HIV and ViiV Healthcare

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Overview

1. ViiV Healthcare vision
2. ViiV Healthcare history and operating model
3. HIV market
4. Dolutegravir (DTG)
5. R&D strategy
6. Concluding remarks

ViiV Healthcare vision

An ambitious vision

Establish ViiV Healthcare as the leading company in the HIV market in innovation, sales and reputation

ViiV Healthcare history and operating model

A rich HIV history joined under a unique model

2009 GSK (85%) and Pfizer (15%) create a joint venture dedicated to HIV treatments

2012 Shionogi (10%) The Japanese company becomes new partner and shareholder*

2013 Dolutegravir era First dolutegravir (DTG) launch in the US

2016 ViiV Healthcare acquires BMS' HIV pipeline and discovery assets

ViiV Healthcare shareholding

Highly reliant on GSK infrastructure

- **R&D**
- **Manufacturing**
- **Distribution (Alliance markets)**
- **Administrative and functional (HR, IT, Legal, Finance)**

ViiV Healthcare

- **Strategy**
- **Drug discovery and development**
- **Medical affairs**
- **Marketing**
- **Sales**
- **Public affairs**
- **Global operations**
- **Resource management**
- **Performance management**

External support from Pfizer and Shionogi

- **R&D support**
- **Manufacturing**

*Current shareholding of ViiV Healthcare: GSK 78.3%, Pfizer 11.7%, Shionogi 10%

End to end operation reliant on the scale and infrastructure of large Pharma shareholders

3
regions – North America, Europe and International

15
affiliates and a presence in more than 50 countries through GSK

900+
employees worldwide

150
employees working in Alliance markets*

244
employees working for GSK in R&D for ViiV Healthcare

222
employees working for ViiV Healthcare through shared service agreements

450+
planned, concluded and active clinical trials since creation, including BMS acquisitions

*Alliance markets: Agreement with GSK in markets were ViiV Healthcare is not a legal entity

ViiV Healthcare success to date has evolved in two phases – First Phase: 2009 - 2013

2009 — Re-energised commercial operation and R&D — 2013

1. Led the Epzicom/Kivexa turnaround

2. Created an unprecedented development programme to catapult DTG's success

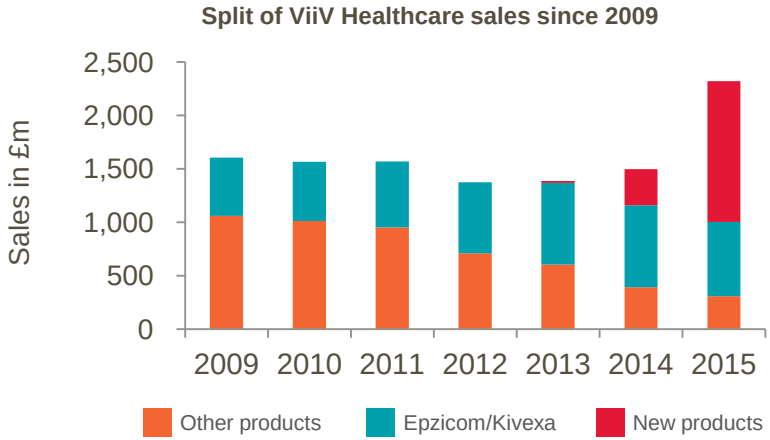
SINGLE
SPRING²
FLAMINGO
SAILING
VIKING-3

Source: GSK reported financial results

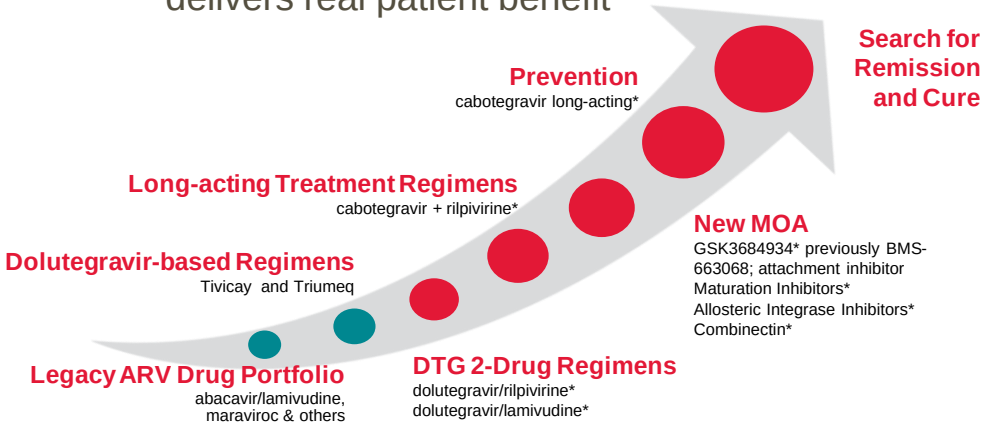
ViiV Healthcare success to date has evolved in two phases – Second Phase: 2013 - Today

2013 — Emerging Leadership: market growth and innovation — Today

1) DTG success fuelling ViiV Healthcare growth



2) Commitment to true innovation that delivers real patient benefit



Source: Reported Financial Results

* Note, therapies denoted with an (*) are investigational; safety and efficacy in treating/preventing HIV has not been established

The HIV market

The HIV epidemic remains a substantial challenge of our time

36.7m people living with HIV worldwide[1]

2.1m infections and **1.1m** AIDS-related deaths per year globally[1]

2.4m people living with HIV in Western and Central Europe and North America[1]

Patients are living longer and infection rates have begun to rise again
Treatment rate in developed markets is only 50-70%[2,3]
IAS July 2016 recommends that all people living with HIV should receive treatment

Source: 1. UNAIDS. Core epidemiology slides. June 2016; 2. IMS World Model Dec'15; 3. IMS local monthly model (Mar'16)

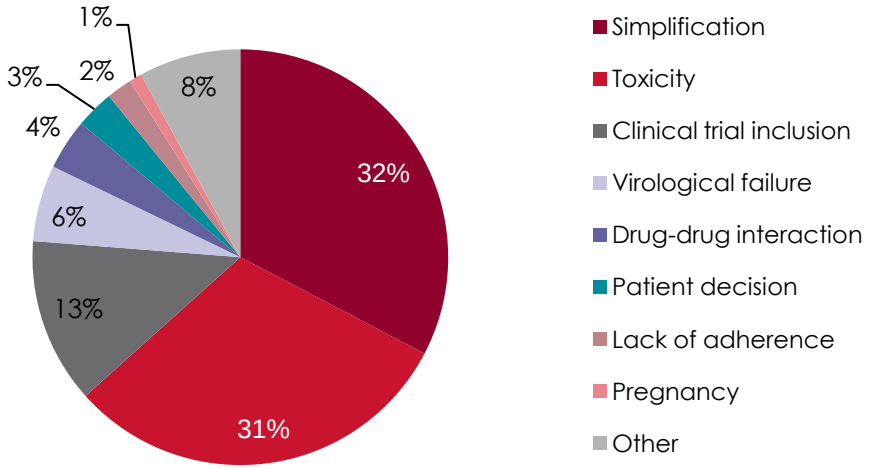
A highly dynamic market

HIV market valued at £16 billion in 2015

Dynamic Segment
~15-35% of the market per year

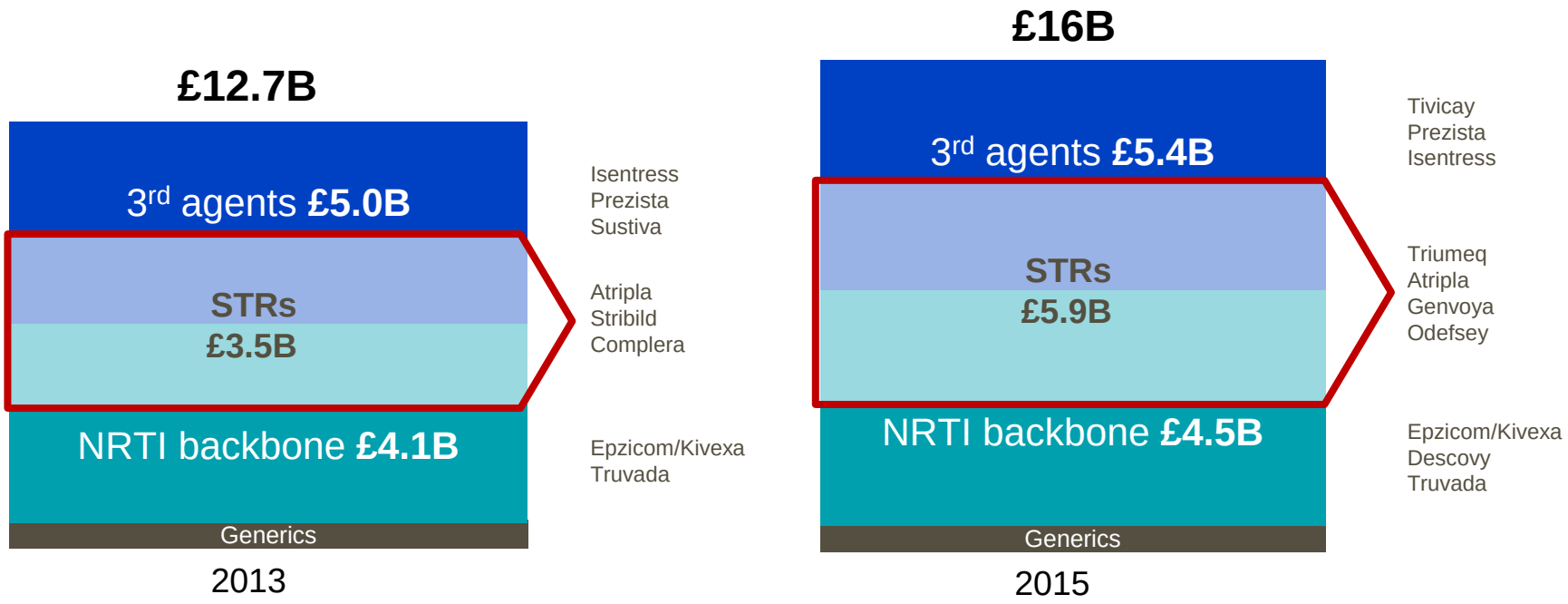
- Initiation (naive) ~5-10%
- Switch ~10-25%
- Stable segment ~65-85%

Reported reason for patients switching to a new therapy as reported by physicians (N=246)



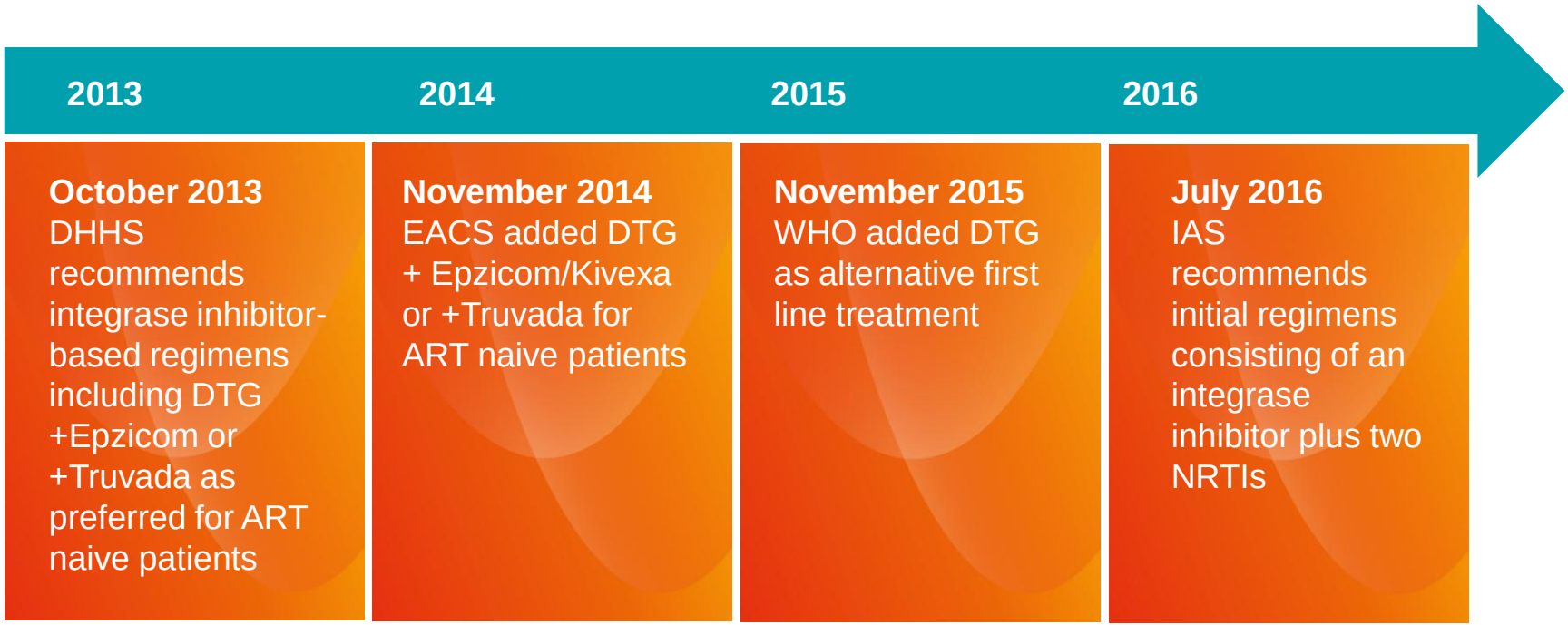
Source: IMS MIDAS Database, Ipsos and IMS NBRx, and GSK internal analysis. Carrero-Gras A, et al. J Int AIDS Soc 2014;17(Suppl 3):19819

The market has been receptive to innovation and remains a strong opportunity for growth



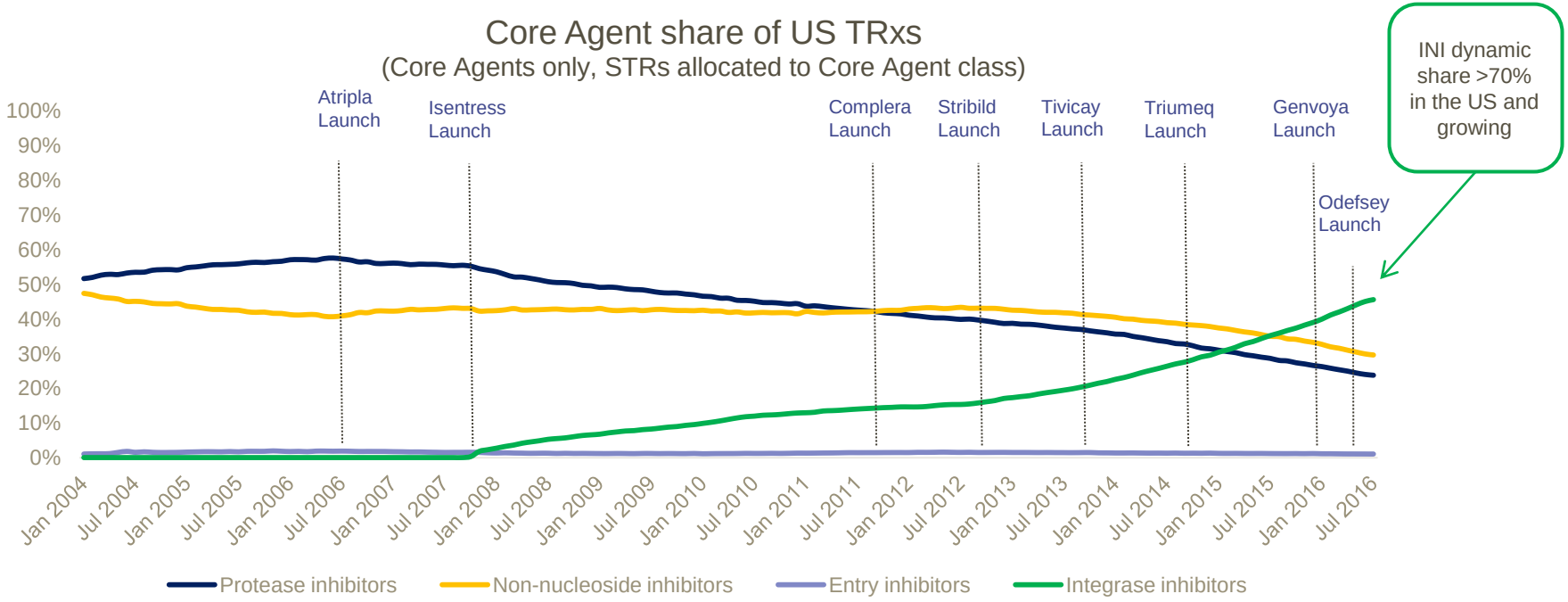
Source: IMS MIDAS Database

Guideline updates drive market evolution



We have now entered the integrase inhibitor era

INIs represent 46% of the TRx market, a figure that will continue to grow



Source: IMS NPA Monthly Jul 2016

Dolutegravir

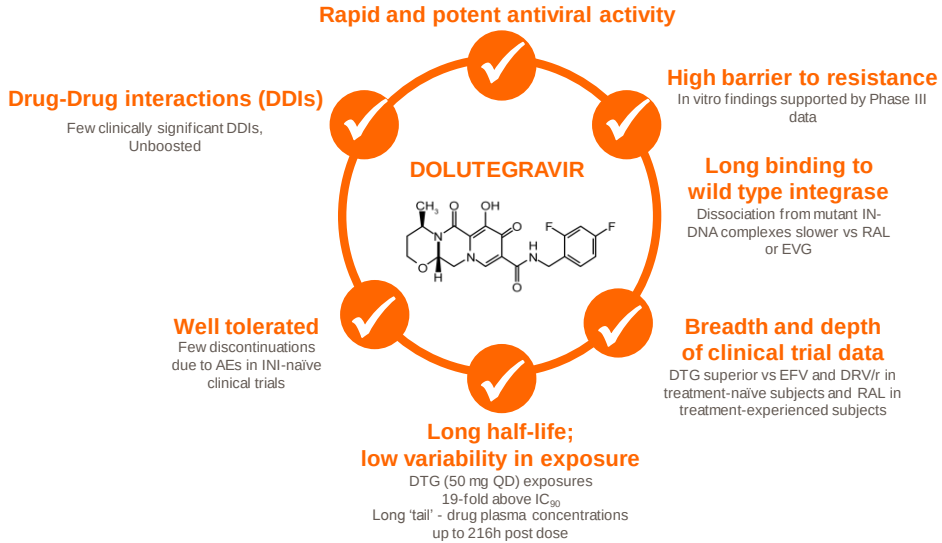
Amongst integrase inhibitors, DTG stands out

Unprecedented and unmatched clinical trial results

	efavirenz	raltegravir	darunavir	atazanavir
dolutegravir	SUPERIOR (naive) SINGLE	SUPERIOR (experienced) SAILING NON INFERIOR (naive) SPRING 2	SUPERIOR (naive) FLAMINGO	SUPERIOR (women / naive) ARIA
elvitegravir / cobicistat	NON INFERIOR (naive)			SUPERIOR (women / naive)
raltegravir	NON INFERIOR (naive)			NON INFERIOR (naive)

SINGLE, FLAMINGO, SPRING 2, SAILING and ARIA were non-inferiority studies with a pre-specified analysis for superiority
Chart shows primary endpoint outcomes

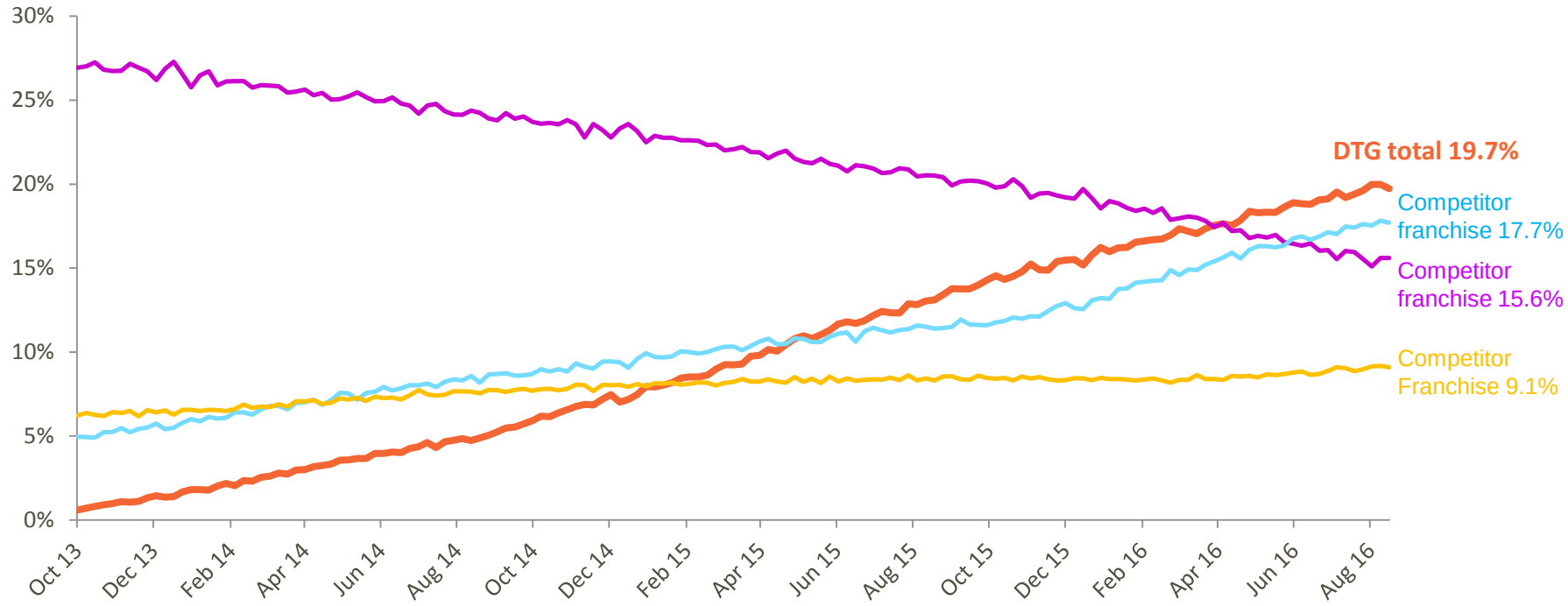
Unique product characteristics



References: 1. Min S, et al. AIDS 2011;25:1737–45, 2. Walmsley S, et al. N Engl J Med 2013;369:1807–18, 3. Clotet B, et al. Lancet 2014;383:2222–31, 4. Cahn P, et al. Lancet 2013;382:700–8, 5. Raffi F, et al. Lancet,013;381:735–43, 6. Kobayashi M, et al. Antiviral Research 2008;80;213–22, 7. Kobayashi M, et al. Antimicrob Agents Chem 2011;55(20):813-821, 8. Hightower KE, et al. Antimicrob Agents Chemother 2011;5:4552–9, 9. van Lunzen J, et al. IAS 2011. Abstract TUAB0102, 10. van Lunzen J, et al. Lancet Infect Dis 2012;12:111–8, 11. Elliot E, et al. IWCPHIV 2015. Abstract 13

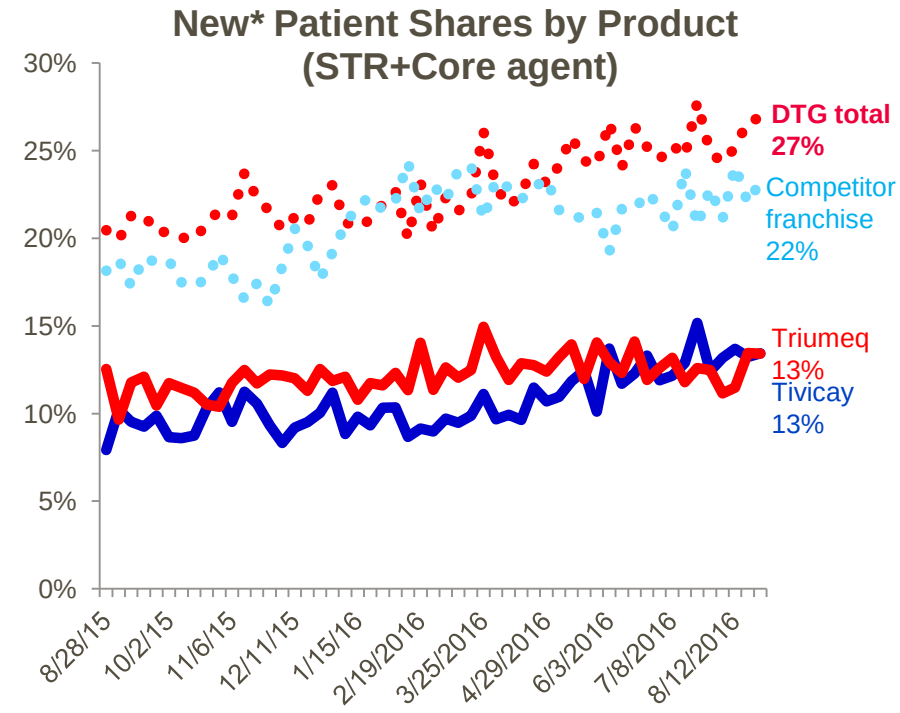
Dolutegravir leads the market as the #1 core agent

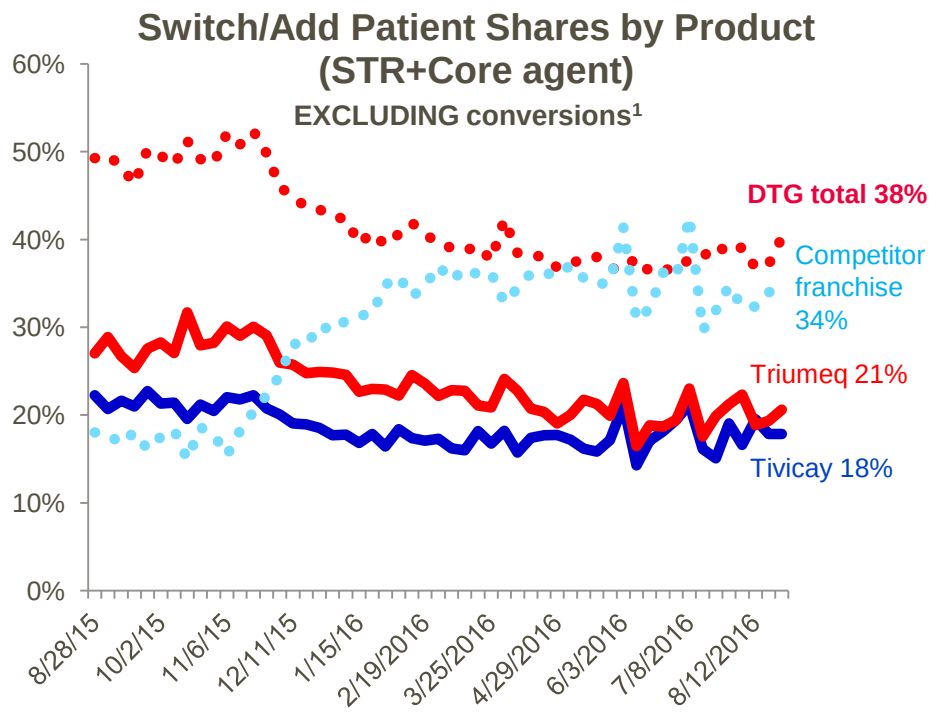
Weekly US TRx market share (STR + core agent) – since Tivicay launch



Source: IMS data to 2 September 2016
#1 meaning most prescribed

And the #1 agent in dynamic share in the US





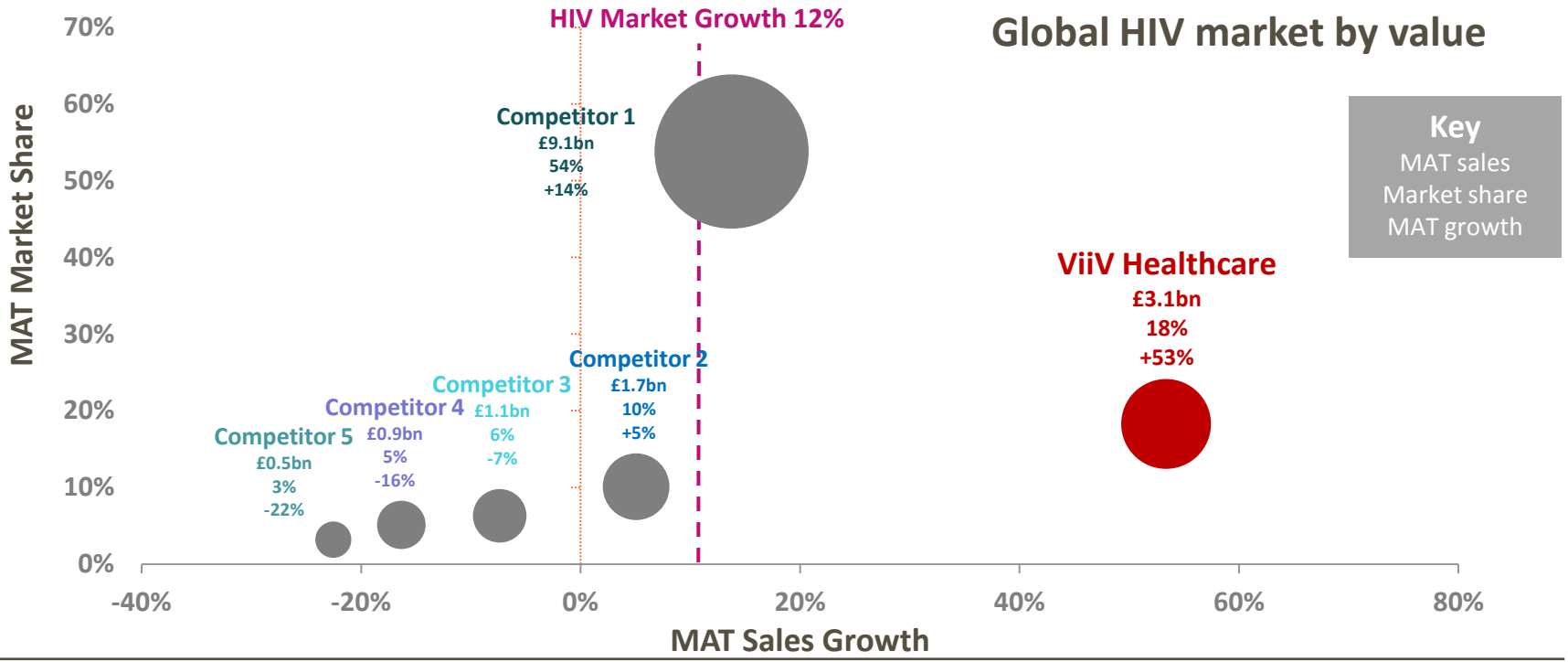
1 Conversions = switches from Truvada+Sustiva to Atripla, Truvada+Edurant to Complera, Tivicay+Epzicom to Triumeq, Prezista to Prezcobix, Reyataz to Evotaz, Stribild to Genvoya, Complera to Odefsey. ** IMS “New” metric is a proxy for naïve patients. It represents a longitudinal IMS panel of patients with no prior HIV therapy RX in the last 12 months, and overstates true naïve volume slightly.
Source: IMS NBRX Custom HIV Report 26 August 2016. #1 meaning most prescribed.

Already #1 agent in dynamic share in many other key markets

	# 1 in Naïve	# 1 in Switch
France	✓	✓
Germany	✓	✓
Italy	✓	✓
Spain	✓	✓
UK	✓	✓
Canada	✓	✓
Japan	✓	✓

Sources: IMS NBRX Custom HIV Report 08/19/2016 (US), Ipsos Scope Aug 2016 (FR, IT, SP, UK, JP), Lemon Wave 4 - June-July 2016 (GER), IMS Rx Dynamics (CA)
#1 meaning most prescribed

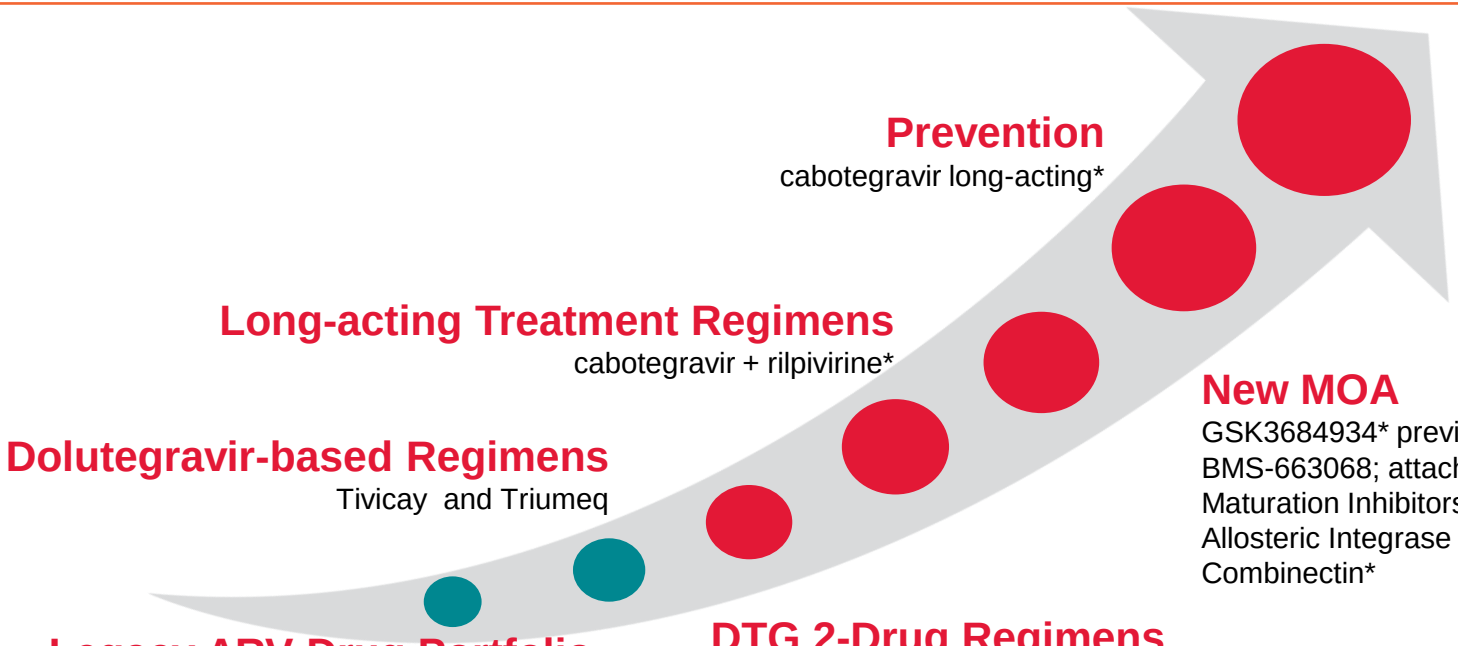
ViiV Healthcare is the only company with increasing growth in HIV over the past 12 months (from +34% to +53%)



Source: IMS Health MAT June 2016

R&D strategy

Committed to innovation and leadership in HIV



Search for Remission and Cure

Prevention
cabotegravir long-acting*

Long-acting Treatment Regimens
cabotegravir + rilpivirine*

Dolutegravir-based Regimens
Tivicay and Triumeq

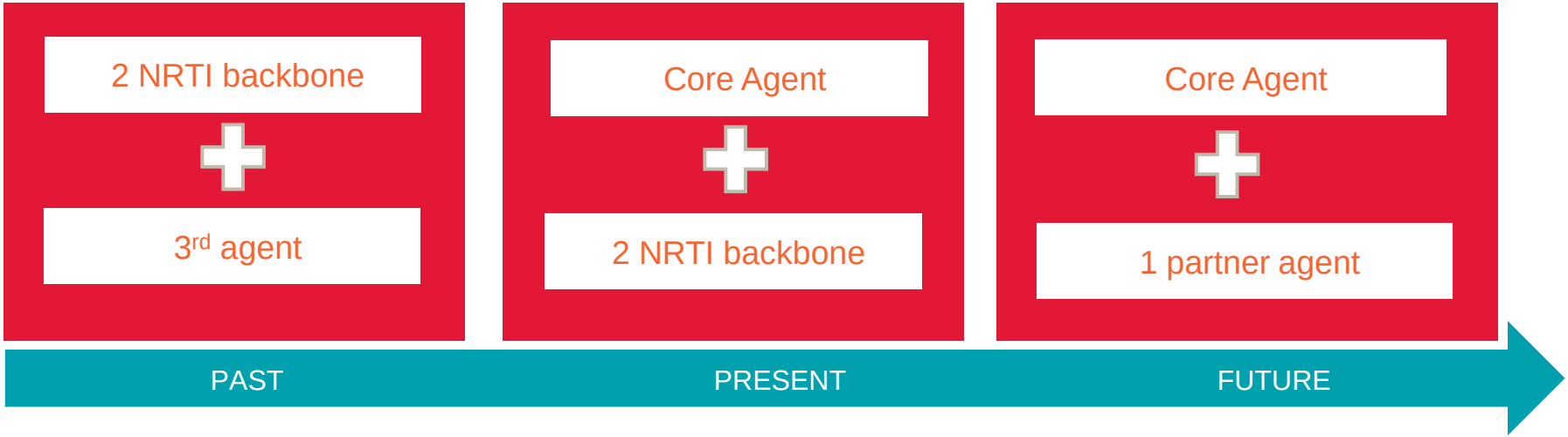
New MOA
GSK3684934* previously BMS-663068; attachment inhibitor
Maturation Inhibitors*
Allosteric Integrase Inhibitors*
Combinectin*

Legacy ARV Drug Portfolio
abacavir/lamivudine, maraviroc & others

DTG 2-Drug Regimens
dolutegravir/rilpivirine*
dolutegravir/lamivudine*

*Note, therapies denoted with an (*) are investigational; safety and efficacy in treating/preventing HIV has not been established

Our belief in the market evolution



Why can 2-drug regimens (2DR) succeed?

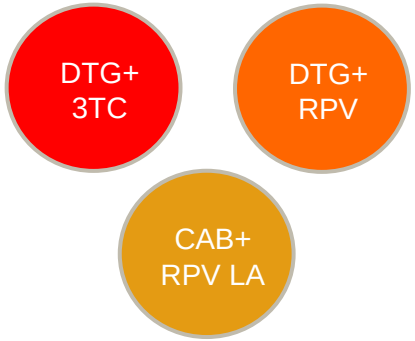
Scientifically viable	DTG/CAB uniquely positioned for 2DRs
	Encouraging clinical data
Unmet medical need	Long term treatments with improved adverse event profile
	Ageing HIV patient population with co-morbidities
Market demand	Persistent interest in 2DR research
	Market receptive to new treatment advances

2DRs have the potential to challenge therapy standard

ViiV Healthcare integrase inhibitors at the forefront of the 2DR paradigm shift

Establish DTG as the leading core agent in the market

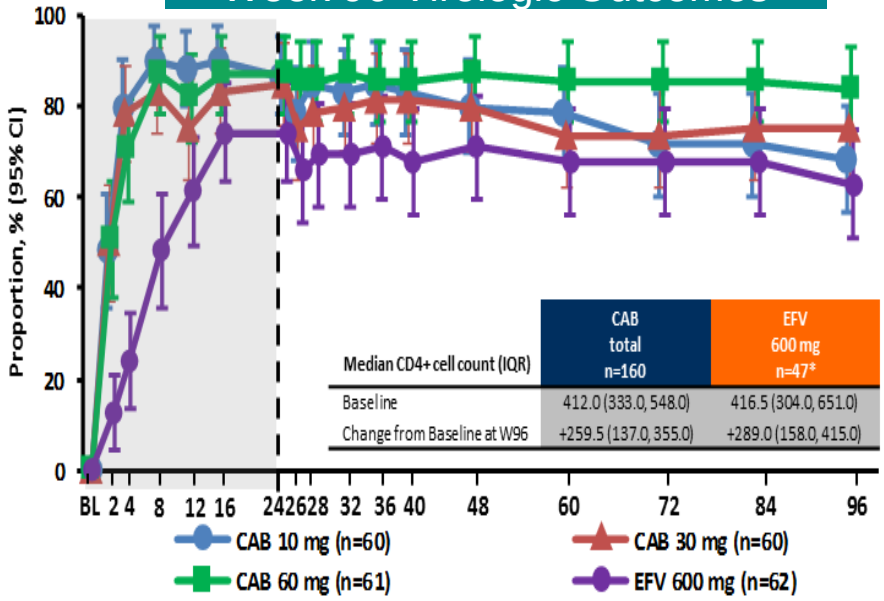
Challenge the three drug paradigm



Cabotegravir LATTE and LATTE-2 Studies

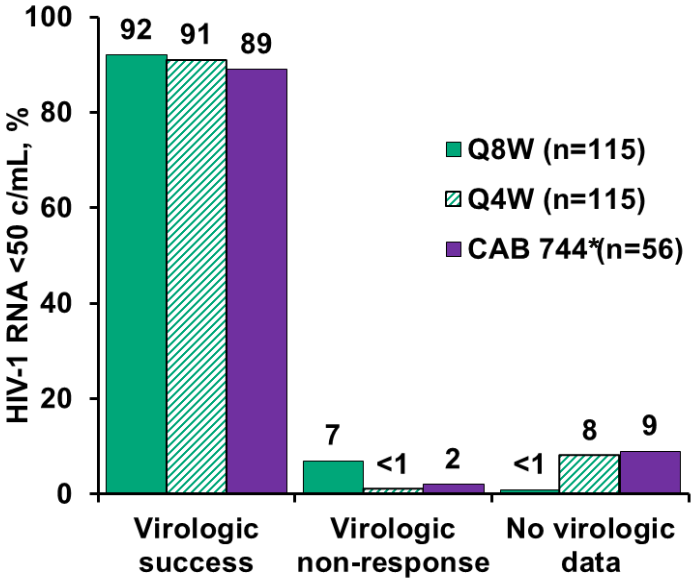
Durable virologic suppression with oral and long-acting (LA) 2DR

LATTE (oral CAB+RPV) Week 96 Virologic Outcomes



Median CD4+ cell count (IQR)	CAB total n=160	EFV 600 mg n=47*
Baseline	412.0 (333.0, 548.0)	416.5 (304.0, 651.0)
Change from Baseline at W96	+259.5 (137.0, 355.0)	+289.0 (158.0, 415.0)

LATTE-2 (LA inj. CAB+RPV) Week 48 Virologic Outcomes



Reference: Margolis et al, Lancet Inf Dis 2015;15(10):1145-1155 Margolis D et al., 21st IAC, abstract THAB0206LB, 2016

*Cabotegravir + abacavir + lamivudine oral

Investigator initiated 2DR studies

GARDEL LPV/r+3TC	**SALT** ATV/r + 3TC	**PADDLE** **ASPIRE** **LAMIDOL** **ACTG 5353** DTG+3TC	**DUALIS** DTG+ DRV/r	**DOLATAV** DTG+ATV/r

LPV/r = lopinavir boosted with ritonavir ; DRV/r = darunavir boosted with ritonavir ; ATV/r = atazanavir boosted with ritonavir

DTG + RPV

Phase III started May 2015

SWORD 1 and 2	
Indication	Maintenance therapy for adult patients with HIV-1 infection
Number of patients	1,000 virologically suppressed patients
Study design	Phase III, randomised, open-label study to assess the safety and efficacy of switching to DTG + RPV versus continuing current antiretroviral regimen
Primary endpoint	The primary endpoint is proportion of patients with plasma HIV-1 RNA <50 copies per milliliter (c/mL) at week 48. Key secondary endpoints include evaluation of the development of viral resistance, measurements of safety and tolerability, and changes in renal, bone and cardiovascular biomarkers
Expected readout date	End of 2016
Expected launch date	H1 2018

DTG + 3TC

Phase III started August 2016

GEMINI 1 and 2	
Indication	Treatment for HIV-1 infection in adults who have not received prior antiretroviral therapy
Number of patients	1,400 naive patients
Study design	Phase III, randomised, multicentre, non-inferiority studies to evaluate the efficacy, safety, and tolerability of DTG + 3TC QD versus DTG + TDF/FTC FDC over 148 weeks
Primary endpoint	The primary endpoint for these studies is non-inferior antiviral activity measured by the proportion of participants with plasma HIV-1 RNA <50 copies/mL (c/ML) at week 48
Expected readout date	2018
Expected launch date	H1 2019

A growing body of evidence to support 2DR

INTERNAL STUDIES

SWORD 1 & 2

GEMINI 1 & 2

ISS STUDIES*

PADDLE 96 weeks

ACTG 5353

ASPIRE

DUALIS

LAMIDOL

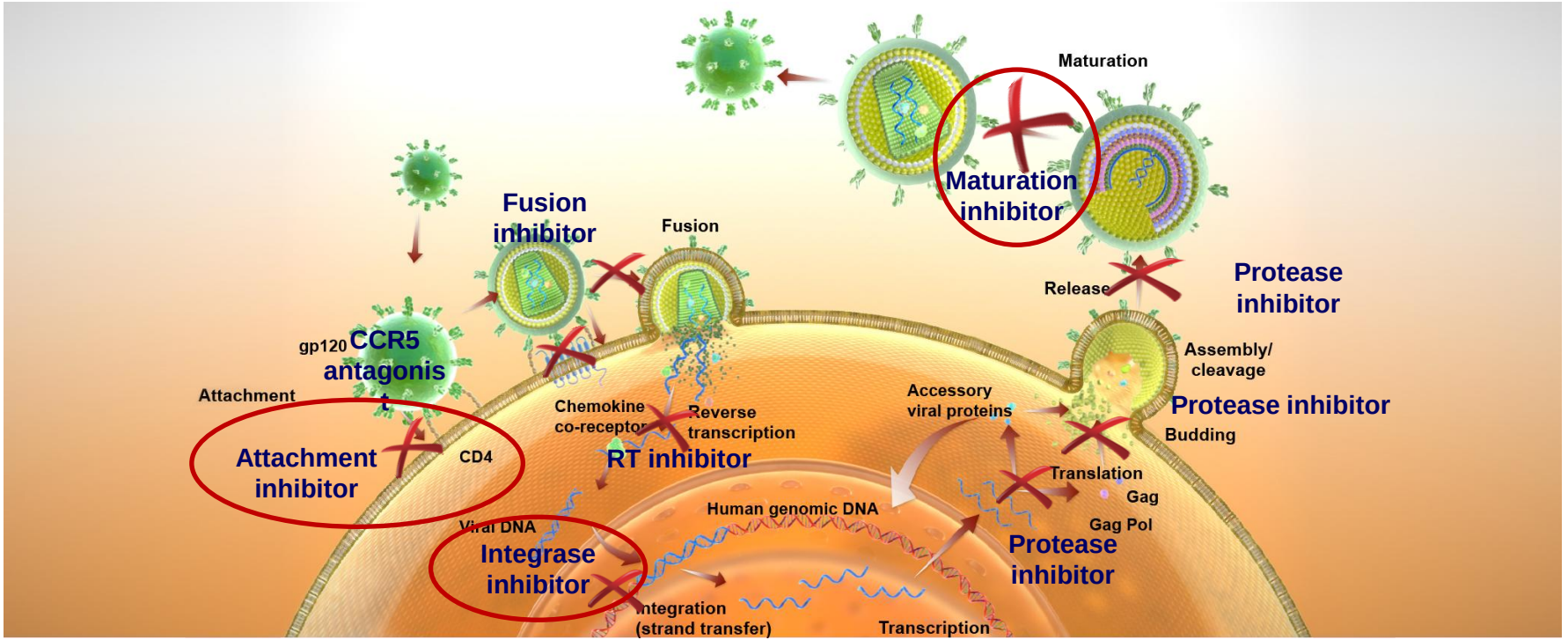
DOLATAV

Forward-looking, dependant on data availability

*ISS abstract are best estimates only and subject to change based on investigator decision

Next available congress presentation = ▲

Why innovation should remain a priority in HIV



Reference: Lataillade et al. CROI 2015, Abstract 114LB

Concluding remarks

Our strategic priorities to ensure near and long term success

Continue to drive share in traditional 3 drug regimens through strength of DTG

Create a new paradigm in oral treatment through 2DR

Create a new paradigm in treatment through long-acting therapy

Continue to lead HIV innovation with research that delivers new mechanisms offering new options for patients most in need

Q&A