



EKMUD 2018 KONGRESİ

9 Mayıs 2018

HIV / AIDS KURSU

Kurs Koordinatörleri: **Fehmi Tabak, Behice Kurtaran**

## Oturum-2

# 2017 Yılında ART'de Neler Değişti?

Dr. Figen Kaptan

İKÇÜ Atatürk Eğitim ve Araştırma Hastanesi

"Değişim, mevcut halin olduğundan farklı bir hale dönüşmesi"  
demektir.



"Her değişim, daima başka değişimlere ihtiyaç gösterir."

Niccola Machieavelli\*

\*DİPLOMAT, YAZAR (1469 - 1527)

Tarih ve politika biliminin kurucusu sayılan Floransa'lı düşünür, devlet adamı, askerî stratejist, şair ve oyun yazarı. İtalyan Rönesans hareketinin en önemli figürlerindedir. En bilinen eseri "Prens"dir.



# Hızlı ART Başlanması

## "HIV Testi ve ART Başlanması Aynı Gün İçinde"

RESEARCH ARTICLE

Same-day HIV testing with initiation of antiretroviral therapy versus standard care for persons living with HIV: A randomized unblinded trial

Standard Grup: HIV testinden 3 hafta sonra ART  
Aynı Gün Grubu: HIV testi ile aynı gün ART

Serena P. Koenig<sup>1,2</sup>,  
Cynthia Riviere<sup>1</sup>, M  
Alexandra Apollon<sup>1</sup>,  
Arlodne Souroutzidi

HAİTİ: Ağustos 2013 – Ekim 2015

Ayaktan izlenen, DSÖ Evre 1 ve CD4  $\leq$ 500 olan hastalar  
Test sonrası 12. ayda takipte kalma ve HIV-RNA  $<$ 50 k/mL

Sonuç	Standard Grup 356 hasta	Aynı Gün Grubu 347 hasta
ART başlama oranı	%92	%100
Test sonrası 12. ayda takipte kalma oranı	%72	%80
Test sonrası 12. ayda takipte kalma ve HIV-RNA $<$ 50 k/mL oranı	%44	%53

RR: 1.21 (95% CI: 1.04, 1.38; p = 0.015)

# Hızlı ART Başlanması

## "HIV Testi ve ART Başlanması Aynı Gün İçinde"

RESEARCH ARTICLE

Same-day HIV testing with initiation of antiretroviral therapy versus standard care for persons living with HIV: A randomised, unblinded trial

Serena P. Koenig<sup>1,2\*</sup>, Nancy Dorvil<sup>1</sup>, Jessy G. Divieux<sup>2</sup>, Bethany Cynthia Riviere<sup>1</sup>, Mikerlyne Faustin<sup>1</sup>, Kerlyne Lavoile<sup>1</sup>, Christian Alexandra Apollon<sup>1</sup>, Limalthe Duverger<sup>1</sup>, Margaret L. McNairy<sup>3,4,5</sup>, Ariadne Souroutzidis<sup>1</sup>, Pierre-Yves Cremieux<sup>2</sup>, Patricia Severn<sup>1</sup>, J



PLOS Medicine 2017

Erken dönem HIV hastalığında uygulanması mümkün ve yararlı olabilir.

Kısıtlılık: Tek merkezli ve kentsel bölge çalışması.

### The Effect of Same-Day Observed Initiation of Antiretroviral Therapy on HIV Viral Load and Treatment Outcomes in a US Public Health Setting. Pilcher CD, et al. JAIDS 2017

Pilot Çalışma, San Francisco, yeni başvuran **86** hasta değerlendirilmiş:

- Akut / Yeni HIV infeksiyonu veya CD4 <200 olan **39** hasta: Hızlı ART Grubu  
→ **37** hastaya 24-saat içinde ART başlanmış
- Standard ART Grubu: **47** hasta
- Virolojik baskılanma (<200 k/mL) süresi Hızlı ART grubunda daha kısa
  - Ort. 1.8 vs 4.3 ay, P= 0.0001
- Takipten çıkma oranları benzer: %10.3 vs %14.9
- "Emniyetli; ART'nin kabul edilebilirliğini olumsuz etkilemiyor."

# İlaç Geliştirilmesinde 30 Yıl



1987

• AZT

1990 -  
2002

- Didanosine
- Zalcitabine
- Stavudine
- Lamivudine
- Saquinavir HG
- Saquinavir SGC
- Indinavir
- Nevirapine
- Ritonavir
- Combivir
- Delavirdine
- Nelfinavir
- Abacavir
- Efavirenz
- Amprenavir
- Didanosine EC
- Lopinavir/r
- Trizivir (FDC)
- Tenofovir DF

2003  
-2008

- Atazanavir
- Emtricitabine
- Enfuvirtide
- Fos-APV
- Truvada (FDC)
- Tipranavir
- Atripla (FDC)
- Darunavir
- Maraviroc
- Raltegravir
- Etravirine

2011- 2016

- Rilpivirine/TDF/FTC
- Nevirapine XR
- Rilpivirine
- Elvitegravir/C/F/TDF
- Dolutegravir
- Cobicistat
- Dolutegravir/ABC/3TC
- Elvitegravir/C/F/TAF
- Darunavir/COBI
- Atazanavir/COBI
- FTC/TAF (10, 25 mg)
- Rilpivirine/TAF/FTC
- *Dolutegravir*

1983

Entry inhibitors

Integrase inhibitors (InSTI)

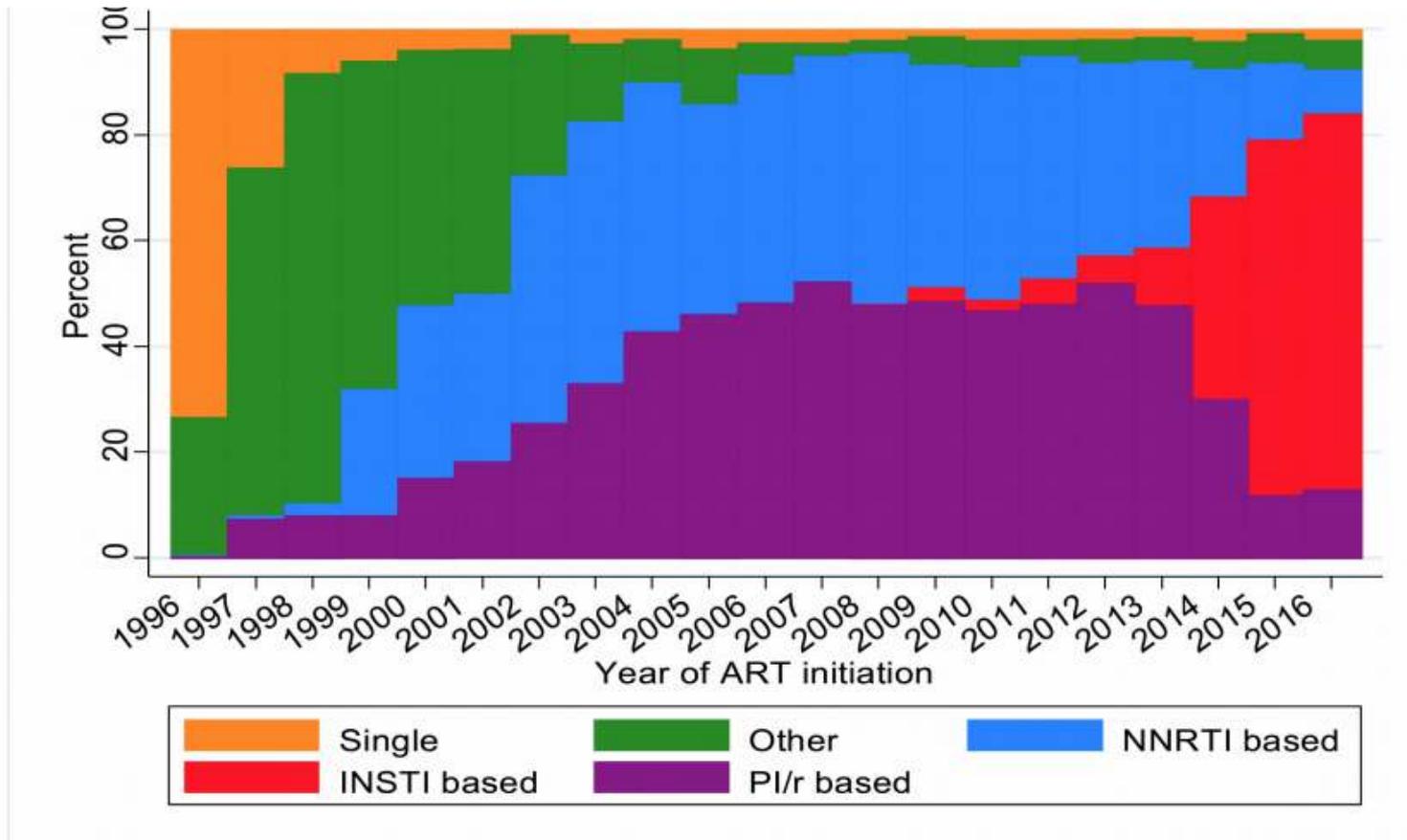
Protease inhibitors (PI)

Fusion inhibitors

RT (non) nucleosidic inhibitors (N-NRTI)

- \*(submitted)
- *Generic versions*

# Klinik Uygulamalar (1996-2017)



# İlaç Geliştirilmesinde 30 Yıl



**1983**  
• AZT

**1987**

**1990 -  
2002**

- Didanosine
- Zalcitabine
- Stavudine
- Lamivudine
- Saquinavir HG
- Saquinavir SGC
- Indinavir
- Nevirapine
- Ritonavir
- Combivir
- Delavirdine
- Nelfinavir
- Abacavir
- Efavirenz
- Amprenavir
- Didanosine EC
- Lopinavir/r
- Trizivir (FDC)
- Tenofovir DF

**2003  
-2008**

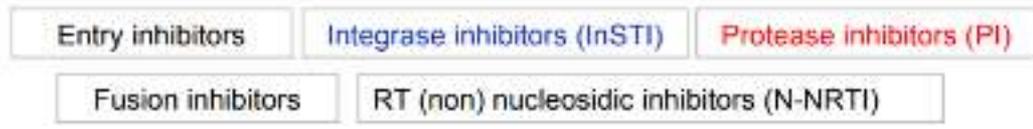
- Atazanavir
- Emtricitabine
- Enfuvirtide
- Fos-APV
- Truvada (FDC)
- Tipranavir
- Atripla (FDC)
- Darunavir
- Maraviroc
- Raltegravir
- Etravirine

**2011- 2016**

- Rilpivirine/TDF/FTC
- Nevirapine XR
- Rilpivirine
- Elvitegravir/C/F/TDF
- Dolutegravir
- Cobicistat
- Dolutegravir/ABC/3TC
- Elvitegravir/C/F/TAF
- Darunavir/COBI
- Atazanavir/COBI
- FTC/TAF (10, 25 mg)
- Rilpivirine/TAF/FTC
- Dolutegravir

**2017-**

- Raltegravir HD
- FTC/TDF
- (D/C/F/TAF)\*
- (Bictegravir/TAF/FTC)\*
- (Dolutegravir/RIL)\*
- (Dolutegravir/3TC/TDF)\*



• \*(submitted)  
• Generic versions

# Başlangıç ART: TDF vs TAF

*J Acquir Immune Defic Syndr*. 2017 Jun 1;75(2):211-218. doi: 10.1097/QAI.0000000000001350.

**Brief Report: Randomized, Double-Blind Comparison of Tenofovir Alafenamide (TAF) vs Tenofovir Disoproxil Fumarate (TDF), Each Coformulated With Elvitegravir, Cobicistat, and Emtricitabine (E/C/F) for Initial HIV-1 Treatment: Week 144 Results.**

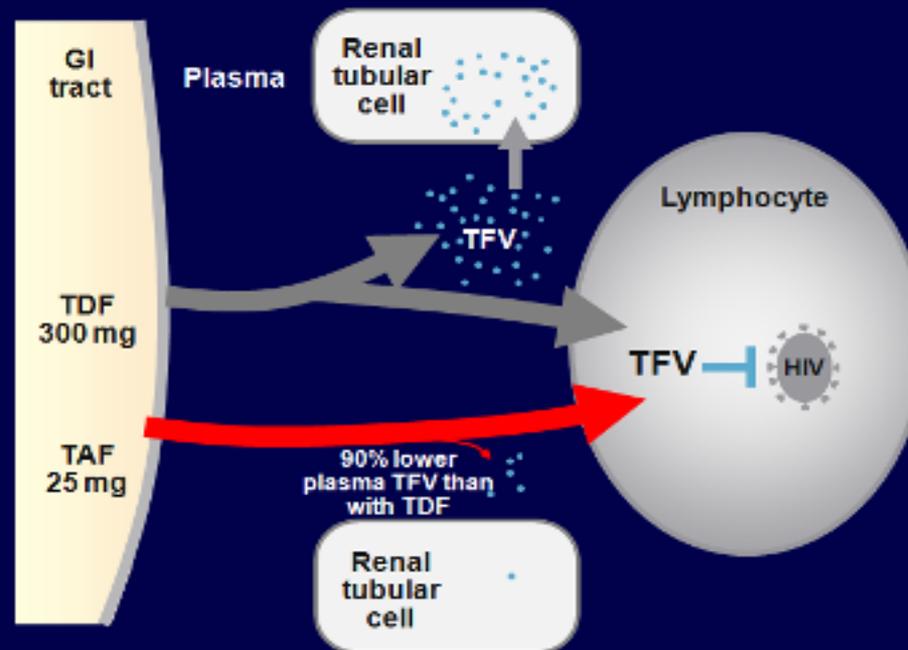
Ambas JR<sup>1</sup>, Thompson M, Sax PE, Haas B, McDonald C, Wohl DA, DeJesus F, Clarke AE, Guo S, Wang H, Callahan C, Plummer A, Chang A, Das M, McCalister S.

Daha önce ART almamış 1733 hasta

**TAF** veya **TDF** Elvitegravir/Cobicistat/Emtricitabin (E/C/F) ile koformüle 144 hafta verileri:

- Virolojik etkinlik (HIV-1 RNA <50 k/mL): TAF daha üstün: **%84.2** vs **%80.0** (Fark %4.2; 95% CI: 0.6% - 7.8%).
- TAF: Kemik mineral yoğunluğu ve renal biyomarkerler üzerine etkisi daha az
- TAF: Renal nedenle tedaviyi bırakma yok (TDF grubunda 12 hasta; P < 0.001); Proksimal tübülopati yok (TDF grubunda 4 hasta).
- TAF: Lipid↑ daha fazla; Total kolesterol/HDL oranında değişiklik yok.
- E/C/F/TDF ile kıyaslandığında, başlangıç tedavisi için E/C/F/TAF etkinlik, kemik ve renal emniyet açısından daha üstün.

# TAF vs TDF: Mechanism of Action



Arribas JR, et al. CROI 2017, Abstract 453.  
Sax PE, et al. Lancet. 2015;385:2606-2615.  
Wohl D, et al. J Acquir Immune Defic Syndr. 2016;72:58-64.

Slide credit: [clinicaloptions.com](http://clinicaloptions.com)

TDF: CrCl <60 mL/dk ise kullanma; <50 ise doz ayarı  
TAF: CrCl <30 mL/dk ise kullanma

# Raltegravir: Yüksek Doz, Günde Tek Doz

## Articles

Raltegravir 1200 mg once daily versus raltegravir 400 mg twice daily, with tenofovir disoproxil fumarate and emtricitabine, for previously untreated HIV-1 infection: a randomised, double-blind, parallel-group, phase 3, non-inferiority trial

Pedro Cahn, MD, Richard Kaplan, MD, Prof Paul E Sax, MD, Kathleen Squires, MD, Prof Jean-Michel Molina, MD, Anchalee

Avihingsanon, MD, Winai F

Vandekerckhove, MD, Pet

Rodgers, MS, Lilly East, Ph

Yen Nguyen, MD, Randi Le

† Members of the ONCEMR

**ONCEMRK: Faz 3, ÇK, randomize (2:1), eşdeğerlilik çalışması**  
**>18 yaş, ART almamış, HIV RNA >1000 k/mL, 139 merkez**  
**26/05/2014 – 05/12/2014 arası hasta alımı**

**Raltegravir + TDF/FTC**

Sonuç

**RAL 1200 mg**  
(600 mg tb 1\*2)  
531 hasta

**RAL 800 mg**  
(400 mg tb 2\*1)  
266 hasta

# "İlk Basamak ART için Raltegravir 1200 mg Günde Tek Dozda" Kullanılabilir.

**ONCEMRK:** Faz 3, ÇK, randomize (2:1), eşdeğerlilik çalışması  
>18 yaş, ART almamış, HIV RNA >1000 k/mL, 139 merkez  
26/05/2014 – 05/12/2014 arası hasta alımı  
Raltegravir + TDF/FTC

48. Hafta	<b>RAL 1200 mg</b> (600 mg tb 1*2) 531 hasta	<b>RAL 800 mg</b> (400 mg tb 2*1) 266 hasta
HIV RNA <40 k/mL	<b>%89</b>	<b>%88</b>
Advers olay oranı	%24	%26
- Ciddi	1 hasta	2 hasta
- İlacı bırakma	Yok	2 hasta
Advers olaylar		
- Bulantı	%7	%7
- Baş ağrısı	%3	%5
- Sersemlik	%2	%3
İlaç ilişkili ölüm	Yok	Yok

Fark: %0.5,  
95% CI  
-4.2 ile 5.2

**96 Hafta:** <40 k/mL

**%81.5 vs %80.1**

Başlangıç CD4 ve  
viral yükten bağımsız

Cahn P, IAS 2017

# Bictegravir, GS-9883

- Yeni, potent etkili, güçlendirici gerektirmeyen HIV-1 INSTI
- İntegrazın zincir transferi aktivitesini inhibe eder; hücreye integrasyonunu önler.
- TAF, FTC, DRV ile in-vitro sinerjik etkili
- In-vitro direnç profili RAL ve EVG'den üstün, DTG ile benzer.
- BIC- tarafından seçilen mutasyon: RAL, DTG ve EVG'e düşük-orta düzeyde çapraz direnç var.

# Bictegravir vs Dolutegravir

Articles

The Lancet HIV 2017

Bictegravir versus dolutegravir, each with emtricitabine and tenofovir alafenamide, for initial treatment of HIV-1 infection: a randomised, double-blind, phase 2 trial

Prof Paul E Sax, MD, Edwin DeJesus, MD, Anthony Mills, MD, Cynthia Brinson, MD, Dr Hal Martin, MD, Erin Quirk

Randomize (2:1), ÇK, Çok Merkezli, Faz 2 Çalışma  
>18 yaş, daha önce ART almamış, HIV-RNA >1000 k/mL, CD4 > 200, eGFR ≥70 mL/dk, FTC ve tenofovire duyarlı HIV-1 genotipi  
Dışlama: Gebelik, HBV, HCV koinfeksiyonu, yeni AIDS tanımlayan durum (30 gün içinde)

24. Hafta	<b>Bictegravir</b> 75 mg TAF/FTC 25/200 mg 65 Hasta	<b>Dolutegravir</b> 50 mg TAF/FTC 25/200 mg 33 Hasta
HIV RNA <50 k/mL	%96.6	%93.9
Advers olay	%85	%67
- İshal	%12	%12
- Bulantı	%8	%12
- İlacı bırakma	1 hasta*	0

Weighted difference  
2.9%,  
95% CI -.5 to 14.2;  
p=0.50

\*Ürtiker, 24. haftadan sonra.

# Bictegravir vs Dolutegravir

Tedavi almamış hastalar,  
Randomize, Faz 3

BIC/FTC/TAF vs DTG + FTC/TAF  
BIC/FTC/TAF vs DTG/ABC/3TC

1490

[Lancet](#). 2017 Nov 4;390(10107):2073-2082. doi: 10.1016/S0140-6736(17)32340-1. Epub 2017 Aug 31.

**Coformulated bictegravir, emtricitabine, and tenofovir alafenamide versus dolutegravir with emtricitabine and tenofovir alafenamide, for initial treatment of HIV-1 infection (GS-US-380-1490): a randomised, double-blind, multicentre, phase 3, non-inferiority trial.**

[Sax PE](#)<sup>1</sup>, [Pozniak A](#)<sup>2</sup>, [Montes ML](#)<sup>3</sup>, [Koenig E](#)<sup>4</sup>, [DeJesus E](#)<sup>5</sup>, [Stellbrink HJ](#)<sup>6</sup>, [Antinori A](#)<sup>7</sup>, [Workowski K](#)<sup>8</sup>, [Slim J](#)<sup>9</sup>, [Reynes J](#)<sup>10</sup>, [Garner W](#)<sup>11</sup>, [Custodio J](#)<sup>11</sup>, [White K](#)<sup>11</sup>, [SenGupta D](#)<sup>12</sup>, [Cheng A](#)<sup>11</sup>, [Quirk E](#)<sup>11</sup>.

Avustralya, Avrupa, Latin Amerika, Kuzey Amerika

1489

[Lancet](#). 2017 Nov 4;390(10107):2063-2072. doi: 10.1016/S0140-6736(17)32299-7. Epub 2017 Aug 31.

**Bictegravir, emtricitabine, and tenofovir alafenamide versus dolutegravir, abacavir, and lamivudine for initial treatment of HIV-1 infection (GS-US-380-1489): a double-blind, multicentre, phase 3, randomised controlled non-inferiority trial.**

[Gallant J](#)<sup>1</sup>, [Lazzarin A](#)<sup>2</sup>, [Mills A](#)<sup>3</sup>, [Orkin C](#)<sup>4</sup>, [Podzamczar D](#)<sup>5</sup>, [Tebas P](#)<sup>6</sup>, [Girard PM](#)<sup>7</sup>, [Brar J](#)<sup>8</sup>, [Daar ES](#)<sup>9</sup>, [Wohl D](#)<sup>10</sup>, [Rockstroh J](#)<sup>11</sup>, [Wei X](#)<sup>12</sup>, [Custodio J](#)<sup>12</sup>, [White K](#)<sup>12</sup>, [Martin H](#)<sup>13</sup>, [Cheng A](#)<sup>12</sup>, [Quirk E](#)<sup>12</sup>.

Avrupa, Latin Amerika, Kuzey Amerika

# Bictegravir vs Dolutegravir

Çalışma	1490 BIC/ FTC/TAF DTG + FTC/TAF		1489 BIC/FTC/TAF DTG/3TC/ABC	
	Bictegravir N=320	Dolutegravir N=325	Bictegravir N=314	Dolutegravir N=315
Sonuç	<b>%89</b>	<b>%93</b>	<b>%92.4</b>	<b>%93</b>
48 hafta HIV RNA <50 k/mL	Fark -%3.5, %95.002 CI -7.9 ile 1.0, p=0.12), eşdeğer etkinlik		Fark -%0.6, %95.002 CI -4.8 ile 3.6; p=0.78), eşdeğer etkinlik	
Direnç gelişimi	Yok	Yok	Yok	Yok
Advers olay - Bulantı - İlacı bırakma	%12* %2	%26* <%1	%26 %10**	%40 %23**

\*p=0.022

\*\*p<0.0001

# Bictegravir

FDA: 7 Şubat 2018'de Bictegravir/FTC/TAF onayı aldı.  
EMA: Sonuç bekleniyor ...

U.S. Department of Health and Human Services Contact Us | En Español

**AIDSinfo** | OFFERING INFORMATION ON HIV/AIDS  
TREATMENT, PREVENTION, AND RESEARCH

Home Guidelines Understanding HIV/AIDS Drugs Clinical Trials Apps

## HIV/AIDS News

Home > HIV/AIDS News > Department of Health and Human Services Adults and Adolescents Antiretroviral Guidelines Panel\* Classifies a Fixed-Dose Combination Product of Bictegravir/Tenofovir Alafenamide/Emtricitabine as One of the Recommended Initial Regimens for Most People with HIV

### Department of Health and Human Services Adults and Adolescents Antiretroviral Guidelines Panel\* Classifies a Fixed-Dose Combination Product of Bictegravir/Tenofovir Alafenamide/Emtricitabine as One of the Recommended Initial Regimens for Most People with HIV

Date: March 27, 2018  
Source: AIDSinfo

**Introduction**

Bictegravir (BIC) is a new HIV-1 integrase strand transfer inhibitor (INSTI) that has been approved by the U.S. Food and Drug Administration for initial therapy in adults with HIV as part of a single-tablet, once-daily regimen that includes tenofovir alafenamide and emtricitabine (BIC/TAF/FTC).<sup>1</sup> BIC/TAF/FTC is not recommended for individuals with creatinine clearance <30 mL/min or with severe liver impairment. It is not approved for persons younger than 18 years of age, and there is insufficient safety information regarding its use in pregnant women.

On the basis of clinical trial results, the Panel on Antiretroviral Guidelines for Adults and Adolescents (the Panel) recommends the use of BIC/TAF/FTC 50/25/200 mg once daily as one of the Recommended Initial Regimens for Most People with HIV (A).

# ART Değişimi

## Güçlendirilmiş Pİ Bazlı Rejim ile Baskılanmış Hastada BIC/FTC/TAF Rejimine Geçilmesi

October 4-8 • San Diego, CA • [www.idweek.org](http://www.idweek.org)



- Register
- Search
- Print Page
- Interested? (email, text) (create your schedule here)
- Abstracts (11)
- Dr. A. Cohen
- Home by Day:
- Tuesday, October 3rd
- Wednesday, October 4th
- Thursday, October 5th
- Friday, October 6th
- Saturday, October 7th
- Sunday, October 8th
- Browse by Track:
- Abstract
- Global ID
- HIV-STD-TB
- Innovative ID
- Neuro ID
- Epidemiology & Infection Control
- Training
- Home by Session Type
- Person Index

### LB-4. Phase 3 Randomized, Controlled Trial of Switching to Fixed-dose Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/TAF) from Boosted Bictegravir/Emtricitabine/Tenofovir Alafenamide (BIC/TAF) from Boosted Protease Inhibitor-based Regimens in Virologically Suppressed Adults: Week 48 Results

Session: Oral Abstract Session 1 (Abstract Oral Abstracts)  
Sunday, October 7, 2017 11:00 AM  
Room: 02

**Background:** Boosted protease inhibitor regimens (PI) are effective and often used in HIV-infected individuals with CD4 counts with adherence, but they can have drug-drug interactions and GI adverse effects. Bictegravir (B), a novel, potent integrase strand transfer inhibitor with a high barrier to resistance and low potential for drug-drug interactions, was coformulated with the second-generation nucleoside reverse transcriptase inhibitor backbone emtricitabine (FTC)/tenofovir alafenamide (TAF) and demonstrated high efficacy and durability in randomized studies in treatment-naïve adults. This randomized Phase 3 study assesses efficacy and safety of switching to BIC/TAF from a multi-label regimen containing a PI.

**Methods:** HIV-infected adults suppressed on regimens of boosted atazanavir (ATV) or darunavir (DRV) + abacavir/emtricitabine (ABC/FTC) or FTC/emtricitabine/dolutegravir (DTG) were randomized 1:1 to continue their current PI regimen or switch to open label coformulated BIC/TAF (500/250/25 mg) once daily. Primary endpoint was proportion with HIV-1 RNA <50 copies/mL (copies/mL) (TVA endpoint). Noninferiority was assessed through 95.00% confidence interval (CI) using a margin of 4%. Secondary endpoints included proportion with HIV-1 RNA <100 copies/mL and adverse events (AEs).

**Results:** 677 participants were randomized and treated with BIC/TAF (n=292) or current PI regimens (n=385); 11% women, 25% Black, median age 48 yrs. Most were receiving a PI with FTC/DTG (55%), all remaining ABC/FTC, switching to BIC/TAF was restricted to containing 1 PI with 4.7% in each group having HIV-1 RNA <50 copies/mL (difference: 0.0% [95.00% CI: -0.5% to 0.5%], p=1.00). The proportion with HIV-1 RNA <100 copies/mL was 22.1% in BIC/TAF vs 26.5% in PI. No participants on BIC/TAF developed resistance to any drugs. One participant on DRV/emtricitabine + ABC/FTC developed a treatment-emergent L74V mutation. Incidence of grade 3 or 4 AEs was similar (BIC/TAF 4%, PI regimens 6%). No fatal adverse events or hospitalization cases occurred with BIC/TAF.

**Conclusion:** After switching to BIC/TAF from a boosted PI maintained high rates of virologic suppression without resistance. BIC/TAF was safe and well tolerated.

Eric Daar, MD<sup>1</sup>, Erwin Dominguez, MD<sup>2</sup>, Peter Rizzardio, MD<sup>3</sup>, Gordon Croxall, MD<sup>4</sup>, Gordon Guyatt, MD<sup>5</sup>, Catherine Croxall, MD<sup>6</sup>, Louise K. Burrows, MD<sup>7</sup>, Tracy M. Hahn, MD, MPH<sup>8</sup>, Peter Higgs, MD<sup>9</sup>



# ART Değişimi

## Güçlendirilmiş Pİ Bazlı Rejim ile Baskılanmış Hastada, BIC/FTC/TAF Rejimine Geçilmesi

577 hasta\*

- Güçlendirilmiş Pİ bazlı rejim
- Virolojik olarak baskılanmış
- Pİ: ATV, DRV
- Omurga:  
%85 FTC/TAF  
%15 3TC/ABC

BIC/FTC/TAF  
N=290

48. Hafta HIV RNA

- >50 k/mL %1.7\*
- <50 k/mL %92.1
- Direnç yok

Aynı rejim ile  
devam  
N=287

- >50 k/mL %1.7\*
- <50 k/mL %88.9
- n=1 → L74V

\*Fark -0.0%;  
%95.002 CI  
-2.5% to 2.5%,  
p=1.00

Evre 3-4 advers olay:

**%4 vs %6.**

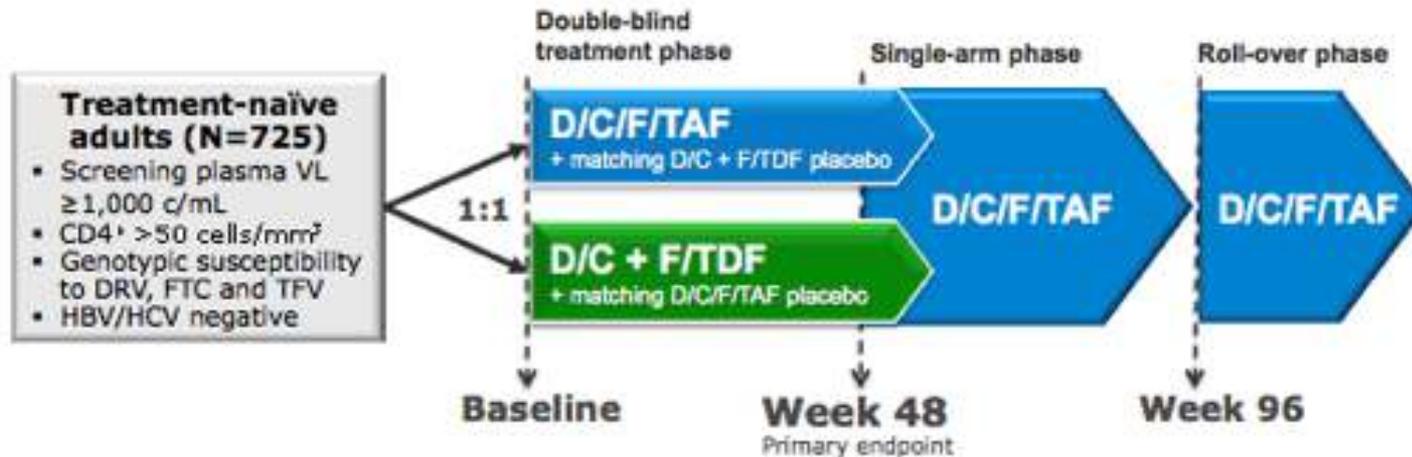
# Bictegravir

- CYP 3A4 ve UGT 1A1 substratıdır.
- Rifamisinler BIC ve TAF serum düzeyini ↓'tır.
- Bazı antikonvülzanlar ve St John's wort ile kullanılmamalı
- OAT-2 ve MATE-1 ilaç transport sistemini inhibe eder; bazı ilaçların serum düzeyleri ↑ (Antiaritmik dofetilid ile kontrendike).
- CYP 3A4: İndüklemey / inhibe etmez.
- Polivalan katyonlar ile emilimi ↓
- Kreatinin tübüler sekresyonunu ↓'tır, glomerüler fonksiyon etkilenmez.

# Darunavir/Cobicistat/Emtricitabin/TAF

## Güçlendirilmiş PI İçeren Tek Tablet Rejimi

**AMBER: Faz 3, Uluslar arası, çok merkezli RÇK**



**Primary objective:** Assess non-inferiority of D/C/F/TAF vs D/C + F/TDF by proportion of patients with VL  $< 50$  c/mL at 48 weeks (NI margin 10%; FDA-Snapshot algorithm)<sup>†</sup>

Randomisation stratified by screening VL  $\leq / > 100,000$  c/mL and CD4<sup>+</sup>  $< / \geq 200$  cells/mm<sup>3</sup>

\*121 sites in USA, Canada, Belgium, France, Germany, Italy, Poland, Russia, Spain, UK

<sup>†</sup>Lower limit of 95% CI of stratified Mantel-Haenszel difference between D/C/F/TAF and control  $> -10\%$  AMBER (NCT02431247)

\*121 sites in USA, Canada, Belgium, France, Germany, Italy, Poland, Russia, Spain, UK

<sup>†</sup>Lower limit of 95% CI of stratified Mantel-Haenszel difference between D/C/F/TAF and control  $> -10\%$

# Darunavir/Cobicistat/Emtricitabin/TAF

Güçlendirilmiş PI İçeren Tek Tablet Rejimi

**AMBER: Faz 3, Uluslar arası, çok merkezli RÇK**

48. Hafta	DRV/c/F/TAF 362 hasta	DRV/c + F/TDF 363 hasta
HIV RNA <50 k/mL	%91.4	%88.4
Virolojik başarısızlık	%4.4	%3.3
Advers olay		
-İlacı bırakma	%1.9	%4.4
-Ciddi	%4.7	%5.8
-Evre 3-4	%5.2	%6.1
eGFR ↓	Daha az*	-
KMY ↓	Daha az*	-
T Kol, LDL, TG ↑	-	Daha az*

Benzer etkinlik

Eylül 2017  
Avrupa'da onaylandı



INSTI  
+3TC

PI/r  
+3TC

# 2-ilaç ile İlk Basamak ART

## Dolutegravir + Lamivudin

Çalışma	Sonuç
<b>1. ACTG 5353:</b> Faz 2;120 hasta INSTI dahil direnç yok HBV koinfek yok HIV-RNA > 100.000 k/mL dahil 24. Hafta sonuçları	108 (%90): HIV RNA <50 k/mL 7 (%6) veri yok 5 (%4): HIV RNA >50 k/mL: - 3 hastada protokol olarak tanımlanmış virolojik başarısızlık; DTG serum düzeyi düşük
<b>2. PADDLE:</b> 20 hasta	8. Hafta: Tümünde HIV RNA <50 k/mL. 1 hasta: 24 haftadan sonra viral yükte ↑ - Takiben baskılanmış. Transkriptaz bölgesinde direnç yok. IN ve proteaz amplifiye edilememiş. 1 hasta: Suisid (24. hf)
<b>3. GEMINI I VE II:</b> RKÇ, 700 hasta DTG + 3TC vs DTG + TDF/FTC	Sonuç bekleniyor ...

1. Taiwo BO, et al. IAS 2017. Abstract MOAB0107LB.

2. Cahn P, JIAS 2017

# 2-ilaç ile İlk Basamak ART

## ANDES: DRV/r + 3TC vs DRV/r + TDF/3TC

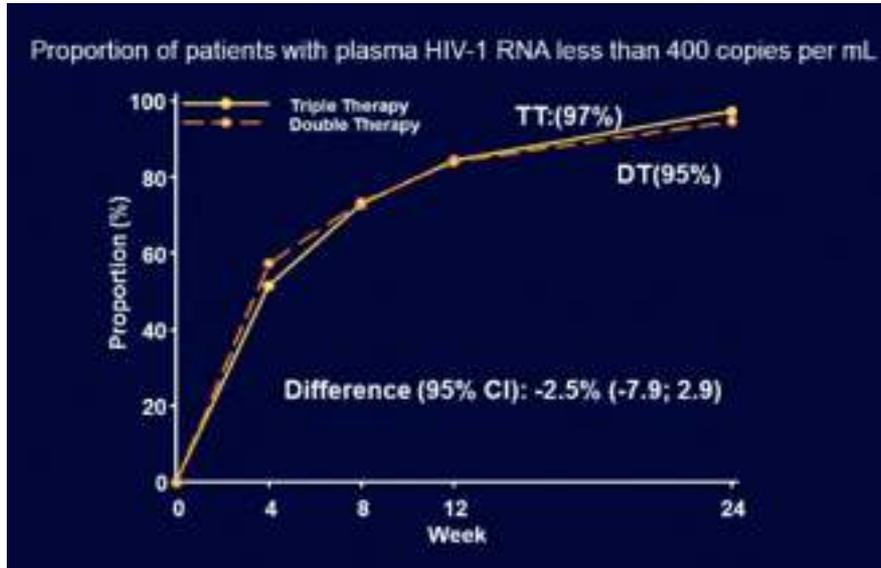
Faz IV randomize çalışma. N=145 hasta. %24 hastada başlangıç HIV-RNA >100,000 k/mL.

24. Hafta <400 k/mL, ITT; %	DRV/r + 3TC N = 75	DRV/r + TDF/3TC N = 70
Tüm hastalar	95	97
Başlangıç HIV-RNA >100,000 k/mL	100	100

Başlangıç HIV-RNA >100,000 k/mL  
- DRV/r + 3TC: n = 20  
- DRV/r + TDF/3TC: n = 15

DRV/r + TDF/3TC kolunda  
1 virolojik başarısızlık\*

İkili tedavi grubunda  
virolojik başarısızlık yok.



\*24. hafta ve sonrasında HIV-1 RNA  $\geq$  400 k/mL veya 48. haftada sonra HIV-1 RNA  $\geq$  50 k/mL.



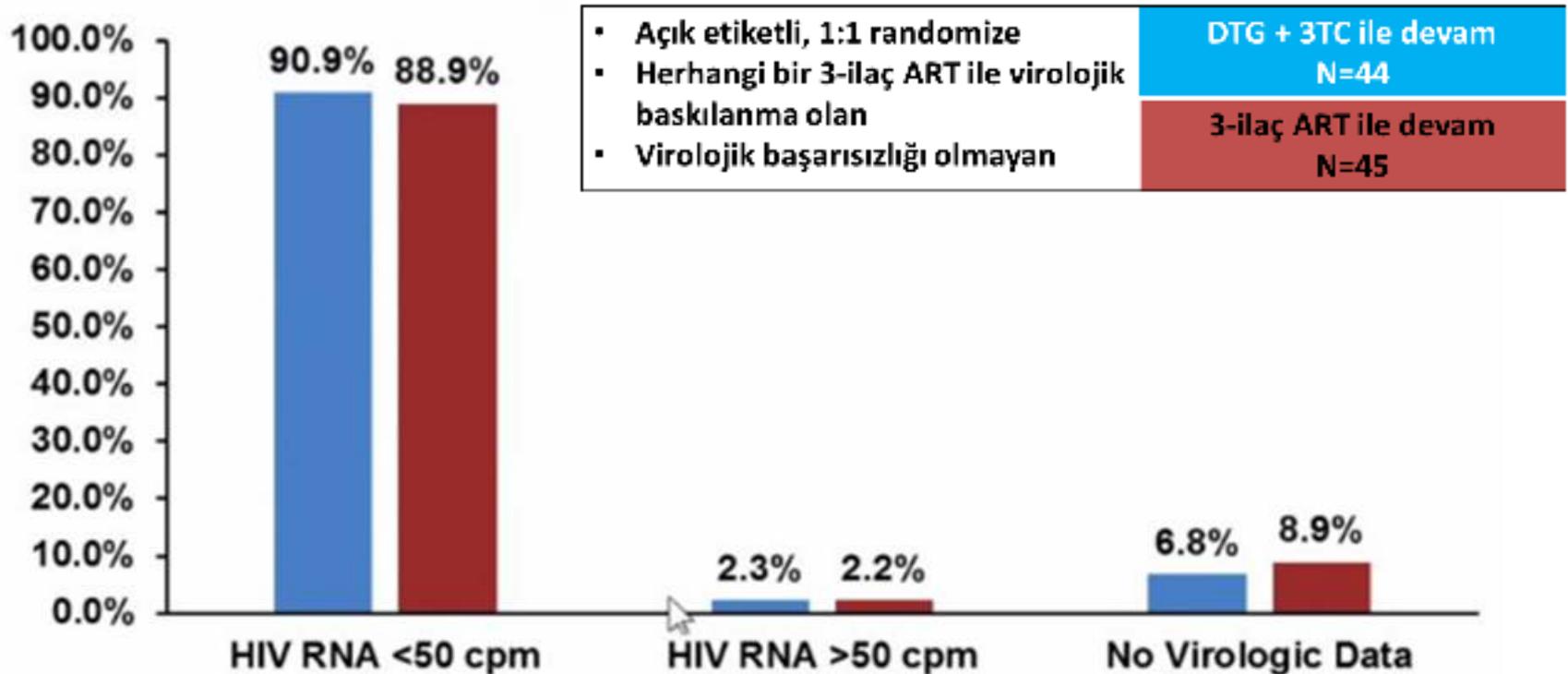
## **Virolojik Olarak Baskılı Hastada 2-ilaç ile ART'ye Devam Edilmesi**

DTG + 3TC

PI/r + 3TC

DTG + RPV

# Virolojik Olarak Baskılı Hastalarda 2-ilaç ile Devam Rejimi: DTG + 3TC: ASPIRE



N	40	40	1	1	3	4
On Study	44	45	44	45	44	45

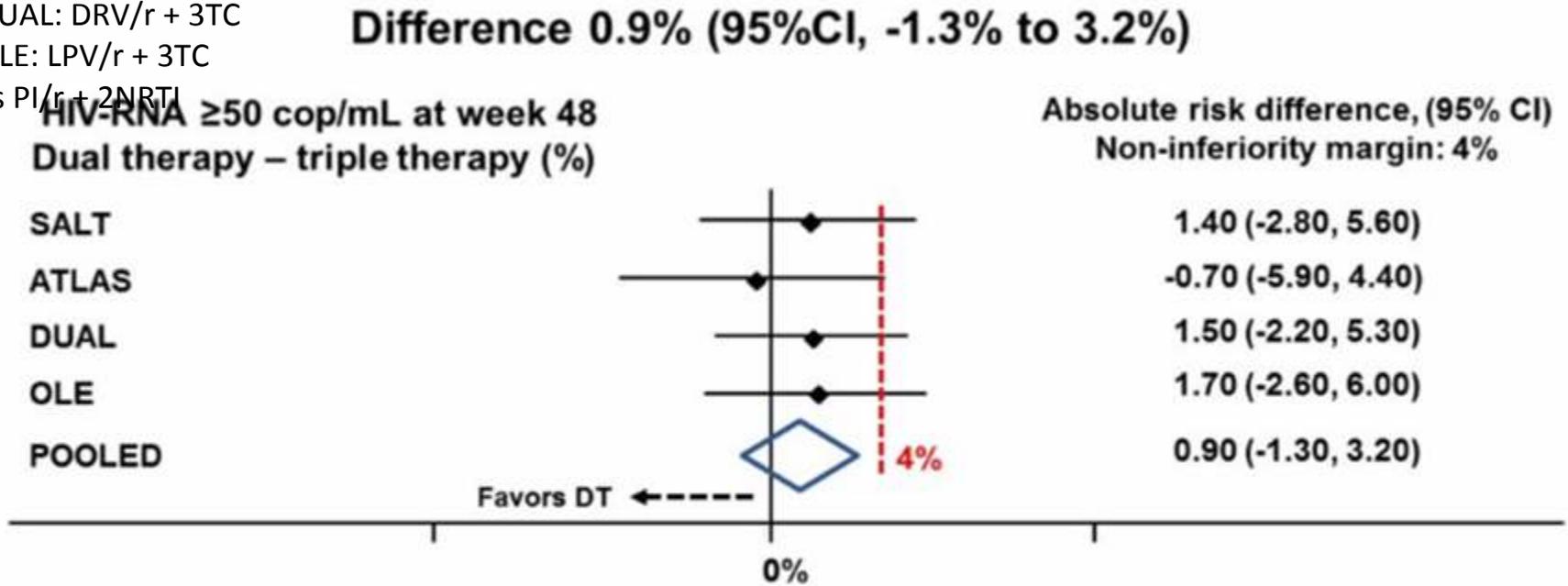
# Virolojik Olarak Baskılı Hastalarda 2-ilaç ile Devam Rejimi: PI/r ve 3TC: Meta-analiz

SALT ve ATLAS: ATV/r + 3TC

DUAL: DRV/r + 3TC

OLE: LPV/r + 3TC

vs PI/r + 2NRTI



48. hafta: HIV-RNA  $>50$  k/mL:

- İkili Tedavi grubunda %4, Üçlü Tedavi grubunda %3.04
- Fark, cinsiyet, HCV durumu veya kullanılan PI cinsinden etkilenmiyor.

Efficacy, safety, and tolerability of **dolutegravir-rilpivirine** for the **maintenance** of virological suppression in adults with HIV-1: phase 3, randomised, non-inferiority **SWORD-1** and **SWORD-2** studies. Llibre JM, et al. Lancet 2018

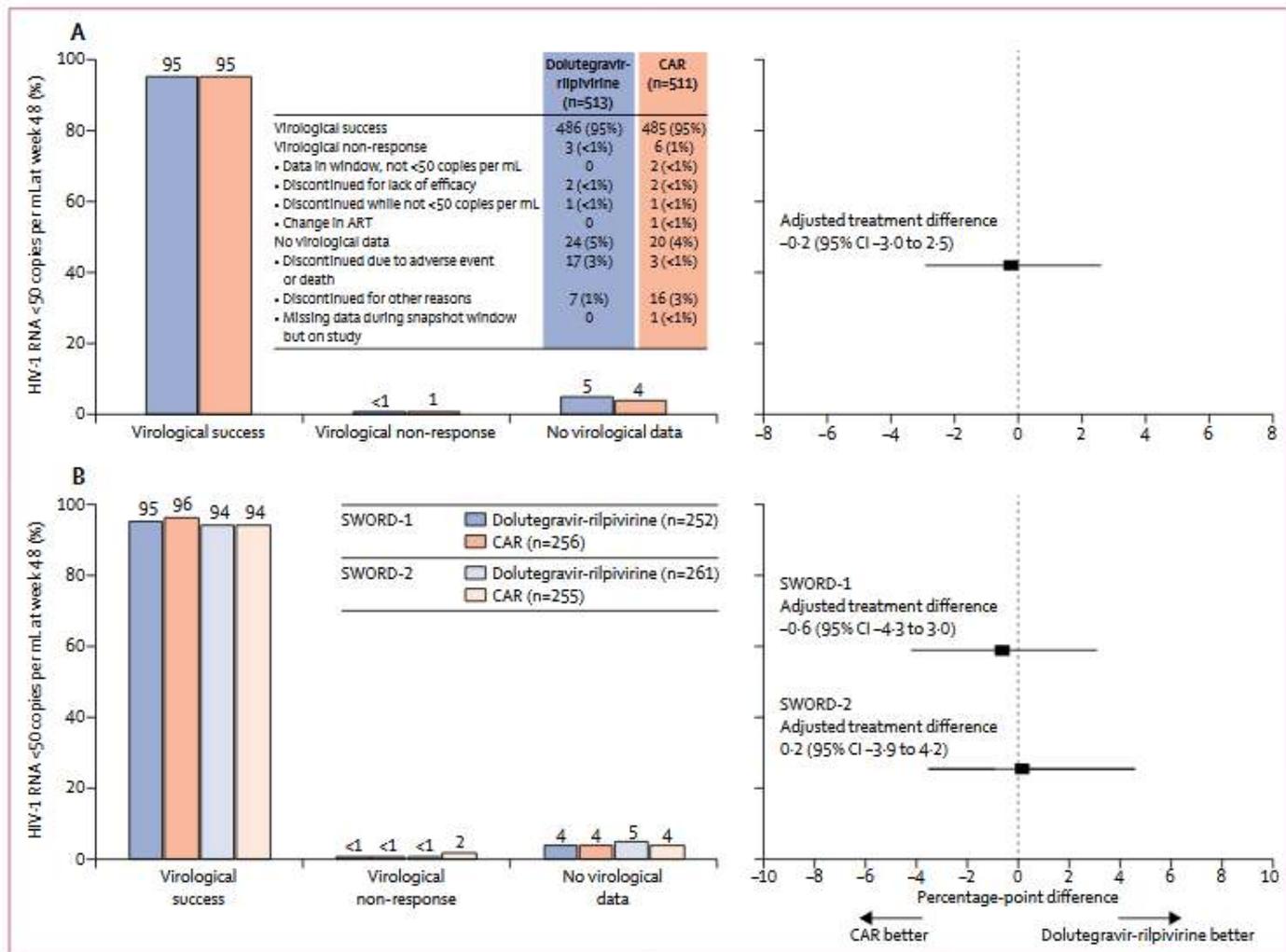


Figure 2: Virological outcomes at week 48 (US Food and Drug Administration snapshot) in the pooled SWORD-1 and SWORD-2 intention-to-treat study population (A) and separated by study (B)

Treatment difference was adjusted for age and baseline third-agent class. CAR=current antiretroviral regimen. ART=antiretroviral therapy.

# Advers Olay



- **Abakavir:** Kardiyovasküler hastalık riski: Konsensus yok
- **Efavirenz:** QTc intervalinde uzama
- **DRV/r:** Kümülatif DRV/r kullanımı ile KVH riski artmakta.\*
  - Risk artışı az; ancak tedrici olarak artmakta (bağımsız ilişkili)

<b>D:A:D: 35,711 hasta</b> Ortanca 7.0 yıl izlem (IQR 6.3-7.1)	<b>1,157 KVH saptanmış</b> IR 5.3/1000 Hasta Yılı İzlem [%95%CI 5.0-5.6]
<b>DRV/r</b> maruziyeti yok >6 yıl maruziyet	<b>4.91</b> /1000 HYİ [4.59-5.23] <b>13.67</b> /1000 HYİ [8.51-18.82] IRR <b>1.59</b> [1.33-1.91] /5 yıl
<b>ATV/r</b> maruziyeti yok >6 yıl maruziyet	<b>5.03</b> [4.69-5.37] <b>6.68</b> /1000 HYİ [5.02-8.35] IRR <b>1.03</b> [0.90-1.18]/5 yıl



\*Lene Ryom,  
CROI 2017,  
Abstract 128LB

# Advers Olay



## Psychiatric Symptoms in Patients Receiving Dolutegravir

*Anna Fettiplace, PhD, MBChB,\* Chris Stainsby, BSc Hons,\* Alan Wireton, MD,† Naomi Givens, MSc,\* Sarah Puccini, BSc Hons,\* Vani Vannappagari, PhD,‡ Ricky Hsu, MD,§ Jennifer Fusco, BS,|| Romina Quercia, MD, PhD,‡ Michael Aboud, MBChB, MRCP,‡ and Lloyd Curtis, MA, MRCP\**

DTG ilişkili Psikiyatrik Semptom'lar (insomnia, anksiyete, depresyon, suisid) araştırılmış

1. Observational Pharmaco-Epidemiology Research & Analysis: **OPERA** kohort

5 randomize klinik çalışma (3 çalışma çift-kör)

2. ViiV Healthcare: Bildirilen olgular

- DTG alanlarda daha düşük veya karşılaştırılan ilaçla (ATV, DRV, EFV, RAL) benzer oranda.
- İnsomnia en sık. En yüksek oranlar SINGLE çalışmasında (DTG %17, efavirenz %12); diğer çalışmalarda daha düşük oranda (DTG: %3–8 vs karşılaştırma ilacı:% 3–7).
- İlacı bırakma: EFV alanlarda daha fazla.
- OPERA kohortunda başlangıçta PS öyküsü EFV grubunda en az (<DTG, RAL, DRV).
- Bazal farklılığa rağmen tedavi sırasında PS prevalansı ve insidansı 4 ilaçta benzer.
- PS nedeniyle ilacı bırakma DTG (%0–0.6) ile en düşük; RAL (%0–2.5) ile en yüksek.
- DTG-alan hastalarda PS'lar az sıklıkta görülür, nadiren ilacın kesilmesini gerektirir.  
J Acquir Immune Defic Syndr 2017;74:423–431

**TABLE 2.** Characteristics of PSs\* in the OPERA Cohort

	ART Regimens			
	DTG-Containing (n = 2029)	EFV-Containing (n = 1608)	RAL-Containing (n = 963)	DRV-Containing (n = 1747)
History of diagnoses at baseline, n (%)				
Insomnia	291 (14.3)	124 (7.7)	133 (13.8)	173 (9.9)
Anxiety	345 (17.0)	148 (9.2)	145 (15.1)	216 (12.4)
Depression	656 (32.3)	261 (16.2)	282 (29.3)	465 (26.6)
Suicidality	9 (0.4)	3 (0.2)	4 (0.4)	8 (0.5)
Prevalence of diagnoses during follow-up, n (%)				
Insomnia	157 (7.7)	139 (8.6)	82 (8.5)	96 (5.5)
Discontinued	13 (0.6)	19 (1.2)	7 (0.7)	9 (0.5)
Anxiety	134 (6.6)	110 (6.8)	98 (10.2)	132 (7.6)
Discontinued	7 (0.3)	13 (0.8)	14 (1.5)	20 (1.1)
Depression	205 (10.1)	153 (9.5)	136 (14.1)	204 (11.7)
Discontinued	13 (0.6)	25 (1.6)	24 (2.5)	19 (1.1)
Suicidality	3 (0.1)	3 (0.2)	2 (0.2)	1 (0.1)
Discontinued	0	1 (0.1)	0	0
Incidence of new diagnoses during follow-up, n (%)				
Insomnia	110 (5.4)	110 (6.8)	55 (5.7)	71 (4.1)
Discontinued	6 (0.3)	15 (0.9)	6 (0.6)	8 (0.5)
Anxiety	98 (4.8)	89 (5.5)	64 (6.6)	93 (5.3)
Discontinued	3 (0.1)	10 (0.6)	8 (0.8)	12 (0.7)
Depression	98 (4.8)	104 (6.5)	69 (7.2)	109 (6.2)
Discontinued	5 (0.2)	17 (1.1)	7 (0.7)	12 (0.7)
Suicidality	3 (0.1)	3 (0.2)	2 (0.2)	1 (0.1)
Discontinued	0	1 (0.1)	0	0

\*History of PSs (insomnia, anxiety, depression, and suicidality) was determined at the baseline date, defined as the date of regimen prescription. Prevalence of PSs during follow-up includes PS diagnoses that occurred after baseline, regardless of whether the patient had the diagnosis before baseline. Incidence of new PSs during follow-up includes only new PS diagnoses that occurred in patients without a history of the specified PS at or before baseline. Discontinued indicates discontinuation of drug due to the specified PS. The PS category insomnia included insomnia, initial insomnia, middle insomnia, and terminal insomnia; anxiety included anxiety and anxiety disorder; depression included depression, major depression, depressed mood, depressive symptom, and bipolar disorder; suicidality included suicide attempt, suicidal ideation, completed suicide, intentional self-injury, and self-injurious behavior.

EFV, efavirenz; OPERA, Observational Pharmaco-Epidemiology Research & Analysis.

## Recommended X

### Recommended Initial Regimens for Most People with HIV

Recommended regimens are those with demonstrated durable virologic efficacy, favorable tolerability and toxicity profiles, and ease of use.

#### INSTI + 2 NRTIs:

- DTG/ABC/3TC<sup>a</sup> (AI)—if HLA-B\*5701 negative
- DTG + tenofovir<sup>b</sup>/FTC<sup>a</sup> (AI for both TAF/FTC and TDF/FTC)
- EVG/c/tenofovir<sup>b</sup>/FTC (AI for both TAF/FTC and TDF/FTC)
- RAL<sup>c</sup> + tenofovir<sup>b</sup>/FTC<sup>a</sup> (AI for TDF/FTC, All for TAF/FTC)

On March 28, the Department of Health and Human Services Guidelines issued an update to the HIV treatment guidelines, with a focus on the recent approval of ledipasvir/TAF/FTC.

ledipasvir/FTC is an effective and well-tolerated INSTI-based regimen for initial therapy in adults with HIV, with efficacy that is noninferior to DTG/ABC/3TC and DTG plus TAF/FTC for up to 48 weeks. On the basis of these clinical trial results, the Panel identifies ledipasvir/FTC as one of the Recommended Initial Regimens for Most Adults with HIV.

## Alternative X

### Recommended Initial Regimens in Certain Clinical Situations

These regimens are effective and tolerable, but have some disadvantages when compared with the regimens listed above, or have less supporting data from randomized clinical trials. However, in certain clinical situations, one of these regimens may be preferred (see [Table Z](#) for examples).

#### Boosted PI + 2 NRTIs: (In general, boosted DRV is preferred over boosted ATV)

- (DRV/c or DRV/r) + tenofovir<sup>b</sup>/FTC<sup>a</sup> (AI for DRV/r and All for DRV/c)
- (ATV/c or ATV/r) + tenofovir<sup>b</sup>/FTC<sup>a</sup> (BI)
- (DRV/c or DRV/r) + ABC/3TC<sup>a</sup> —if HLA-B\*5701–negative (BII)
- (ATV/c or ATV/r) + ABC/3TC<sup>a</sup> —if HLA-B\*5701–negative and HIV RNA <100,000 copies/mL (CI for ATV/r and CIII for ATV/c)

#### NNRTI + 2 NRTIs:

- EFV + tenofovir<sup>b</sup>/FTC<sup>a</sup> (BI for EFV/TDF/FTC and BII for EFV + TAF/FTC)
- RPV/tenofovir<sup>b</sup>/FTC<sup>a</sup> (BI)—if HIV RNA <100,000 copies/mL and CD4 >200 cells/mm<sup>3</sup>

#### INSTI + 2 NRTIs:

- RAL<sup>c</sup> + ABC/3TC<sup>a</sup> (CII)—if HLA-B\*5701–negative and HIV RNA < 100,000 copies/mL

#### Regimens to Consider when ABC, TAF, and TDF Cannot be Used:<sup>d</sup>

- DRV/r + RAL (BID) (CI)—if HIV RNA <100,000 copies/mL and CD4 >200 cells/mm<sup>3</sup>
- LPV/r + 3TC<sup>a</sup> (BID)<sup>e</sup> (CI)



Lopinavir/Ritonavir

Darunavir: Kardiyovasküler hastalık

ART deęişimi endikasyonları:

- HCV tedavisi
- Kemik, böbrek üzerine toksisite

ART deęişimi: DTG + RPV ile dual tedavi

Gebelik ile ilgili olarak:

- Efavirenz ile ilgili uyarı kaldırıldı
- TAF, Cobicistat kullanılmamalı

People first,  
always!

## People-first Language

- X HIV infected person
- ✓ Person with HIV

