

How to RESPOND to Modern Challenges for People Living with HIV (PLWH): A New Cohort Collaboration

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The Consortium:

- RESPOND was established, as a collaboration between HIV cohorts and clinics across Europe and Australia. A total of 26,018 PLWH were enrolled at RESPOND establishment in 2017 (baseline; Table and Figure 1).
- RESPOND collects large scale observational data, with the intent to quickly be able to respond to areas with unmet research needs.
- The core RESPOND data collection contains detailed information on HIV related parameters, antiretroviral drugs (ARVs), coinfections and comorbidities (Table and Figure 1). In addition, RESPOND's modular data collection structure, allows for project specific data capture.
- Collection and central validation of clinical events (Figure 1) is essential for the study.

RESPOND at EACS 2019

Uptake and discontinuation of Integrase Inhibitors in a large cohort setting, **L. Greenberg (PS8/7)**

A simple tool to evaluate the effectiveness of HIV care for settings with gaps in data availability, **D. Raben (PS9/2)**

Virologic, immunologic and clinical outcomes in antiretroviral treatment naïve individuals in the RESPOND cohort collaboration, **A. Mocroft (PE2/40)**

The Scientific Interest Groups:

- The research agenda is generated in designated Scientific Interest Groups.
- Outcomes with ARVs Group:**
 - Aims to investigate long term clinical outcomes and efficacy of ARVs overall and in key sub-groups.
 - Assessing impact of HIV on development of non-AIDS comorbidities and mortality.
 - Monitor trends in uptake and discontinuation of contemporary ARVs, especially focused on integrase inhibitors.
 - Evaluating safety profiles of newer ARV when used in routine clinical practice.
- Public Health Group:**
 - Developing an online tool to assess the of the HIV continuum of care.
 - Estimating ARV-resistance among PrEP users.

Table1: Demographics and clinical characteristics at RESPOND baseline

	n	(%)
Gender	Male	19329 (74.3)
	Female	6689 (25.7)
Race	White	18834 (72.4)
	Black	4368 (16.8)
	Other / Unknown	2816 (10.8)
Mode of transmission	Sex between men	11300 (43.4)
	Intravenous drug use	3883 (14.9)
	Heterosexual	8931 (34.3)
Age group	≤ 50	14397 (55.3)
	51-60	7811 (30.0)
	>60	3810 (14.7)
Date of HIV diagnosis	≤ 2011	20723 (79.6)
Viral suppression (<200 copies/mL)		21028 (91.3)
ART naïve		1384 (5.3)
	Median	25% Quartile
Age	48	40 56
CD4 (cells/μL)	622	439 833
CD4 Nadir (cells/μL)	208	91 327
Baseline date (mm/yy)	06/17	12/15 9/17

Criteria for joining RESPOND:

- Contribute data from ≥1000 unselected PLWH.
- Have a designated clinical lead and IT manager.
- Store data on participants in a standardized format.
- Provide ≥ 80 % completeness for all key variables.
- Adequate information on clinical events available.
- Ability to update follow-up on an annual basis.

Acknowledgements:

Cohort principal investigators: S. De Wit (St. Pierre, Brussels), R. Zangerle (AHIWCOS), M. Law (AHOD), F. Wit (ATHENA), G. Wandeler (EuroSIDA), C. Stephan (Frankfurt), N. Chkhartishvili (IDACIRC), C. Pradier (Nice HIV cohort), A. d'Arminio Monforte (ICoNA), C. Mussini (Modena), J. Casabona & J.M. Miro (PISCIS), H. Günthard (SHCS), A. Sönnnerborg (Swedish InCare), C. Smith (Royal Free HIV cohort), A. Castagna (St. Raffaele, Milano), J.C. Wasmuth (Bonn, HIV Cohort) and J.J. Vehreschild (Cologne, HIV cohort). Cohort Coordinator, operational team members and data management: C. Necsoi, M. Dell'orge (St. Pierre, Brussels), H. Apovov, U. Daddag, G. Leterer (AHIWCOS), J. Hutchinson, N. Rose (AHOD), P. Reiss, M. Hillebrand, T. Rufkens, D. Bergami (ATHENA), F. Ebeling, M. Buchi, (Frankfurt), O. Chokoshvili, E. Karakshadze (IDACIRC), E. Fontas, K. Dollet, C. Calzavara (Nice, HIV cohort), J. Fanti, A. Tavelli, A. Rodano (ICoNA), V. Borghi (Modena), A. Bruggen, J. Reyes-Urueña, A. Montali (PISCIS), H. Bucher, A. Scherrer, J. Schumacher, A. Trajstl (SHCS), V. Svedhem-Johansson, L. Mattsson, K. Alenadaf, (Swedish InCare), F. Lampe, C. Chaloner (Royal Free, HIV cohort), A. Lazzarin, A. Poli, S. Nozza (St. Raffaele, Milano), K. Mohrmann, J. Rockstroh (Bonn, HIV cohort), G. Fäktenheuer, N. Schälze, B. Frank, M. Stecher and H. Weiler (Cologne HIV cohort). RESPOND coordination office, data management and Statisticians : L. Peters, L. Ryom, B. Neegaard, J.F. Larsen, A. Bojesen, M.L. Jacobsen, T. Bruun, E. Hansen, D. Kristensen, T. Elsing, S. Thomsen T. Weide, A. Mocroft and L. Greenberg. RESPOND Scientific Steering Committee, RESPOND Executive Committee, Members and Moderators of RESPOND scientific interest group: Hepatitis, Public Health, Outcomes with antiretroviral treatment, PrEP, Resistance. Funding: The International Cohort Consortium of Infectious Disease (RESPOND) has received funding from ViiV Healthcare LLC and Gilead Sciences. Additional support has been provided by participating cohorts contributing data in-kind: Austrian HIV Cohort Study (AHIWCOS), The Australian HIV Observational Database (AHOD), CHU Saint-Pierre, University Hospital Cologne, The EuroSIDA cohort, Frankfurt HIV Cohort Study, Georgian National AIDS Health Information System (AIDS HIS), Modena HIV Cohort, San Raffaele Scientific Institute, Swiss HIV Cohort Study (SHCS), Royal Free HIV Cohort Study.

Figure1: ARV exposure (A) and validated clinical events (B) at RESPOND baseline:

