to 20% growth since 2015** Products 52, 35, 31, 27 had sales close to 3 bn USD and reported stable growth

* Few products excluded from calculation owing to few TRx prescriptions | 0% to 20% growth – stable growth region

Sixty one products showed a decline in sales of more than 10% since the previous year; products 51 and 15 were the worst affected

Declining: TRx MBS vs Sales Growth

TRx MBS USD in 2016 vs Change in growth from 2015



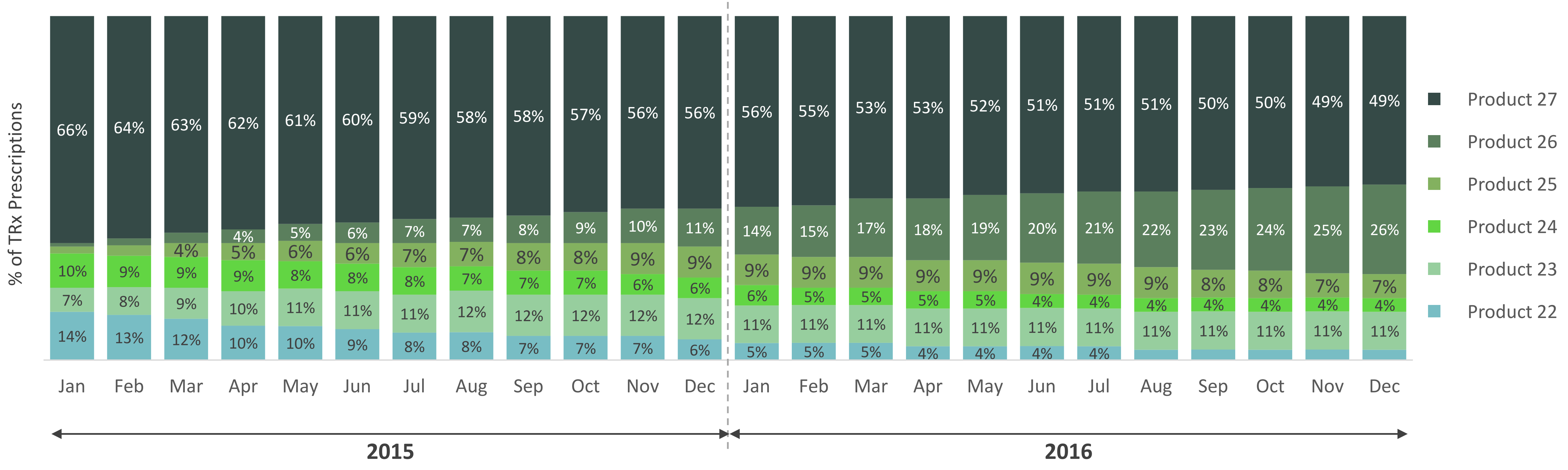
Code	Description
A	**Product 51: Branded, *Insulin, long acting*, Product Family 31** Product 51 had a drop close to 90% whereas Product 53, of the same family, another *Insulin, long acting*, class product had a growth change of 370%
B	**Product 15: Branded, *Glitazone*, Product Family 10** Product 15 had the steepest fall in sales in 2016 when compared to 2015

Product 27's share of voice gradually declined over the two years owing to increase in Product 26's TRx prescriptions in the same period

- Product 27 was also the costliest therapy among both GLP1 and SGLT product classes

GLP1 Class Products Share of Voice*

As a function of total TRx prescriptions



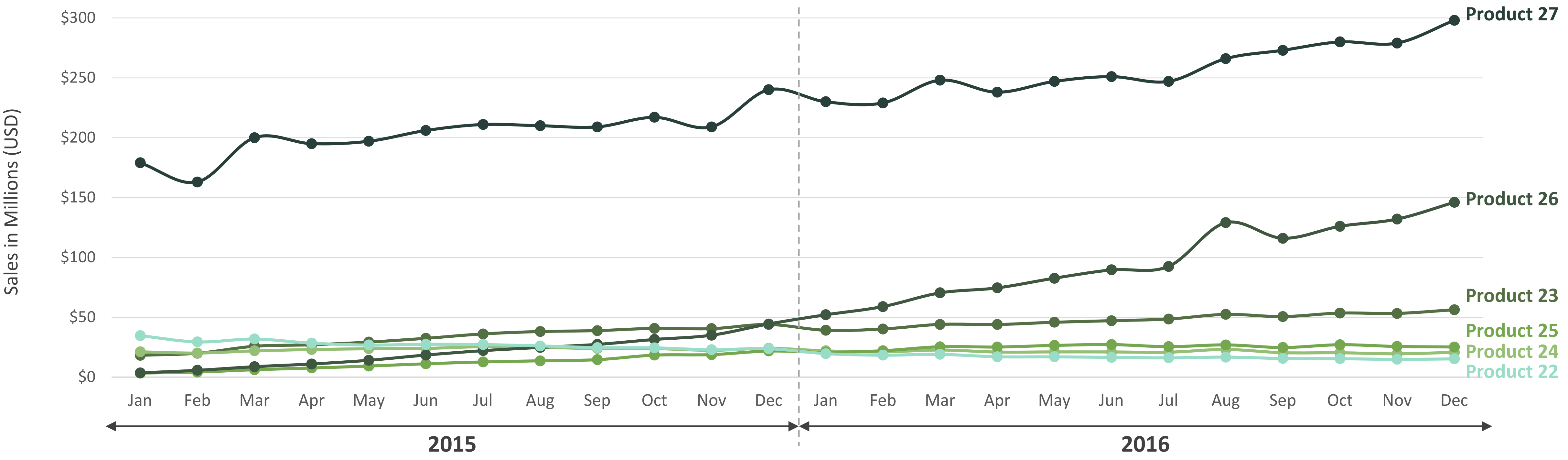
* Share of voice is calculated by considering the # of TRx prescriptions for that product as a fraction of total TRx prescriptions in that month

Product 27 dominated the GLP1 class market in the '15 – '16 time period; following Product 27 was Product 26 which showed remarkable growth in the same time frame

- Despite the continuous drop in share of voice over the two years, TRx MBS of Product 27 kept increasing mainly because of the increase in cost of therapy by 13% since the preceding year.

GLP1 Class Products TRx MBS in USD

Sales in Millions USD over the two years

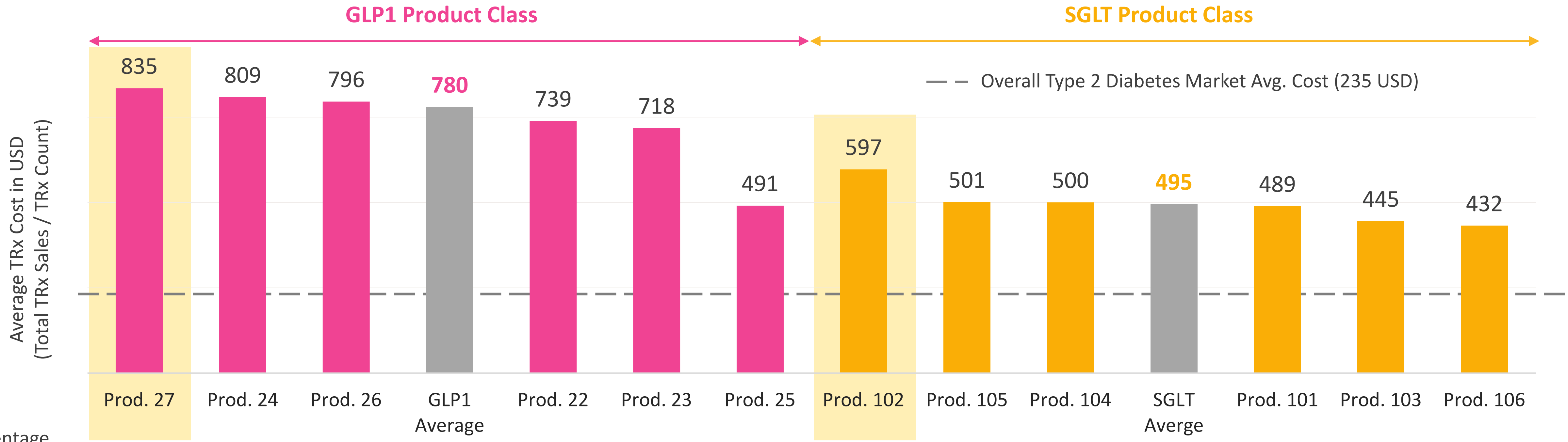


On average, *GLP1* class therapies were more expensive than *SGLT* class therapies; cost of *GLP1* and *SGLT* drugs increased by around 14% in ‘16 YoY

- Product 27, a GLP1 product, was the costliest therapy among both GLP1 and SGLT product classes. Price of Product 27 had increased 13% since the previous year.
- With the exception of Product 102, all SGLT products were priced around ~500 USD which was remarkably higher than the average T2 diabetes market drug price

Average Treatment Cost in USD*

Total TRx Sales / TRx Count



	Prod. 27	Prod. 24	Prod. 26	GLP1 Average	Prod. 22	Prod. 23	Prod. 25	Prod. 102	Prod. 105	Prod. 104	SGLT Averge	Prod. 101	Prod. 103	Prod. 106
Percentage Change in TRx Cost (YoY)	13%	24%	18%	13%	12%	9%	23%	7%	21%	12%	15%	22%	11%	20%

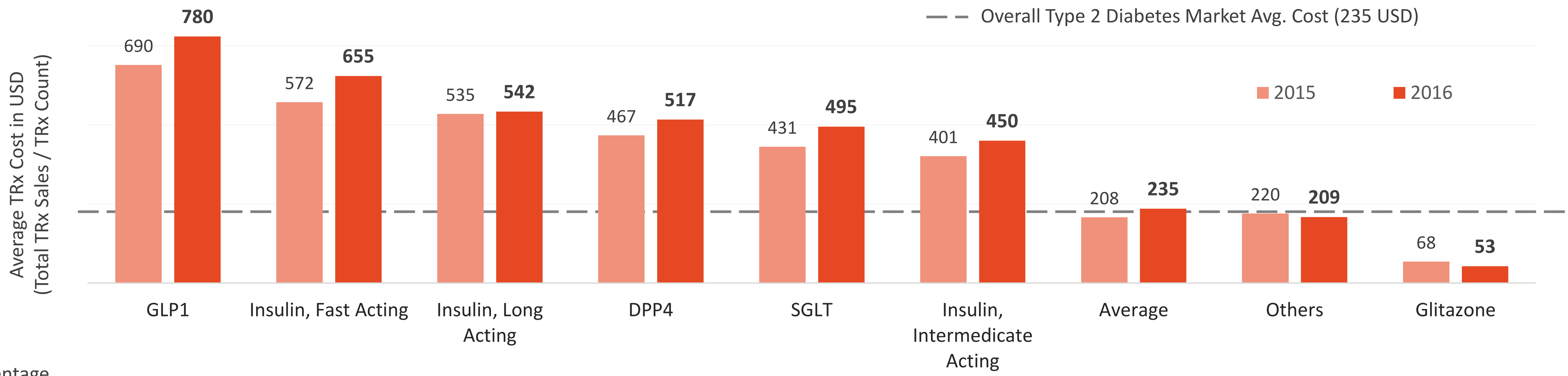
* Average treatment cost is calculated by averaging the TRx MBS over the number of TRx prescriptions

***Insulin, fast acting*, and *Insulin, long acting* were the two most expensive product classes after *GLP1* class therapies**

- With the exception of *Glitazone*, and *other products*, cost of therapy for all other product classes increased in 2016 when compared to 2015

Average Treatment Cost in USD*

Total TRx Sales / TRx Count



Percentage Change in TRx Cost (YoY)	13%	15%	1%	11%	15%	12%	13%	-5%	-22%

* Average treatment cost is calculated by averaging the TRx MBS over the number of TRx prescriptions