

PO-08

Stopping secondary TE prophylaxis in suppressed patients with CD4 100-200 is not safe

Miro JM, Nicolas D, Esteve A* for the Opportunistic Infection Team of the Collaboration of Observational HIV Epidemiological Research in Europe (COHERE) in EuroCoord

Hospital Clinic-IDIBAPS, University of Barcelona, Barcelona;

*Hospital-Based Cancer Registry. ICO. Hospital Germans Trias i Pujol, Badalona, Spain.

Background

Discontinuation of Maintenance Anti-*Toxoplasma* Therapy in Patients who Completed an initial Course of Therapy and had a CD4+ T Lymphocyte >200 Cells/mm³ During More than 3 Months Due to Effective HAART

Study	No.	Relapses	Incidence/100 Patient-years (95% CI)
Denmark ¹⁵⁹	8	0	0 (0–47)
Madrid ¹⁶¹	9	0	0 (ND)
France ¹⁶²	19	0	0 (ND)
Switzerland ^{162a}	22	1	4.5 (0.1–2.3)
Seven European Cohorts ¹⁶³	75	1	0.84 (0.02–4.68)
GESIDA ¹⁶⁴			
Stop	28	0	0 (0–4.78)
Continue	29	0	0 (0–5.19)

HAART, highly active antiretroviral therapy; ND, not done.

Objective

To know if secondary *Toxoplasma gondii* prophylaxis can be safely discontinued in HIV-infected patients with suppressed viremia on antiretroviral therapy (ART) and a CD4 cell counts between 101-200 cells/mm³.

Methods

- The Collaboration of Observational HIV Epidemiological Research in Europe (COHERE) included data from 10 European cohorts on 1151 HIV-infected patients who developed a toxoplasmic encephalitis (TE) and started ART after 1997.
- TE was diagnosed on the basis of the 1993 CDC case definition. A relapse was defined as a new TE episode after 4 months of the initial TE.
- Patient follow-up began at the date of the first TE and ended at the time of first TE relapse, last visit, or death, whichever occurred first.
- Incidence rates of TE relapses were calculated after stratification by current use of prophylaxis, current CD4 cell count, and current viral load (VL).
- Multivariate Poisson regression models were used to model incidence rate ratios (IRRs) of TE.

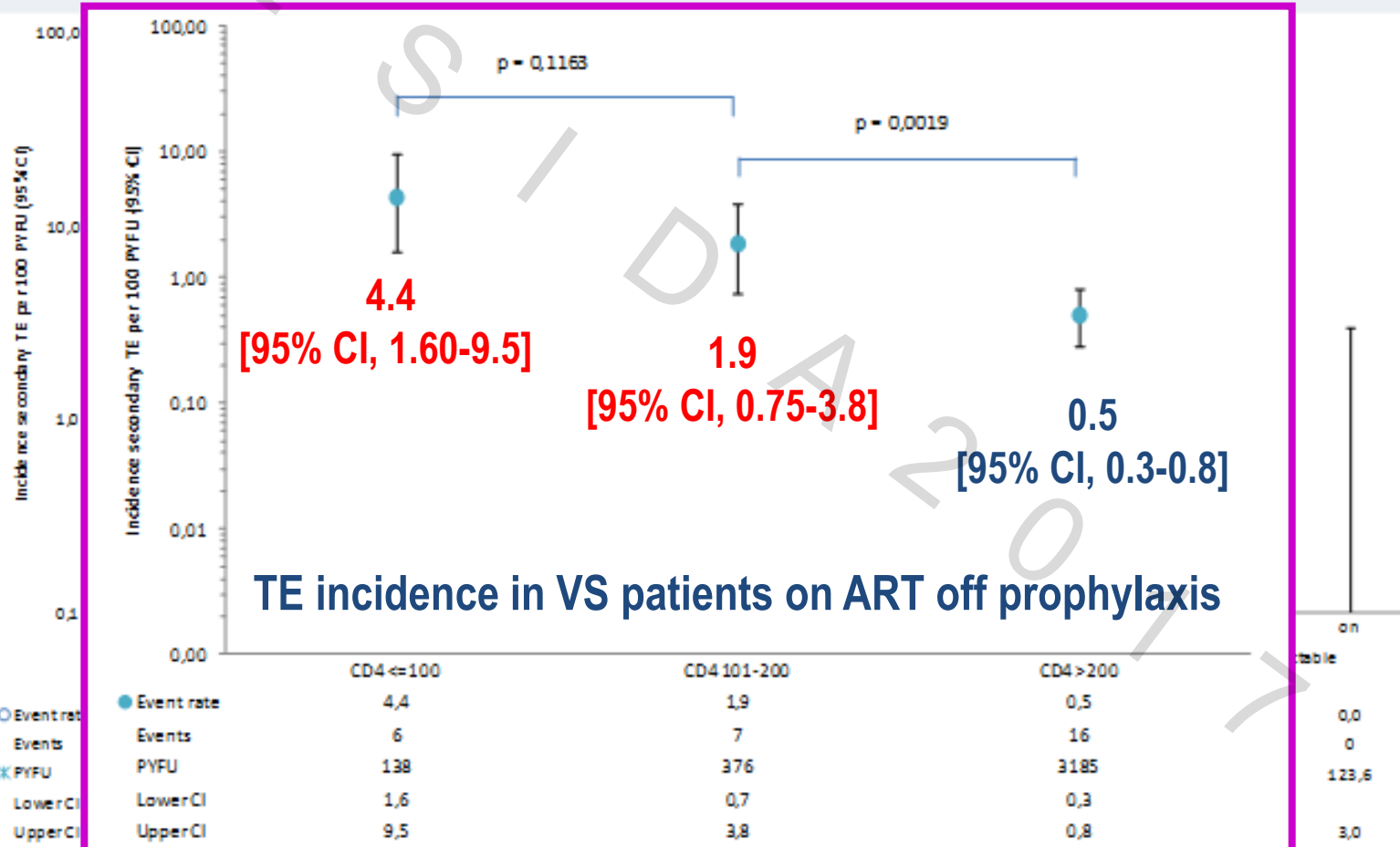
Results:

- 79 TE relapses during 6,030 person-years of follow-up (PYFU).

Table 1: Characteristics of patients at the time of the first TE episode.

		Overall		No relapse		Relapse		p
		N	%	N	%	N	%	
All patients		1151	100	1072	100,0	79	100	
Gender	Male	836	72.6	779	72.7	57	72.2	0.9209
HIV exposure group	MSM	324	28.1	301	28.1	23	29.1	0.5259
	IDU	201	17.5	182	17.0	19	24.1	
	Heterosexual	424	36.8	399	37.2	25	31.6	
	Other	199	17.3	187	17.4	12	15.2	
	Unknown	3	0.3	3	0.3	0	0.0	
Ethnic	White/Caucasian	384	33.4	363	33.9	21	26.6	0.0583
	Other	64	5.6	63	5.9	1	1.3	
	Unknown	703	61.1	646	60.3	57	72.2	
Viral load <400		139	12.1	130	12.1	9	11.4	0.8467
ART	Naive	613	53.3	582	54.3	31	39.2	0.0158
	Before TE	112	9.7	99	9.2	13	16.5	
	at TE episode	426	37.0	391	36.5	35	44.3	
		Median	IQR	Median	IQR	Median	IQR	p
Age	Years	38.4	32.9-45.8	38.8	33.0-45.9	36.0	30.7-43.5	0.0159
CD4	cells/ μ L	46	18-109	46	18-109	43.0	14-112	0.8257
Viral load	log ₁₀ copies/ml	5.1	3.9-5.6	5.1	3.9-5.6	4.9	4,0-5,5	0.3890

Figure 1: Incidence rate of TE relapses according to current CD4 cell count, viral load (VL) and use of anti-*T. gondii* prophylaxis.



Results

- To be on ART (IRR, 0.33; 95% CI, 0.12–0.94; $P=.038$) was the only TE relapse predictor in patients with CD4 cell count between 100 and 200 cells/mm³; whereas detectable VL, CD4 T cell count and prophylaxis were not predictors

Limitations

- The TE episodes and relapses are not validated and we do not know their clinical characteristics.
- No longitudinal data.



Conclusions

- In virologically suppressed HIV-infected adult patients on ART, secondary TE prophylaxis can be safely discontinued in patients with CD4 cell counts >200 cells/mm³.
- However, in patients with detectable HIV RNA the risk of relapse may be substantial, even if the CD4 cell count is >200 cells/mm³ and prophylaxis should be maintained.
- Secondary TE prophylaxis should not be stopped in virologically suppressed patients on ART with CD4 cell counts of 101-200 cells/mm³.

COHERE Acknowledgements

Executive Committee: Stéphane de Wit (Chair, St. Pierre University Hospital), Jose M^a Miró (PISCIS), Dominique Costagliola (FHDH), Antonella d'Arminio-Monforte (ICONA), Antonella Castagna (San Raffaele), Julia del Amo (CoRIS), Amanda Mocroft (EuroSida), Dorthe Raben (Head, Copenhagen Regional Coordinating Centre), Geneviève Chêne (Head, Bordeaux Regional Coordinating Centre). **Steering Committee:** Robert Zangerle (AHIVCOS), Giota Touloumi (AMACS), Josiane Warszawski (ANRS CO1 EPF/ANRS CO11 OBSERVATOIRE EPF), Laurence Meyer (ANRS CO2 SEROCO), François Dabis (ANRS CO3 AQUITAINE), Murielle Mary Krause (ANRS CO4 FHDH), Jade Ghosn (ANRS CO6 PRIMO), Catherine Leport (ANRS CO8 COPILOTE), Linda Wittkop (ANRS CO13 HEPAVIH), Peter Reiss (ATHENA), Ferdinand Wit (ATHENA), Maria Prins (CASCADE), Heiner Bucher (CASCADE), Caroline Sabin (CHIC), Diana Gibb (CHIPS), Gerd Fätkenheuer (Cologne-Bonn), Julia Del Amo (CoRIS), Niels Obel (Danish HIV Cohort), Claire Thorne (ECS), Amanda Mocroft (EuroSIDA), Ole Kirk (EuroSIDA), Christoph Stephan (Frankfurt), Santiago Pérez-Hoyos (GEMES-Haemo), Osamah Hamouda (German ClinSurv), Barbara Bartmeyer (German ClinSurv), Nikoloz Chkhartishvili (Georgian National HIV/AIDS), Antoni Noguera-Julian (CORISPE-cat), Andrea Antinori (ICC), Antonella d'Arminio Monforte (ICONA), Norbert Brockmeyer (KOMPNET), Luis Prieto (Madrid PMTCT Cohort), Pablo Rojo Conejo (CORISPES-Madrid), Antoni Soriano-Arandes (NENEXP), Manuel Battegay (SHCS), Roger Kouyos (SHCS), Cristina Mussini (Modena Cohort), Pat Tookey (NSHPC), Jordi Casabona (PISCIS), Jose M. Miró (PISCIS), Antonella Castagna (San Raffaele), Deborah_Konopnick (St. Pierre Cohort), Tessa Goetghebuer (St Pierre Paediatric Cohort), Anders Sönnernborg (Swedish InfCare), Carlo Torti (Italian Master Cohort), Ramon Teira (VACH), Myriam Garrido (VACH). David Haerry (European AIDS Treatment Group). **Project Leads and Statisticians:** Juan Berenguer, Julia Bohlius, Vincent Bouteloup, Heiner Bucher, Alessandro Cozzi-Lepri, François Dabis, Antonella d'Arminio Monforte, Mary-Anne Davies, Julia del Amo, Maria Dorrucchi, David Dunn, Matthias Egger, Hansjakob Furrer, Marguerite Guiguet, Sophie Grabar, Ali Judd, Ole Kirk, Olivier Lambotte, Valérie Leroy, Sara Lodi, Sophie Matheron, Laurence Meyer, Jose M^a Miró, Amanda Mocroft, Susana Monge, Fumiyo Nakagawa, Roger Paredes, Andrew Phillips, Massimo Puoti, Michael Schomaker, Colette Smit, Jonathan Sterne, Rodolphe Thiebaut, Claire Thorne, Carlo Torti, , Marc van der Valk, Linda Wittkop, Natasha Wyss. **Paediatric cohort representatives:** Ali Judd, Pablo Rojo Conejo. **Regional Coordinating Centres:** Bordeaux RCC: Diana Barger, , Christine Schwimmer, Monique Termote, Linda Wittkop; Copenhagen RCC: Maria Campbell, Nina Friis-Møller, Jesper Kjaer, Dorthe Raben, Rikke Salbøl Brandt. **European AIDS Treatment Group:** David Haerry.

Funding sources: The COHERE study group has received unrestricted funding from: Agence Nationale de Recherches sur le SIDA et les Hépatites Virales (ANRS), France; HIV Monitoring Foundation, the Netherlands; and the Augustinus Foundation, Denmark. The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under EuroCoord grant agreement n° 260694. The group has also received project specific funding from <name of specific funder>. A list of the funders of the participating cohorts can be found at www.COHERE.org.