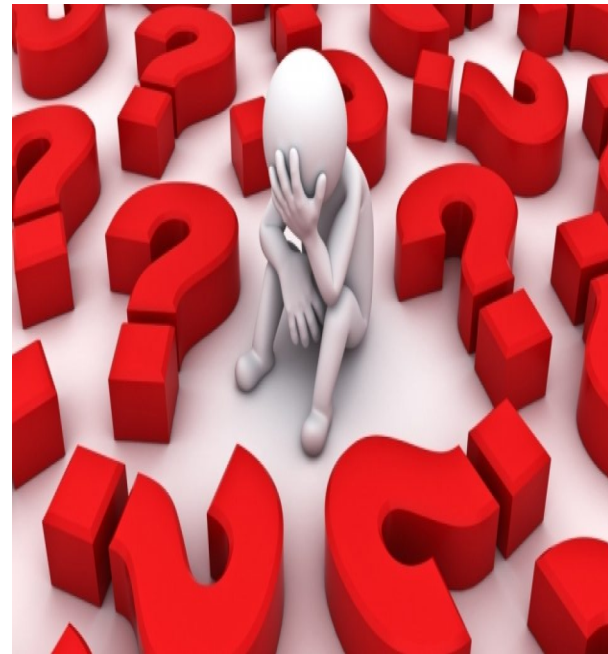


**Doravirine versus ritonavir-boosted darunavir in antiretroviral-naive adults HIV-1 (DRIVE-FORWARD): 48- week results of a randomised, double-blind, phase 3, non inferiority trial**

*Lancet HIV* 2018; 5: e211–20

# Pongámonos en contexto (I)

- ITINAN:
  - EFV: SNC, rash, lípidos, ¿ideación suicida?
  - RPV: eficacia, comida, IBP
  - NVP: toxicidad dermatológica y hepática, warning CD4
  - ETV: BID, no aprobada en naïve



# Pongámonos en contexto (II)

<b>REGIMEN</b>	<b>nb</b>	<b>%</b>
3TC ABC DTG	132	39
DTG ETC TDF	78	23
DRV ETC RTV TDF	25	7
ETC RPV TDF	22	7
ETC EVG TDF	19	6
EFV ETC TDF	16	5

# Pongámonos en contexto (III)

		Virological/ Immunological	TOXICITY					Patient wish	Physician decision	Simplification	Other	No. of Regimen*
			GI	Liver	Kidney	CNS	Other					
2015	DRV ETC RTV TDF	9	14	1	22	3	26	36	69	75	45	289
2015	EFV ETC TDF	2	1	4	13	108	25	12	58	20	45	286
2015	DTG ETC TDF	1	3	5	13	6	7	21	29	101	18	202
2015	ATV ETC TDF	5	2	2	24	1	17	20	39	45	23	169
2015	3TC ABC DRV RTV	1	5	0	0	0	19	14	28	67	13	145

3.9.6: The five frequently discontinued regimens in 2015, by reason, number<sup>0</sup>

# Pongámonos en contexto (y IV)



- Doravirina:
  - Alta potencia ( $IC_{50}$  12 nM en WT)
  - Activo con mutaciones clásicas ITINAN (103, 138, 181)
  - Sustrato de citocromo P450
  - No afectado por ingesta

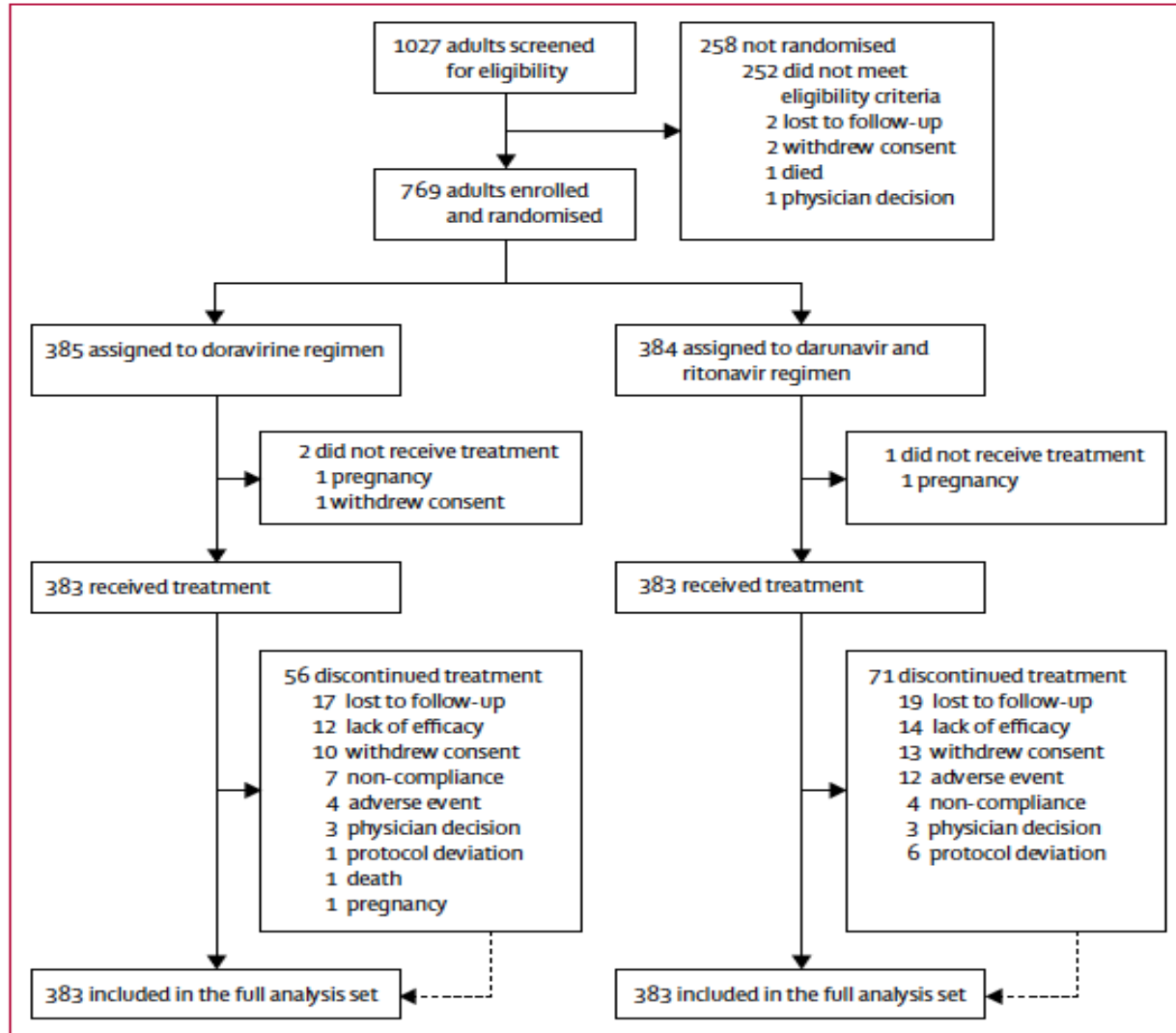
# Métodos (I)

- Fase 3, aleatorizado 1:1, controlado con placebo, doble ciego, de no inferioridad
- 2 ITIAN +:
  - DRV-rtv QD
  - DOR (100 mg)
- ITIAN:
  - TDF+FTC
  - ABC+3TC
  - Libre elección
- Placebo
- 4 cp/día

# Métodos (II)

- Estratificación:
  - Pareja de análogos
  - CV ( $10^5$  copias/mL)
- FV:
  - >200 cp 24 o 36 s
  - >50 cp 48 s
  - Rebrote
  - Muestra confirmación 1-4 s
  - Cambio AN pasada s 2 con  $cv > 50$  cp/mL
- Objetivo Primario:
  - CV < 50 cp/mL 48 s snapshot
- Tamaño estimado: 680
- Análisis interinos:
  - Efectos SNC (200, 8 s)
  - Eficacia (300, 24 s)

# Población

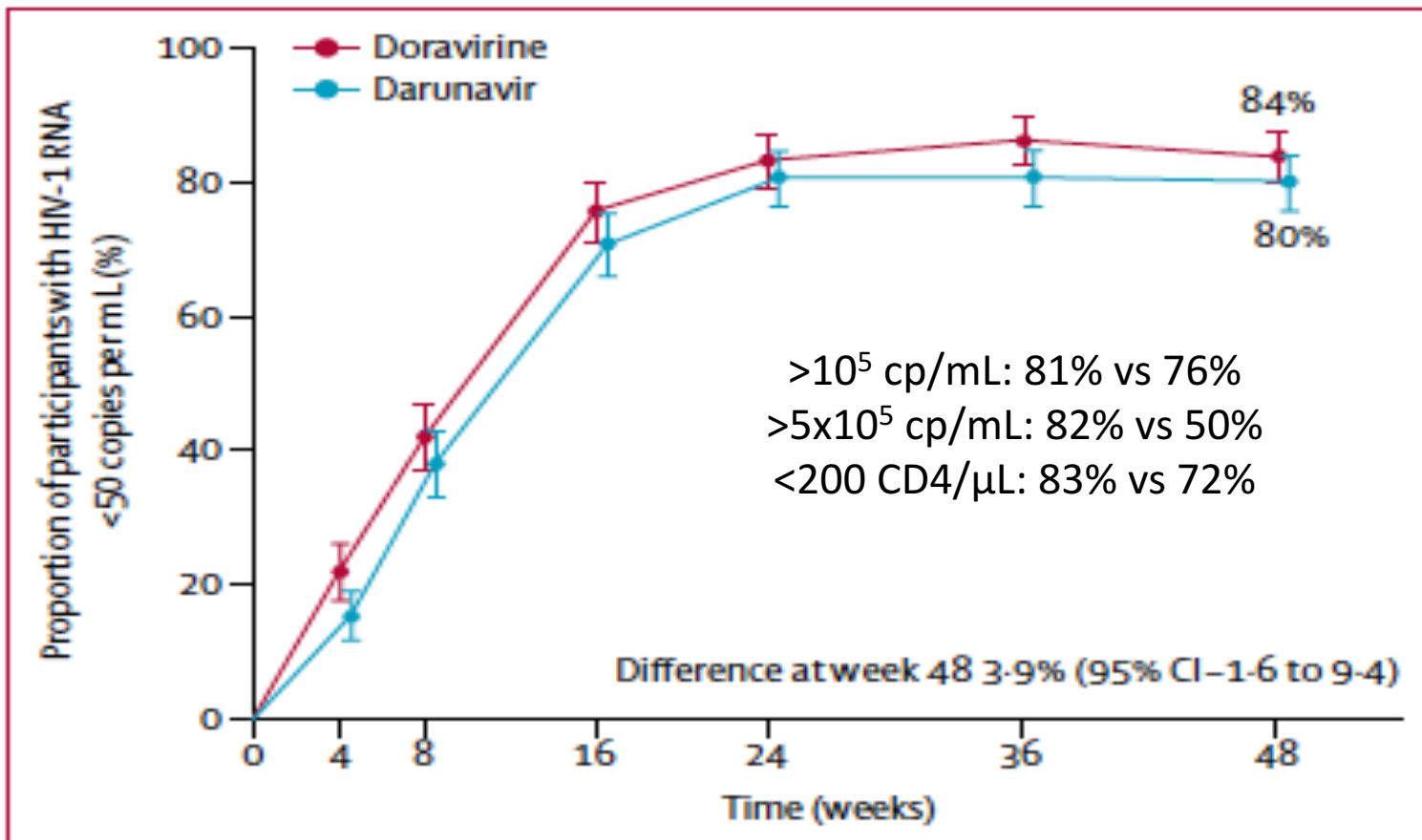




# Características basales

	Doravirine regimen (n=383)	Darunavir and ritonavir regimen (n=383)
Sex		
Men	319 (83%)	326 (85%)
Race		
White	280 (73%)	280 (73%)
Median age, years	33.0 (27-41)	34.0 (27-43)
Median CD4 count (cells per $\mu\text{L}$ )	410 (299-550)	393 (257-547)
CD4 count (cells per $\mu\text{L}$ )		
≤200	42 (11%)	67 (17%)
>200	341 (89%)	316 (83%)
Median HIV-1 RNA $\log_{10}$ copies per mL	4.4 (4.0-4.9)	4.4 (4.0-4.8)
HIV-1 RNA concentration†		
≤100 000 copies per mL	300 (78%)	308 (80%)
>100 000 copies per mL	83 (22%)	74 (19%)
Previous AIDS diagnosis	36 (9%)	37 (10%)
NRTI component‡		
Tenofovir and emtricitabine	333 (87%)	335 (87%)
Abacavir and lamivudine	50 (13%)	48 (13%)

# Eficacia 48 s



**Figure 2: Proportion of participants with HIV-1 RNA of less than 50 copies per mL by visit**

Δ CD4 48 s: 193 vs 186 cél/μL

# Fracasos Virales

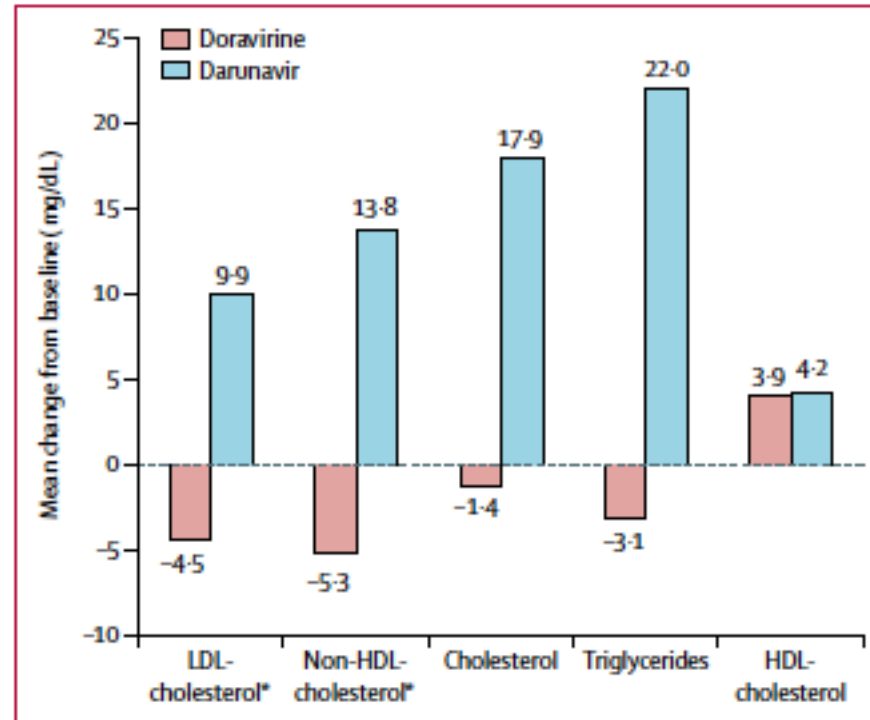
- 5% DOR vs 6% DRV
- Rebotes
- Test Genotípico:
  - 15/43 (7 vs 8)
- Sin R a DOR ni AN
- DRV-rtv: polimorfismos
- Interrupción por otras causas:
  - 10% vs 14%
  - 1% en cada brazo  
cv>400 cp/mL
  - 1 DOR: V106I, H221T,  
Phe227C junto a  
M184V

# Efectos Adversos

	Doravirine regimen (n=383)		Darunavir and ritonavir regimen (n=383)	
	All cause	Treatment-related	All cause	Treatment-related
Any adverse event	307 (80%)	117 (31%)	300 (78%)	123 (32%)
Serious adverse event	19 (5%)	1 (<1%)	23 (6%)	1 (<1%)
Discontinued due to adverse event*	6 (2%)	4 (1%)	12 (3%)	8 (2%)
<b>Most common adverse events†</b>				
Upper abdominal pain	19 (5%)	9 (2%)	10 (3%)	2 (1%)
Diarrhoea	54 (14%)	21 (5%)	86 (22%)	49 (13%)
Nausea	41 (11%)	25 (7%)	46 (12%)	29 (8%)
Fatigue	31 (8%)	18 (5%)	20 (5%)	8 (2%)
Nasopharyngitis	30 (8%)	0	39 (10%)	0
Upper respiratory infection	36 (9%)	0	23 (6%)	0
Back pain	21 (5%)	0	8 (2%)	0
Dizziness	19 (5%)	11 (3%)	15 (4%)	7 (2%)
Headache	53 (14%)	23 (6%)	41 (11%)	10 (3%)
Cough	19 (5%)	1 (<1%)	6 (2%)	0
<b>Events of clinical interest</b>				
Rash‡	28 (7%)	8 (2%)	32 (8%)	12 (3%)
Neuropsychiatric§	44 (11%)	22 (6%)	50 (13%)	19 (5%)

Incidencia de anomalías de laboratorio 3-4 similares

# Lípidos



**Figure 3: Change from baseline in fasting lipid concentrations at week 48**  
Statistical analyses were not prespecified for cholesterol, triglyceride, or HDL-cholesterol. \* $p < 0.0001$  for between-group comparison.

# Conclusiones (I)

- Se demuestra la no inferioridad de DOR vs DRV-rtv a 48 s
  - CV > 10<sup>5</sup> cop/mL
  - CD4 < 200
  - Ascenso de CD4 similar
  - Similar con TDF/FTC y ABC/3TC
- DOR: eficacia similar a RPV y EFV
- DRV-rtv: eficacia menor
  - Más penalizado por interrupciones
  - Definición y protocolo de fracaso viral

# Conclusiones (II)

- Fracasos virales:
  - DOR: mutaciones resistencias 0.3% (1/383)
- Perfil lipídico favorable
- Rash y SNC:
  - Similares a RPV (ECHO, THRIVE)

