





TRILYTICS CASE STUDY







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Analyzing Treatment Rates, Market Size and the Product

Migraine Treatment	Market Size	Product Comparison	Practitioner Perspective
 Mainly of two types Episodic and Chronic Episodic Migraine prevalence of 17.1% in women and 5.3% in men By 2024, the migraine treatment rate is expected to reach 87.21%. 	 Target Market comprises of patients who are suffering from Episodic Migraine, and receive acute treatment This market is about 114 per 1000 patients who visit the doctors for an appointment 	 Based on the overall rating, that is calculated keeping in mind the physician perspectives for individual drug, 'RELIEVE' is rated to be better than the most suitable drug in the existing market 'TRIPTAN' 	 All the 250 HCPs rated, how likely they are going to prescribe RELIEVE Trends show, Neurologists, practicing for 26-30 years, as a solo office practitioner are most likely to prescribe RELIEVE

Pricing the product, Forecasting the Market Penetration and Necessary Recommendations

Pricing the pill	Product Uptake and Future Market	Recomme	endations
• After comparing with RELIEVE's main	launched earlier, it is est price predicted from the bill trends that RELIEVE will , RELIEVE reach Peak Potential in 8	PRODUCT	STRATEGIC
competitor the best price to be set is \$8.5/ pill At this price point, RELIEVE will generate a revenue of \$9.23Bn by 2034		pills • Developing other forms of consumption	 Patenting the formula to leverage monopoly Strategic alliance with insurance companies

Study on Migraine is a very intriguing topic in the field of medical sciences, due to its widespread prevalence while not all are treated

MIGRAINE

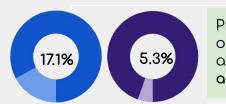
Migraine is a headache of varying intensity, often accompanied by nausea and sensitivity to light and sound

Episodic	Chronic	
Shows a headache	Shows a headache	
frequency of less than 15	frequency of more than	
days a month	15 days a month[1]	

PREVALENCE

According to latest reports of AMPP(American Migraine Prevalence and Prevention) study we found...[1]

Prevalence of EM among Women and 1.3% CM



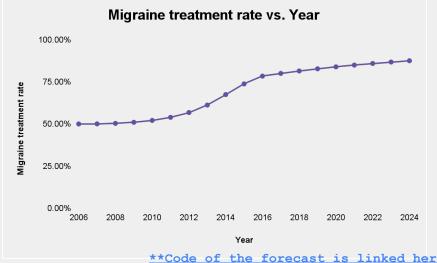
Prevalence of EM among Men and 0.5% CM

TREATMENT RATE

Not all of those who are suffering from Migraine are treated. After analyzing the data, and using "Holt's Method with Additive Dampina", it is forecasted that

87.51% of total migraine patients will receive a proper





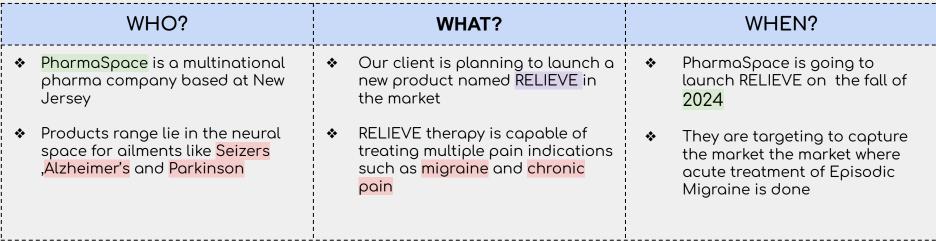
**Code of the forecast is linked here

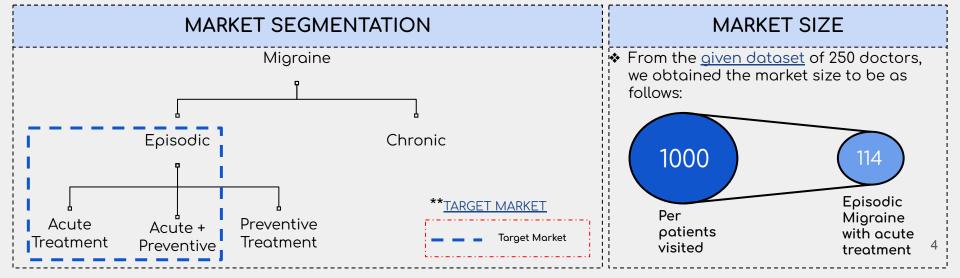
Reference

[1] Defining the Differences Between Episodic Migraine and Chronic Migraine - PMC

- ** EM = Episodic Migraine
- ** CM= Chronic Migraine

Most of the migraine patients in the US are suffering from Episodic Migraine and our client is trying to capture this market space





Though doctors have alternatives to treat migraine based on existing $\|\cdot\|^1$ medications, 'RELIEVE' shows strong potential to surpass them

DETERMINING AND COMPARING OVERALL RATINGS

- → The mean of all attributes from the HCP's perception on individual treatment alternatives is calculated from the main data set
- → The mean importance rating is evaluated from the primary data set for all alternatives

Overall rating = Σ (Importance Rating xPerception rating)/49

Rating (out of 7)	NSAID	Triptan	Opioid	Barbiturate	Relieve
Pain Relief	4.11	5.00	4.01	3.91	4.90
Pain Freedom	3.85	4.80	3.67	3.83	4.73
% improvement	3.71	4.63	3.46	3.57	4.62
Side Effects	4.30	4.11	2.93	3.25	4.64
Admin. route	4.04	4.31	3.49	3.46	4.22
Mechanism	2.95	3.35	2.45	2.55	3.57
Efficacy	3.84	4.35	3.82	3.63	4.62
Overall Score	3.83	4.36	3.40	3.46	4.47

POTENTIAL DRIVERS FOR RELIEVE

- Minimal side effects in comparison to Triptans (most preferred alternative)
- Practitioners are willing to overcome insurance hurdles,provided it's a promising product
- High unmet need for acute treatment of patients contraindicated to Triptans

POTENTIAL BARRIERS FOR RELIEVE

- Intravenous mode of treatment is economically beneficial than RELIEVE for practitioners
- Unavailability of low dosage medication which is preferred by practitioners in early stage

Based on primary competitor analysis, and market research on pricing strategy, 'RELIEVE' is should be priced at \$8.5/pill.



PRIMARY COMPETITOR ANALYSIS[3]



Type of Triptan	Risk of Side Effect	Recurrence	Cost per pill
SumaTriptan	HIGH	MODERATE	\$8
ZolmiTriptan	HIGH	HIGH	\$8.7
AlmoTriptan	LOW	LOW	\$9.4
RizaTriptan	LOW	HIGH	\$9.4

COMPETITORS VS RELIEVE

<u>SumaTriptan</u>

→ The triptan with the most side effects

ZolmiTripton

- → Higher Side Effects
- → Higher Recurrence

<u>AlmoTriptan</u>

→ Costly Pill

<u>RizaTriptan</u>

- → Higher Recurrence
- → Costlier Pill

PRICING THE PILL & CONSIDERATIONS

\$8.5 /pill

★ Keeping in mind the high capital investment in R&D (\$2-3 billion)
★ Has similar benefits with negligible

adverse effect from Sumatriptan
 ★ Expected to gain competitive
 advantage at the price point

[3] Choosing the Right Triptan

Certain group of doctors are showing high reliability on 'RELIEVE' and III hence sorting the key considerations for launching[2] it in the market

Key Characteristic Identification of HCPs

For determining the characteristics we determined overall rating given by the HCPs for each categorical variables using this formula:

Rating =

 Σ (Rating value * Count of HCP)/ Σ count of **HCPs**

Physician Persona





Neurologists are most likely to prescribe RELIEVE as their ratings for prescribing RELIEVE is 5.90/7.



Doctors who have solo- practice in **an office** are more likely to prescribe RELIEVE (Rating: 5.80/7)



Doctors who have a work experience of 26-30 years are more likely to prescribe RELIEVE (Rating:

[2] Rates and reasons for discontinuation of triptans and opioids in episodic migraine: Results from the American Migraine Prevalence and Prevention (AMPP) study - ScienceDirect

HCP = Health Care Professional **trtmnt = treatment S.C.= SupplyChain

SWOT ANALYSIS

STRENGTHS

- No CV contraindication
- High % Pain Freedom
- No Side Effects

Profitability

• 80% people with mild or no pain after 2 hours

WEAKNESSES

- Only available as oral pills
- Only a single dosage amount
- IV infusions profitable for doctors

<u>OPPORTUNITIES</u>

- Those contraindicated to triptan have high unmet need
- •Triptan, ergot not efficacious

THREATS

• No compliance of insurance companies

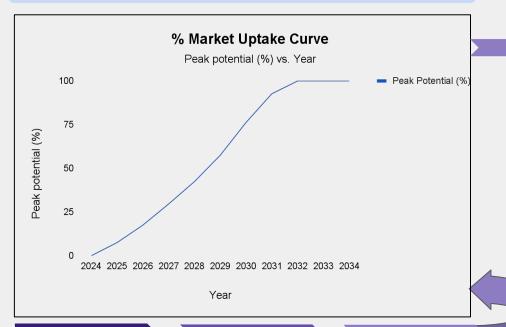
LAUNCH STRATEGY CONSIDERATIONS

	Target Market	Episodic Migraine + acute trtmnt		
	Product and Competitor	Competitor Analysis on diff parameters		
Operational considerations		Investment in Manufacturing, S.C and Marketing		
	Market Reach	Well Established in the US market		
	Profitability	To be considered before launch		

Forecasting 'RELIEVE' to reach its peak potential by 2032, and to generate a net revenue of \$9.23 bn by 2034.



PEAK POTENTIAL FORECAST



DATASET

★Preparing a dataset of the existing products with their duration to reach p.p

REGRESSION

★ Checking out Regression models to find best model to predict the p.p

PLOT

★ Using predicted values from Random Forest to plot uptake curve

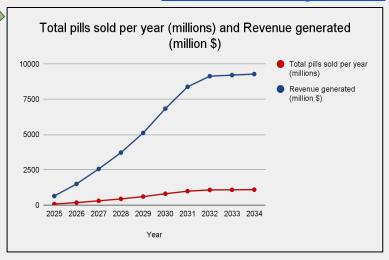
SALES FORECAST

Population using RELIEVE=(*U.S population*_[4] x %prevalence[1] x %episodic acute x % treatment penetration x % use of RELIEVE x % Market Uptake)

Total pills[5] = (Population using RELIEVE x 1.5 x 12)

Revenue = (Total pills per person x \$8.5)

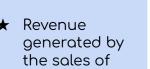
** Calculations and Spreadsheet



Relying on the Revenue Stream and the estimated future use of indv. Drugs, the market share of 'RELIEVE' is expected to reach 32% by 2034.

REVENUE STREAM

PROJECTED MARKET PENETRATION (per Drug Type)



RELIEVE in the

R&D

market

Sales

<u>Patent Rights</u>

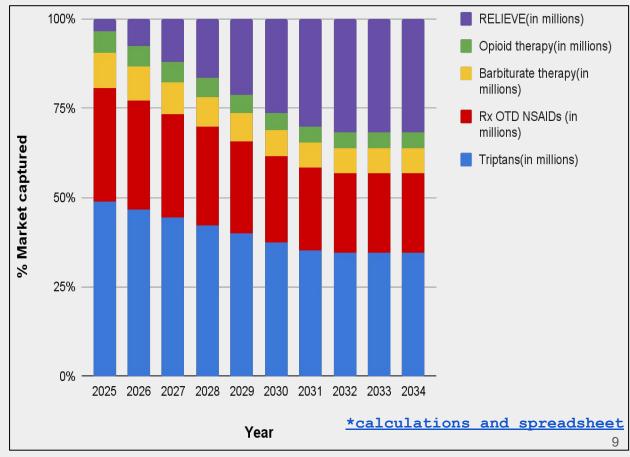
★ Exclusive rights of RELIEVE will help in controlling the profit margin

the in

Strategic Alliance

★ Further Research ★ Tie up with
 & Development insurance
 of RELIEVE will companies will
 improve the help in smooth
 product and easier
 contributing to greater sales
 Tie up with
 hour and easier
 claims for end
 consumers

Assuming that no improvements in the competitors and no new product launches over the time period, CAGR growth of RELIEVE is expected to be 30.62%









Thank You