

Sélection VIH et (coinfections) hépatites

Lionel Piroth

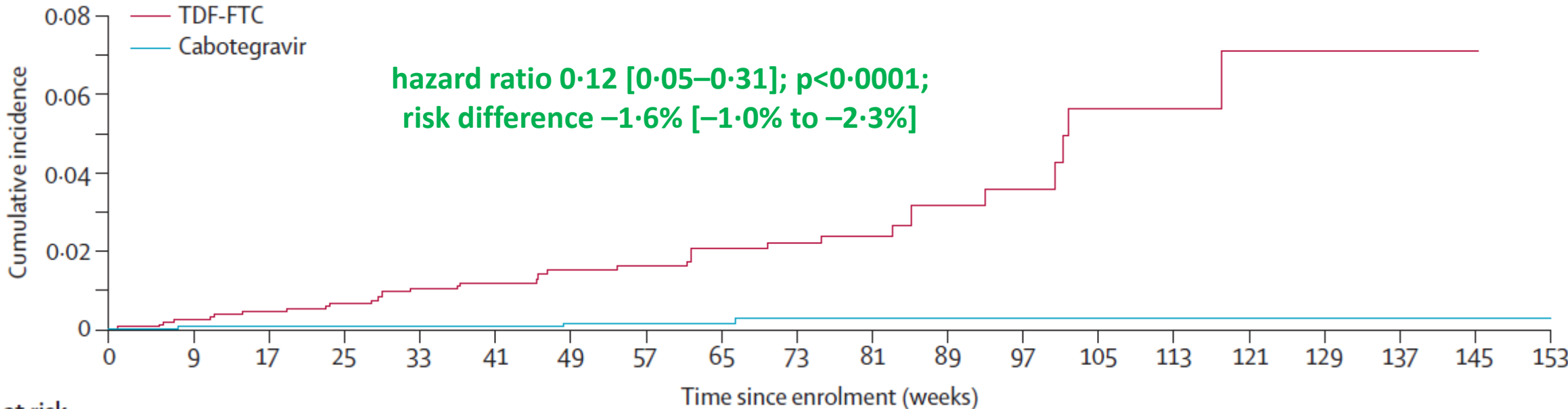
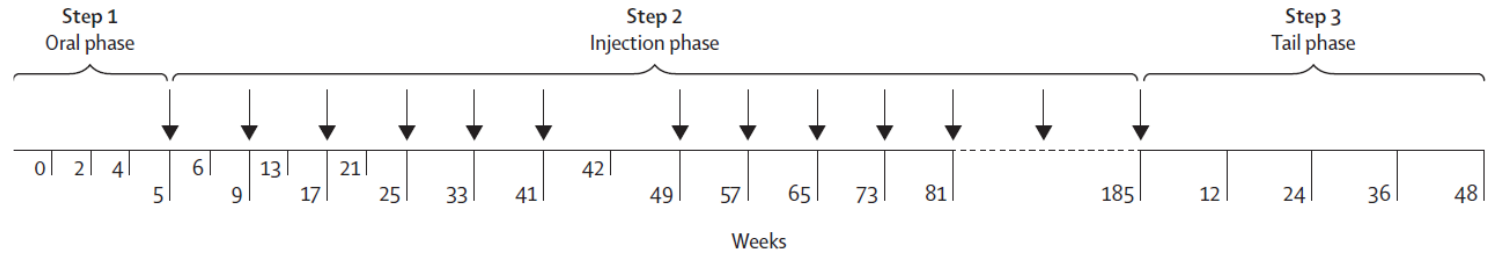
Journée SPILF 2023

Cabotegravir for the prevention of HIV-1 in women: results from HPTN 084, a phase 3, randomised clinical trial

3224 femmes 18-45 ans Afrique+++
 Randomisées double aveugle 1:1
Cabote (IM/8sem)+placebo vs FTC/TDF+ placebo

Sinead Delany-Moretlwe, James P Hughes, Peter Bock, Samuel Gurrion Ouma, Portia Hunidzarira, Dishiki Kalonji, Noel Kayange, Joseph Makhema, Patricia Mandima, Carrie Mathew, Elizabeth Spooner, Juliet Mpendo, Pamela Mukwekwerere, Nyaradzo Mgodzi, Patricia Nahirya Ntege, Gonasagrie Nair, Clemensia Nakabiito, Harriet Nuwagaba-Biribonwoha, Ravindre Panchia, Nishanta Singh, Bekezela Siziba, Jennifer Farrior, Scott Rose, Peter L Anderson, Susan H Eshleman, Mark A Marzinke, Craig W Hendrix, Stephanie Beigel-Orme, Sybil Hosek, Elizabeth Tolley, Nirupama Sista, Adeola Adeyeye, James F Rooney, Alex Rinehart, William R Spreen, Kimberly Smith, Brett Hanscom, Myron S Cohen, Mina C Hosseinipour, on behalf of the HPTN 084 study group

Lancet 2022; 399: 1779-89



Number at risk	0	9	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	137	145	153
TDF-FTC	1610	1490	1429	1410	1353	1260	1160	984	800	656	485	306	201	115	70	63	52	22	3	0
Cabotegravir	1614	1488	1441	1429	1371	1279	1181	988	801	647	482	304	204	116	67	58	50	23	3	2

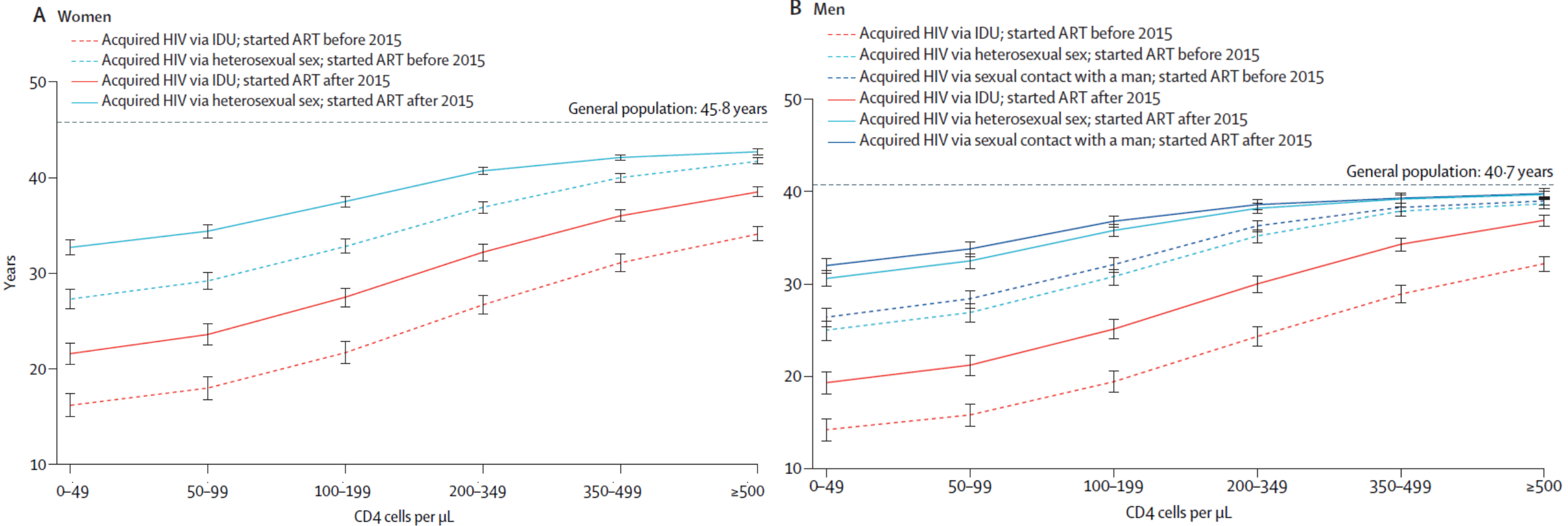
Life expectancy after 2015 of adults with HIV on long-term antiretroviral therapy in Europe and North America: a collaborative analysis of cohort studies

Lancet HIV 2023

Published Online

March 20, 2023

Adam Trickey, Caroline A Sabin, Greer Burkholder, Heidi Crane, Antonella d'Arminio Monforte, Matthias Egger, M John Gill, Sophie Grabar, Jodie L Guest, Inma Jarrin, Fiona C Lampe, Niels Obel, Juliana M Reyes, Christoph Stephan, Timothy R Sterling, Ramon Teira, Giota Touloumi, Jan-Christian Wasmuth, Ferdinand Wit, Linda Wittkop, Robert Zangerle, Michael J Silverberg, Amy Justice, Jonathan A C Sterne

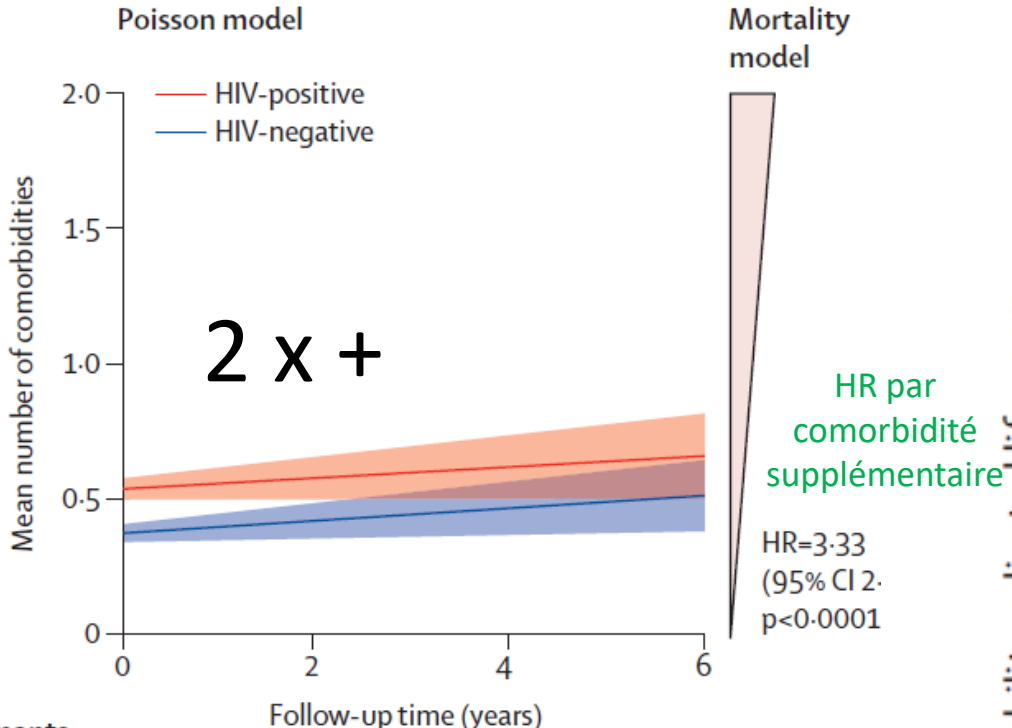


Pour les PVVIH avec des taux de CD4 élevés, espérance de vie seulement quelques années plus basse qu'en population générale
Mais si CD4 initiaux bas → baisse plus importante

Long-term evolution of comorbidities and their disease burden in individuals with and without HIV as they age: analysis of the prospective AGE_hIV cohort study

Lancet HIV 2023
 Published Online
 February 9, 2023

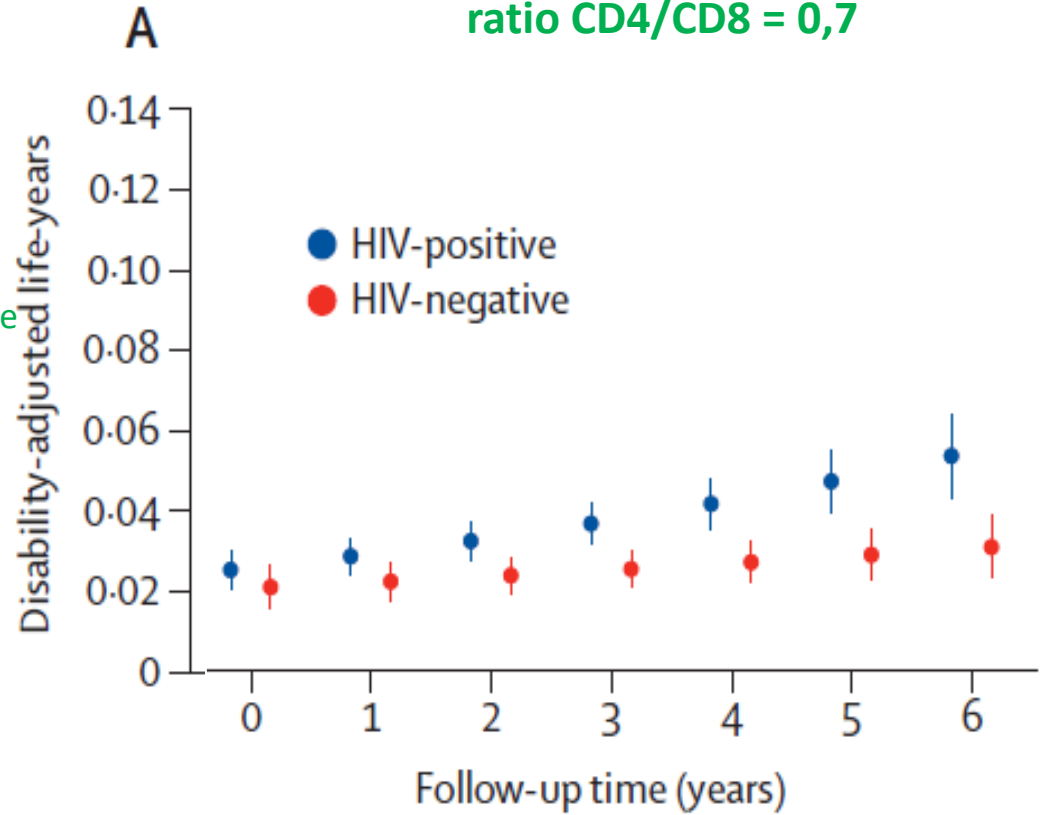
Eveline Verheij*, Anders Boyd*, Ferdinand W Wit, Sebastiaan O Verboeket, Myrthe L Verburgh, Marc van der Valk, Maarten F Schim van der Loeff†, Peter Reiss†, on behalf of the AGE_hIV cohort study



Number of participants in active follow-up				
HIV-positive	596	499	437	420
HIV-negative	550	481	457	457
Cumulative number of participants who are deceased				
HIV-positive	0	12	23	31
HIV-negative	0	2	5	7

596 HIV-positive et 550 HIV-negative 2010 → 2018

à BL= 12 ans d'infection, CD4 565, ratio CD4/CD8 = 0,7

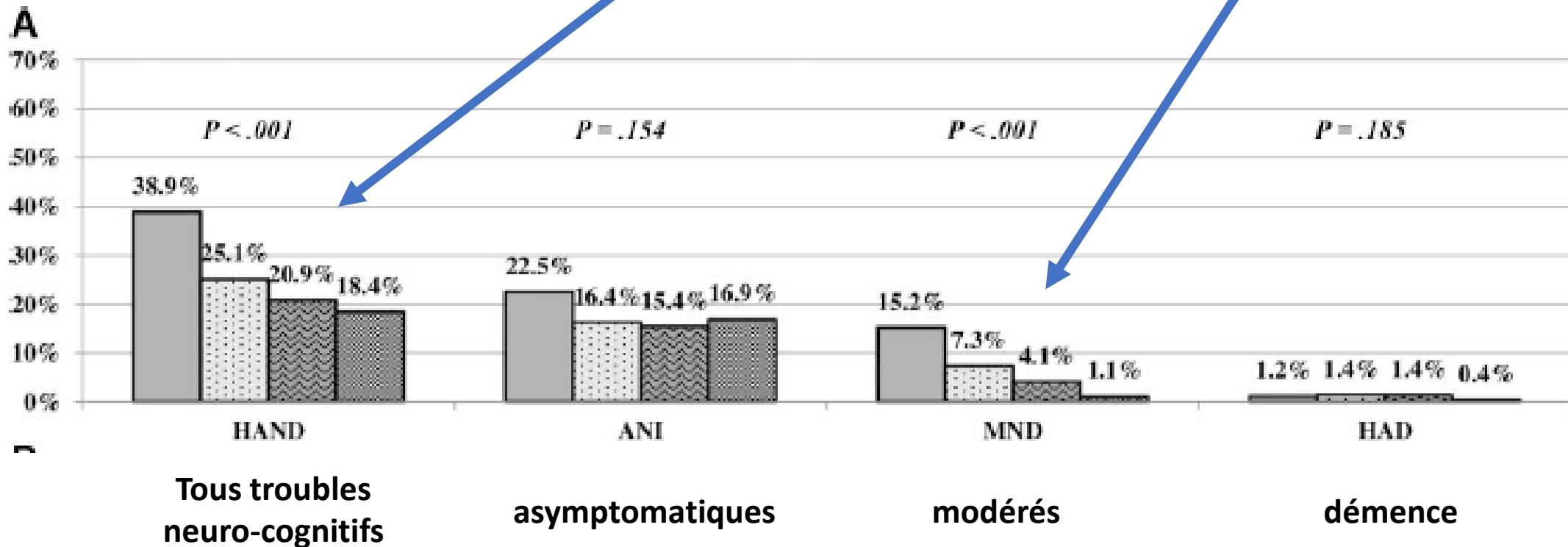


Declining Prevalence of Human Immunodeficiency Virus (HIV)-Associated Neurocognitive Disorders in Recent Years and Associated Factors in a Large Cohort of Antiretroviral Therapy-Treated Individuals With HIV

Ilaria Mastrorosa,¹ Carmela Pinnetti,¹ Anna Clelia Brita,² Annalisa Mondì,¹ Patrizia Lorenzini,^{1,3} Giulia Del Duca,¹ Alessandra Vergori,¹ Valentina Mazzotta,¹ Roberta Gagliardini,¹ Marta Camici,¹ Federico De Zottis,¹ Marisa Fusto,¹ Maria Maddalena Plazzi,¹ Elisabetta Grilli,¹ Rita Bellagamba,¹ Stefania Cicalini,¹ and Andrea Antinori¹

Tous troubles = prévalence divisée par 2

troubles modérés = prévalence divisée par >10



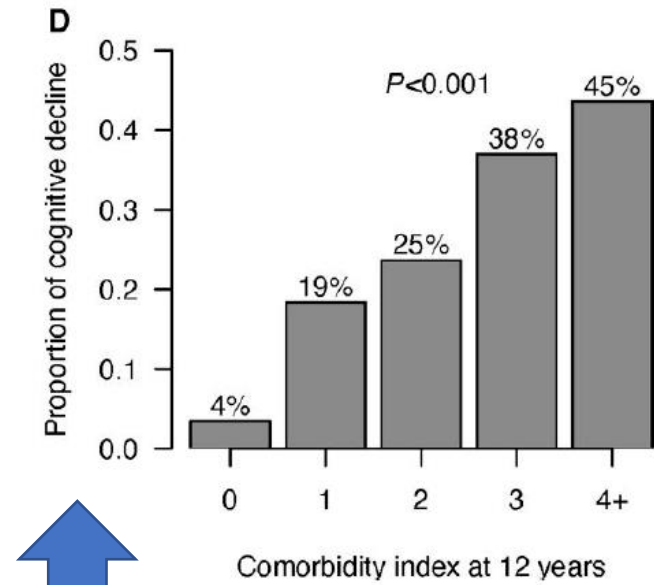
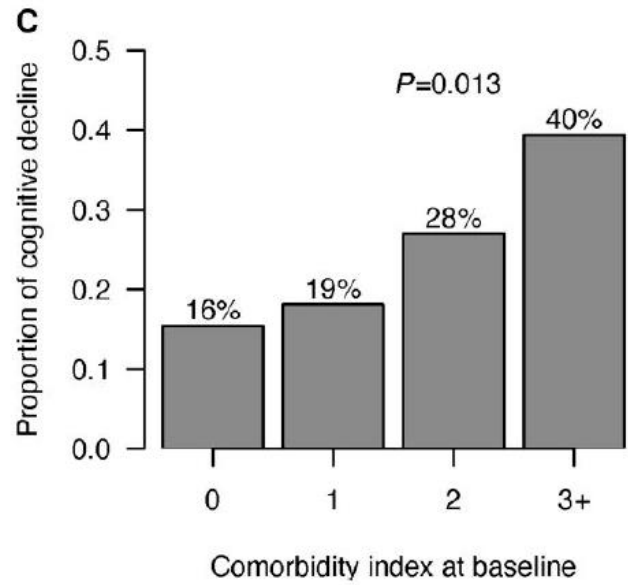
Twelve-year neurocognitive decline in HIV is associated with comorbidities, not age: a CHARTER study

Robert K. Heaton,¹ Ronald J. Ellis,^{1,2} Bin Tang,¹ Christina M. Marra,³ Leah H. Rubin David B. Clifford,⁵ J. Allen McCutchan,⁶ Benjamin B. Gelman,^{7,8} Susan Morgello,⁹ Donald R. Franklin,¹ and Scott L. Letendre^{1,6}

- Suivi 12 ans de 409 PVVIH
 - Ttt ARV = de 75% à >95%
 - CV<200 cp/ml = de 70% à 93%
 - CD4 = de 490 à 600/mm3



- Déclin neurocognitif (GCS) = 23,7% - facteur associés
 - Diabète, HTA, insuffisance respiratoire, douleurs neuropathiques, fragilité, dépression, usage de cannabis au long cours
 - MAIS pas avec critères VIH ou traitement... ni différence entre jeunes et vieux

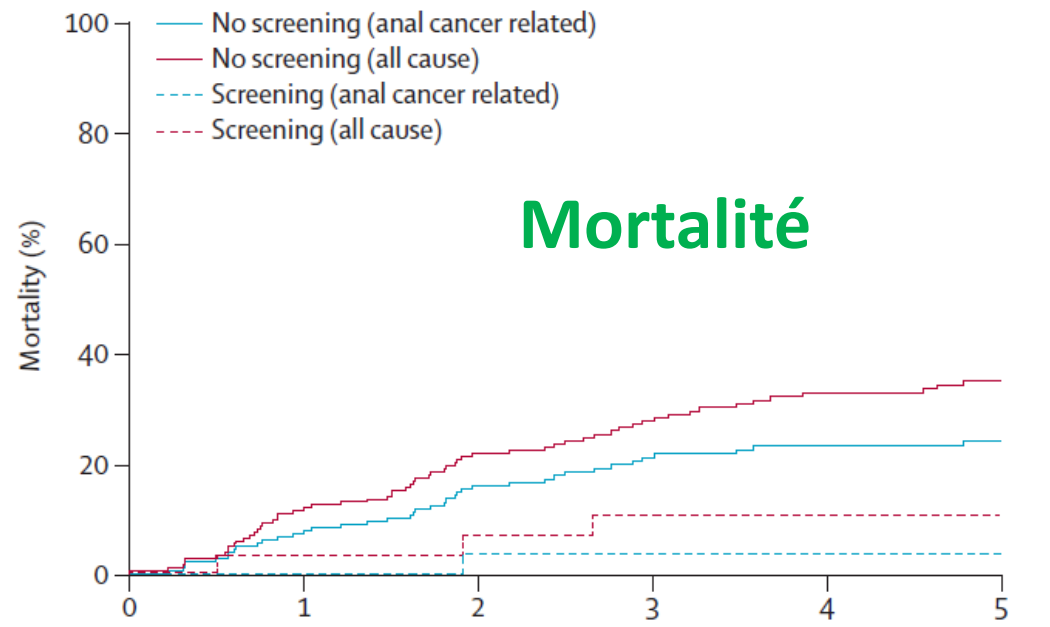
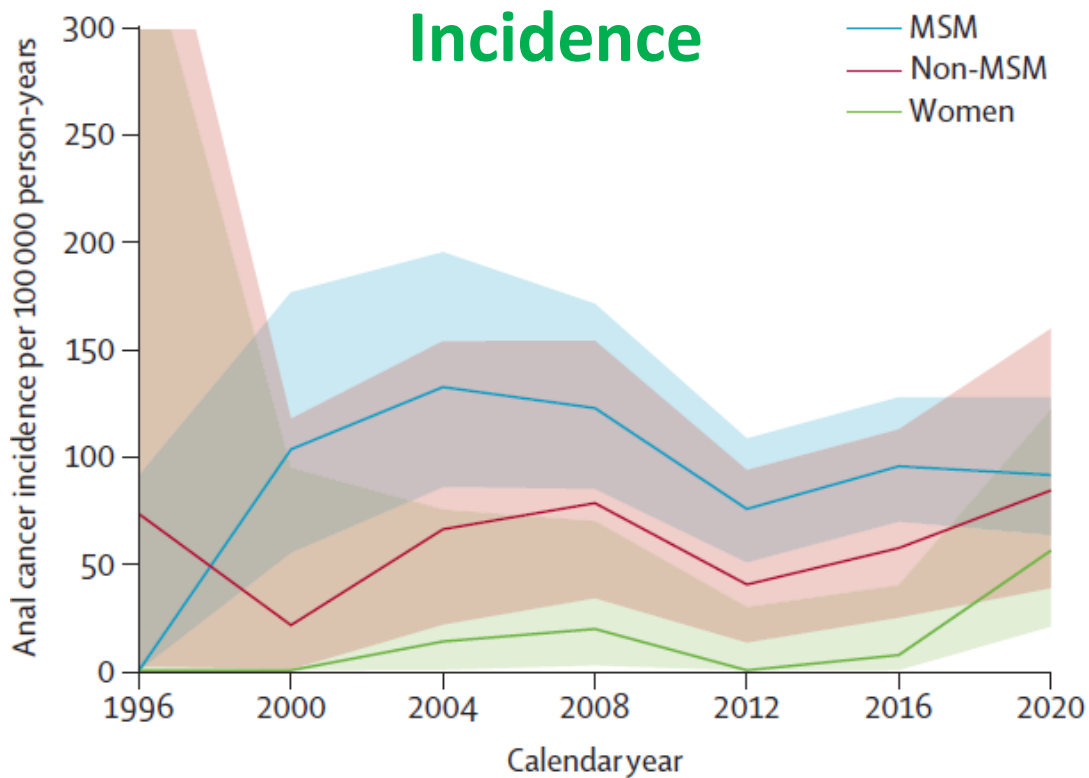


Effect of the introduction of screening for cancer precursor lesions on anal cancer incidence over time in people living with HIV: a nationwide cohort study

Lancet HIV 2023; 10: e97-106

Ramon P van der Zee*, Ferdinand W N M Wit*, Olivier Richel, Marc van der Valk, Peter Reiss, Henry J C de Vries, Jan M Prins, on behalf of the ATHENA national observational HIV cohort†

28 175 individuals in HIV care (59.7% MSM), 227 primary anal cancer cases (ATHENA cohort)



	Number at risk					
	0	1	2	3	4	5
No screening (anal cancer related)	187 (0)	163 (11)	141 (18)	120 (31)	100 (48)	88 (147)
No screening (all cause)	187 (0)	163 (3)	141 (6)	120 (17)	100 (29)	88 (126)
Screening (anal cancer related)	30 (0)	29 (1)	26 (3)	22 (7)	17 (12)	12 (29)
Screening (all cause)	30 (0)	29 (0)	26 (2)	22 (5)	17 (10)	12 (27)

Figure 1: Crude anal cancer incidence in the Netherlands per 100 000 person-years (95% CIs), 1996–2020

- ➔ HSH ++ mais moins qu'avant / les autres +!
- ➔ Mieux de dépister ++++ (même si ici AHR)
- ➔ Pour autant toujours mortalité malgré dépistage

CD4/CD8 Ratio and Cancer Risk Among Adults With HIV

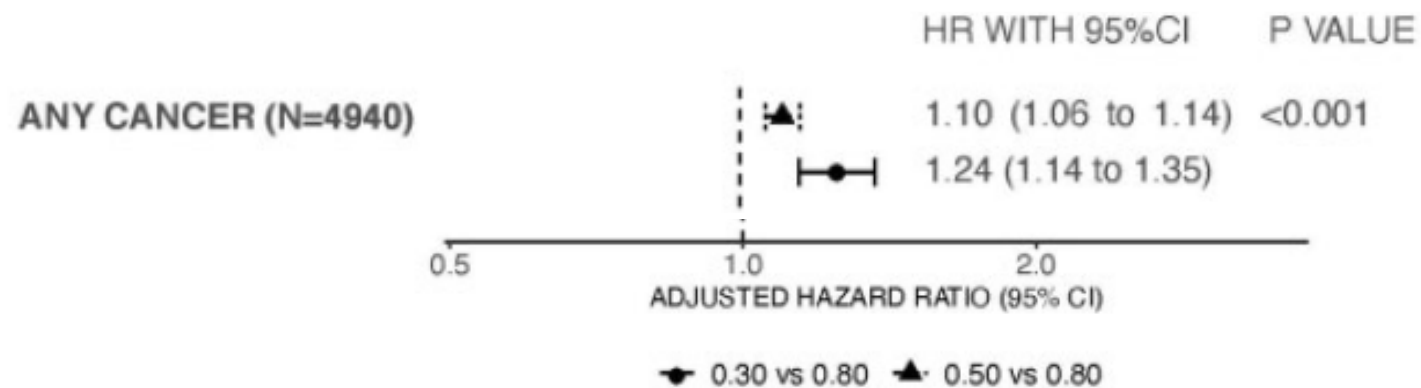
Jessica L. Castilho, MD, MPH ^{1,*} Aihua Bian, MPH,² Cathy A. Jenkins, MS,² Bryan E. Shepherd, PhD,² Keith Sigel, MD ³ M. John Gill, MD,⁴ Mari M. Kitahata, MD, MPH ⁵ Michael J. Silverberg, PhD, MPH ⁶ Angel M. Mayor, MD ⁷ Sally B. Coburn, MPH ⁸ Dorothy Wiley, PhD, RN ⁹ Chad J. Achenbach, MD,¹⁰ Vincent C. Marconi, MD ¹¹ Ronald J. Bosch, PhD,¹² Michael A. Horberg, MD ¹³ Charles S. Rabkin, MD ¹⁴ Sonia Napravnik, PhD ¹⁵ Richard M. Novak, MD,¹⁶ W. Christopher Mathews, MD, MSPH ¹⁷ Jennifer E. Thome, MD, PhD,^{8,18} Jing Sun, MD, MPH, PhD ⁸ Keri N. Althoff, PhD, MPH ⁸ Richard D. Moore, MD, MHS,¹⁹ Timothy R. Sterling, MD,¹ Staci L. Sudenga, PhD ²⁰; for the North American AIDS Cohort Collaboration on Research and Design (NA-ACCORD) of the International Epidemiology Databases to Evaluate AIDS (IeDEA)

JNCI J Natl Cancer Inst (2022) 114(6): djac053

North American AIDS Cohort
Collaboration on Research and Design
observational cohorts with validated
cancer diagnoses between 1998 and
2016

83 893 PVVIH / 5628 cancers incidents

Ratio CD4/CD8 bas jusqu'à 2 ans avant
le diagnostic de cancer associé
indépendamment à un sur-risque de
cancer



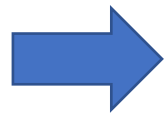
- Poumon
- Anal
- Kaposi
- Hodgkin

CD4/CD8 Ratio Outcome According to the Class of the Third Active Drug in Antiretroviral Therapy (ART) Regimens: Results From the Quebec Human Immunodeficiency Virus (HIV) Cohort Study

Mohamed N'dongo Sangaré,¹ Jean-Guy Baril,^{2,3,4} Alexandra de Pokomandy,^{5,6} Marina Klein,⁵ Réjean Thomas,⁷ Cécile Tremblay,^{3,4,8,9} Costa Pexos,⁵ Madeleine Durand,⁸ Seerat Chawla,⁵ Louise Laporte,¹⁰ and Helen Trotter^{10,11}

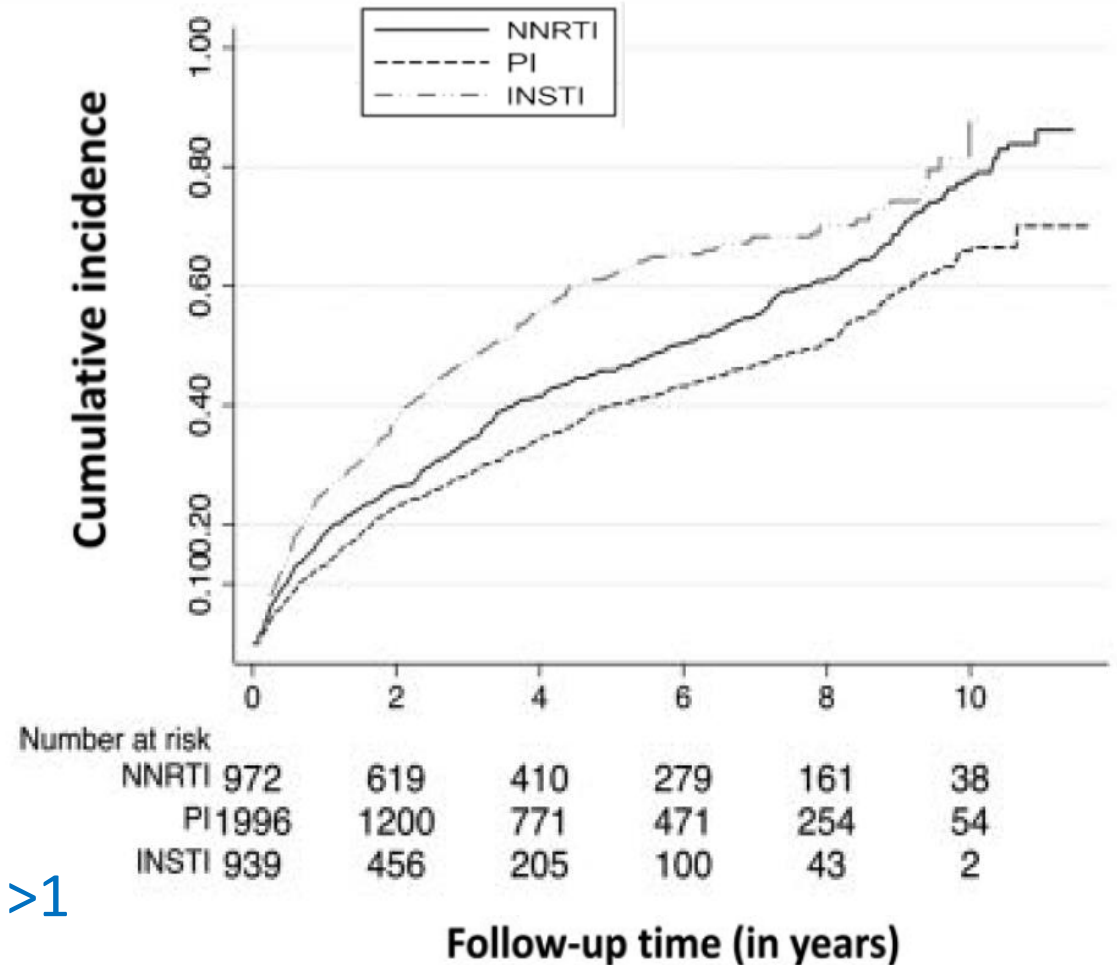
Clinical Infectious Diseases 2023

- Suivi total = 13 640 personnes-années.
- HR pondéré pour association 3ème agent et ratio CD4/CD8 ratio ≥ 1 =
 - 0,56 (IC95% 0,48–0,65) NNRTI + 2 NRTIs
 - 0,41 (IC95% 0,35–0,47) PI + 2 NRTIs,
 - Comparé à INSTI + 2 NRTIs.



INSTI = meilleur chance d'avoir un ratio >1

Ratio CD4/CD8 ≥ 1

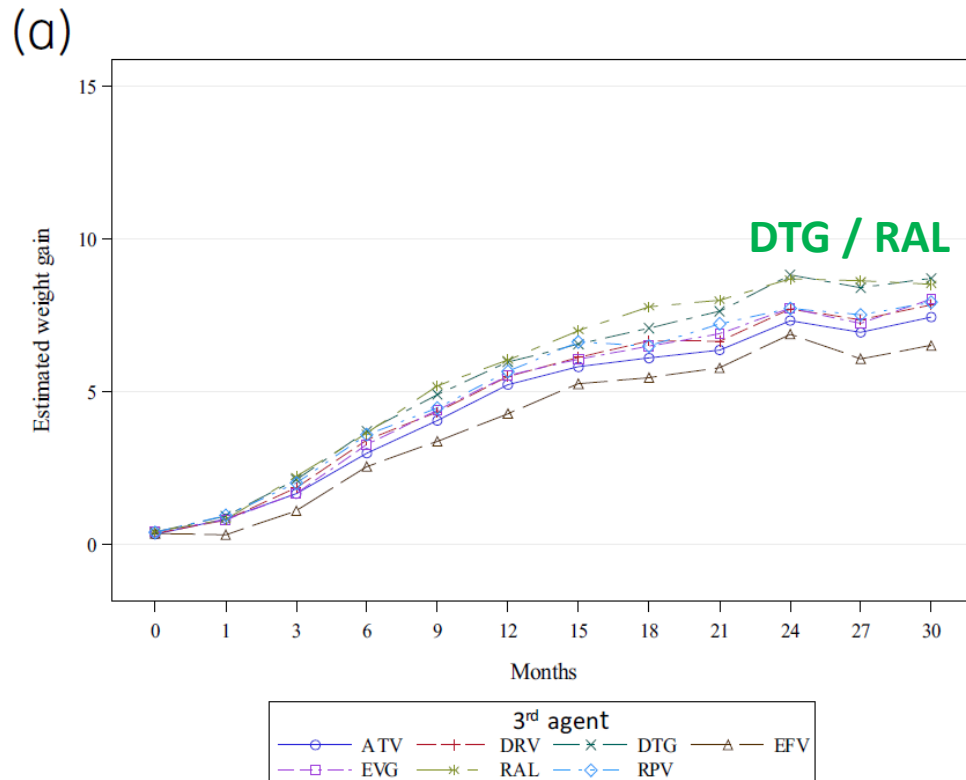


Striking differences in weight gain after cART initiation depending on early or advanced presentation: results from the ANRS CO4 FHDH cohort

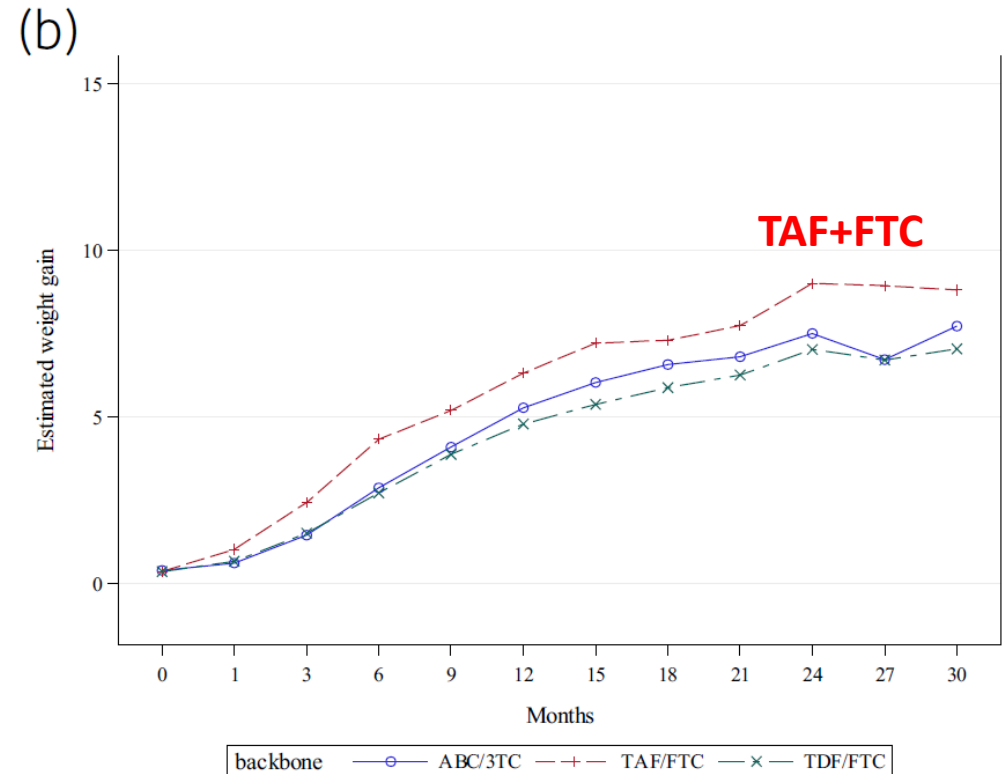
Sophie Grabar^{1*}, Valérie Potard², Lionel Piroth³, Sophie Abgrall⁴, Louis Bernard⁵, Clotilde Allavena⁶, Fabienne Caby^{2,7}, Pierre de Truchis⁸, Claudine Duvivier^{9,10,11,12}, Patricia Enel¹³, Christine Katlama¹⁴, Marie-Aude Khuong¹⁵, Odile Launay¹⁶, Sophie Matheron¹⁷, Giovanna Melica¹⁸, Hugues Melliez¹⁹, Jean-Luc Meynard²⁰, Juliette Pavie²¹, Laurence Slama²², Sylvie Bregigeon²³, Pierre Tattevin²⁴, Jacqueline Capeau²⁵ and Dominique Costagliola²

- A 30 mois, 34,5% ont une prise de poids >10%
 - 20,9% (presentation précoce) / +2,8 kg
 - 63,1% (presentation tardive) / + 9,7 kg

For all PWH: according to third agent



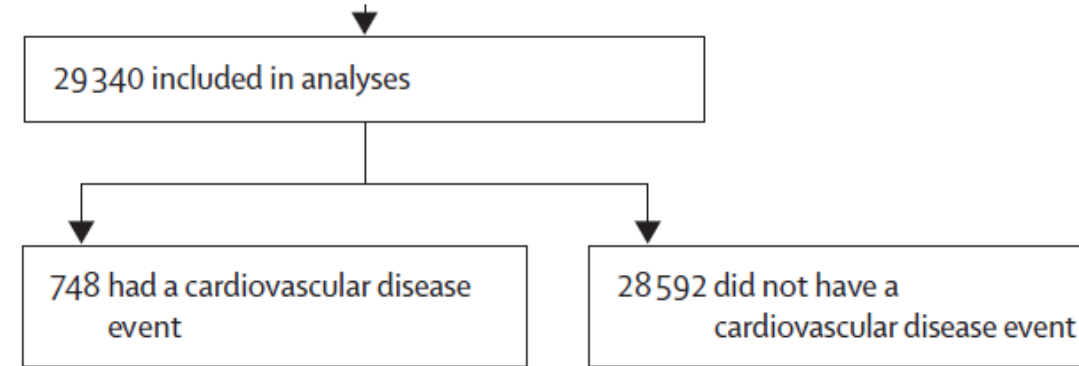
according to backbone



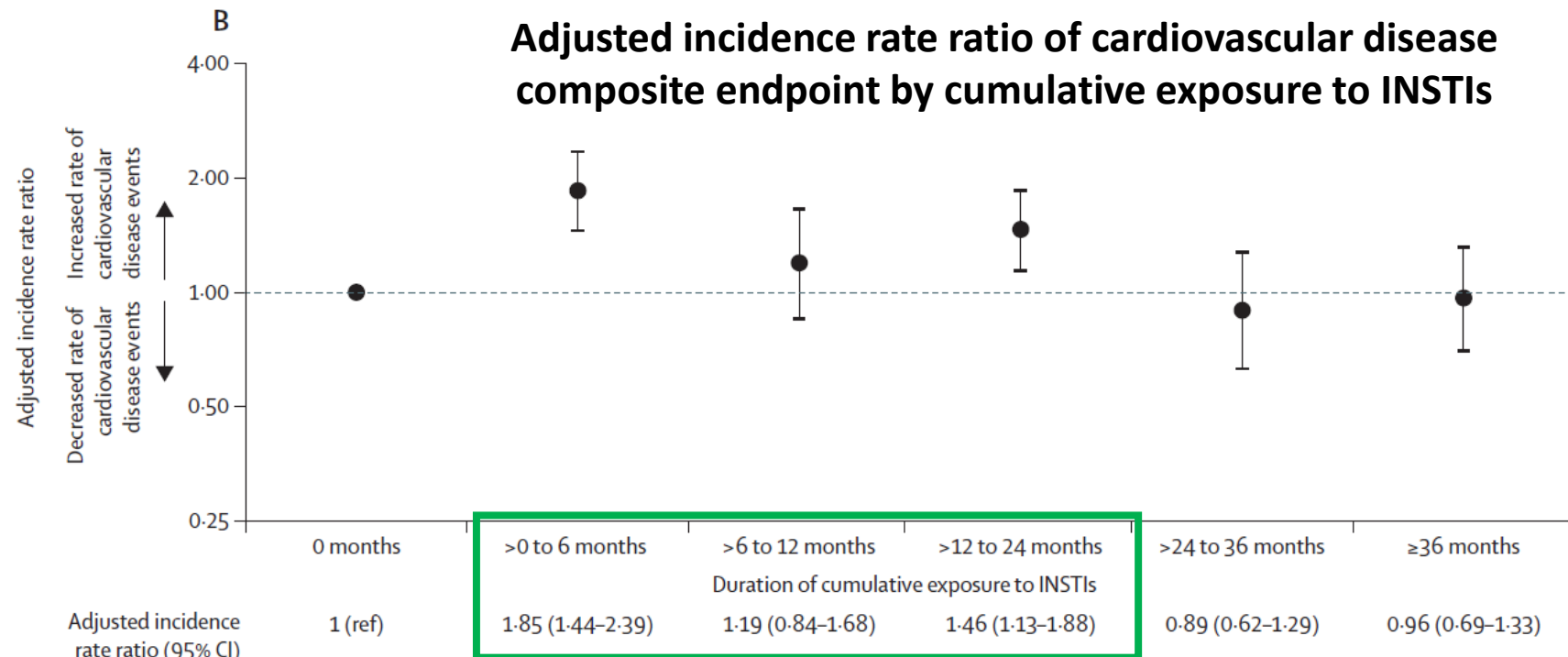
Associations between integrase strand-transfer inhibitors and cardiovascular disease in people living with HIV: a multicentre prospective study from the RESPOND cohort consortium

Bastian Neesgaard, Lauren Greenberg, Jose M Miró, Katharina Grabmeier-Pfistershammer, Gilles Wandeler, Colette Smith, Stéphane De Wit, Ferdinand Wit, Annegret Pelchen-Matthews, Cristina Mussini, Antonella Castagna, Christian Pradier, Antonella d'Arminio Monforte, Jörg J Vehreschild, Anders Sönnnerborg, Alain V Anne, Andrew Carr, Loveleen Bansal-Matharu, Jens D Lundgren, Harmony Garges, Felipe Rogatto, Robert Zangerle, Huldrych F Günthard, Line D Rasmussen, Coca Necsoi, Marc van der Valk, Marianna Menozzi, Camilla Muccini, Lars Peters, Amanda Mocroft, Lene Ryom

Lancet HIV 2022; 9: e474-85



RESPOND is a prospective, multicentre, collaboration study between 17 pre-existing European and Australian cohorts and includes more than 32 000 adults living with HIV in clinical care after Jan 1, 2012.



• Hypothèses:

- IMC augmente avec sd métabolique?
- Augmentation HTA et dyslipidémie qui précède évènement (observée)
- Activation plaquettaire ? (non observée)
- IRIS ? (non observé)
- Facteur de confusion? (TDF...)

Associations of modern initial antiretroviral drug regimens with all-cause mortality in adults with HIV in Europe and North America: a cohort study

Adam Trickey, Lei Zhang, M John Gill, Fabrice Bonnet, Greer Burkholder, Antonella Castagna, Matthias Cavassini, Piotr Cichon, Heidi Crane, Pere Domingo, Sophie Grabar, Jodie Guest, Niels Obel, Mina Psychogiou, Marta Rava, Peter Reiss, Christopher T Rentsch, Melchor Riera, Gundolf Schuettfort, Michael J Silverberg, Colette Smith, Melanie Stecher, Timothy R Sterling, Suzanne M Ingle, Caroline A Sabin, Jonathan A C Sterne

Lancet HIV 2022; 6: e404-13

- **ART-CC+ UK CHIC = 62 500 ART-naive**
- **Seul le premier schéma pris en compte dans le modèle (pas ceux qui suivent)**
- **2% de décès**
- **Au final peu de différence de risque de mortalité avec les traitements modernes**
- **Explication pour sur-risque raltégravir? Probable biais de sélection (CD4+bas, CV VIH plus haute, BK, chimio, ...)**

HR mortalité	All (n=62 500)	
	Unadjusted analysis	Adjusted for main variables*
Rilpivirine vs dolutegravir	0.45 (0.34-0.58)	0.77 (0.57-1.02)
Darunavir vs dolutegravir	1.19 (0.97-1.47)	0.96 (0.77-1.20)
Raltegravir vs dolutegravir	2.32 (1.87-2.88)	1.79 (1.42-2.26)
Elvitegravir vs dolutegravir	0.57 (0.45-0.72)	0.80 (0.62-1.03)
Efavirenz vs dolutegravir	0.62 (0.48-0.81)	0.68 (0.52-0.90)
Rilpivirine vs elvitegravir	0.78 (0.60-1.03)	0.96 (0.72-1.27)
Darunavir vs elvitegravir	2.09 (1.67-2.60)	1.20 (0.96-1.51)
Raltegravir vs elvitegravir	4.06 (3.23-5.09)	2.24 (1.77-2.83)
Efavirenz vs elvitegravir	1.09 (0.84-1.42)	0.86 (0.65-1.12)
Darunavir vs rilpivirine	1.91 (1.53-2.39)	1.26 (0.98-1.62)
Raltegravir vs rilpivirine	5.17 (4.06-6.58)	2.34 (1.81-3.04)
Efavirenz vs rilpivirine	1.39 (1.06-1.83)	0.89 (0.67-1.19)
Raltegravir vs darunavir	1.95 (1.62-2.33)	1.86 (1.55-2.24)
Efavirenz vs darunavir	0.52 (0.42-0.65)	0.71 (0.56-0.89)
Raltegravir vs efavirenz	3.72 (2.98-4.65)	2.62 (2.07-3.32)

A 4-days-on and 3-days-off maintenance treatment strategy for adults with HIV-1 (ANRS 170 QUATUOR): a randomised, open-label, multicentre, parallel, non-inferiority trial

Lancet HIV 2022; 9: e79-90

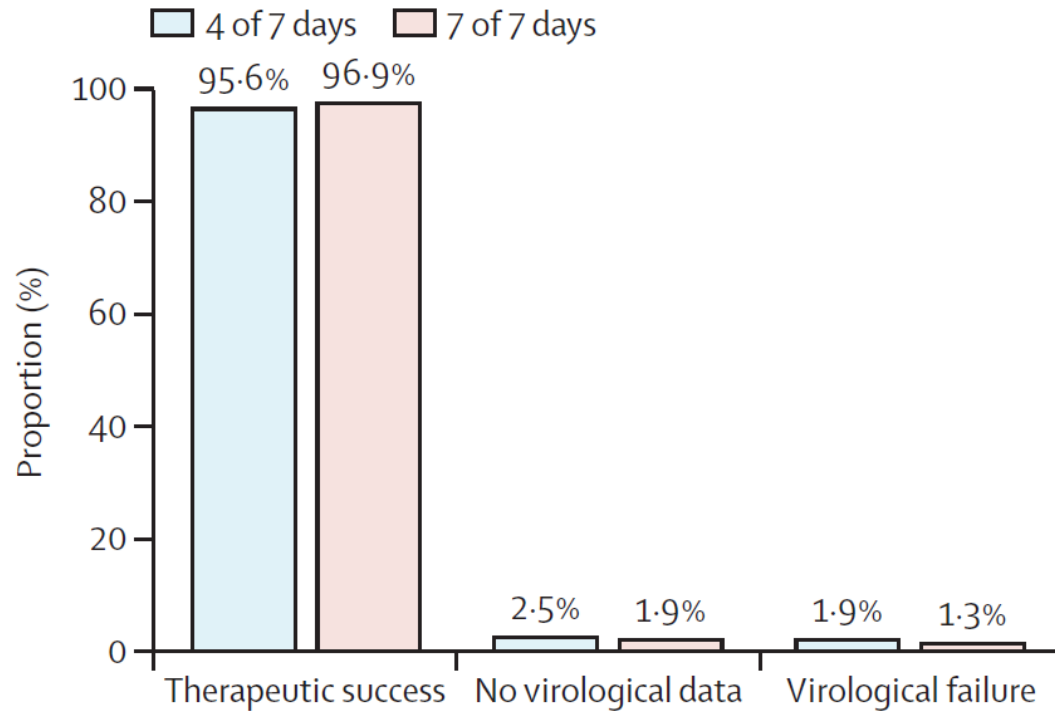
Roland Landman, Pierre de Truchis, Lambert Assoumou, Sidonie Lambert, Jonathan Belet, Karine Amat, Benedicte Lefebvre, Liotia Alavena, Christine Katlama, Yazdan Yazdanpanah, Jean-Michel Molina, Ventzislava Petrov-Sanchez, Séverine Gibowski, Jean-Claude Alvarez, Jacques Leibowitch*, Jacqueline Capeau, Soraya Fellahi, Martin Duracinsky, Laurence Morand-Joubert, Dominique Costagliola, Pierre-Marie Girard, ANRS 170 QUATUOR study group†

318 patients

- Sous trithérapie
- CV VIH < 50 cp/ml depuis > 12 mois
- VIH sensible à tous les traitements
- CD4 > 250/mm³
- Non coïnfectés VHB +/- VHC

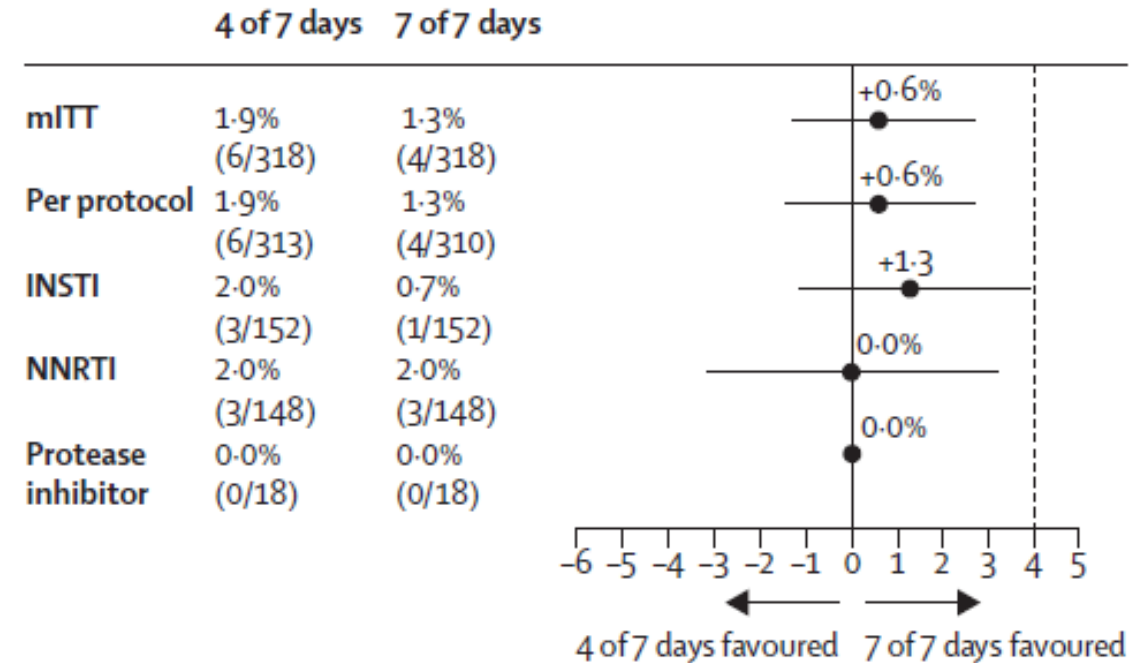
randomisés 1:1

A Primary endpoint (FDA snapshot method)



Number success	304	308	310	312	312	314
Number failure	14	10	8	6	6	4
Number at risk	318	318	318	318	318	318

D Virological failure (FDA snapshot method)



Efficacy and Safety of Switching to the 2-Drug Regimen Dolutegravir/Lamivudine Versus Continuing a 3- or 4-Drug Regimen for Maintaining Virologic Suppression in Adults With Human Immunodeficiency Virus 1: Week 48 Results From the Phase 3, Noninferiority SALSA Randomized Trial

Josep M. Llibre,¹ Carlos Brites,² Chien-Yu Cheng,^{3,4} Olayemi Osiyemi,⁵ Carlos Galera,⁶ Laurent Hocqueloux,⁷ Franco Maggiolo,⁸ Olaf Degen,⁹ ...

Clinical Infectious Diseases® 2023;76(4):720–9

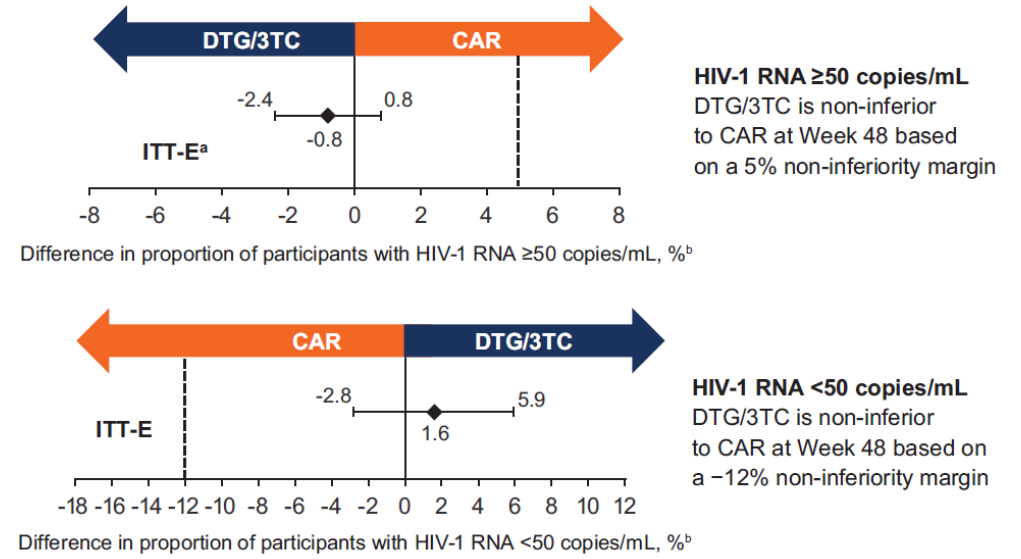
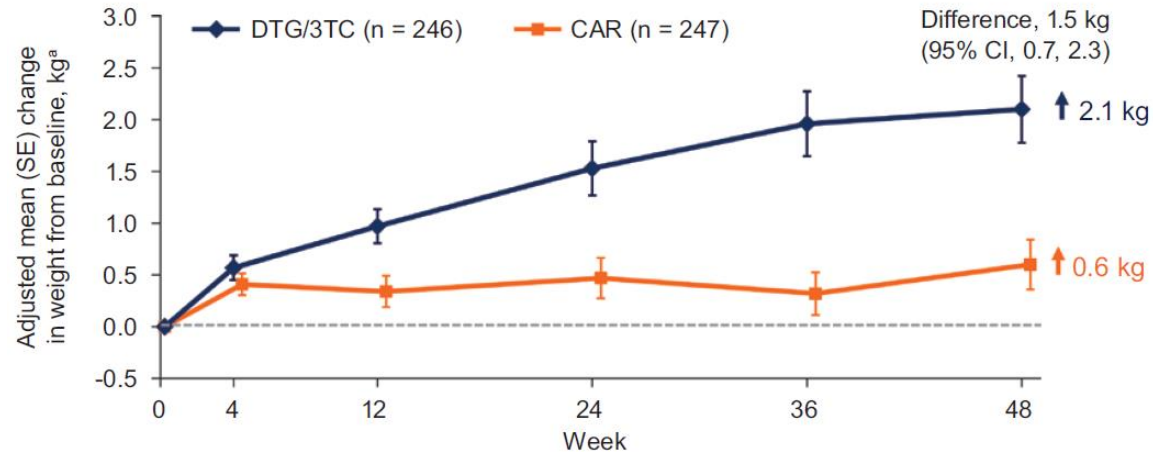


Table 2. Snapshot Outcomes at Week 48 in the ITT-E Population

	DTG/3TC (n = 246)	CAR (n = 247)
HIV-1 RNA <50 copies/mL	232 (94)	229 (93)
HIV-1 RNA ≥50 copies/mL	1 (<1)	3 (1)

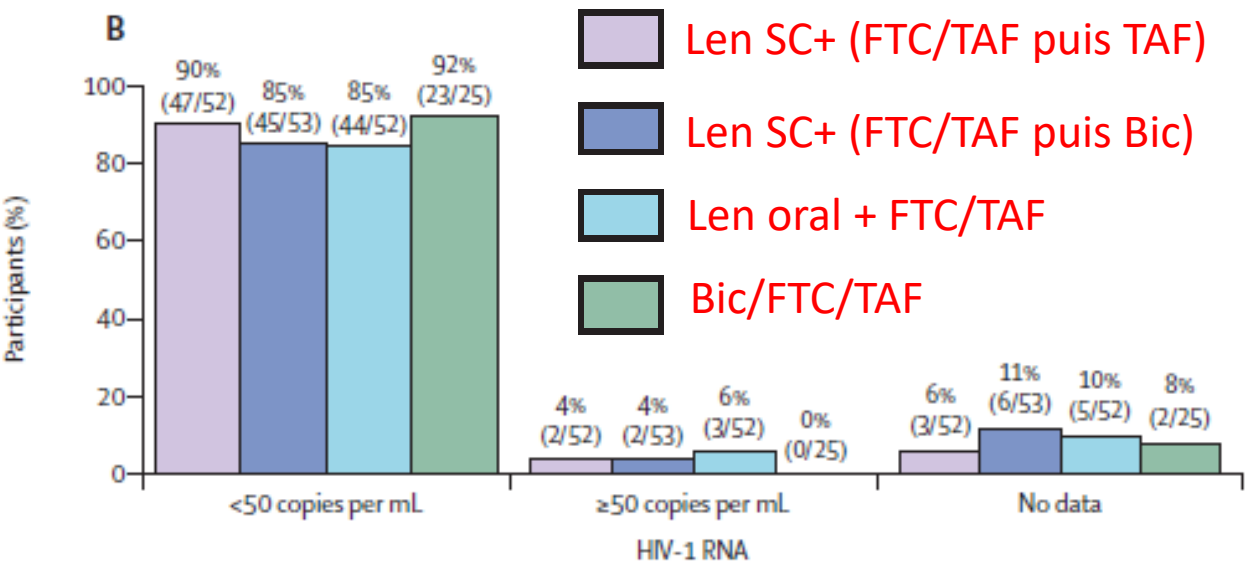
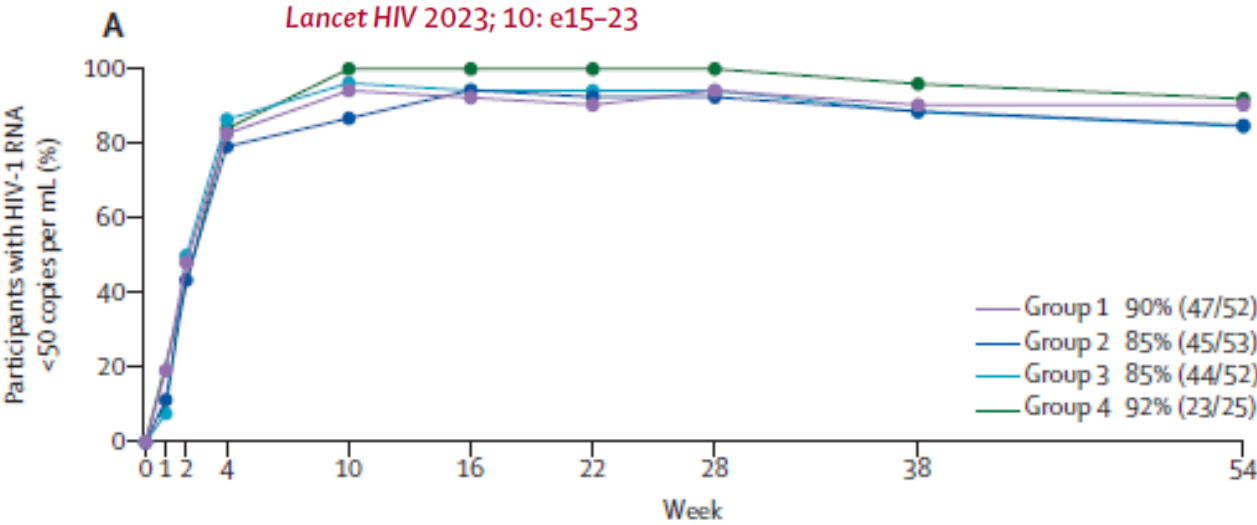
Poids





Lenacapavir administered every 26 weeks or daily in combination with oral daily antiretroviral therapy for **initial** treatment of HIV: a randomised, open-label, active-controlled, phase 2 trial

Samir K Gupta, Mezgebe Berhe, Gordon Crofoot, Paul Benson, Moti Ramgopal, James Sims, Cheryl McDonald, Peter Ruane, William E Sanchez, Anita Scribner, Shan-Yu Liu, Laurie A VanderVeen, Hadas Dvory-Sobol, Martin S Rhee, Jared M Baeten, Ellen Koenig

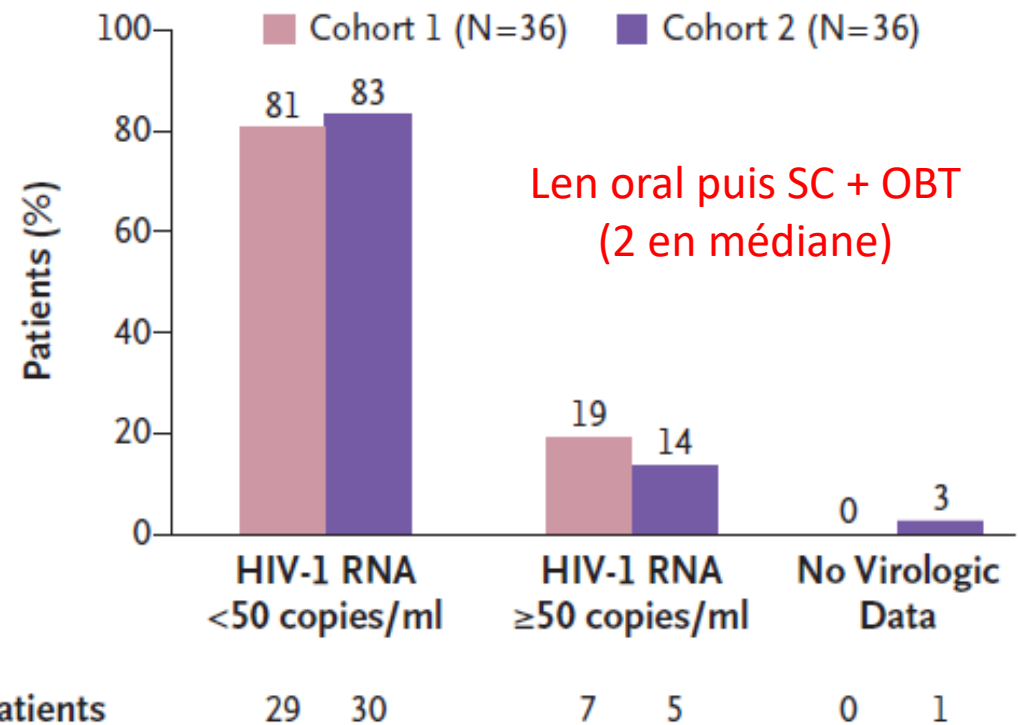


ORIGINAL ARTICLE

Capsid Inhibition with Lenacapavir in Multidrug-Resistant HIV-1 Infection

Sorana Segal-Maurer, M.D., Edwin DeJesus, M.D., Hans-Jurgen Stellbrink, M.D., Antonella Castagna, M.D., Gary J. Richmond, M.D., Gary I. Sinclair, M.D., Krittaecho Siripassorn, M.D., Peter J. Ruane, M.D., Mezgebe Berhe, M.D., Hui Wang, Ph.D., Nicolas A. Margot, M.A., Hadas Dvory-Sobol, Ph.D., Robert H. Hyland, D.Phil., Diana M. Brainard, M.D., Martin S. Rhee, M.D., Jared M. Baeten, M.D., Ph.D., and Jean-Michel Molina, M.D., Ph.D., for the CAPELLA Study Investigators*

B HIV-1 RNA at 26 Weeks randomisée non randomisée



No. of Patients

29 30 7 5 0 1

Prevalence and Characteristics of Nonalcoholic Fatty Liver Disease and Fibrosis in People Living With HIV Monoinfection: A Systematic Review and Meta-analysis

Markos Kalligeros,¹ Athanasios Vassilopoulos,² Fadi Shehadeh,^{2,3} Stephanos Vassilopoulos,² Ingrid Lazaridou,¹ Eleftherios Mylonakis,² Kittichai Promrat,⁴ and Jack R. Wands⁵

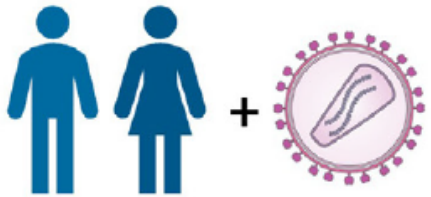
NAFLD



Prevalence and characteristics of NAFLD and fibrosis in people living with HIV monoinfection: a systematic review and meta-analysis

Background

People living with HIV (PLWH) are at increased risk for NAFLD



Prevalence of NAFLD, NASH and fibrosis are unknown



Key Findings

43 studies
 8230 patients

Prevalence estimates:

On imaging:

NAFLD
33.9% (CI: 29.6%-38.3%)

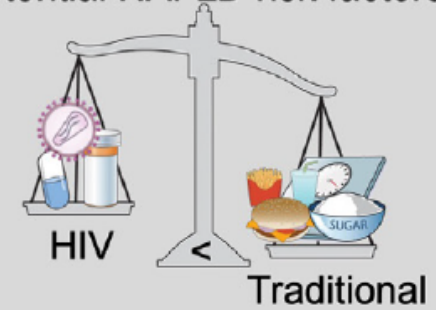
Fibrosis (≥ 7.1 kPa)
12% (CI: 10%-14.1%)

On Biopsy:

Fibrosis (\geq F2 on histology)
23.3% (CI: 14.9%-32.7%)

NASH
48.7% (CI: 34.3%-63.3%)

Potential NAFLD risk factors



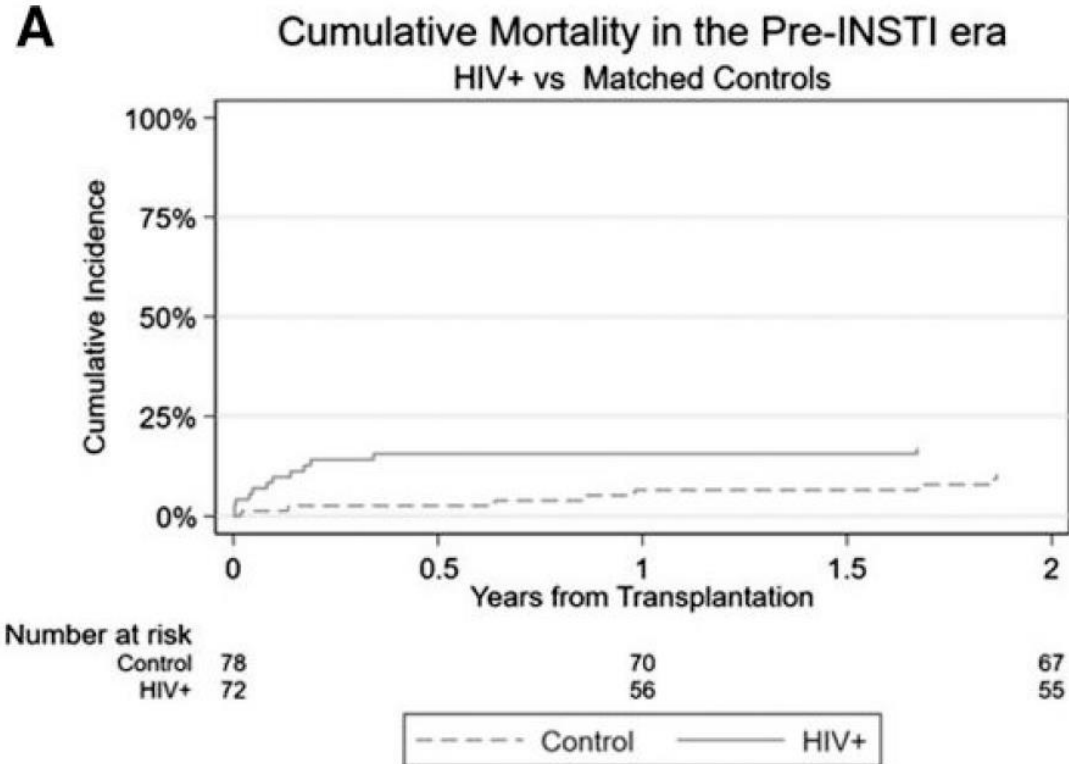
Clinical Gastroenterology and Hepatology

2023

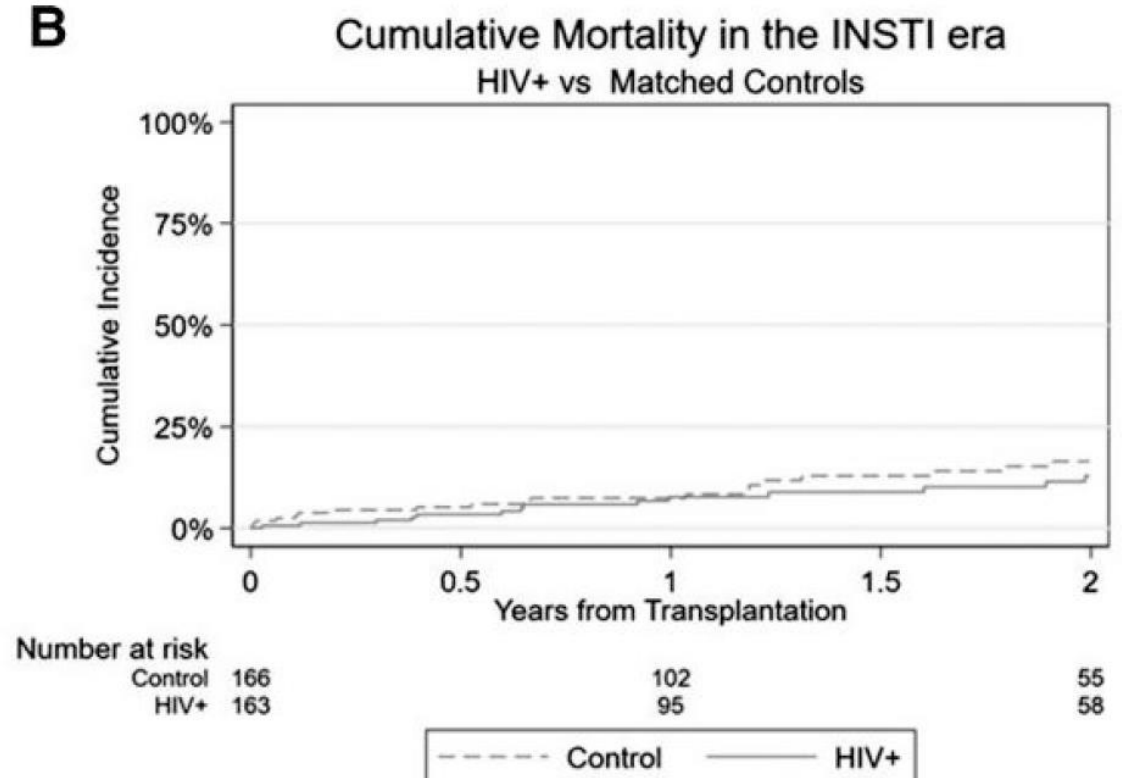
Improved Survival After Liver Transplantation for Patients With Human Immunodeficiency Virus (HIV) and HIV/Hepatitis C Virus Coinfection in the Integrase Strand Transfer Inhibitor and Direct-Acting Antiviral Eras

Jake Sheraj Jacob,¹ Anjiya Shaikh,² Karthik Goli,¹ Nicole E. Rich,³ Jihane N. Benhammou,⁴ Aijaz Ahmed,⁵ Donghee Kim,⁵ Abbas Rana,⁶ John A. Goss,⁶ Susanna Naggie,⁷ Tzu-Hao Lee,^{1,6} Fasiha Kanwal,¹ and George Cholankeril^{1,6}

Base US transplantation hépatique 235 PVVIH greffés



HIV+HR, 2.060 (95% CI, 1.172–3.621), *P* = .012

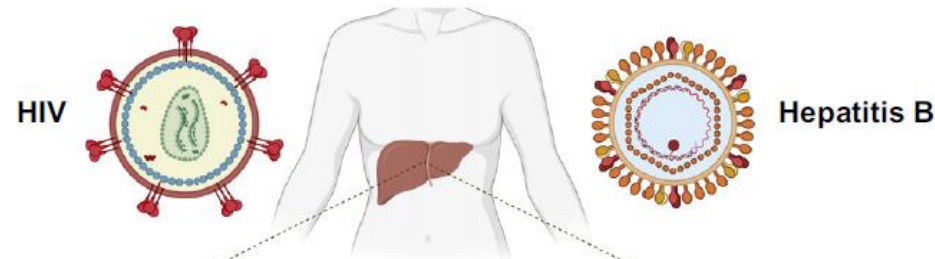


HIV+HR, 0.767 (95% CI, .419–1.402), *P* = .389

External validation of the PAGE-B score for HCC risk prediction in people living with HIV/HBV coinfection

Authors

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*SCORE PAGE-B (PLAQUETTES, AGE, GENRE) :

Age évalué par CATEGORIES

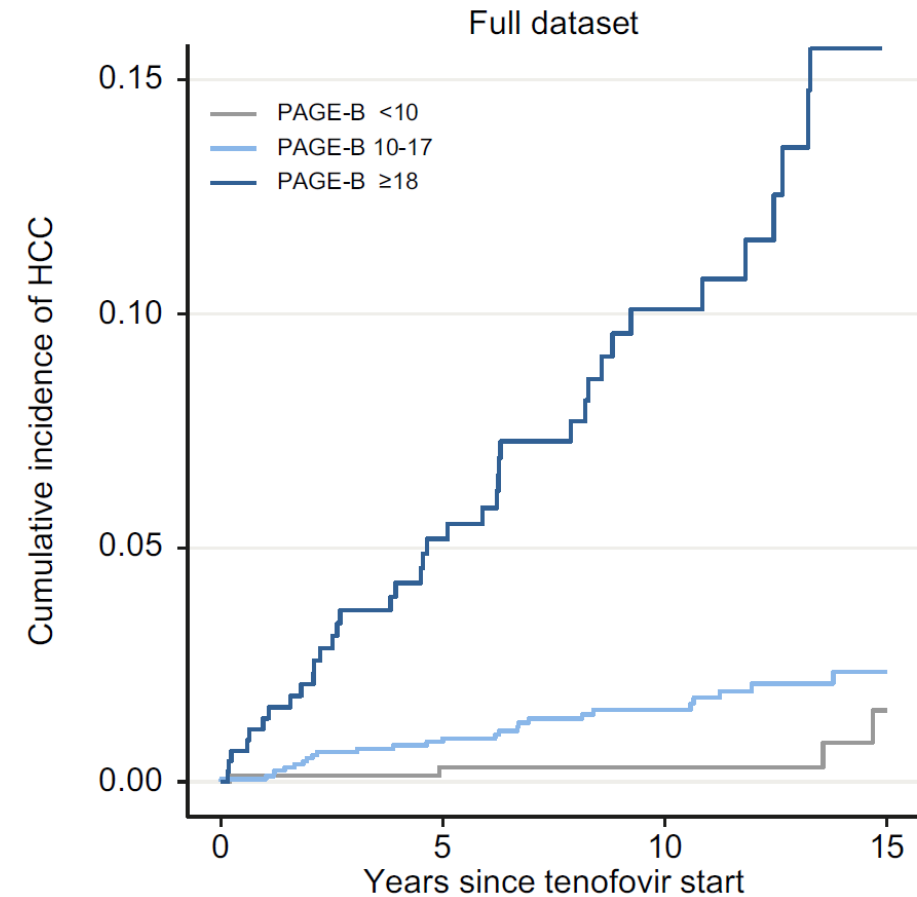
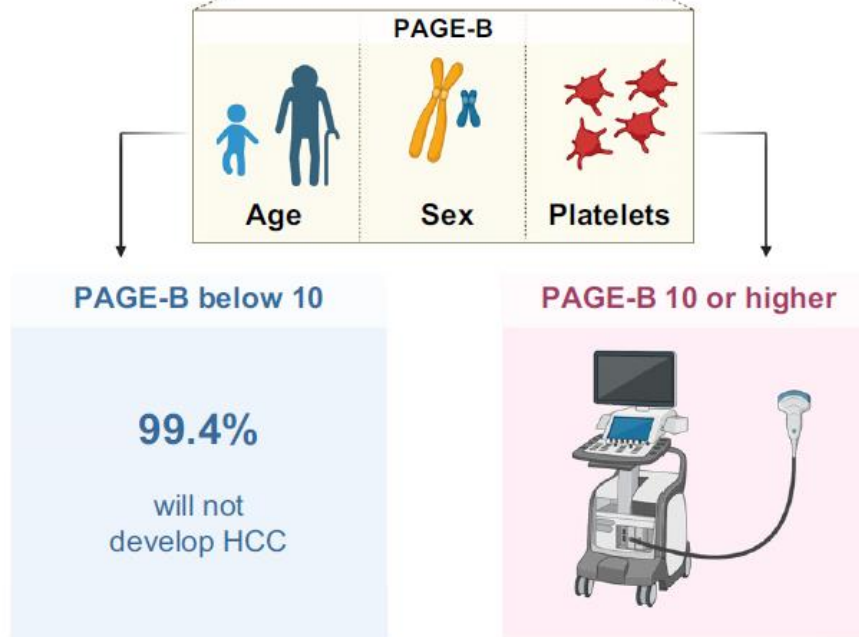
- 16 à 29 ans : 0 point
- 30 à 39 ans : 2 points
- 40 à 49 ans : 4 points
- 50 à 59 ans : 6 points
- 60 à 69 ans : 8 points
- ≥ 70 ans : 10 points

Sexe

- Homme : 6 points
- Femme : 0 point

Plaquettes évaluées par CATEGORIES

- ≥ 200 G/l : 0 point
- 100 à 199 G/l : 1 point
- <100 G/l : 2 points



N° at risk				
PAGE-B <10	785	573	358	131
PAGE-B 10-17	1,711	1,319	863	279
PAGE-B ≥18	466	311	175	52

Hépatite B

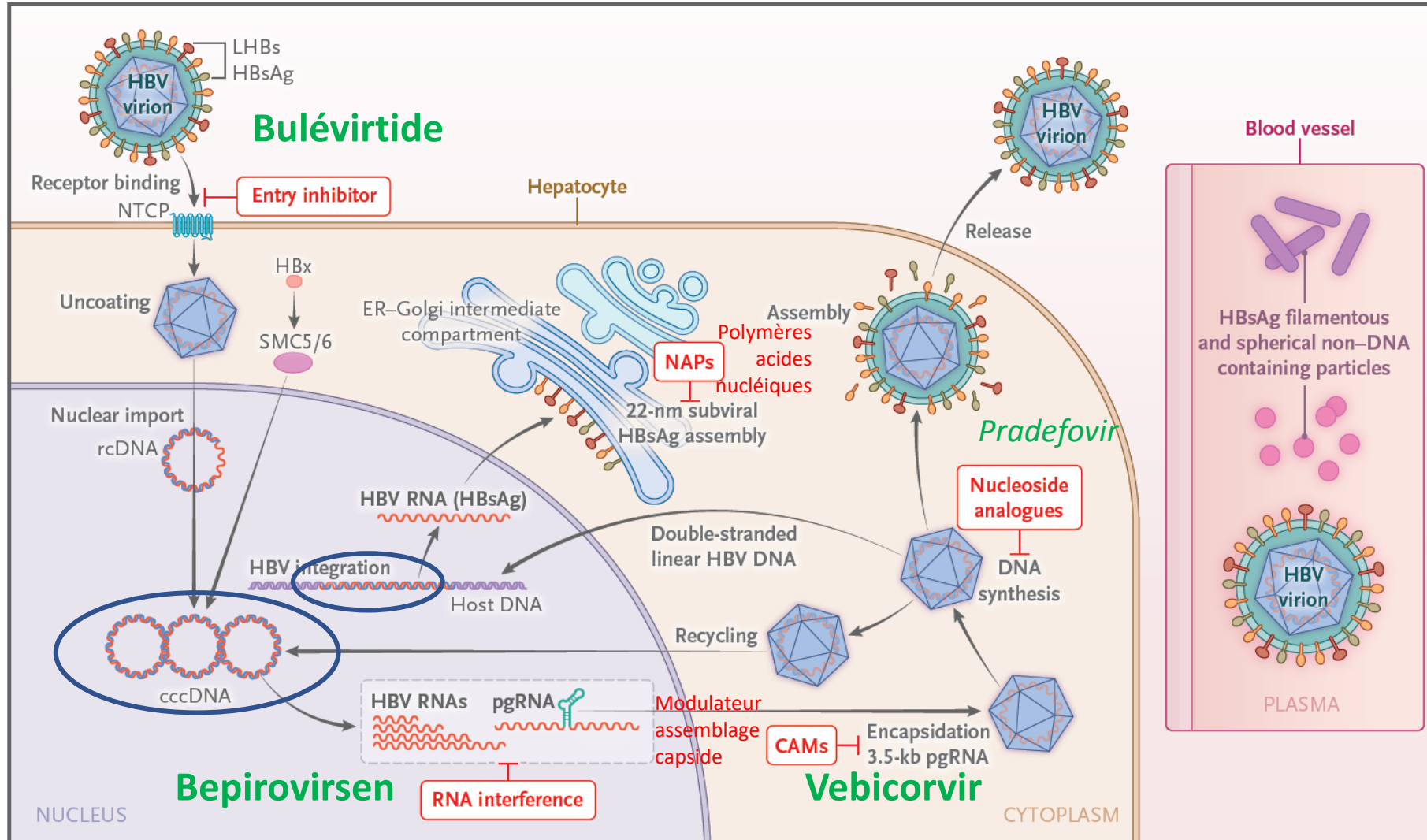


Table 2. New Anti-HBV Compounds in Clinical Development.

Type and Compound	Originator	Phase*
Capsid assembly modulators		
Vebicorvir (ABI-H0731)	Assembly Biosciences	Phase 2 terminated
ABI-H3733		Phase 1
ABI-4334		Preclinical studies
Morphothiadin (GLS4)	HEC Pharma	Phase 2
JNJ-6379	Janssen	Phase 2b
EDP-514	Enanta	Phase 2
RG7907	Roche	Phase 2
QL-007	Qilu	Phase 1
Canocapavir	Zhimeng Biopharma	Not available
ALG-000184	Aligos Therapeutics	Phase 1
AB-836	Arbutus	Phase 1 and 2
VNRX-9945	Venatorx	Phase 1 terminated
O7049839	Roche	Phase 1
siRNA agents†		
RG6346 (RO7445482)	Roche/Dicerna	Phase 2
JNJ-3989	Janssen	Phase 2b
AB7-29-001	Arbutus	Phase 2
VIR-2218	Vir Biotechnology	Phase 2
ALG-125755	Aligos Therapeutics	Phase 1
Antisense oligonucleotides		
Bepirovirsen (GSK3228836)	GSK	Phase 2
RO7062931	Roche	Phase 1
ALG-020572-401	Aligos Therapeutics	Phase 1
Nucleic acid polymers: REP 2139, REP 2165		
Active-site polymerase inhibitor: ATI-2173	Antios	Phase 2
Entry inhibitor: bulevirtide	Gilead	Phase 3 (hepatitis D)
Transcriptional inhibitor: nitazoxanide	Romark Laboratories/Lupin	Phase 2

Vebicorvir = inhibiteur de la protéine du core VHB

→ interfère avec l'assemblage de la capsid, l'encapsidation du pgRNA et la formation du cccDNA

Research Article
Viral Hepatitis

JOURNAL
OF HEPATOLOGY

Research Article
Viral Hepatitis

JOURNAL
OF HEPATOLOGY

Safety and efficacy of vebicorvir in virologically suppressed patients with chronic hepatitis B virus infection

Man-Fung Yuen, Kosh Agarwal,
Xiaoli Ma, ..., Jacob P. Lalezari,
Scott K. Fung, Mark S. Sulkowski

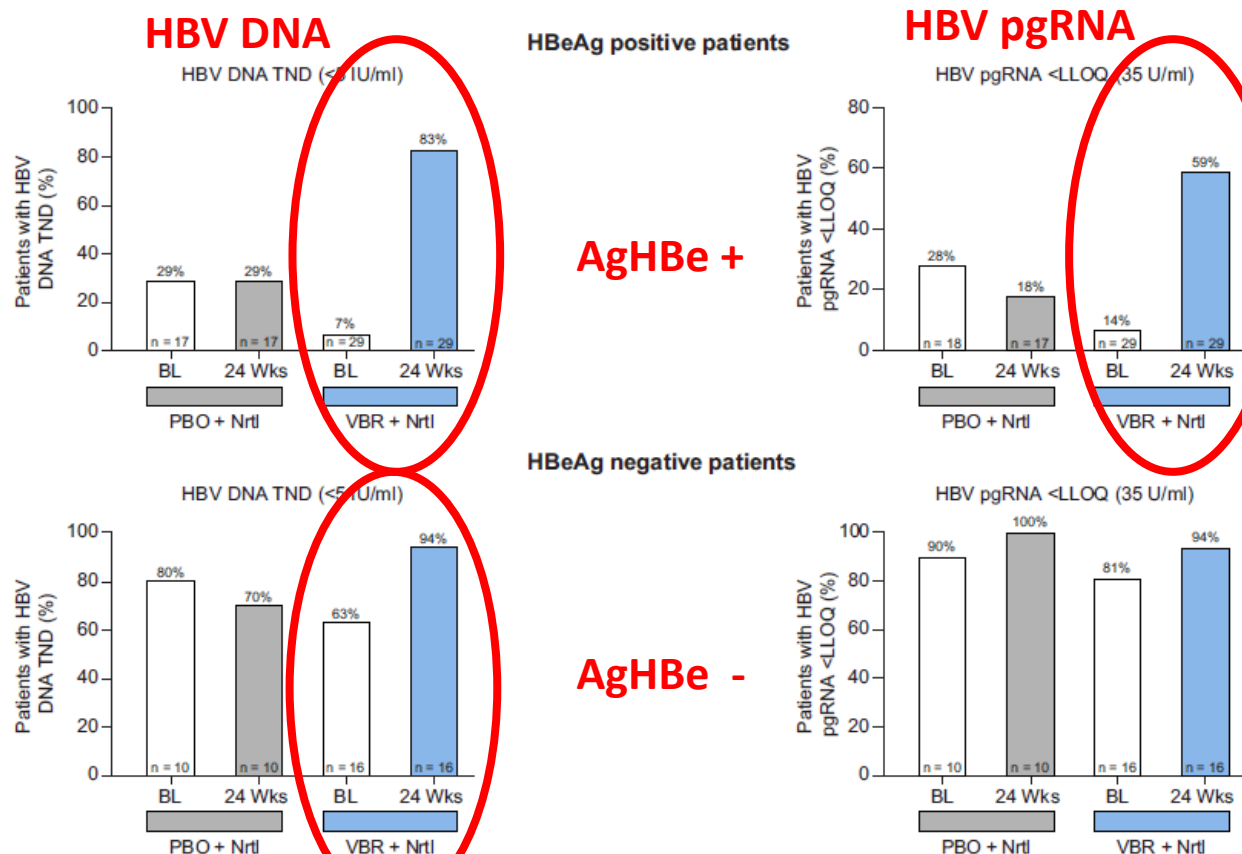
virus infection

Phase 2

Safety and efficacy of vebicorvir administered with entecavir in treatment-naïve patients with chronic hepatitis B virus infection

Mark S. Sulkowski, Kosh Agarwal,
Xiaoli Ma, ..., Jacob P. Lalezari,
Scott K. Fung, Man-Fung Yuen

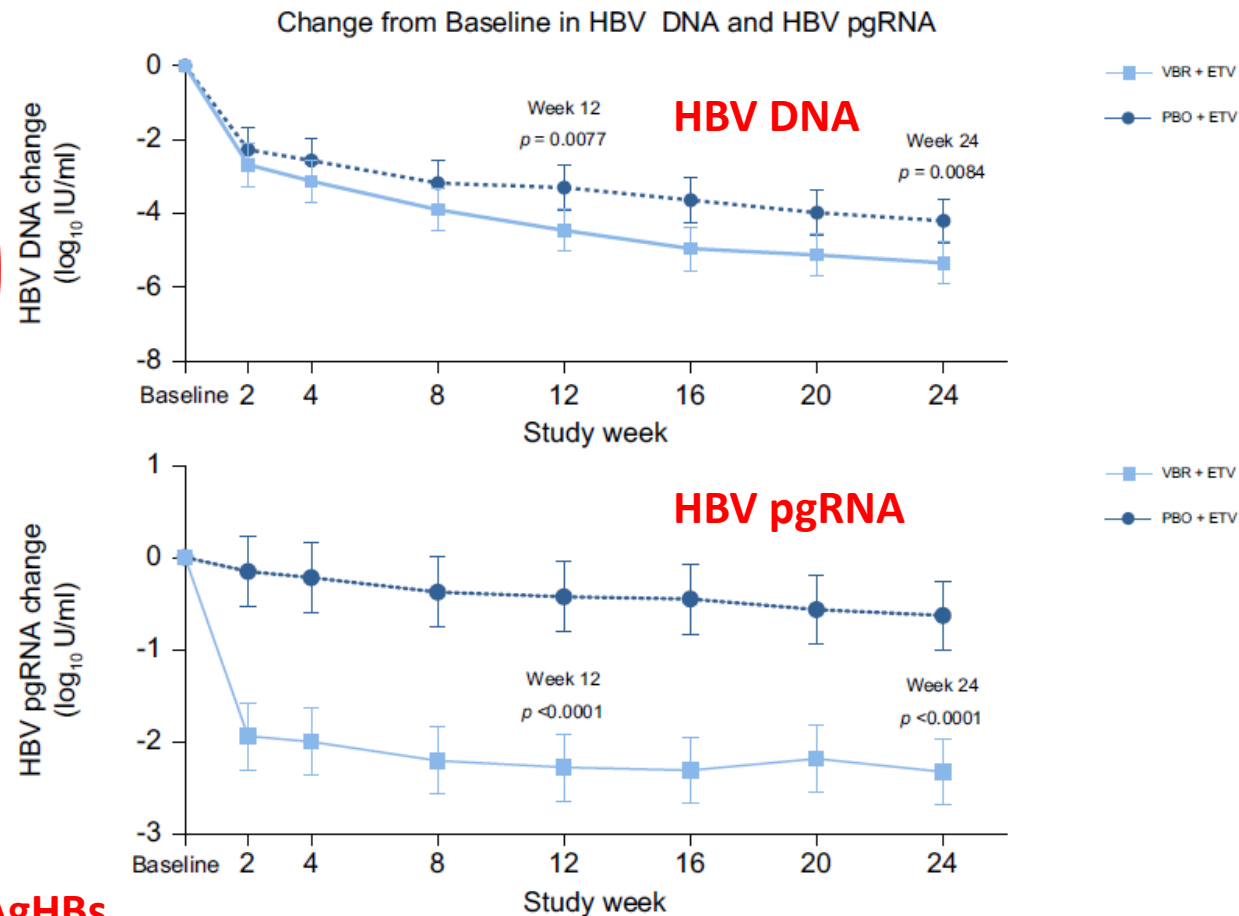
Phase 2



AgHBe +

AgHBe -

Pas d'impact sur taux AgHBs



Bepirovirsen = oligonucleotide antisens qui cible tous les ARN VHB (ARN messenger VHB, ARN pré-génomique)

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Efficacy and Safety of Bepirovirsen in Chronic Hepatitis B Infection

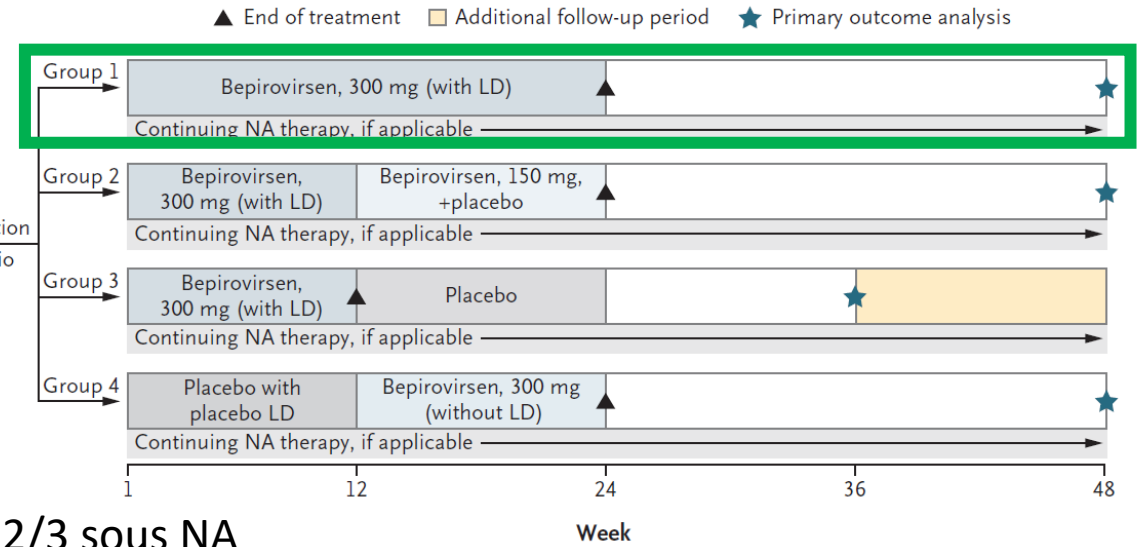
M.-F. Yuen, S.-G. Lim, R. Plesniak, K. Tsuji, H.L.A. Janssen, C. Pojoga, A. Gadano, C.P. Popescu, T. Stepanova, T. Asselah, G. Diaconescu, H.J. Yim, J. Heo, E. Janczewska, A. Wong, N. Idriz, M. Imamura, G. Rizzardini, K. Takaguchi, P. Andreone, M. Arbune, J. Hou, S.J. Park, A. Vata, J. Cremer, R. Elston, T. Lukić, G. Quinn, L. Maynard, S. Kendrick, H. Plein, F. Campbell, M. Paff, and D. Theodore, for the B-Clear Study Group*

Receiving stable NA therapy (N=227)
Not currently receiving NA therapy (N=230)

Randomization
3:3:3:1 ratio

Phase 2b

457 patients, 2/3 AgHBe -, 2/3 sous NA



Primary outcome = taux d'Ag HBs sous le seuil de détection ET AND VHB <20UI/mL 24 semaines après la fin du bepovirsen

Table 2. Primary Outcome (Intention-to-Treat Population).*

Variable	Receiving NA Therapy				Not Receiving NA Therapy			
	Group 1 (N=68)	Group 2 (N=68)	Group 3 (N=68)	Group 4 (N=23)	Group 1 (N=70)	Group 2 (N=68)	Group 3 (N=68)	Group 4 (N=24)
Primary-outcome event — no. of participants (%) †	6 (9)	6 (9)	2 (3)	0	7 (10)	4 (6)	1 (1)	0
Point estimate of response — % (95% credible interval)	9 (0–31)	9 (0–43)	3 (0–16)	2 (0–8) ‡	10 (0–38)	6 (0–25)	2 (0–6) ‡	2 (0–8) ‡

Bulevirtide = se lie/bloque le sodium taurocholate cotransporting polypeptide (NTCP) – récepteur entrée VHB et VHD

Safety and efficacy of bulevirtide in combination with tenofovir disoproxil fumarate in patients with hepatitis B virus and hepatitis D virus coinfection (MYR202): a multicentre, randomised, parallel-group, open-label, phase 2 trial

Heiner Wedemeyer, Katrin Schöneweis, Pavel Bogomolov, Antje Blank, Natalia Voronkova, Tatiana Stepanova, Olga Sagalova, Vladimir Chulanov, Marina Osipenko, Viacheslav Morozov, Natalia Geyvandova, Snezhana Sleptsova, Igor G Bakulin, Ilsiya Khaertynova, Marina Rusanova, Anita Pathil, Uta Merle, Birgit Bremer, Lena Allweiss, Florian A Lempp, Kerstin Port, Mathias Haag, Matthias Schwab, Julian Schulze zur Wiesch, Markus Cornberg, Walter E Haefeli, Maura Dandri, Alexander Alexandrov, Stephan Urban

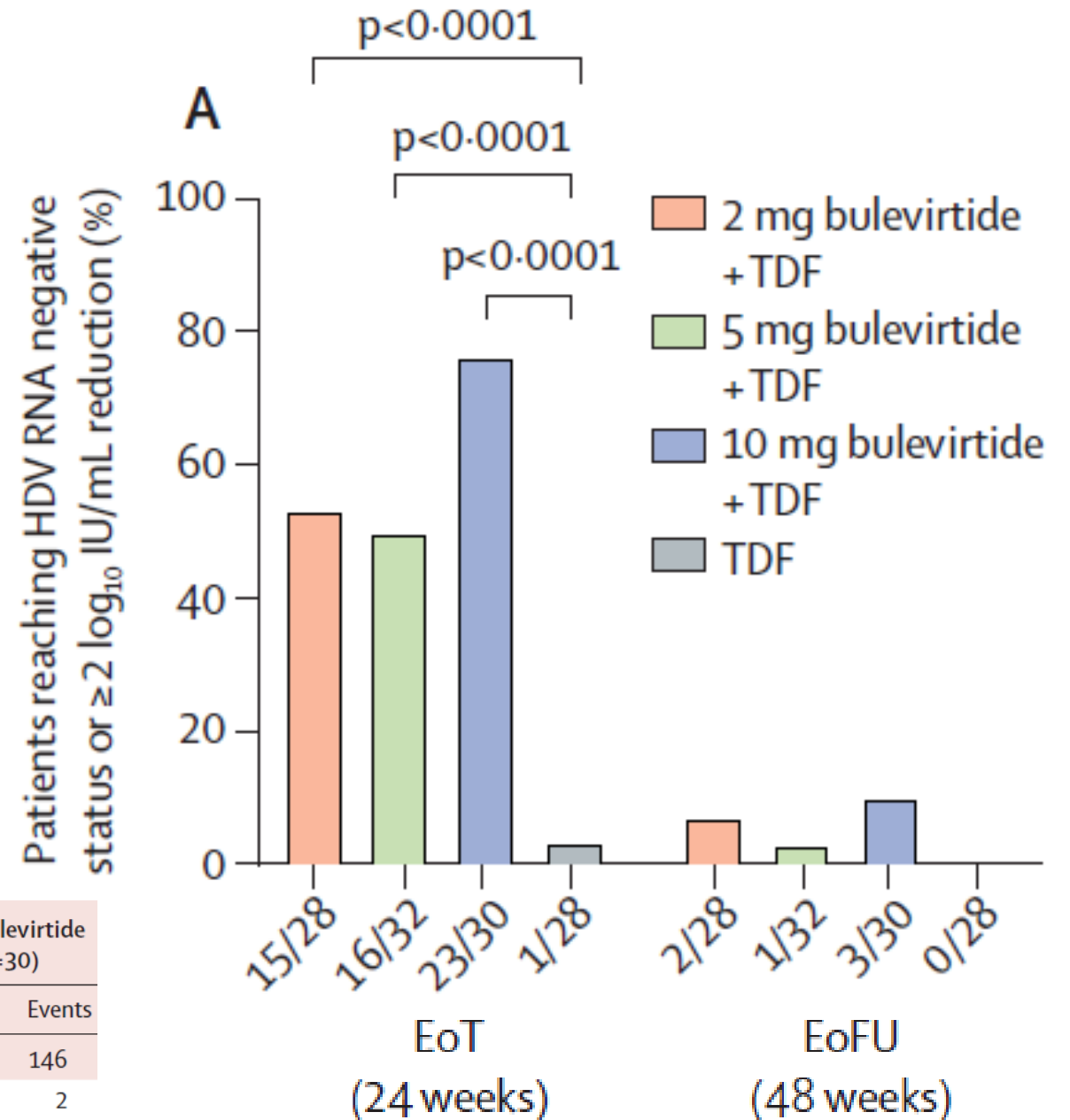
Lancet Infect Dis 2023;

23: 117–29

phase 2 randomisé 1:1:1:1 en ouvert

120 patients inclus – si bulevirtide, pris 24 semaines – TDF seul après

Patients VIH, insuff rénaux ou cirrhose Child B ou C non inclus



	2 mg bulevirtide group (n=28)		5 mg bulevirtide group (n=32)		10 mg bulevirtide group (n=30)	
	n (%)	Events	n (%)	Events	n (%)	Events
Any adverse event	18 (64%)	74	21 (66%)	131	23 (77%)	146
Any serious adverse event	0	0	3 (9%)	3	2 (7%)	2

Merci de votre attention

Prolonged viral suppression with anti-HIV-1 antibody therapy

<https://doi.org/10.1038/s41586-022-04597-1>

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Christian Gaebler¹, Lilian Nogueira¹, Elina Stoffel^{1,2}, Thiago Y. Oliveira¹, Gaëlle Breton¹, Katrina G. Millard¹, Martina Turroja¹, Allison Butler¹, Victor Ramos¹, Michael S. Seaman³, Jacqueline D. Reeves⁴, Christos J. Petropoulos⁴, Irina Shimeliovich¹, Anna Gazumyan¹, Caroline S. Jiang⁵, Nikolaus Jilg⁶, Johannes F. Scheid⁷, Rajesh Gandhi⁶, Bruce D. Walker⁸, Michael C. Sneller⁹, Anthony Fauci⁹, Tae-Wook Chun⁹, Marina Caskey^{11,12} & Michel C. Nussenzweig^{1,10,11}✉

Combination anti-HIV antibodies provide sustained virological suppression

<https://doi.org/10.1038/s41586-022-04797-9>

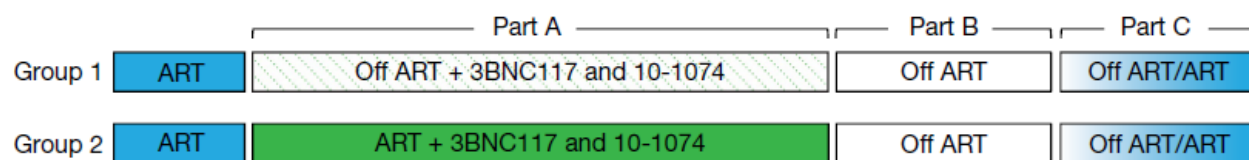
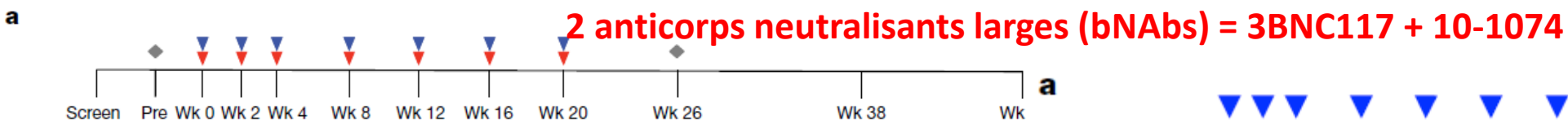
Received: 25 October 2021

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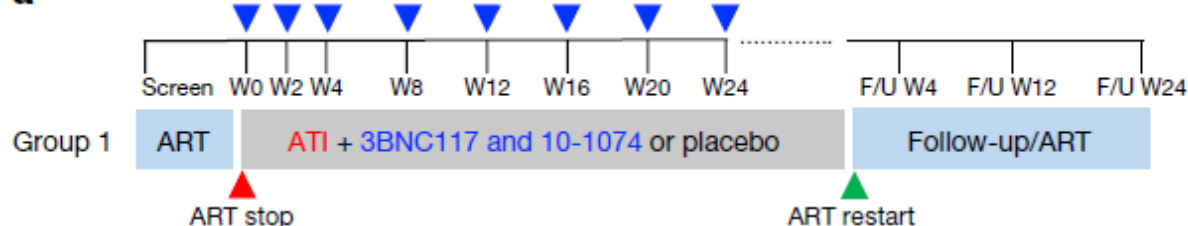
Published online: 1 June 2022

Michael C. Sneller^{1,10}, Jana Blazkova^{1,10}, J. Shawn Justement¹, Victoria Shi¹, Brooke D. Kennedy¹, Kathleen Gittens², Jekaterina Tolstenko¹, Genevieve McCormack¹, Emily J. Whitehead¹, Rachel F. Schneck¹, Michael A. Proschan³, Erika Benko⁴, Colin Kovacs⁴, Cihan Oguz^{5,6}, Michael S. Seaman⁷, Marina Caskey⁸, Michel C. Nussenzweig^{8,9}, Anthony S. Fauci¹, Susan Moir^{1,10} & Tae-Wook Chun^{1,10}✉

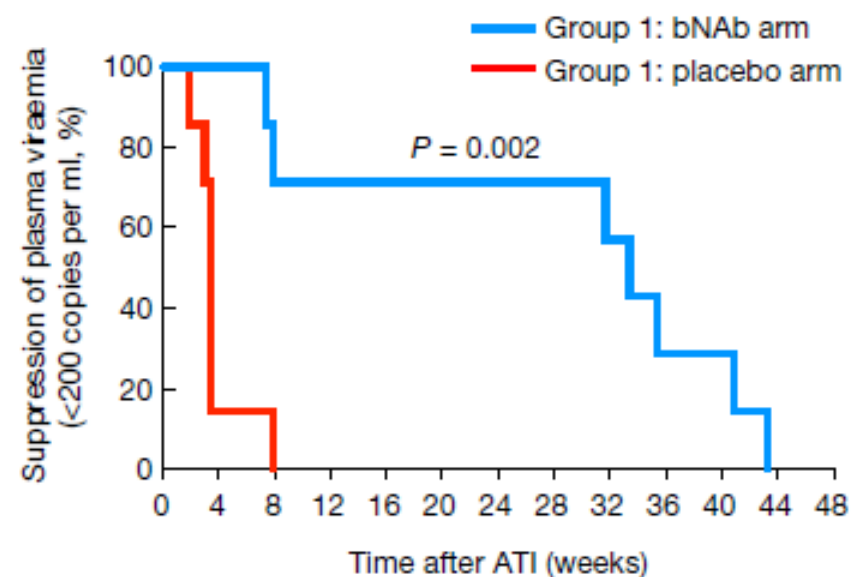
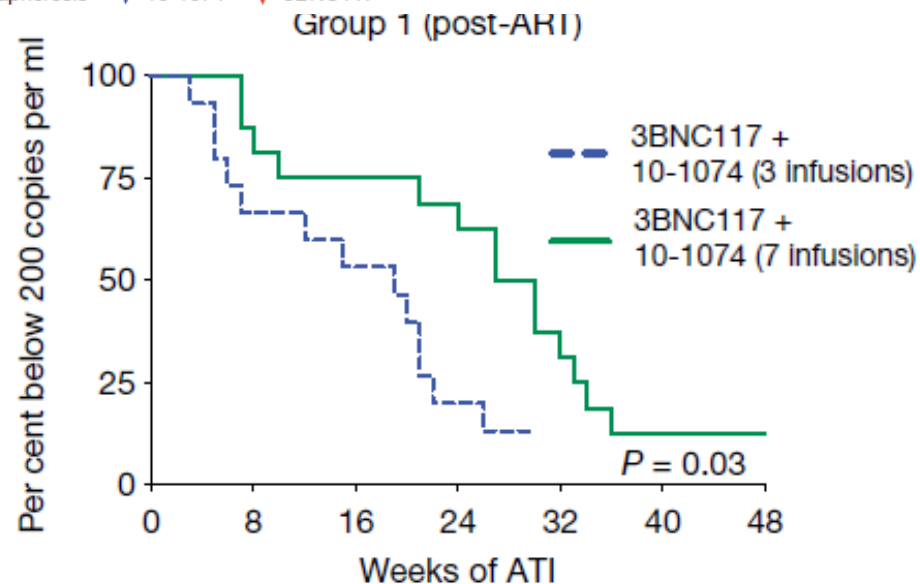
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◆ Leukapheresis ▼ 10-1074 ▼ 3BNC117



Effects of clinical, comorbid, and social determinants of health on brain ageing in people with and without HIV: a retrospective case-control study

Lancet HIV 2023

Kalen J Petersen, Tina Lu, Julie Wisch, June Roman, Nicholas Metcalf, Sarah A Cooley, Ganesh M Babulal, Rob Paul, Aristeidis Sotiras, Florin Vaida, Beau M Ances

Etude rétrospective cas témoins / IRM fonctionnelle
379 PVVIH/ modèle final

**Framingham cardiovascular risk score ($p=0.0034$),
detectable viral load (>50 copies per mL; $p=0.0023$),
hepatitis C co-infection ($p=0.0065$)**

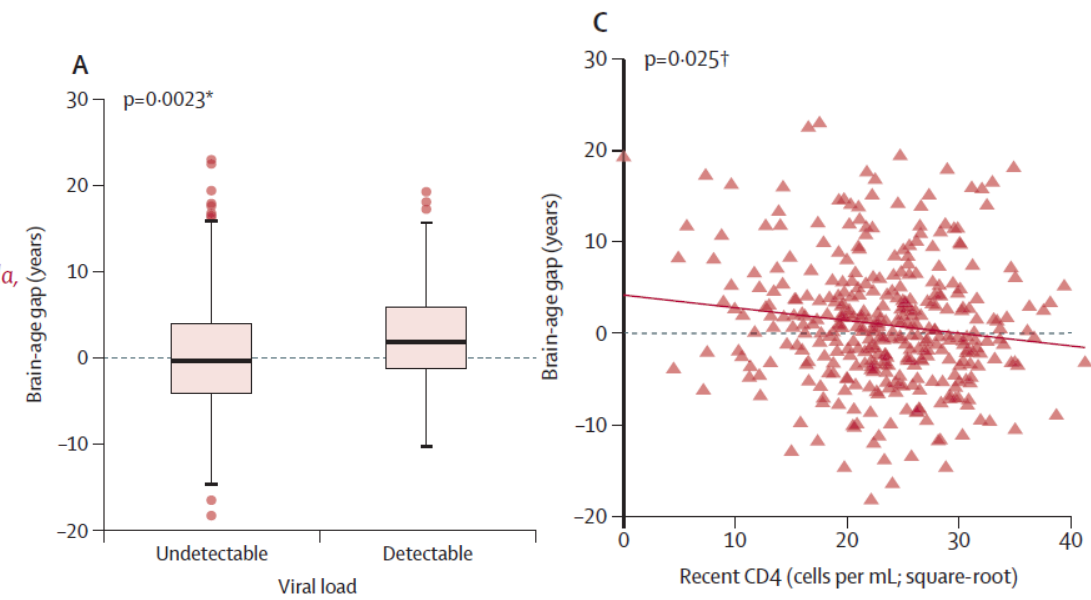


Figure 4 Temporal Trends of Cognitive Performance in PWH, HCs, and ECs in the Small Cohort

RESEARCH ARTICLE

Longitudinal Effects of Combination Antiretroviral Therapy on Cognition and Neuroimaging Biomarkers in Treatment-Naive People With HIV

Miriam T. Weber, PhD, Alan Finkelstein, BS, Md Nasir Uddin, PhD, Elizabeth Asiago Reddy, MD, MS, Roberto C. Arduino, MD, Lu Wang, MA, Madalina E. Tivarus, PhD, Jianhui Zhong, PhD, Xing Qiu, PhD, and Giovanni Schifitto, MD, MS

Neurology® 2022;99:e1045-e1055. doi:10.1212/WNL.0000000000200829

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Tests + IRM fonctionnelle +....
20 PVVIH traités/ 10 élités/20 contrôles

