# Estrategias innovadoras de alcanzar las metas de los 90'

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Reunión MCR, Marzo 2016

HIV Care and Treatment TWG

Presentation for CAR PEPFAR team for ROP planning

## Contenido de la Presentación

A. Evolución de las guías de OMS para promover el control de la epidemia.

B. Estudios científicos apoyan las nuevas estrategias

C. Porqué PEPFAR se suma a esta iniciativa

## Nueva directriz de la OMS sobre TARV

- Tratamiento para todos (sin importar el nivel de CD4) todos, sin importar edad;
- Los PV más enfermos continúan siendo la prioridad (enfermedad sintomática y/o CD4<350)</li>
- Nuevo rango de edad para adolescentes (10-19 años)
- Nuevo estándar: Opción B+
- PrEP como una elección de prevención adicional para todos aquellos en riesgo sustancial de infectarse (>3% incidencia)
- "Guía de entrega de Servicios"



## Prueba y Tratamiento

- La OMS ha evolucionado sus guías de atención basados en la evidencia cada vez mas elocuente sobre como el inicio temprano del tratamiento muestra beneficios en el paciente y en la salud publica:
  - En 2010, OMS recomendó iniciar tratamiento con una cuenta de 350 CD4
  - En 2013, OMS recomendó iniciar TARV a los 500 CD4, basado en estudios observacionales y varias pruebas de eficacia del tratamiento para reducir la transmisión en parejas sero-discordantes, además de los beneficios individuales
  - En noviembre 2015, OMS lanza la recomendación de iniciar TARV sin tomar en cuenta el valor de CD4.

 Contexto: Tratamiento se ha hecho mas simple, mas tolerable y más asequible, y los sistemas de suministro de ARV se han simplificado para permitir ampliar esta estrategia.

# Inicio más temprano de TAR, previene morbilidad y mortalidad relacionada al VIH

Lancet Infect Dis. 2014 April; 14(4): 281-290. doi:

Effects of early versus delayed in treatment on clinical outcomes of the phase 3 HPTN 052 randomised

Beatriz Grinsztejn, Mina C Hosseinipour, Heath Eron, Ying Q Chen, Lei Wang, San-San Ou, Maij Gamble, Nagalingeshwaran Kumarasamy, Jam S Pilotto, Sheela V Godbole, Suwat Charivalerts H Mayer, Susan H Eshleman, Estelle Piwowar-M Ravindre Panchia, Ian Sanne, Joel Gallant, Irvin Saines, David Celentano, Max Essex, Diane Hav Study Team\*

Fred Hutchinson Cancer Research Center, Seattle S-S Ou MS, L Wang PhD); Johns Hopkins Bloomb USA (D Celentano ScD, T E Taha MBBS); Research University, Chaing Mai, Thailand (S Chariyalertsak Medicine, Chapel Hill, NC, USA (M S Cohen MD, MD); Johns Hopkins University School of Medicine Gallant MD, E Piwowar-Manning MT); Harvard Sch Essex DVM, H J Ribaudo PhD); FHI 360, Durham Research Institute (ICMR), Pune, India (S V Godbo Conceição, Porto Alegre RS, Brazil (M Gonçalves Evandro Chagas, Fiocruz, Rio de Janeiro, Brazil ( Harare, Zimbabwe (J G Hakim MD): University of Havlir MD); UNC Project-Malawi, Lilongwe, Mala

Correspondence to: Dr Myron S Cohen, University of North Carolin mscohen@med.unc.edu.
\*See appendix (pp 146-50) for a full list of Study Team members

BG was a site investigator and led writing of the report. MCH was a HJR. YOC, and LW were study statisticians and members of the wri and TG led protocol development and helped manage the study. NK TET, KN-S, and ME were site investigators. SHE and EP-M worked oversight committee. IH led protocol development and was a site in investigator. MSC was the principal investigator.

JE is a consultant to Bristol-Myers Squibb, GlaxoSmithKline, Gilea received research funding to the University of North Carolina (UNC scientific advisory boards or has received consulting income from B Merck: has served on a Data Safety Monitoring Board for Takara Bi Bristol-Myers Squibb, Merck, Sangama Bio Sciences, Vertex Phart Gilead Sciences (to Johns Hopkins University and Southwest CARE principal investigator on an NIH-funded study that receives drugs from THE NEW ENGLAND JOURNAL OF MEDICINE

ORIGINAL ARTICLE

### A Trial of Early Antiretrovirals and Isoniazid Preventive Therapy in Africa

The TEMPRANO ANRS 12136 Study Group\*

### ABSTRACT

### BACKGROUND

The members of the writing group, who In sub-Saharan Africa, the burden of human immunodeficiency virus (HIV)-associated are listed in the Appendix, assume re- ared nuberculosis is high. We conducted a trial with a 2-by-2 factorial design t onsibility for the content and integrity assess the benefits of early antiretrovital therapy (ART), 6-month isoniazid preven to Dr. Anglanet at INSERM Units 197, Unit tive therapy (IPT), or both among HIV-infected adults with high CD4+ cell counts versité de Bordeaux, 146 rue Léo Salgras, 15076 Bordeaux, France, or at savier anglaret@isped.u-bordeaux2.fr.

of this article. Address reprint requests

is provided in the Supplementary Ap-pends, available at Ni JM.org.

This article was published on July 20, 2015,

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N Engl | Med 2015;3/3:909-22.

DOI: 16.1656/NEJMos156/196

M list of additional members of the We included participants who had HIV type 1 infection and a CD4+ count of less TEMPRANO ANRS 12136 Study Group than 800 cells per cubic millimeter and who met no criteria for starting ART according to World Health Organization (WHO) guidelines. Participants were ran domly assigned to one of four treatment groups: deferred ART (ART initiation according to WHO criteria), deferred ART plus IPT, early ART (immediate ART initiation), or early ART plus IPT. The primary end point was a composite of dis eases included in the case definition of the acquired immunodeficiency syndrom (AIDS), non-AIDS-defining cancer, non-AIDS-defining invasive bacterial disease or death from any cause at 30 months. We used Cox proportional models to com pare outcomes between the deferred-ART and early-ART strategies and betwee the IPT and no-IPT strategies.

A total of 2056 patients (41% with a baseline CD4+ count of ≥500 cells per cubi millimeter) were followed for 4757 patient-years. A total of 204 primary end-poin events were observed (3.8 events per 100 person-years; 95% confidence interval [CI], 3.3 to 4.4), including 68 in patients with a baseline CD4+ count of at leas 500 cells per cubic millimeter (3.2 events per 100 person-years; 99% Ct, 2.4 to 4.0 Taberculosis and invasive bacterial diseases accounted for 42% and 27% of pr mary end point events, respectively. The risk of death or severe HIV-related Illnes was lower with early ART than with deferred ART (adjusted hazard ratio, 0.56; 99) Cl, 0.41 to 0.76; adjusted hazard ratio among patients with a baseline CD 4+ coun of≥500 cells per cubic millimeter, 0.56: 95% CL 0.33 to 0.94) and lower with 1P than with no IPT (adjusted hazard ratio, 0.65; 99% CI, 0.48 to 0.88; adjusted has ard ratio among patients with a baseline CD4+ count of ≥500 cells per oabic mil limeter, 0.61; 99% Cl, 0.36 to 1.01). The 30-month probability of grade 3 or adverse events did not differ significantly among the strategies.

In this African country, immediate ART and 6 months of IPT independently led to lower rares of severe liness than did deferred ART and no IPT, both overall and among parients with CD4+ counts of at least 500 cells per cubic millimete (Panded by the French National Agency for Research on AIDS and Viral Hepaticis TEMPRANO ANRS 12136 Clinical Trials gov number, NCT00495651.)

N ENGL J MED 375 D. NEJM. ORG. AUGUST 27, 201

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## The NEW ENGLAND JOURNAL of MEDICINE

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AUGUST 27, 2015

VOL. 373 NO. 9

### Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection

The INSIGHT START Study Group\*

### ABSTRACT

### BACKGROUND

Data from randomized trials are lacking on the benefits and risks of initiating the members of the writing group (see antirectroviral therapy in patients with asymptomatic human immunodeficiency

O. Lundgree, M.D. Joschaff, Adel G.
Babike, Ph.D. Joschaff, Fred Gordin, virus (HIV) infection who have a CD4+ count of more than 350 cells per cubic M.D. Joschait, Sean Emery, Ph.D. Birght

We randomly assigned HIV-positive adults who had a CD4+ count of more than Josep M. Ilfore, M.D., Jean-Michel Moli-500 cells per cubic millimeter to start antiretroviral therapy immediately (immediate-initiation group) or to defer it until the CD4+ count decreased to 350 cells. Karin L. Kingman, M.D., Simon Collins, per cubic millimeter or until the development of the acquired immunodeficiency H. Clifford Law, M.D., Andrew N. Philsyndrome (AIDS) or another condition that dictated the use of antiretroviral therapy (deferred-initiation group). The primary composite end point was any serious AIDS related event, serious non-AIDS related event, or death from any cause. the overall content and integrity of this

A total of 4685 patients were followed for a mean of 3.0 years. At study entry, the median HIV viral load was 12,759 copies per milliliter, and the median CD4+ tious Diseases, Rigoroupitales, Univercount was 651 cells per cubic millimeter. On May 15, 2015, on the basis of an atty of Copenhagen, Blagdamows 9, interim analysis, the data and safety monitoring board determined that the study question had been answered and recommended that patients in the deferred-initiation group be offered antiretroviral therapy. The primary end point occurred in 42 patients in the immediate-initiation group (1.8%; 0.60 events per 100 personyears), as compared with 96 patients in the deferred-initiation group (4.1%; 1.38 events per 100 person-years), for a hazard ratio of 0.43 (95% confidence interval [CI], 0.30 to 0.62; Po0.001). Hazard ratios for serious AIDS related and serious. This article was published on July 20, 2015, non-AIDS-related events were 0.28 (95% CI, 0.15 to 0.50; Pc0.001) and 0.61 (95% at NEJMorg. CL 0.38 to 0.97; P=0.04), respectively. More than two thirds of the primary end NEW 1 Med 2015(373:995-00) points (68%) occurred in patients with a CD4+ count of more than 500 cells per cubic millimeter. The risks of a grade 4 event were similar in the two groups, as were the risks of unscheduled hostital admissions.

The initiation of antiretroviral therapy in HIV-positive adults with a CD4+ count of more than 500 cells per cubic millimeter provided ner benefits over starting such therapy in patients after the CD4+ count had declined to 350 cells per cubic millimeter. (Funded by the National Institute of Allergy and Infectious Diseases and others: START ClinicalTrials.gov number, MCT00867048.)

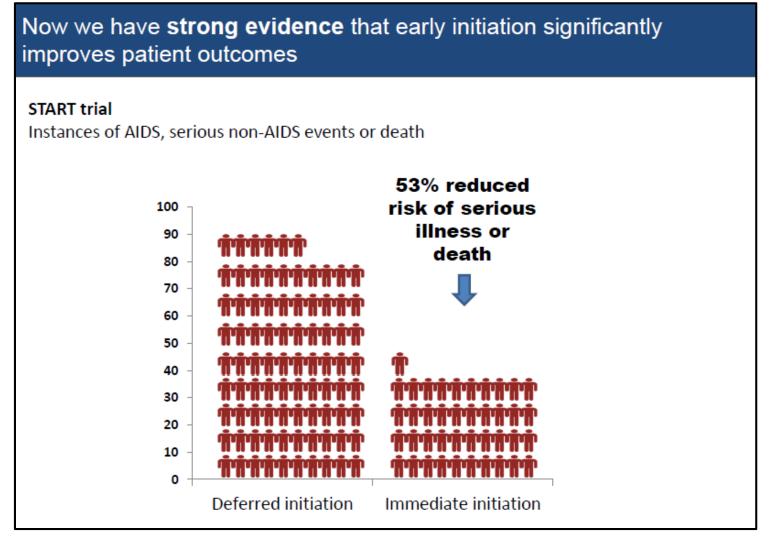
Grund, Ph.D., Shweta Sharma, M.S., Anchalee Arthingsanon, M.D., David A. Cooper M.D. Gord Fitkenhouer M.D. ns, M.D., Paula Munderi, M.D., Mauro Schechter, M.D., Robin Wood, M.D., lips, Ph.D., and James D. Neaton, Ph.D. INSIGHT PID of the INSIGHT START article. The affiliations of the members of the writing group are listed in the Ap-pendix. Address reprint requests to Dr. Lundgren at the Department of Infec-2300 Copenhagen Ø. Denmark or at jens lundgren@regionh.dk.

\*A complete list of members in the Strategic Timing of Antiretroviral Treatment (START) Study Group is provided in the Supplementary Appendix, available at

DOI: 16.1656/NEJMox1566816 copyright of 2013 Managhard In Medical Spaid (



# Inicio inmediato de TARV mejora el resultado en pacientes



<sup>\*</sup>Slide borrowed from CHAI presentation



# Estudios en diversas poblaciones encontraron que, el inicio temprano esta asociado con mejores resultados.





## HPTN052

- Total: 1761
  - Africa 54%

## **TEMPRANO**

- Total: 2056
  - Africa 100%

## START

- Total: 4651
  - Africa 21%

HPTN052: Grinsztejn, Lancet Infect Dis 2014; 14:281-90
Temprano: Temprano study group, NEJM 2015; 373:808-22

START: INSIGHT START study group, NEJM 2015; 373:808-22

Angairet ANRS Sept 2015



## Implementación de P/T o Acceso Universal a ARVs

- Varios países han iniciado ya esta nueva estrategia para ciertas poblaciones:
   Opción B+, TB/HIV, hepatitis/HIV, Trabajadoras del sexo, HSH
  - Uganda tratando a todos los niños menores de 15 años VIH positivos desde 2014.
  - Thailandia empezó un estudio en 2012 tratando a HSH y población transgénero
  - Vietnam -- empezó un programa de T/T para usuarios de drogas desde 2014
- Varios países han empezado programas piloto de P/T en población general o a pequeña escala: Zambia, Kenya
- Múltiples estudios en poblaciones clave están siendo llevados por los CDC
- Brasil implementó P/T en población general desde 2013





# PORQUÉ PEPFAR ESTA POYANDO LA INICIATIVA DE PRUEBA/TRATAMIENTO?





## Acción Acelerada

- 1. Hacer las cosas correctas (eficiencia en las asignaciones)
- 2. En los lugares correctos (Maximización de Equidad, Eficiencia Técnica)
- 3. De la manera correcta (Eficiencia Técnica, Sostenibilidad)
- 4. Ahora mismo (fondos invertidos Genera ahorros)

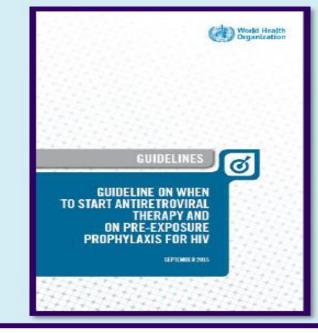
El tratamiento es clave para logar 90-90-90





## Cosas correctas

- ARVT
- Circuncisión masculina
- PTMI-Opción B+
- Condones
- TEST/ TRATAMIENTO
- PrEP
- PPE



IAPAC GUIDELINES FOR OPTIMIZING THE HIV CARE CONTINUUM



### NG THE HIV CARE ENVIRONMENT

- Laws that criminal be the conduct of or event puritive legal measures against men who have see with men (WSW), transgend users, and see workers are not recommended and should be repealed where they have been enacted. (A IVI)
- users, and set womens are not recommended and about to engagester where they have been enacted. (A FV)

  Lears that or inhelicit the conductor if people thing with this (FURIN) based on persched disposure to HIV, and without any evidence of intent to dish a are not recommended and should be repealed where they have been enacted. (A FV)
- 5. HIV-related restrictions on entry, stay, and est dence in any country for RURY are not recommended and should be repealed. W.W.
- Soratepes to monitor for and climinate oligina and discrimination based on race, othnicity, pender, age, sexual orientation, and/or behavior in all
- settings, but period rily in healthcare settings, using Manderstood recessors and evidence haved approaches, are recommended. (B-III)

  5. Proceeding seasor are recommended to identify and manage difficial mental health instruction facilities of disorders (e.g., profety, depression, shaumands stread, and of this treatment, [A-III].
- 6. Enabling PURIN to take responsibility for their care je.g., self-management, user-driven care) is recommended. [51]
- Shifting and sharing HIV cooling, dispensing of artifebroviral therapy (ART), and other appropriate tasks among professional and paragrafessional health worker codes is recommended. (A-II)
- Where his health wastern to precise per test relocation and testing and teach once EUM engagement in Mill care is resonanced to \$1.75.
   Tax is fitting it bring from physicians to appropriately trained health care providers, inducing numerical associate clinicians, is recommended. ATT information and maintenance. (Bill)

### Community engagement in every step across the HIV care continuum is recommended. [Bit] MCREASWORKY INSTITUTE COMMISSION INVESTOR TO MAKE

- Routinely offering opt-out RIV texting to all individuals who present at health facilities is recommended. [A1]
- Community-based HW testing is recommended to neach these who are less their to extend facility-based HW testing. (A.1)
- should be considered. (5.10)
- 12. Hill cell-testing it recommended with the providion of guidance about the proper method for administrating the test and direction on what to do on the results have been obtained [3 ii]

IAFAC Guidelines for Optimising the HIV Care Continuum for Adults and Adolescents - September 36, 2015



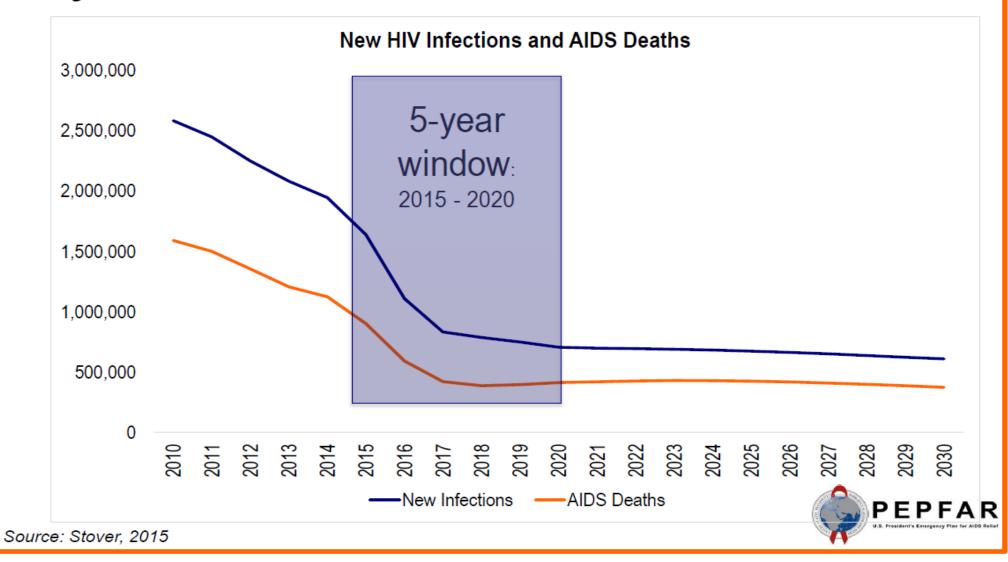
y to Accelerate IMPACT

# PEPFAR apoya la iniciativa de ONUSIDA "fast-track" Accion Acelerada para contener el VIH

- Metas de tratamiento de 90/90/90 para poner fin a la epidemia mundial del VIH
  - Alcanzar las metas fijadas para el 2020 y el 2030
  - Clave para recordar, es que las metas de tratamiento están basadas sobre la presunción de que el tratamiento de VIH no solo mantiene vivas a las personas, mejoran su calidad de vida, sino también previenen la transmisión del VIH.



# Treatment for All: 28M on ART by 2020





## Retos para lograr el 90/90/90

- Limitado espacio físico e infraestructura de laboratorio
- Limitado personal de salud?
- Brechas en la Cascada persisten, oportunidades perdidas y falta de seguimiento.
- Introducir nuevos e innovadores modelos de entrega de servicios, para alcanzar una masiva cobertura en servicios de TARV.





## Metas para mejorar la entrega de servicios

- Optimizar el uso de la actual infraestructura y recurso humano
- Reducir las barreras al tratamiento (medicas, administrativas, estigma, etc.) y centrar el cuidado en el paciente a través de un algoritmo simplificado de atención.
- Incrementar la adherencia y retención a la TARV a través de modelos innovadores
- Mantener/mejorar la calidad de los servicios de atención.

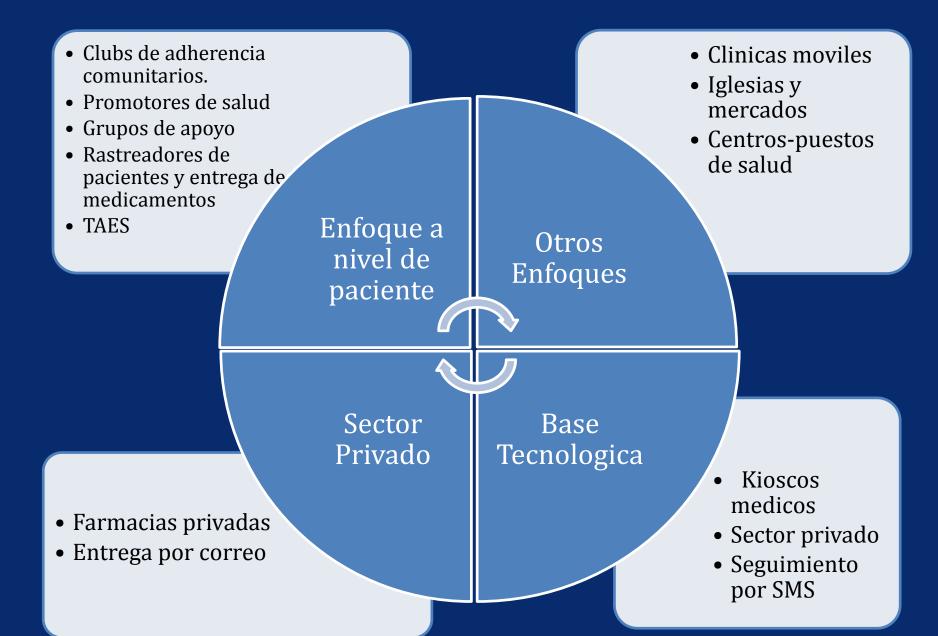




# PEPFAR Modelos diferenciados de entrega de servicios

- Eficientar la entrega de servicios fuera de un establecimiento de salud?
  - Modelos comunitarios deben ser considerados y discutidos
  - Modelo de MSF esta siendo evaluado, principalmente en paises con epidemia generalizada
- Entrega de servicios de atención diferenciados por paciente?
  - Por ejemplo, enfermos, saludables, estables, en TARV por años, adherentes: promover entregas para varios meses, reducir las visitas a las clinicas, promover la visita domiciliaria, etc.

## Modelos de entrega de servicios de ART





# Apoyo de PEPFAR para Prueba/Tratamiento

 Promover como un medio para aumentar el tratamiento y poner fin a la epidemia del SIDA

Sobre la base de apoyo de los objetivos de tratamiento,
 PEPFAR va a colaborar con la OPS, ONUSIDA, FM para apoyar acciones a nivel de la política

 Asegúrese de que las lagunas financieras y de los costos de tratamiento son identificadas y tratadas





# Apoyo de PEPFAR para Prueba/Tratamiento

 Apoyar el análisis de los costos y la rentabilidad de proporcionar un tratamiento más temprano

Abogar por una financiación innovadora de fuentes nacionales

 Promover nuevos modelos de prestación de servicios que sean mas eficientes

