A

Dissertation Project

On

Antiretroviral Market Potential and Identification of Molecule to Prepare Marketing Plan For Europe Territory

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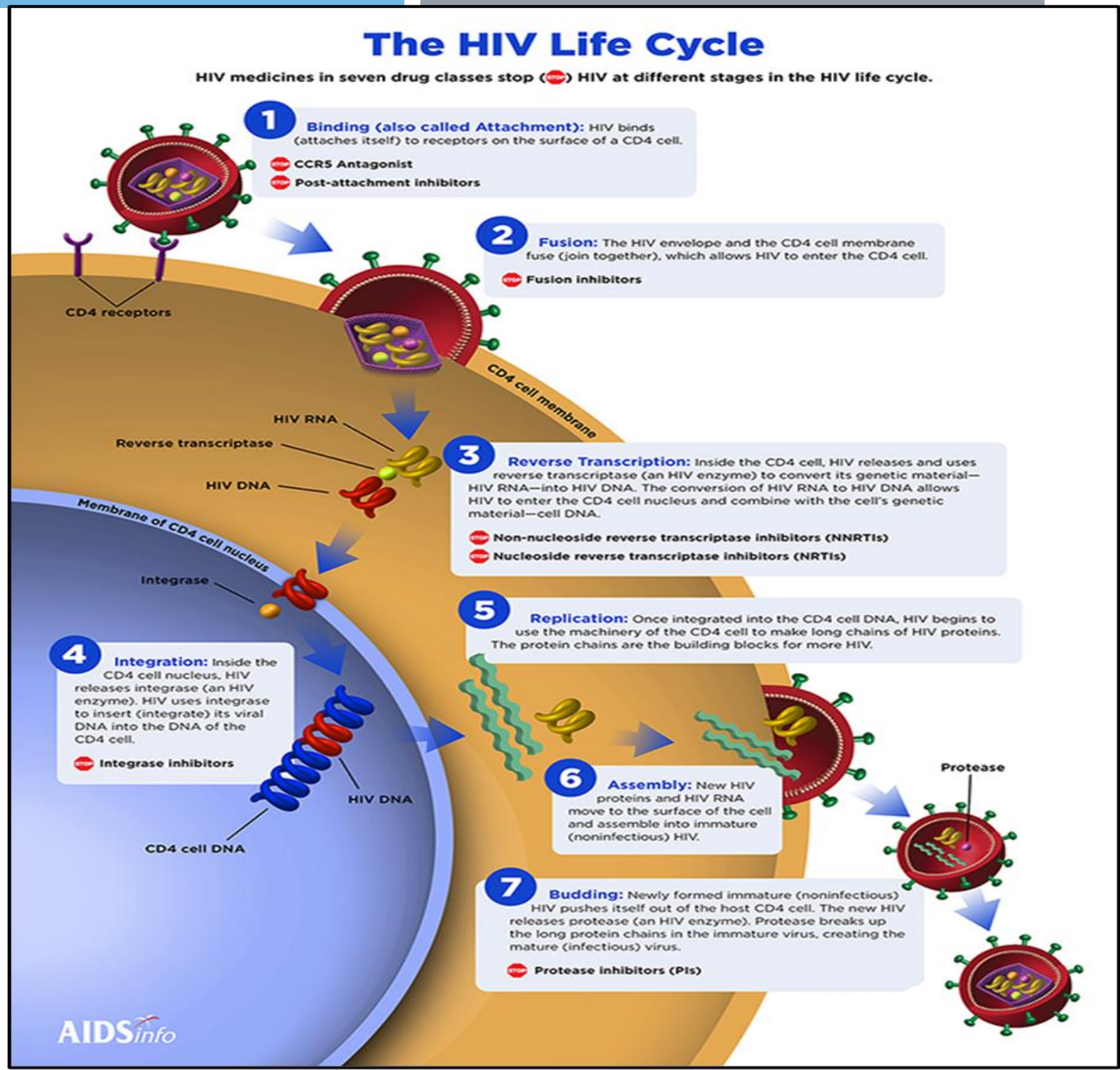
HIV (human immunodeficiency virus) is a virus that attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases and leads AIDS (Acquired Immunodeficiency Syndrome) if left untreated.
There are two types of HIV viruses, HIV-1 and HIV-2, which belong to the retrovirus group.

These viruses can only reproduce within a host cell by copying their genetic blueprint onto the genes of a person's cells. Both HIV-1 and HIV-2 can cause AIDS, but HIV-2 is less easily transmitted and takes longer for the illness to appear.

- 37.9million people are living with HIV in the world, at end-2018.
- 62% of all people are living with HIV had access to antiretroviral therapy at end-2018.
- 8.1mn people living with HIV did not know that they have HIV at end-2018.
- According to WHO People living with HIV in Europe are 2.5mn.
- People receiving Antiretroviral treatment are 2mn.



Anti-Retroviral drugs:

Antiretroviral medications are a group of drugs that inhibit different steps in the HIV replication process. They can suppress HIV infection but never eliminate it from the body. The World Health Organisation (WHO) recommends the use of certain combinations of ARV drugs for the optimal suppression of HIV infection, known as Highly Active Anti-Retroviral Therapy (HAART).

There are four categories of ARV medications: -

- Nucleoside and nucleotide reverse transcriptase inhibitors (NRTIs)
- Non-nucleoside reverse transcriptase inhibitors (NNRTIs).
- Protease inhibitors (PIs).
- Fusion / Entry inhibitors. (FI/EI)
- Integrase inhibitors. (II)
- Single tablet/fixed dose combination (ST/FDC)

RATIONALE OF THE STUDY

The dataset provided by the organization included ideals information for the Antiretroviral market in Europe which included molecules and their pharmaceutical products for the countries in Europe. The dataset included MAT Q4 of all molecule from the year 2016-2018. The information was provided by IQVIA.
This examination provides information on:

- The parameters utilized for shortlisting the molecules having potential in market in given informational index.
- The situational investigation of the shortlisted potential molecule.
- The possible marketing plan that can be adopted to market the shortlisted molecule.

RESEARCH QUESTION

- What are the parameters utilized for shortlisting a molecule with market potential in each data set?
- What is the situational analysis of the shortlisted molecule?
- What would be the possible plan to market the generic version of the branded product?

RESEARCH OBJECTIVE

- To understand the selection criteria.
- To find out the molecule with high market potential.
- To do the situational analysis of the therapy.
- To recommend possible marketing plan of the generic version to launch in competition with other the product.

RESEARCH METHODOLOGY

- **Location of Study Area:** European Union

- **Study Design:**
  This is an observational study conducted to find a molecule having potential market in Europe.

- **Type of Research:**
  Quantitative study

- **Sources of Data:**
  The data provided by organization was obtained from IQVIA and other information was collected from research papers, Google, Wikipedia etc. The study was done upon secondary data. This includes sales output data of 2016-2018 of all the drug molecules of Europe in Antiretroviral market. This study also includes brands having market share in Antiretroviral segment in Indian Pharmaceutical Market. This data shows the unit sales and sales revenue for 3 years, companies manufacturing the antiretroviral drug and price of the antiretroviral drugs.

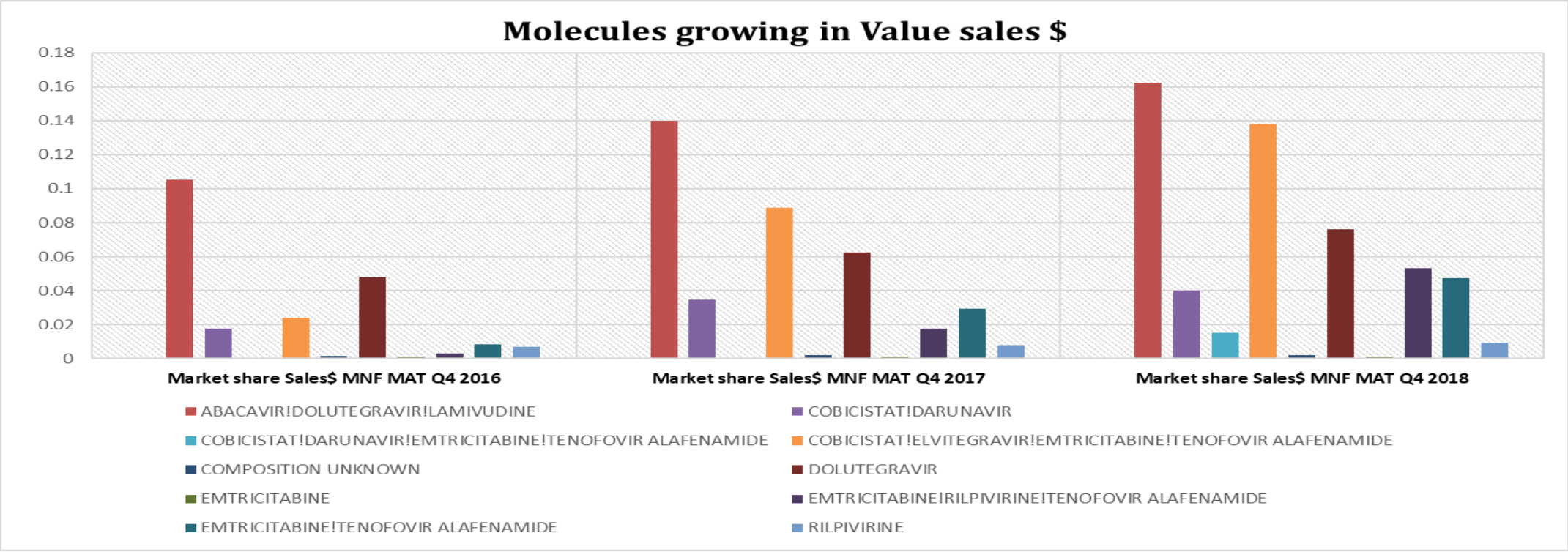
- **Data Representation and Analysis**

The data was analyzed using Microsoft excel and MS word is used for analyzing the data and for graphical representation.

UNDERSTANDING THE SELECTION CRITERIA

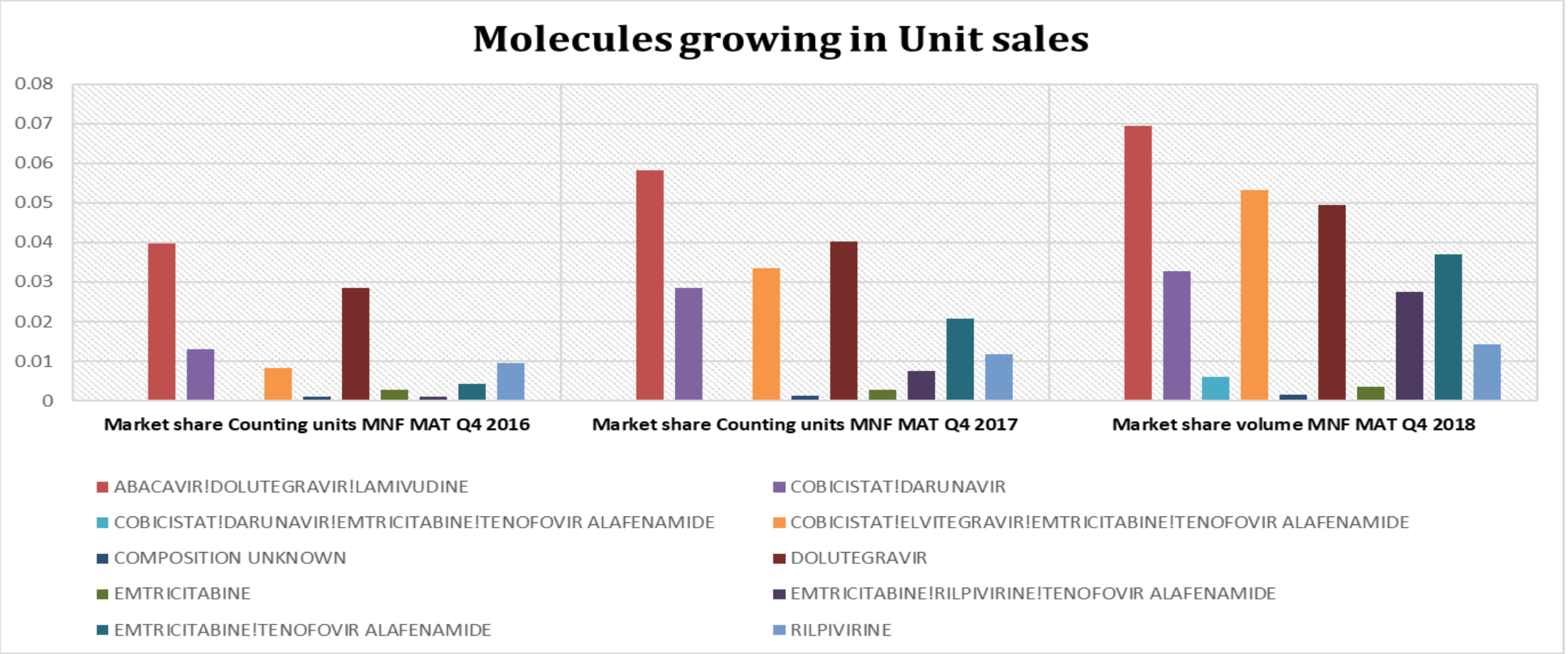
The data provided consisted sales data of 44 molecules in 30 countries for the years 2016-2018. The data was first categorized country wise, molecule wise and sector wise (Hospital and Retail). After doing so the growth percentages and market share was calculated.
The molecules were categorized into two parameters as follows:

- Molecules growing in Unit Sales.
- Molecules growing in Value sales$.



The graph represents percentage of the molecules that have grown value sales $ from year 2016-2018

The above graph represents the molecules growing value sales $ percentage which Abacavir + Dolutrgravir + Lamivudine contributes the highest value sales $ of 16% and Cobicistat+Elvitegravir+Emtricitabine+Tenofovir Alafenamide contributes 14%.



<u>The graph represents percentage of the molecules that have grown in Unit sales from year 2016-2018</u>

The above graph represents the molecules growing in unit sales percentage in which Abacavir + Dolutrgravir + Lamivudine contributes the highest value sales $ of 7% and Cobicistat+Elvitegravir+Emtricitabine+Tenofovir Alafenamide contributes 5%

Situational Analysis of Antiretroviral market in Europe

- Therapy size of Antiretroviral market in Europe is $6.34bn.
- There are 44 antiretroviral molecules in Europe market out of which 10 molecules are growing both in volume sales and value sales, 1 molecule growing only in volume sale, 1 molecule growing only in value sales and 1 molecule which is negative growth, but volume and value sale is very high.
- The top 2 leading antiretroviral molecule in Europe are:
  1. Abacavir+Dolutegravir+Lamivudine.
  2. Cobicistat+Elvitegravir+Emtricitabine+Tenofovir Alafenamide.
- We are marketing the top leading molecule Abacavir+Dolutegravir+Lamivudine under the brand name of the TrioLAD, in the top 5 countries which contributes 75% of market share in Europe Antiretroviral market.

NOTE:

1.Green highlight indicates molecules growing both in volume sales and value sales.

2.Yellow highlight indicates molecules growing in volume sales.

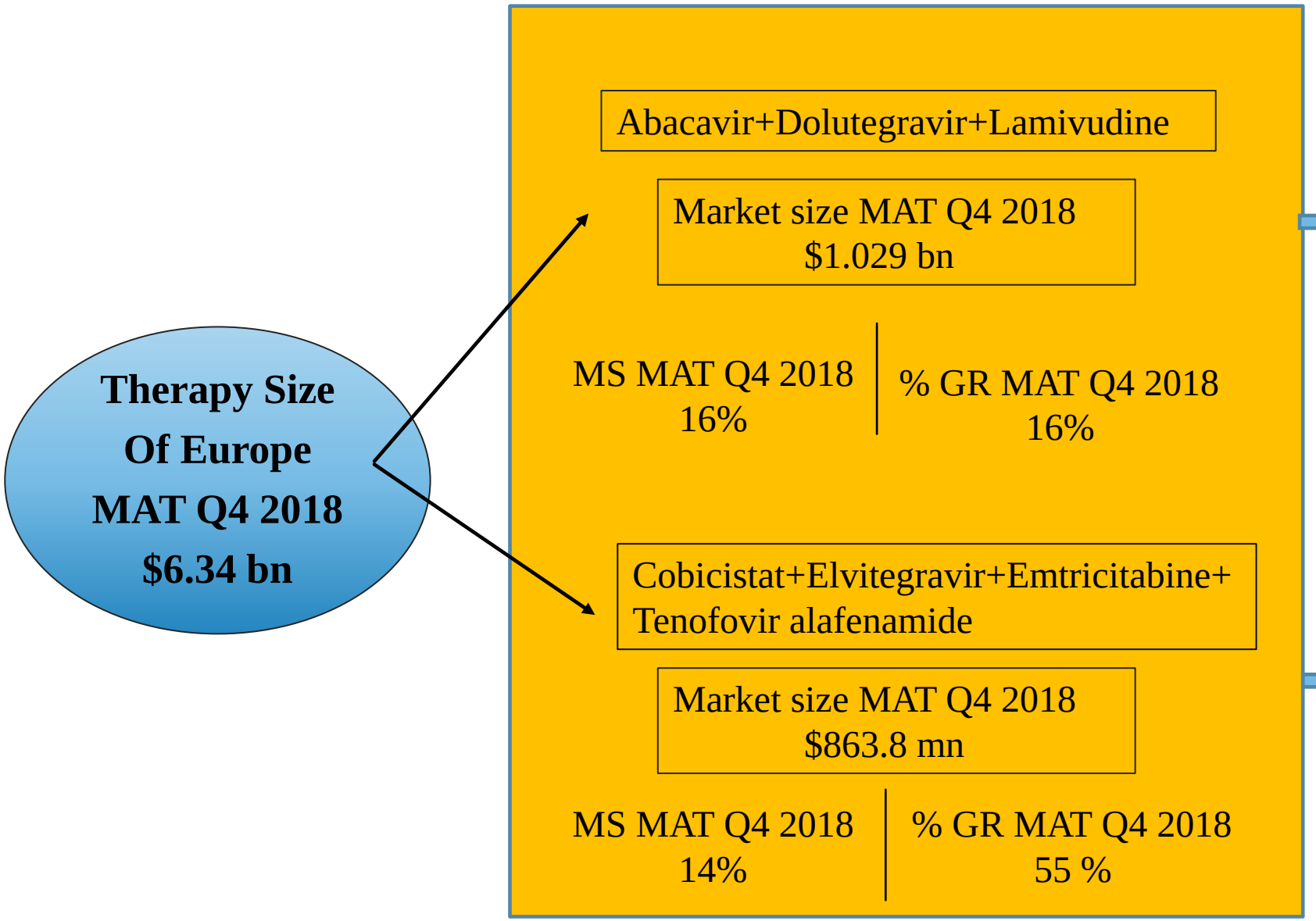
3.Blue highlight indicates molecules growing in value sales.

4.Brown highlight indicates molecules having inegative growth, but volume and value sale s very high

SN	Molecule List	YOY Growth of Sales$ 2018 over 2017 MAT Q4	YOY Growth volume 2018 over 2017 MAT Q4	Market share Sales$ MNF MAT Q4 2018	Market share volume MNF MAT Q4 2018
1	ABACAVIR!DOLUTEGRAVIR!LAMIVUDINE	16%	18%	16%	7%
2	ATAZANAVIR!COBICISTAT	1%	-1%	1%	0%
3	COBICISTAT!DARUNAVIR	15%	15%	4%	3%
4	COBICISTAT!DARUNAVIR!EMTRICITABINE!TI	1773%	2154%	2%	1%
5	COBICISTAT!ELVITEGRAVIR!EMTRICITABINE	55%	57%	14%	5%
6	COMPOSITION UNKNOWN	17%	17%	0%	0%
7	DOLUTEGRAVIR	21%	22%	8%	5%
8	EMTRICITABINE	21%	0%	0%	0%
9	EMTRICITABINE!RILPIVIRINE!TENOFOVIR AL	200%	262%	5%	3%
10	EMTRICITABINE!TENOFOVIR ALAFENAMIDE	60%	76%	5%	4%
11	EMTRICITABINE!TENOFOVIR DISOPROXIL	-34%	-7%	7%	9%
12	RILPIVIRINE	21%	22%	1%	1%
13	TENOFOVIR DISOPROXIL	-24%	7%	3%	6%

Source:- IQVIA data.

Top 2 leading antiretroviral molecules in Europe



- The availability of the molecule in Europe is 60.3% in Hospital sector and 39.6% in Retail sector and business in Europe market is from 58.8% Hospital sector and 41.2% Retailers sector.

- The availability of the molecule in Europe is 54.5% in Hospital sector and 45.5% in Retail sector and business in Europe market is from 57.5% Hospital sector and 42.5% Retailers sector.

Source:- IQVIA data.

- 49% HIV diagnosed reported in Europe happened at a late stage of infection.

- In Europe, the top 5 countries contributes 76% of market share for Abacavir+Dolutegravir+Lamivudine are
  1.France 19%
  2.Spain 23%
  3.Germany 11%
  4.Italy 12%
  5.UK 11%

Therefore, we will 1st target the above countries.

- Patent expiration of Antiretroviral drugs from 2005 – 2022 off-patent molecules will increase the generic competition.

- The innovator brand of Abacavir+Dolutegravir+Lamivudine is Triumeq one patent for Triumeq with the longest validity is set to expire in 2029. Exclusive marketing right for ViiV Healthcare is expired in August 2018.

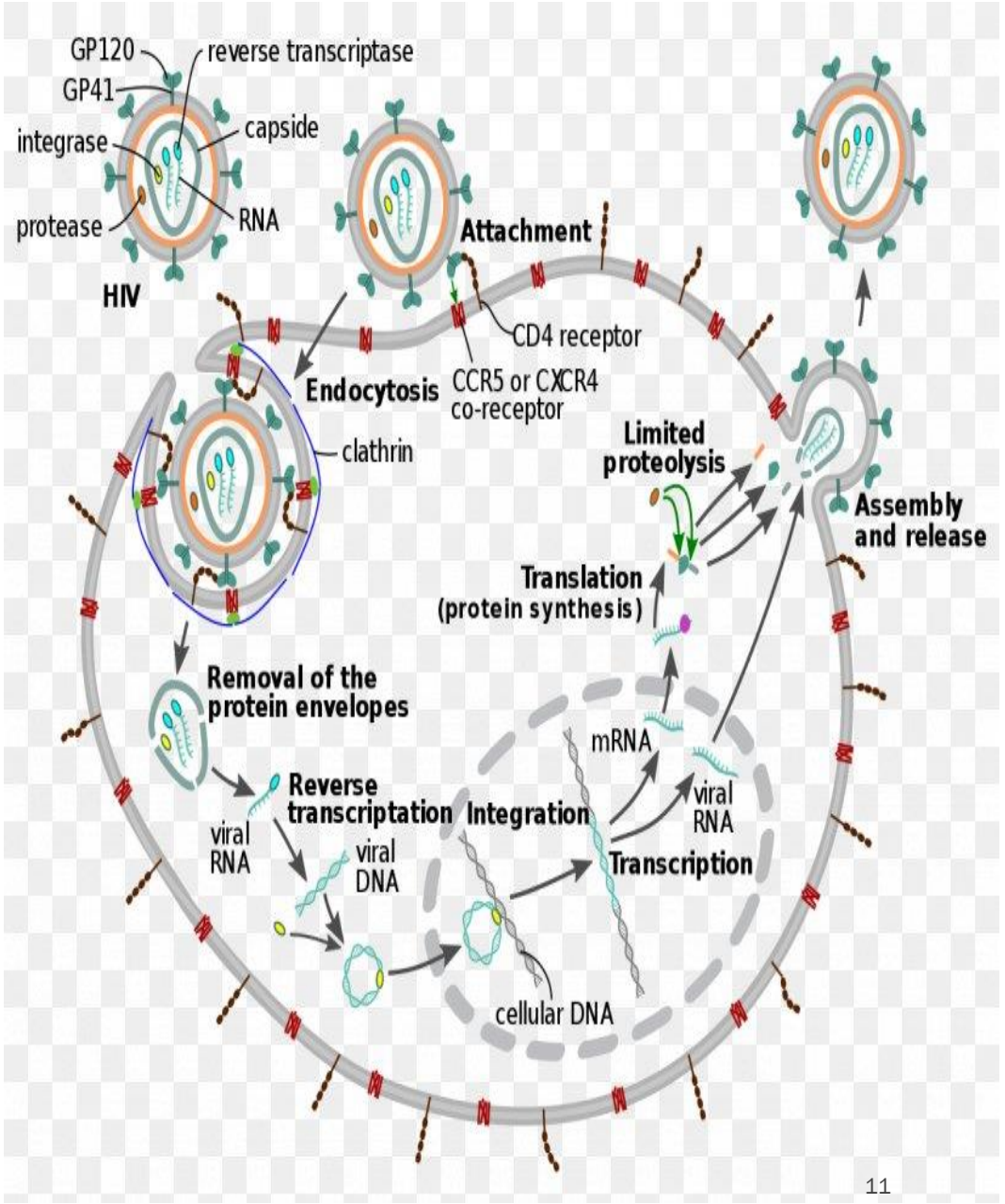
2005	2006	2011	2012	2013
Zidovudine	Stavudine	Lamivudine	Nevirapine	Combivir
	Didanosine		Indinavir	Efavirenz
			Saquinavir	Ritonavir
2014	**2016**	**2018**	**2019**	**2022**
Abacavir	Trizivir	Tenofovir	Kivexa (Epzicom)	Raltegravir
Tipranavir	Lopinavir/r	Atripla	Fosamprenavir	Maraviroc
	Emtricitabine	Truvada	Etravirine	
	Darunavir	Atazanavir		

Source:- IQVIA data.

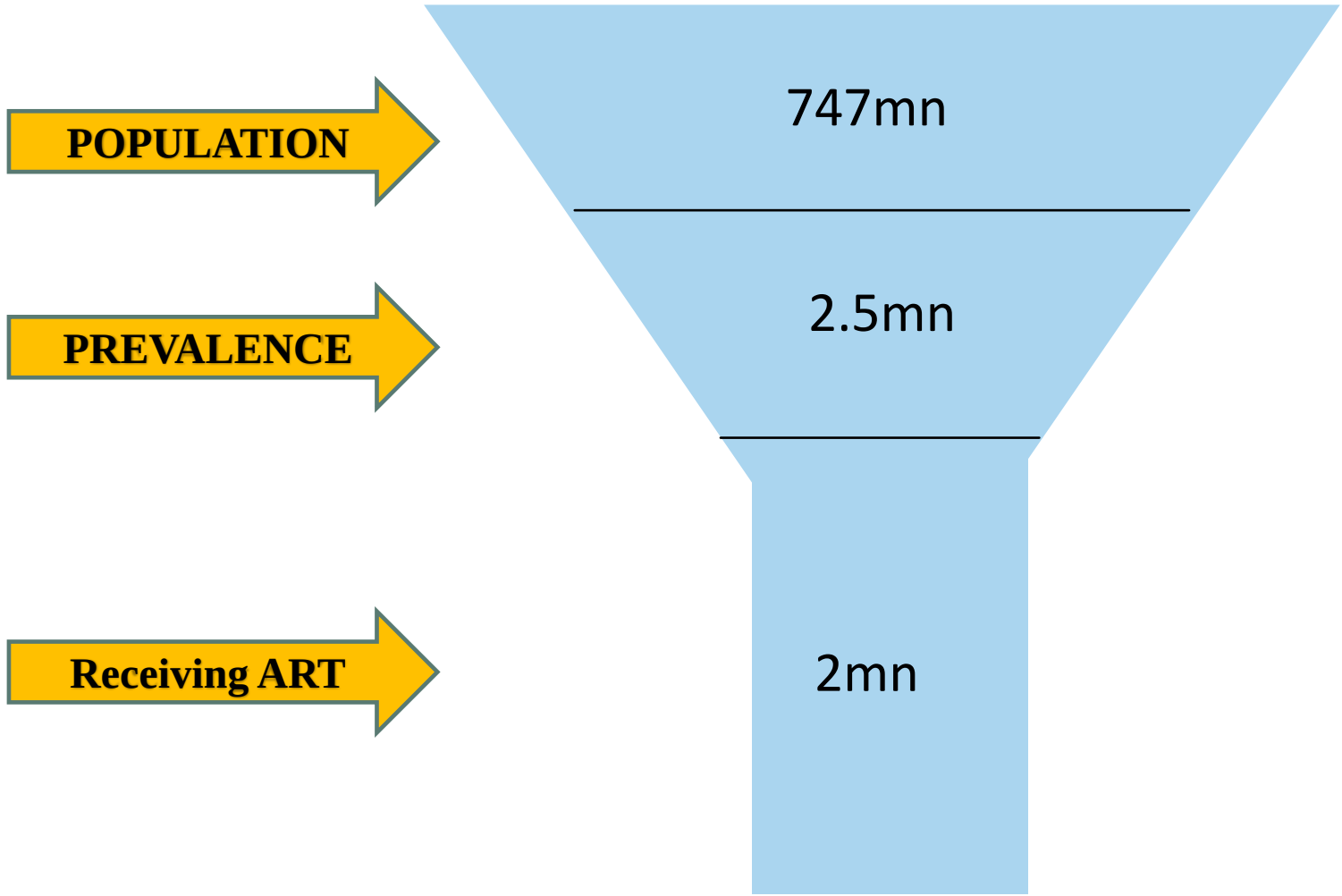
TrioLAD

Molecule*: Abacavir + Dolutegravir + Lamivudine*
Drug Class: Combination Drug(Single tablet regimens)
Dosage form :- Tablet.
Strength:- Abacacvir600MG+Lamivudine300MG+Dolutegravir50MG.
USE:- FDA Approved indications(HIV-1 treatment).
USP :- Booster-free dosing.
High barriers to resistance.
High safety, efficacy and tolerability.
Low pill burden (1 pill once a day).
QUALITY:- FDA APPROVED
MECHANISM OF ACTION:-

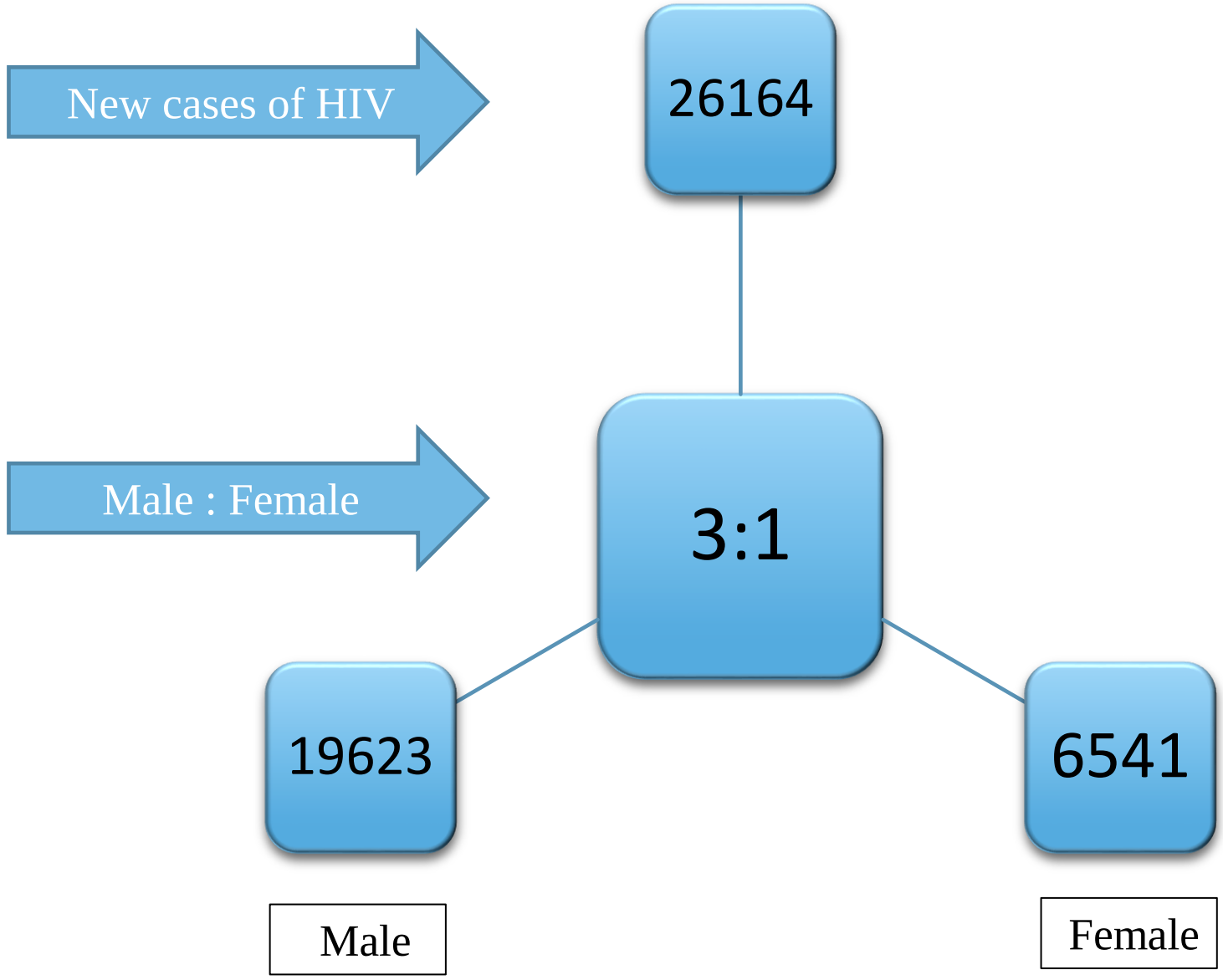
1. Dolutegravir binds to the integrase active site and blocks the strand transfer step of retroviral DNA integration in order to inhibit HIV integrase.
2. Abacavir and lamivudine inhibit HIV reverse transcriptase and, by incorporating monophosphate, form a chain termination on the DNA viral chain.



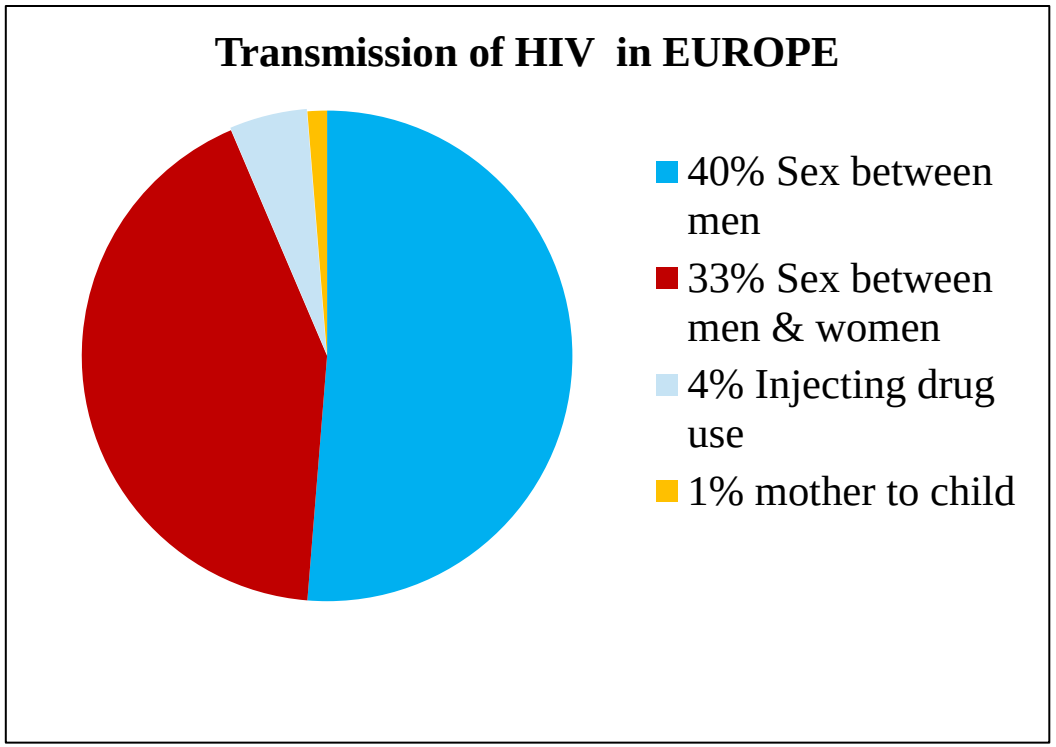
Patient Funneling Of Europe For HIV-1 Treatment

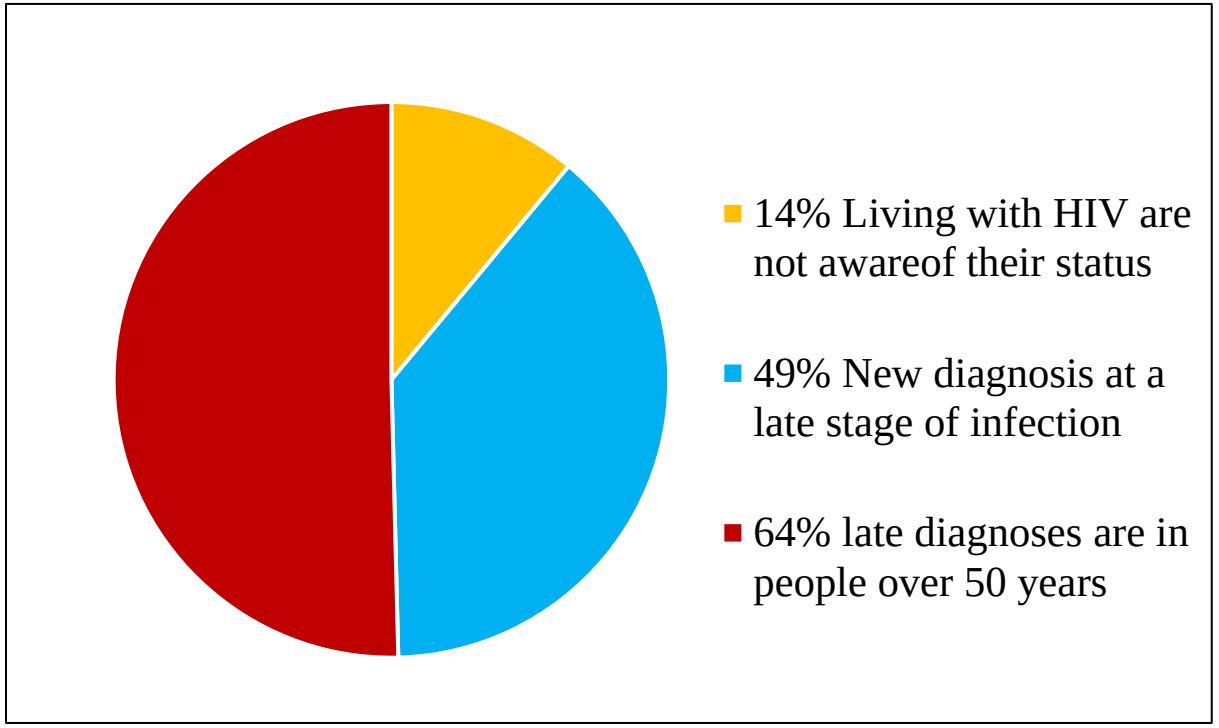


INCIDENCE RATE of HIV in Europe



Source:- https://www.ecdc.europa.eu/en/publications-data/infographic-hiv-and-aids-eueea-2018





Source:- https://www.ecdc.europa.eu/en/publications-data/infographic-hiv-and-aids-eueea-2018

GOAL

To capture 15% ***Abacavir+Dolutegravir+Lamivudine*** market in Europe in next 5 years.

Market share % in Sales $	YEAR	Revenue in $
5%	1st (2020)	(5% of ➔1413839366) **70,691,968**
7%	2nd (2021)	(7% of ➔1598517309) **111,896,212**
9%	3rd (2022)	(9% of ➔1783195252) **160,487,573**
12%	4th (2023)	(12% of ➔1967873195) **236,144,783**
15%	5th (2024)	(15% of ➔2152551138) **322,882,671**

Present and future Sales$ forecast of Abacavir+Dolutegravir+Lamivudine (Triumeq) in Europe.

SN	Years	Sum of LC$ MNF MAT Q4	Extrapolated figures
1	2016	660234772	⇩
2	2017	889591180	
3	2018	1029590658	
4	2019		1229161423
5	2020		1413839366
6	2021		1598517309
7	2022		1783195252
8	2023		1967873195
9	2024		2152551138

Source:- IQVIA data.

Present and future Volume forecast of Abacavir+Dolutegravir+Lamivudine (Triumeq) in Europe.

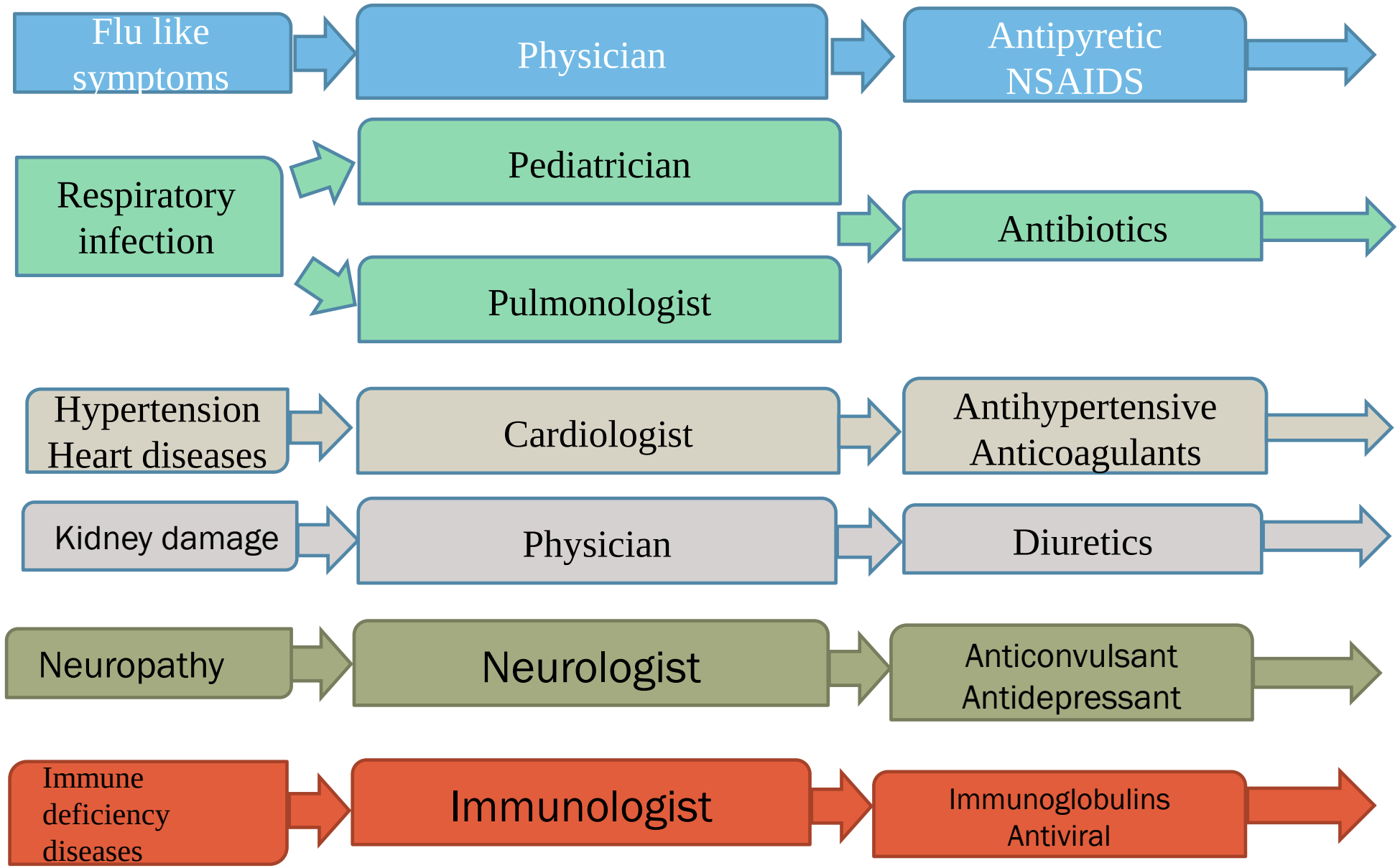
SN	Years	Sum of Counting Units MAT Q4	Extrapolated figures
1	2016	20320020	
2	2017	28194416	
3	2018	33267414	
4	2019		40208011
5	2020		46681708
6	2021		53155405
7	2022		59629102
8	2023		66102799
9	2024		72576496

Market share % in unit	YEAR	Unit Sales
5%	1st (2020)	(5% of→46681708) **2,334,085**
7%	2nd (2021)	(7% of→53155405) **3,720,878**
9%	3rd (2022)	(9% of→59629102) **5,366,619**
12%	4th (2023)	(12% of→66102799) **7,932,336**
15%	5th (2024)	(15% of→72576496) **10,886,474**

Source:- IQVIA data.

III II

PATIENT JOURNEY



HIV TEST

- ❑ HIV antibody test.
- ❑ HIV antibody & antigen test.
- ❑ HIV RNA test.

HIV Confirmed

1

HIV Specialist

Line 1: Antiretroviral drug (Single molecule)

No effect on disease

Line 2: Combination of any two classes of HIV drug like (PIs+NRTIs).

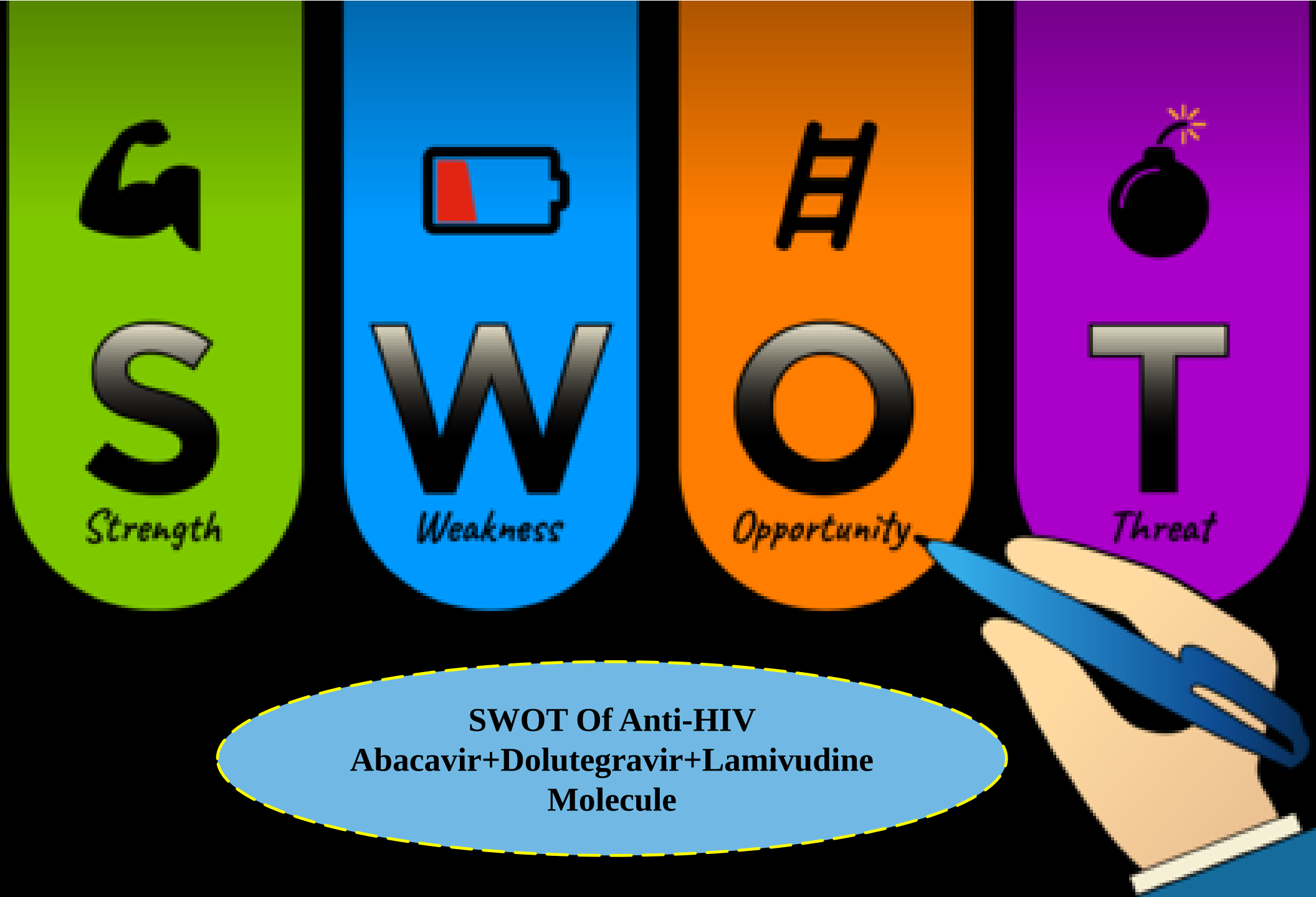
Developed resistance

Line 3: Combination of three molecule like (Single tablet regimens)

- ❖ Abacavir+Dolutegravir+Lamivudine.
- ❖ efavirenz/emtricitabine/TDF

Alternative therapies in HIV

- Relaxation technique
- Physical therapies: Sports or medical massage, yoga, chiropractic care, acupuncture.
- Herbal medication and supplements.
- Medical marijuana.



SWOT Of Anti-HIV
Abacavir+Dolutegravir+Lamivudine
Molecule

STRENGTH

- Recommended regimen by HHS and EACS for treatment of HLA-B*5701-negative patients.
- Superior efficacy and tolerability to Atripla (efavirenz/emtricitabine/TDF).
- FDA and EMA approval for use in treatment-experienced patients means high target patient numbers and high commercial potential.
- Approved for use in adolescents ≥ 12 years of age in addition to adults.
- High barrier to genetic resistance of dolutegravir component.
- Convenient STR.
- Booster- free dosing and can take with or without food.
- Low pill burden and less dropout due to less side effects.
- Does not affect kidney function like tenofovir.
- Reduce the risk of sexual transmission because of reduced viral load.
- As superiority against Reyataz (atazanavir) in women.

EACS= European AIDS Clinical Society.
EMA= European Medicine Agency.
HHS= US Department of Health and Human Services.
STR= Single-tablet regimen, TDF= Tenofovir Disoproxil Fumarate

WEAKNESS

- Limited to HLA-B*5701—negative patients, which has a small impact on patient numbers.
- Issues regarding abacavir component associated with hypersensitivity and unconfirmed risk of myocardial infraction.
- Fourth STR to market.

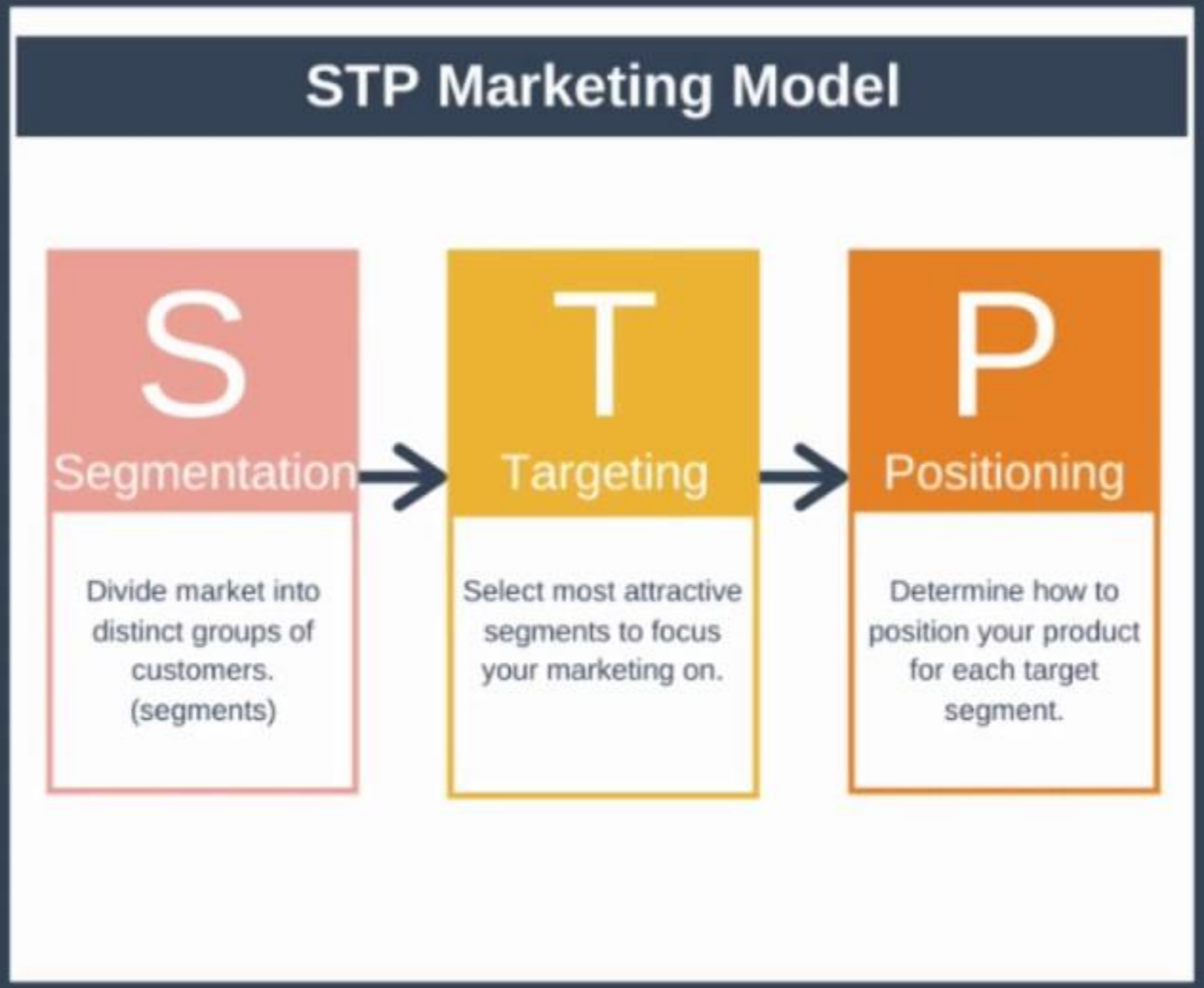
Brand Name	Components	Year of FDA Approval
Atripla	• Efavirenz • Emtricitabine • Tenofovir disoproxil fumarate	2006
Complera	• Rilpivirine • Emtricitabine • Tenofovir disoproxil fumarate	2011
Stribild	• Elvitegravir • Cobicistat • Emtricitabine • Tenofovir disoproxil fumarate	2012
Triumeq	• Dolutegravir • Abacavir • Lamivudine	2014

OPPORTUNITIES

- Increasing incidence rate (male: female = 3:1) and prevalence rate 2.5mn of HIV-1 in Europe.
- Growing Antiretroviral market in Europe.
- Used as a switching regimen.
- Indication for treatment of paediatric patients.
- Long term therapy (Lifelong disease)
- 14% patient living with HIV are not aware of their status this gives an opportunity to create awareness of the disease and indirectly can increase brand awareness and brand image of TrioLAD.

THREAT

- Cumulative competitive pressure from following products
  1. **Atripla** (efavirenz (NNRTI), emtricitabine (NRTI), and tenofovir disoproxil fumarate (NRTI))
  2. **Complera** (emtricitabine (NRTI), rilpivirine (NNRTI), and tenofovir disoproxil fumarate (NRTI)
  3.**Stribild** (elvitegravir (INSTI), cobicistat (CYP3A inhibitor), emtricitabine (NRTI), and tenofovir disoproxil fumarate (NRTI)
- Physicians preference for Truvada (emtricitabine/TDF) backbone.
- Increasing pricing pressure.
- Generic incursion following patent expiry of Epzicom in 2019 in (EU).
- Generic efavirenz could lead to physicians being urged to prescribe individual Atripla components, which would negatively impact TrioLAD sales.
- Threat from Dovato (Dolutegravir+Lamivudine) approved in April 2019.
- Threat of new entry.

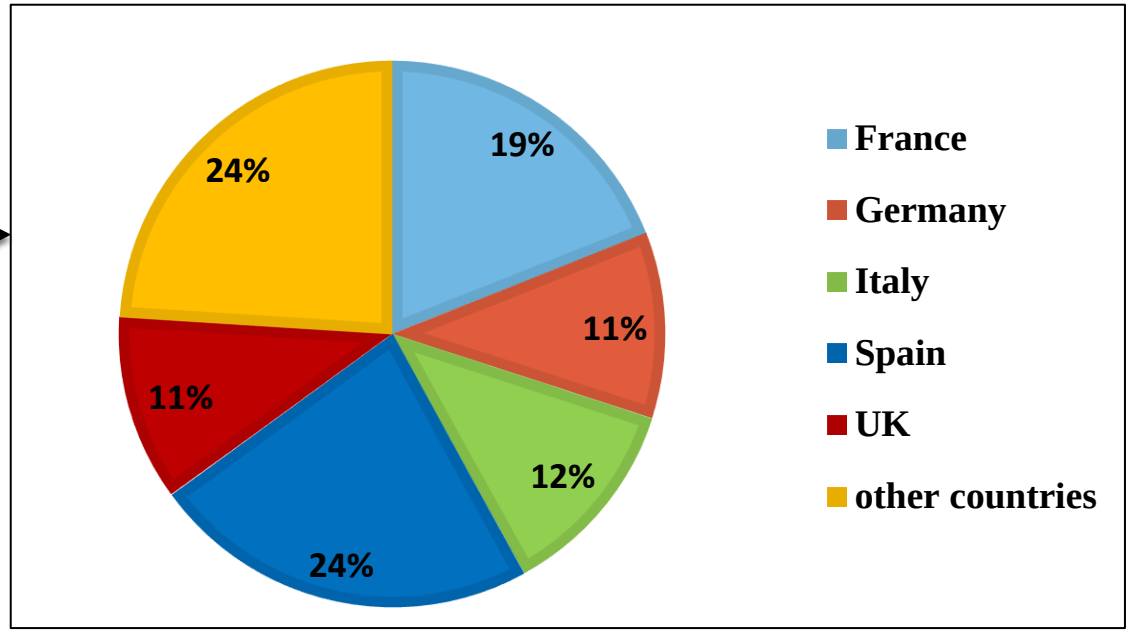


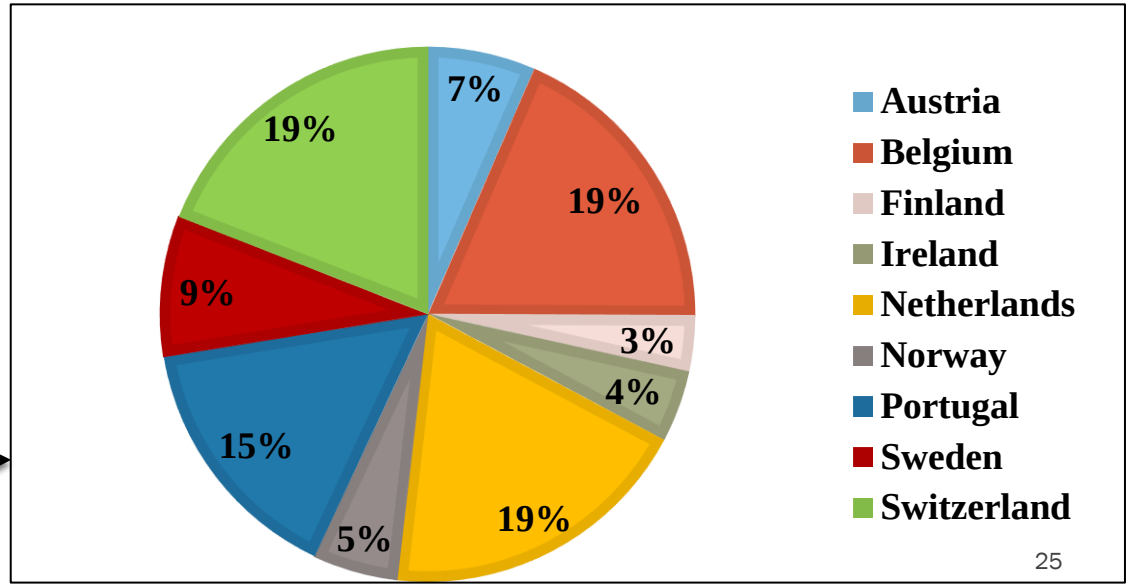
STP Marketing Model

Geographical segmentation

- In Europe, top 5 countries contributes 76% of market share for Abacavir+Dolutegravir+Lamivudine those are France, Germany, Italy, Spain and UK.

- In Europe, 24% of market share is contributed by rest 20 countries.

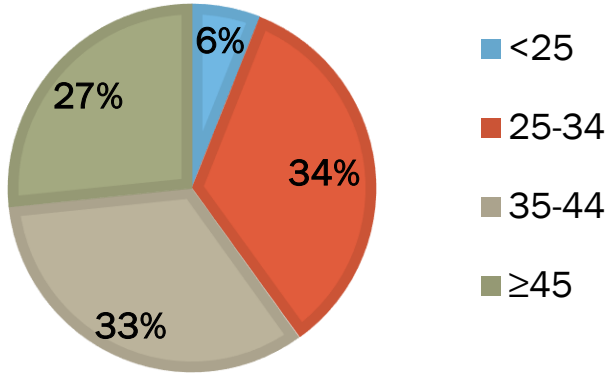




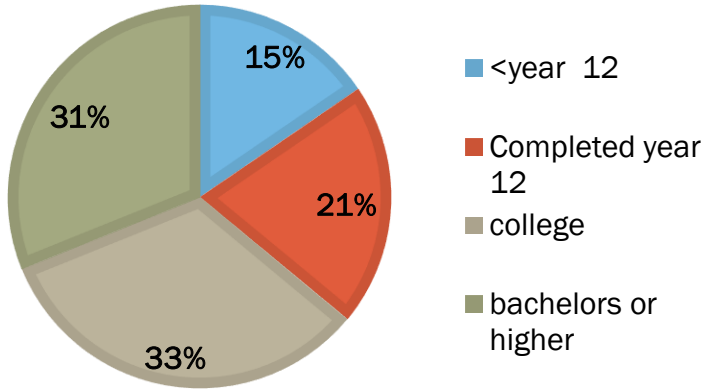
Source:- QVIA data.

Demographical segmentation

AGE, YEARS



EDUCATION

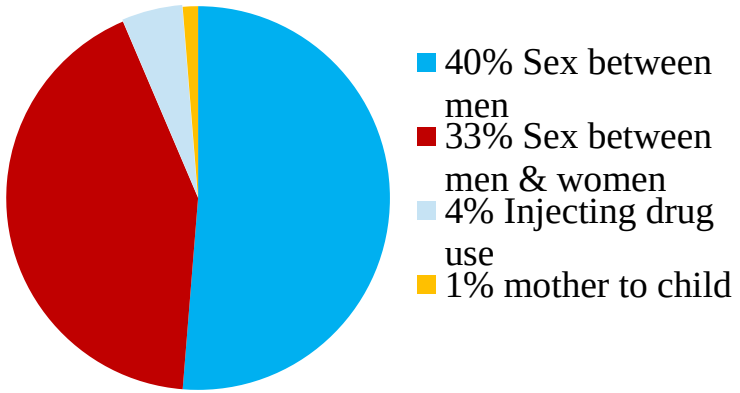


GENDER

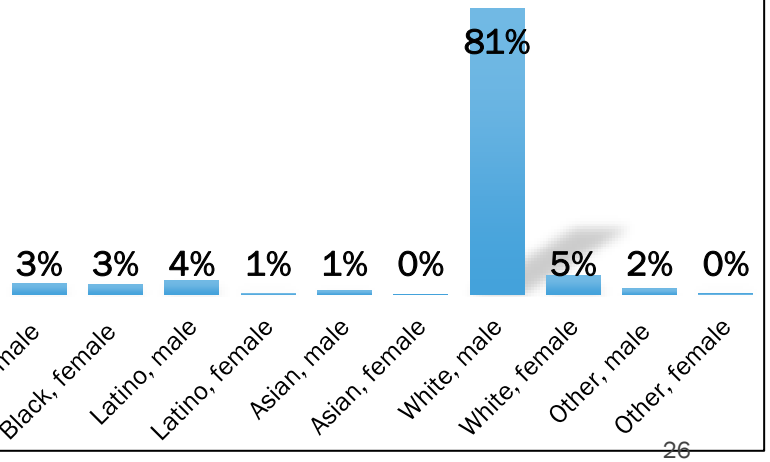
MALE : FEMALE

3 : 1

Transmission of HIV in EUROPE



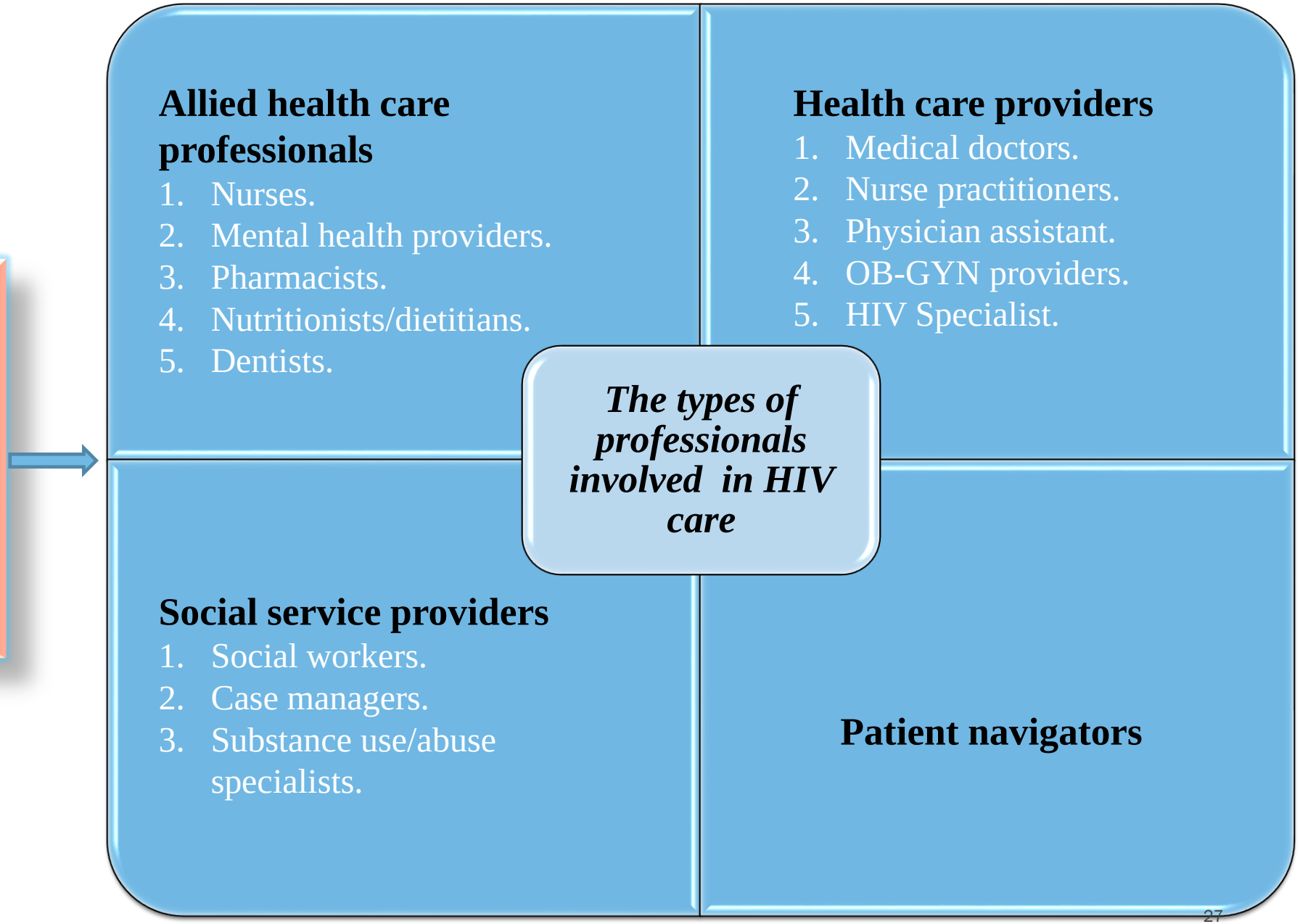
Race



Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4341937/

Health Care Segmentation

The professional are divided into groups which respond in similar manner to the promotional activities.



TARGETING

- ***Specialty focus***
  - HIV specialist.
  - Medicine (md) or doctor of osteopathic medicine (do)
  - Consultant physician assistant
  - Tender Authority.
- ***Geographical location***
  - France, Germany, Italy, Spain and UK.
- ***Patient Population***
  - Adolescents ≥ 12 years- Adults HIV patient.

POSITIONING

"TrioLAD – Enhance Confidence and Reassure the hope"

BARRIERS

- Limited to HLA-B*5701—negative patients.
- Abacavir associated with hypersensitivity and unconfirmed risk of myocardial infraction.
- Competitive pressure from Atripla, Complera and Stribild.

DRIVERS

- High barrier to resistance.
- Proven virologic efficacy.
- Booster free and can be taken with or without food.
- No drug interactions.
- High tolerability.
- High patient adherence because of low pill burden and less side effects.

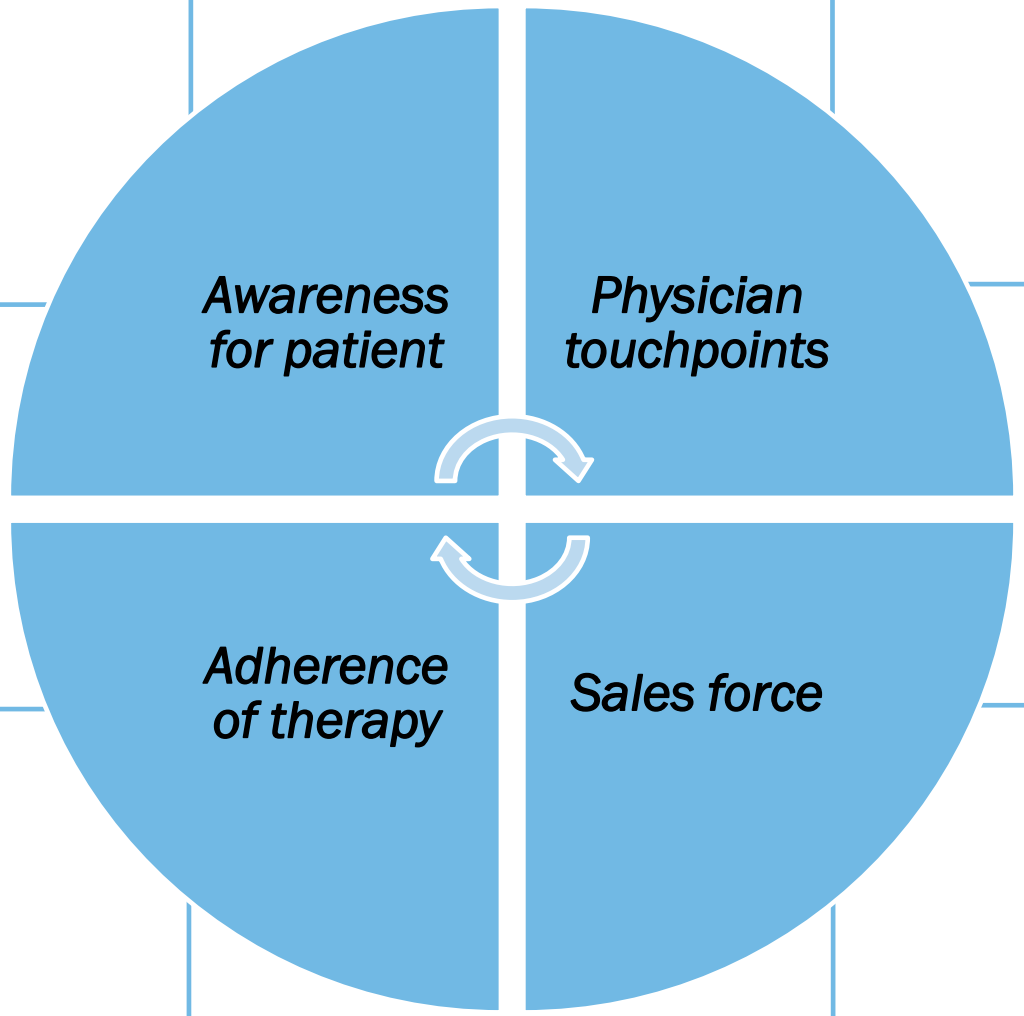
LPBO Table

LEVERAGE POINTS	BEHAVIOURAL OBJECTIVES
Lesser diagnosis rate of HIV (Patient education)	• To increase awareness of HIV as a disease (lifestyle) • To increase awareness of diagnostic supplies for HIV (Lab test, OraQuick in-Home HIV test)
Incorrect treatment at the onset of disease (First point of care-Physician)	• To drive healthcare practitioners for better communication with patient for onboarding the therapy and awareness about the HIV symptoms.
Build stronger KOLs & KBLs (HIV Specialist)	• To nurture transactional analysis in physician-patient relationship (soft skill programs for doctors, nurses) to decrease drop off and improve adherence.

Strategies	What needs to be done	How will it be done
Operational effectiveness	• Technology applications • Training employees	✓ Mobile apps, partner with OraQuick. ✓ New target setting for reaching more HIV Specialist & physicians
Unique activities	• Need based positioning • Access positioning	✓ Physician touchpoints *(lucrative sponsorships, case studies, HIV testing kit for hospitalized patients)* ✓ Urban population
Strategic of fit	• Reinforcing	✓ Free samples for physicians
Rediscovering strategy	• Profitable growth	✓ Multimedia education at patient waiting rooms

BRAND STRATEGIES

- Patient education camps on *Worlds AIDS Day (Dec 1st)*
- E-promotional activities- SEO, video detailing, online events
- Mobile apps:- for customer and consumer -push notifications about the HIV medications, Dose reminder, connect to doctor, quick question redressal.
- Partner with OraQuick in-Home HIV kit.



- Soft skill programs for doctors, nurses and pharmacists
- Symposia's/ RTDs
- Lunch & Learn
- Drive KBL towards our product - lucrative sponsorship, case studies

- Patient guides for waiting room experience
- Multimedia education (articles, videos, 3D anatomical) with text and email compatibility
- Importance of adherence and risk of missed dose and drop of therapy.

- Mobile App:-sales force for (On the job training and Sales force effectiveness).
- Increase the productive Call plan (size & frequency) & territory modeling.
- Maintain sales performance
- Sales campaign
- Motivational activities like Giving recognition for their work and rewards

LIST OF PARAMETERS COMPANY SHOULD BE TRACKING ON MONTHLY BASIS

- ***Time spent selling:-*** Track how much time your team is spending at each stage with the help of CRM or sales automation software.
- ***Lead response time:-*** How quickly are reps able to reply to inbound leads? The longer it takes to respond to interested leads, the greater the chance of that opportunity slipping away.
- ***Opportunity win rate:-*** it is simply the percentage of total sales opportunities that go on to become paying customers.
- ***Sales pipeline coverage ratio:-*** How much value /opportunities the pipeline should hold at all times.
- ***Customer acquisition cost:-*** it is the costs associated with growing the business and expanding the customer base.
- ***Customer lifetime value:-*** The amount of value a customer contributes to the business over their lifetime.

ADDITIONAL ANALYSIS

- Break down the revenue to see
  - ***Percentage of new business:-*** customers who have never bought anything from the company before.
  - ***Percentage of upsell/cross sell/expansion:-***Existing customers who are buying another product or upgrading a higher package.
  - ***Percentage of renewal:-*** Customers who are extending their contract for another month.

Sales funnel leakage:- it tells where did the prospects drop out of the funnel at the greatest rates and prescribe the competitors product.

Risk factors faced by company

- Increase in competitors product.
- Public and government pressure to make drug price more affordable irrespective of fact whether they are generic or patent.
- Decrease in productivity of sales call.
- Low conversion rate.
- Issue related to stock availability.
- Decrease in supply of product in market.

MARKETING MIX

❖ PRODUCT

- **Brand name: TrioLAD.**
- **Other names:** ABC / DTG / 3TC, abacavir sulphate / dolutegravir sodium / lamivudine
- **Drug Class:** Combination Drug(Single tablet regimens)
- **Dosage form :-** Tablet.
- **Strength:-** Abacacvir600MG+Lamivudine300MG+Dolutegravir50MG.
- **USE:-** FDA Approved indications(HIV-1 treatment).
- **USP** :- Booster-free dosing.
  High barriers to resistance.
  High safety, efficacy and tolerability.
  Low pill burden**.**
- **QUALITY:-** FDA APPROVED

❖ PRICE

As the generic pressure is less the price can be less than competitor product Triumeq.

Triumeq:- Average price for

Pack size 30 = 27$ USD(Single tablet) & 809.4$ USD (one pack size 30 tablets).

Pack size 90 = 30.6$ USD(Single tablet) & 22755.5$ USD (one pack size 30 tablets).

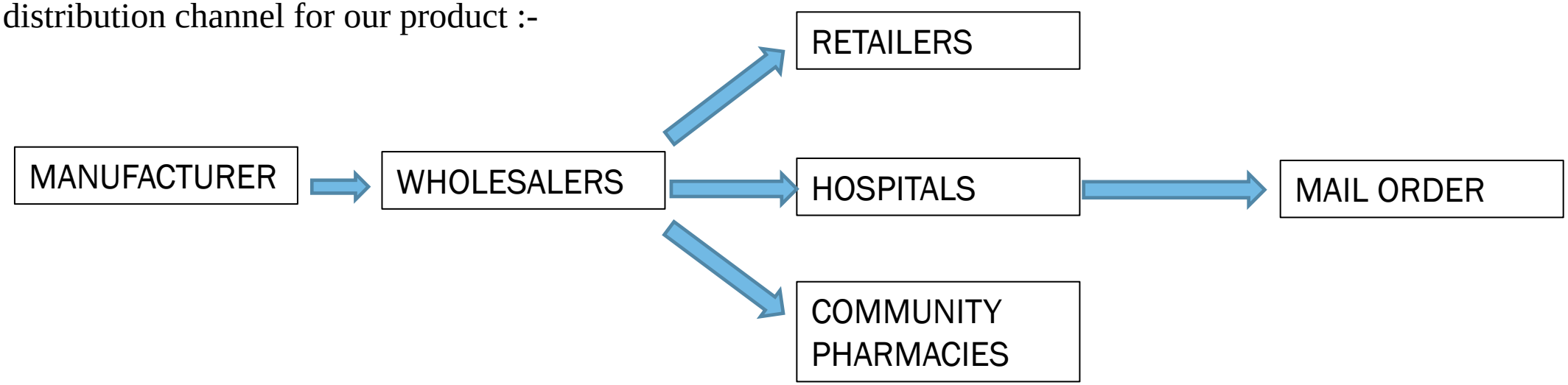
Source:- IQVIA data.

❖ PLACE

- The availability of the molecule in Europe is 60.3% in Hospital sector and 39.6% in Retail sector and business in Europe market is from 58.8% Hospital sector and 41.2% Retailers sector.

- The huge untapped market, creates opportunity to place our product both at hospital and retail by extensive promotion of the product.

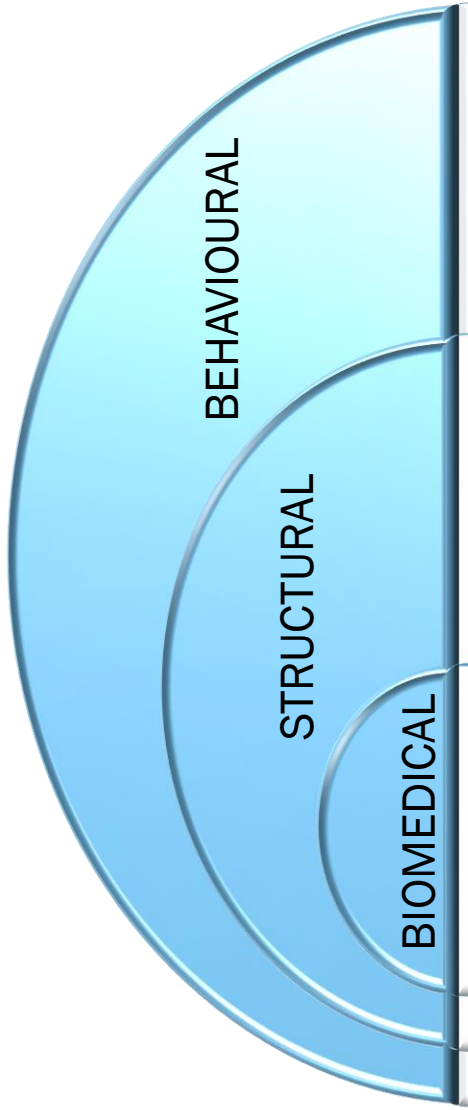
The distribution channel for our product :-



Source:- IQVIA data.

PROMOTION

- Promotion to professionals has experienced a major shift with the development of nonpersonal selling techniques. These include educational digital asset development, e-learning and direct marketing, including email and direct mail.
- Doctors are now utilizing more external sources for information about products and bypassing the traditional representative.
- Digital marketing has seen the emergence of search engines, social media, video distribution, blogging and device ubiquity.
- Special offers, Advertising, Endorsements, Users trails, Leaflets/Posters, Free gifts.
- 2-3 brand ambassadors- telling their stories online on our websites, TV etc.



Interventions with clinical and medical methods

- Counselling on risk reduction
- Comprehensive sex education camps
- Peer education programs
- Social marketing campaigns (e.g., to promote condom use)

Interventions that promote an enabling environment

- Decriminalization of transmission.
- Interventions to reduce stigma and discrimination.

Intervention that promote healthy behaviors

- Condoms and Lubricants
- HIV Testing .
- Antiretroviral treatment for all.
- Needle and syringe programs
- Prevention of transmission.

TrioLAD

Lamivudine 300MG+ Abacavir 600MG + Dolutegravir 50MG

Complete HIV-1 treatment in 1 pill once a day

- ***Lamivudine and Abacavir***

  Inhibit HIV reverse transcriptase and, by incorporating monophosphate, form a chain termination on the DNA viral chain.

- ***Dolutegravir***

  Binds to the integrase active site and blocks the strand transfer step of retroviral DNA integration in order to inhibit HIV integrase.

- BOOSTER-FREE DOSING
- HIGH BARRIER TO RESISTANCE
- HIGH SAFETY, EFFICACY, TOLERABILIITY

Approved for use in adolescents ≥ 12 years- Adults.

FDA APPROVED

Conclusion

- Antiretroviral segment is a growing market in Europe having 44 molecules out of which 13 molecules contributes 66% market share in value $ and 45% market share in unit sales. Out these 13 molecules, the top 2 lead molecules are Abacavir+Dolutegravir+Lamivudine and Cobicistat+Elvitegravir+Emtricitabine+Tenofovir Alafenamide.
- Abacavir+Dolutegravir+Lamivudine is well developed molecule with $1.029bn market size, which grows at 16% growth rate (IQVIA data) in Europe and 76% of market share is contributed by the top 5 countries France, Germany, Italy, Spain and UK. So, to launch generic version of this TrioLAD is assumed to capture 15% of market share in next 5 years.
- Antiretroviral therapy size in Europe MAT Q4 2018 - $6.34bn.
- Market size of Abacavir+Dolutegravir+Lamivudine molecule - $1.029bn.
- Market size of Cobicistat+Elvitegravir+Emtricitabine+Tenofovir Alafenamide molecule - $863.8mn.
- Total Antiretroviral drugs Units sold in MAT Q4 2018 – 478.9mn

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Thank you