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HIV Drug Therapy Glasgow 2016

Persistent disparities in meeting WHO/UNAIDS targets for ART coverage and ART-induced HIV-RNA suppression across Europe

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Background

- Health disparities exist across Europe in HIV[1]
- Increasing interest in comparing quality of care across countries
- International comparisons hampered by differences in data collection[2]
- Varying definitions of steps in the continuum of care complicate international comparisons[2]
- EuroSIDA's study design allows direct comparison between clinics

[1] Podlekareva D, Cent Eur J Public Health. 2008, Reekie J, PLoS One 2012.
[2] European Centre for Disease Prevention and Control. Thematic report: HIV continuum of care, 2014. Levi J IAS 2015 abstract number MOAD0102. Lourenço L, Lancet HIV 2015. Medland NA, J Int AIDS Soc 2015.

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Aims

- Characterize country-specific levels of
  - Proportion on ART among those in care
  - Proportion virologically suppressed among those on ART
- Monitor temporal trends

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Methods

- Patients included from all EuroSIDA clinics
- A priori defined 3 different time periods
  - 2004/05 (1st Jan' 04 – 31st Dec '05)
  - 2009/10 (1st Jan' 09 – 31st Dec '10)
  - 2014/15 (1st Jan' 14 – 31st Dec '15)

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Definitions

- **In care in the time period assessed**
  - Under active follow-up in the period, irrespective of clinic visit interval
- **On ART among those in care**
  - Any ≥3 antiretrovirals at the latest clinic visit in the period
- **Virologically suppressed among those on ART**
  - Among those on ART, most recent HIV-RNA <500copies/mL in the period, if available
  - In care, but no HIV-RNA measurement in time period assessed, considered unsuppressed (missing = failure)

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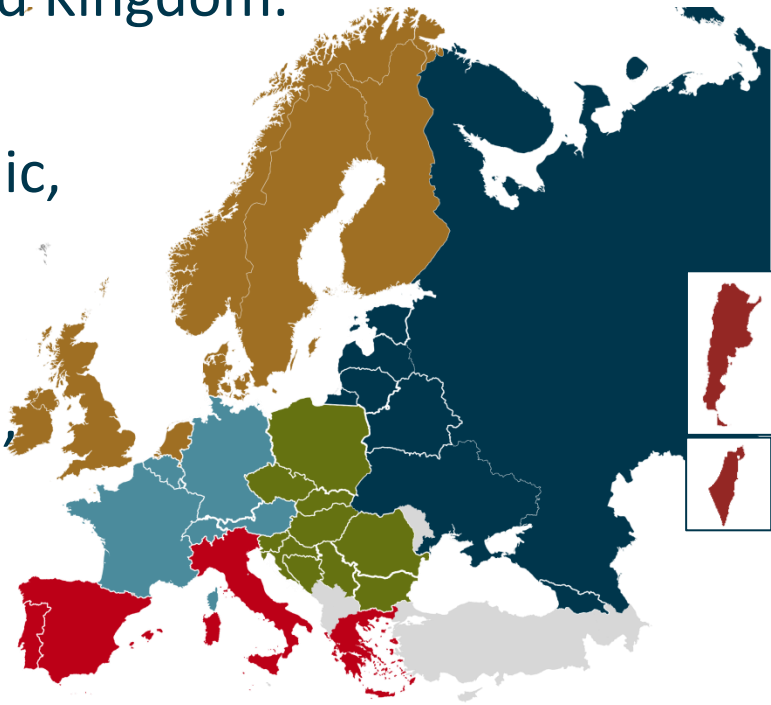
Regions

- **Western Europe (WE):** Austria, Belgium, France, Germany, Luxembourg, Switzerland
- **Southern Europe (SE):** Greece, Israel, Italy, Portugal, Spain, Argentina
- **Northern Europe (NE):** Denmark, Finland, Iceland*, Ireland, Netherlands, Norway, Sweden, United Kingdom.
- **East Central Europe (EC):** Bosnia-Herzegovina*,Croatia*, Czech Republic, Hungary, Poland, Romania, Serbia, Slovakia¤, Slovenia*.
- **Eastern Europe (EE)**: Belarus, Estonia, Georgia*, Latvia, Lithuania, Russia, Ukraine.



* only included in 2014/15 cohort, ¤ only included in 2004/05 cohort

Statistical analyses

- Unadjusted country-specific and region-specific estimates of:
  - Proportion on ART among those in care
  - Proportion virologically suppressed among those on ART

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Statistical analyses

- Logistic regression with generalized estimating equations to monitor trends over time
- Adjusted for
  - Gender
  - Current age
  - Risk group
  - CD4 cell count at first visit
  - Current HBV-status
  - Current HCV-status

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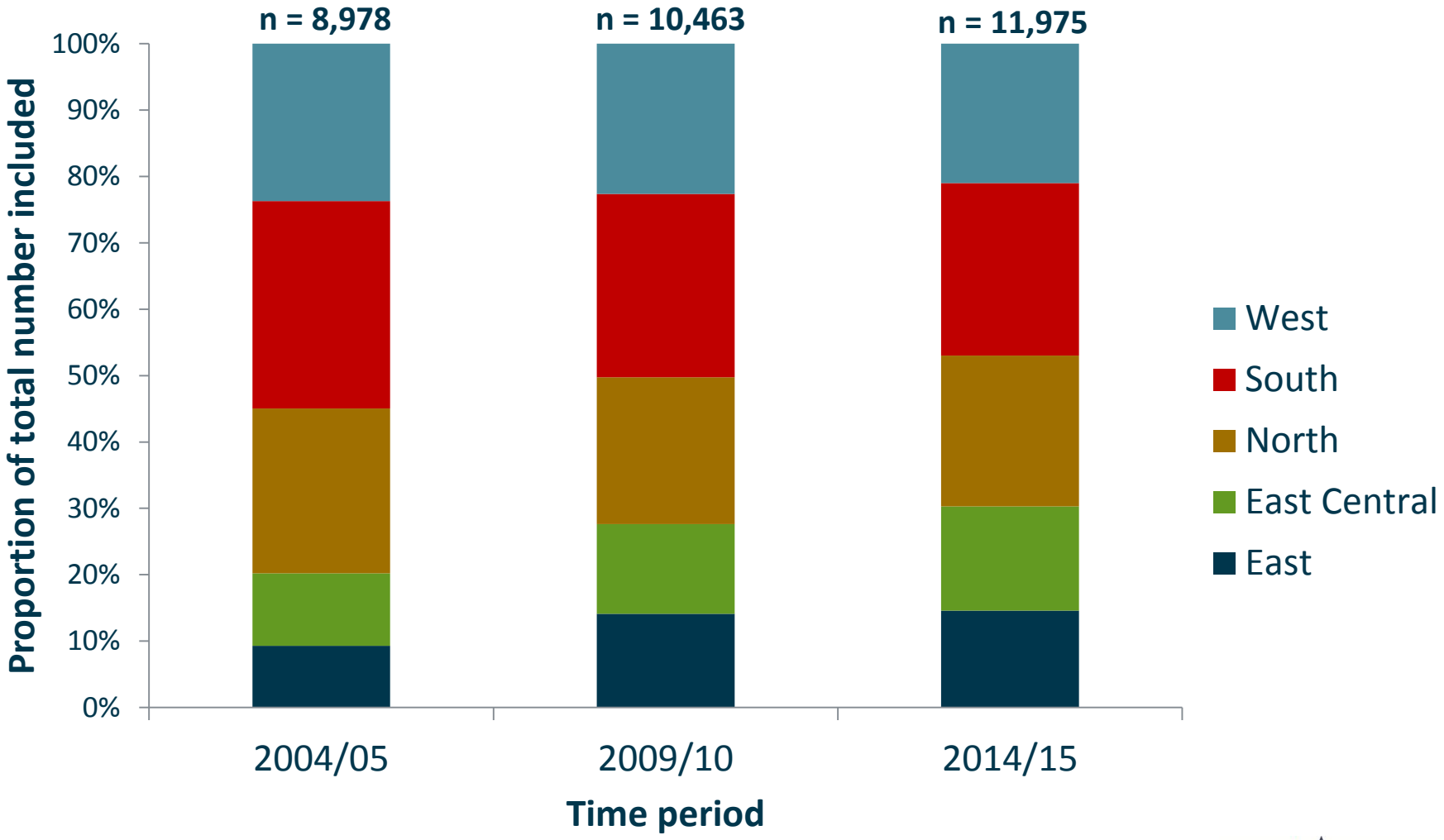
Regional distribution



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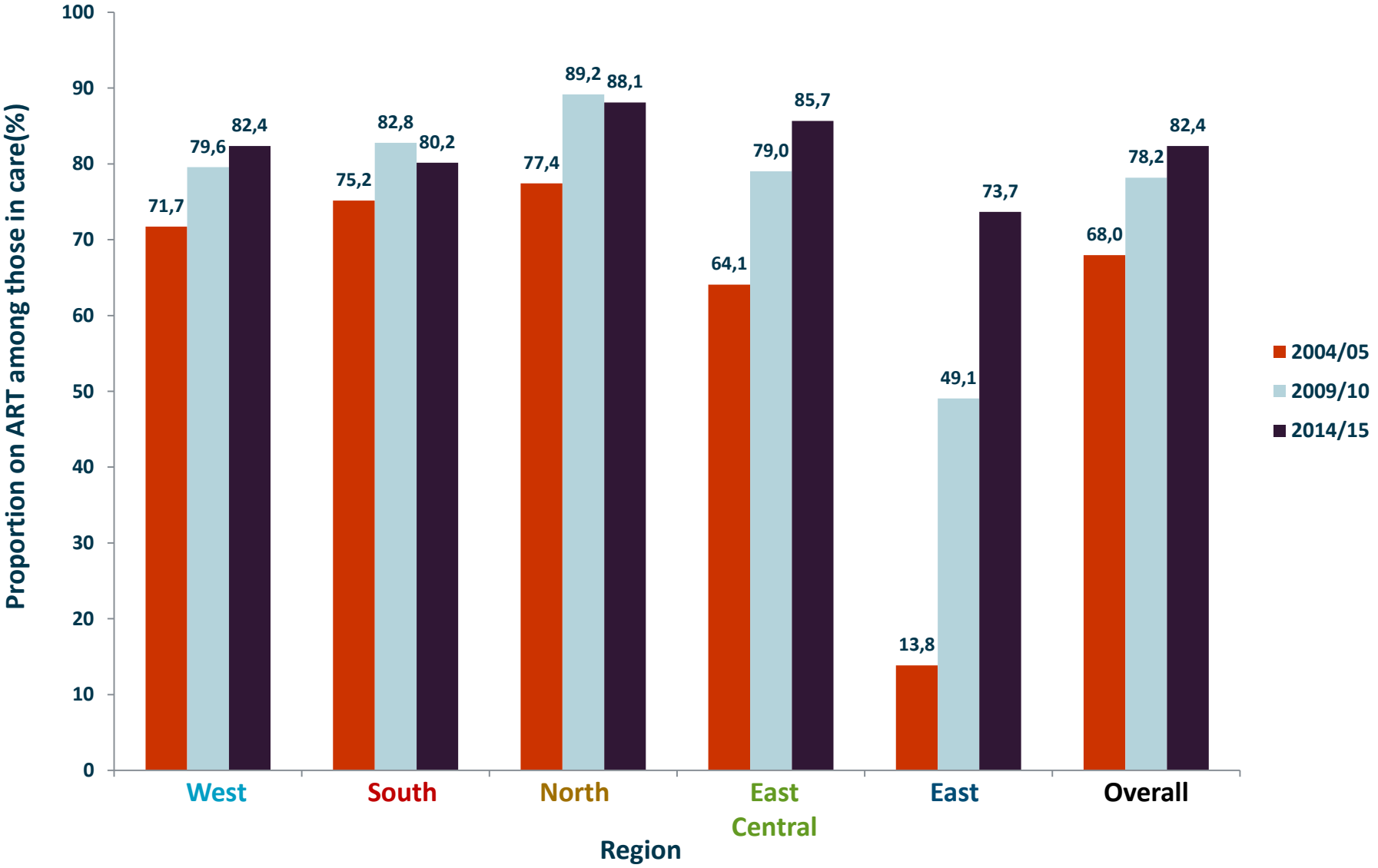
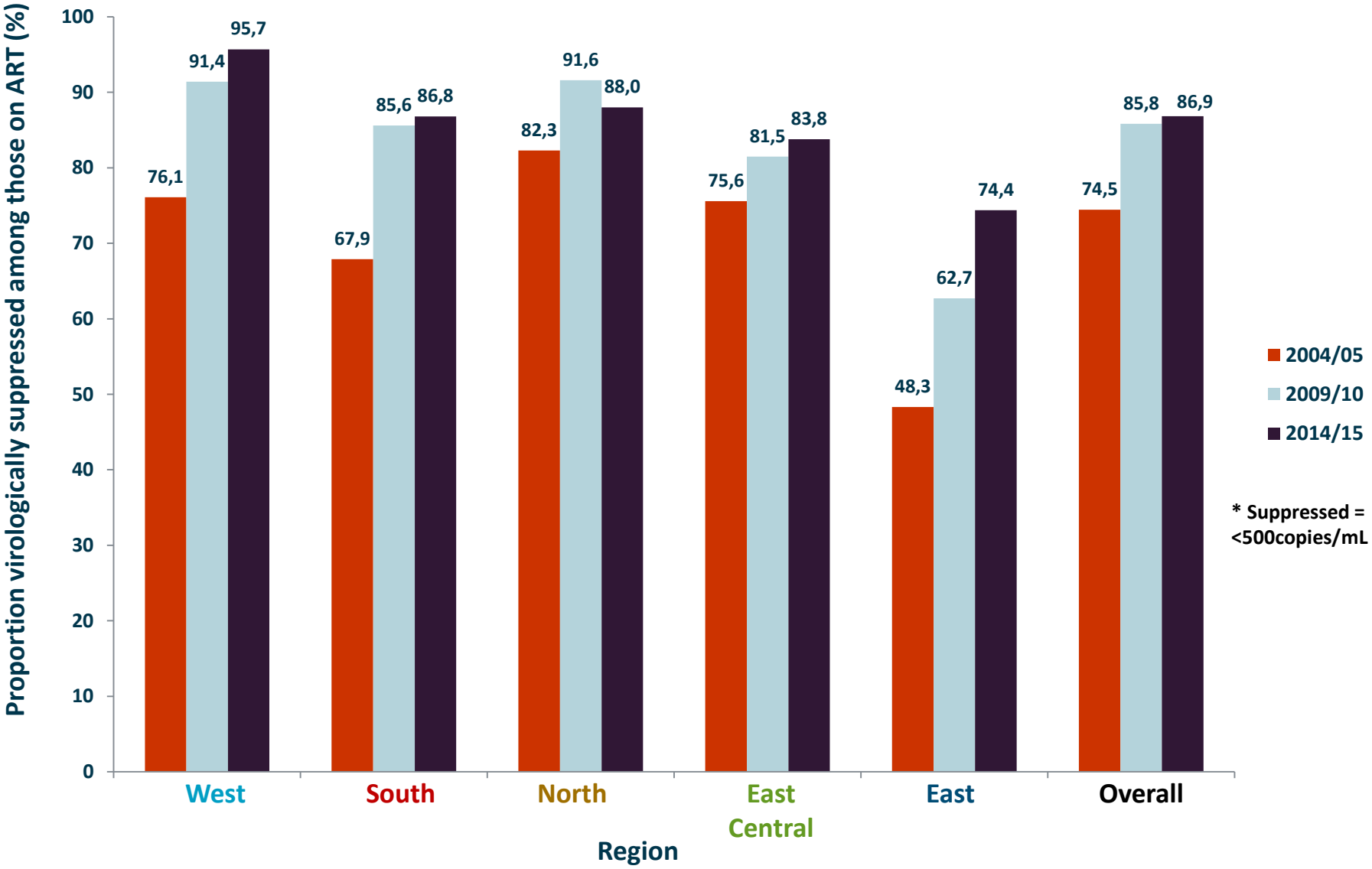
	2004/05	2009/10	2014/15
Number of clinics included	98	102	105
Number of countries included	31	34	35
Total number of patients included	8,978	10,463	11,975
Gender, n (% of total)			
Male	6,688 (74.5)	7,539 (72.1)	8,649 (72.2)
Female	2,290 (25.5)	2,924 (27.9)	3,326 (27.8)
Age, median (IQR)	40.8 (35.4, 47.7)	39.2 (32.4, 45.9)	37.8 (30.2, 44.5)
Mode of infection, n (% of total)			
MSM	3,761 (41.9)	4,260 (40.7)	4,571 (38.2)
IDU	2,090 (23.3)	2,138 (20.4)	2,744 (22.9)
Heterosexual	2,556 (28.5)	3,352 (32.0)	3,808 (31.8)
Other/unknown	571 (6.4)	713 (6.8)	852 (7.1)

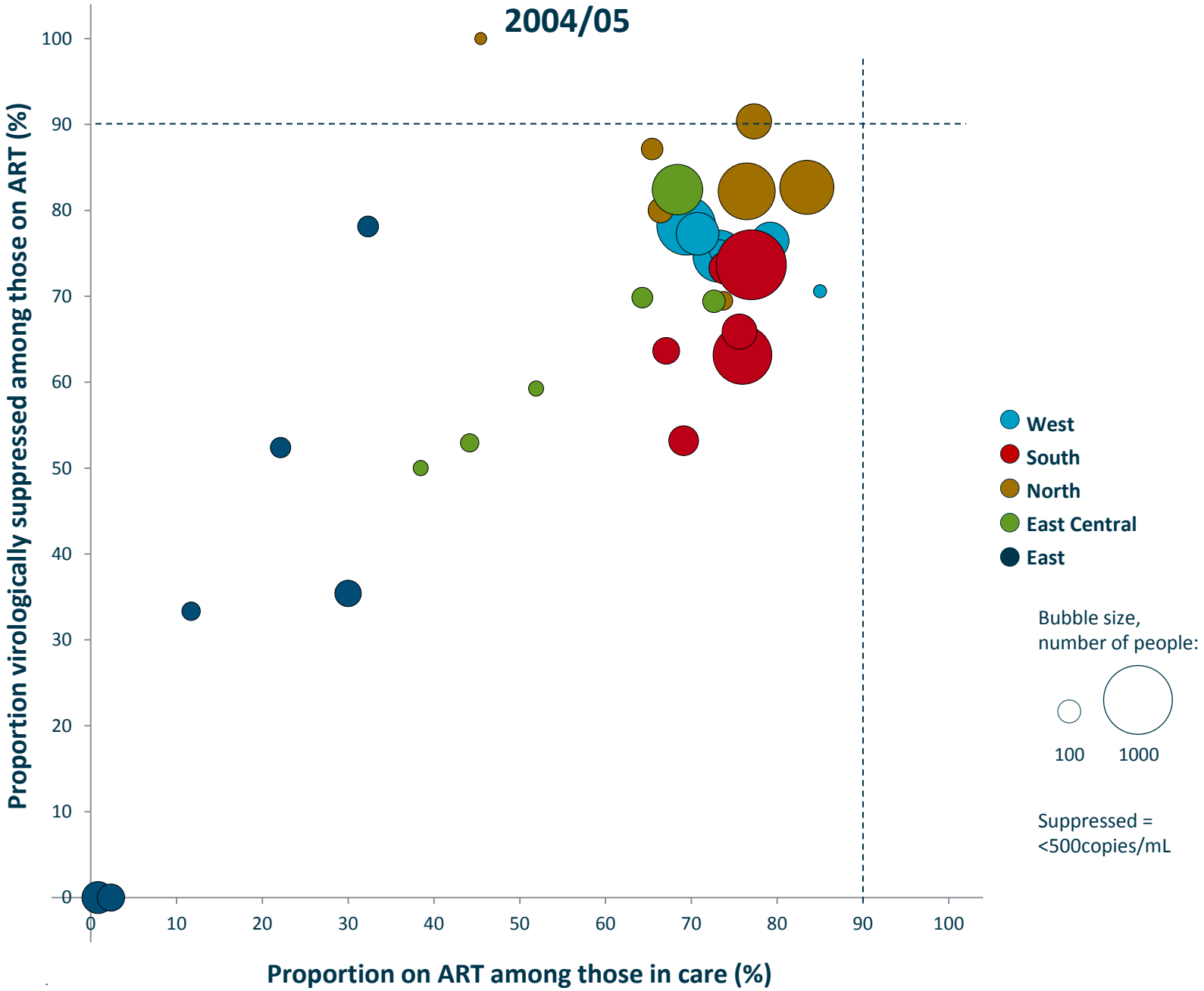
Temporal change in proportion on ART among those in care



Temporal change in proportion virologically suppressed* among those on ART



Country-specific proportions of people on ART and virologically suppressed



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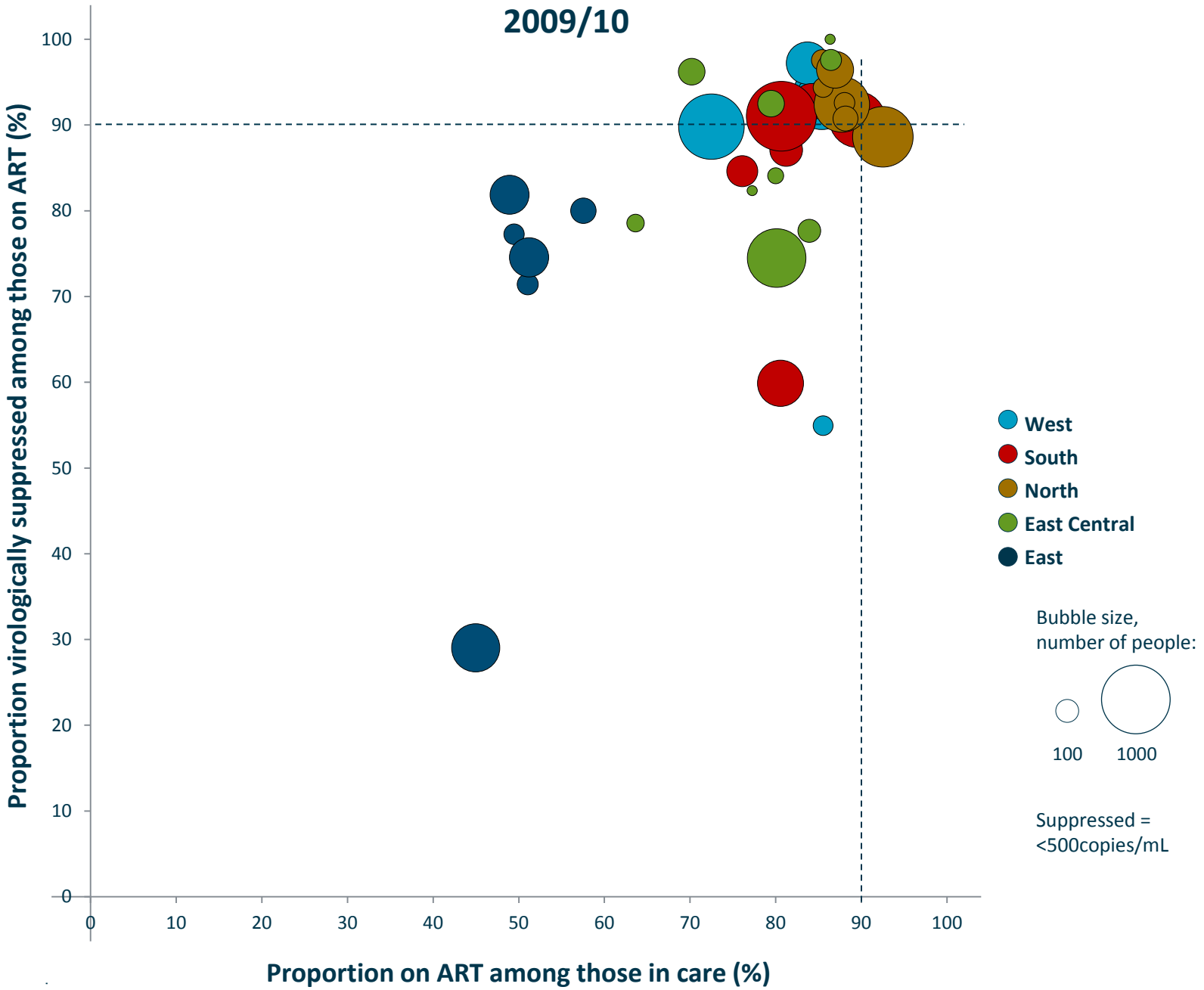

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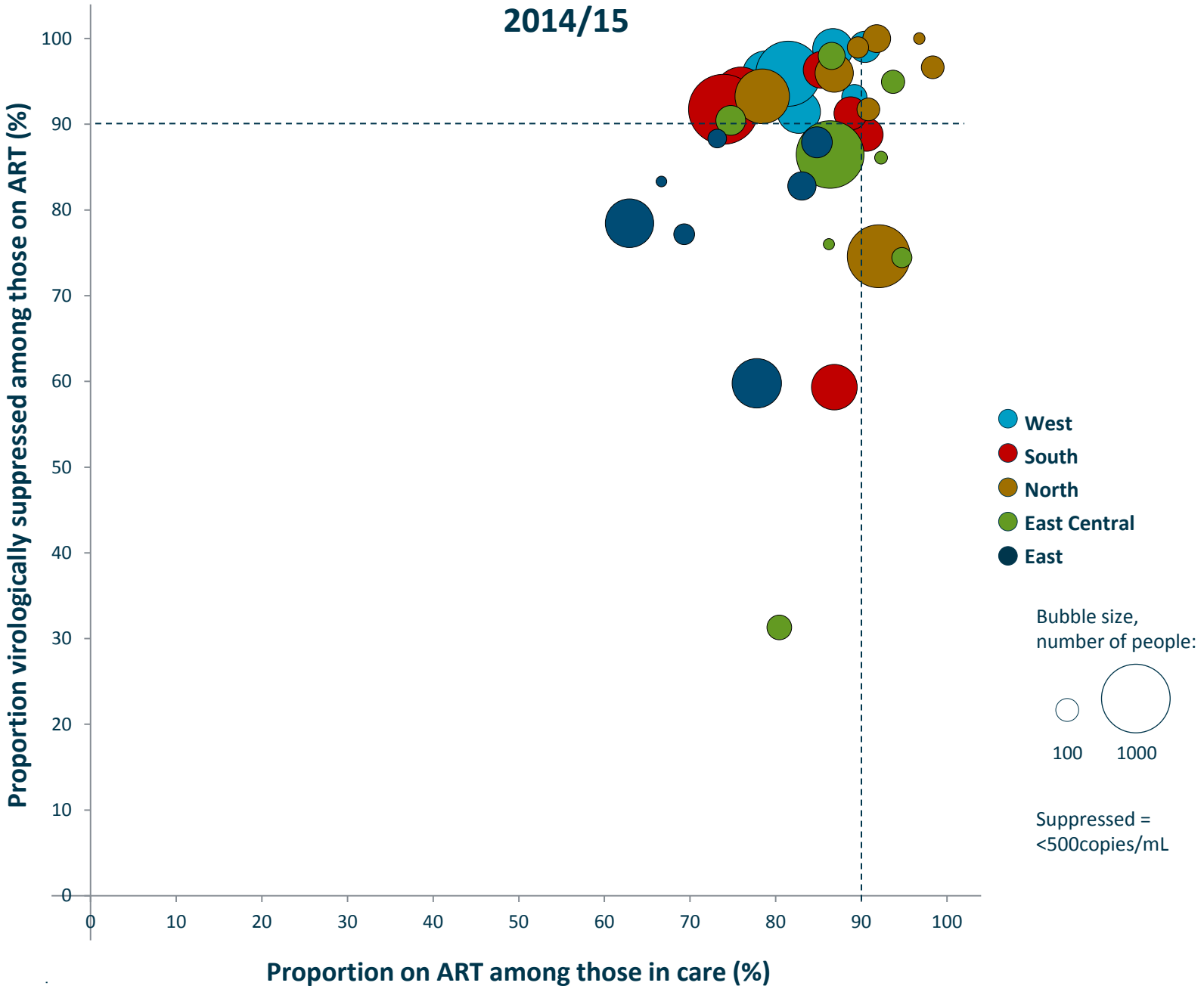

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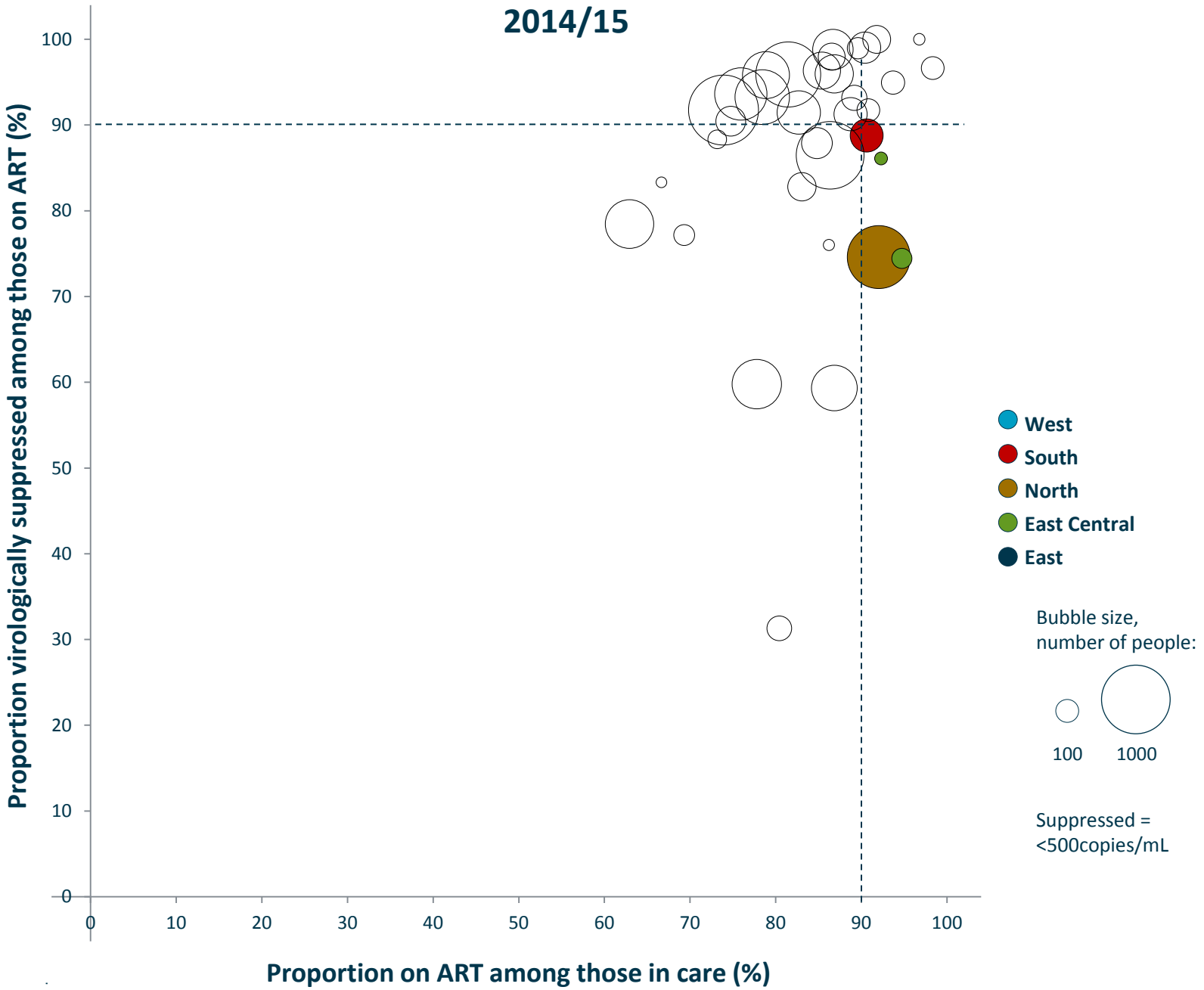

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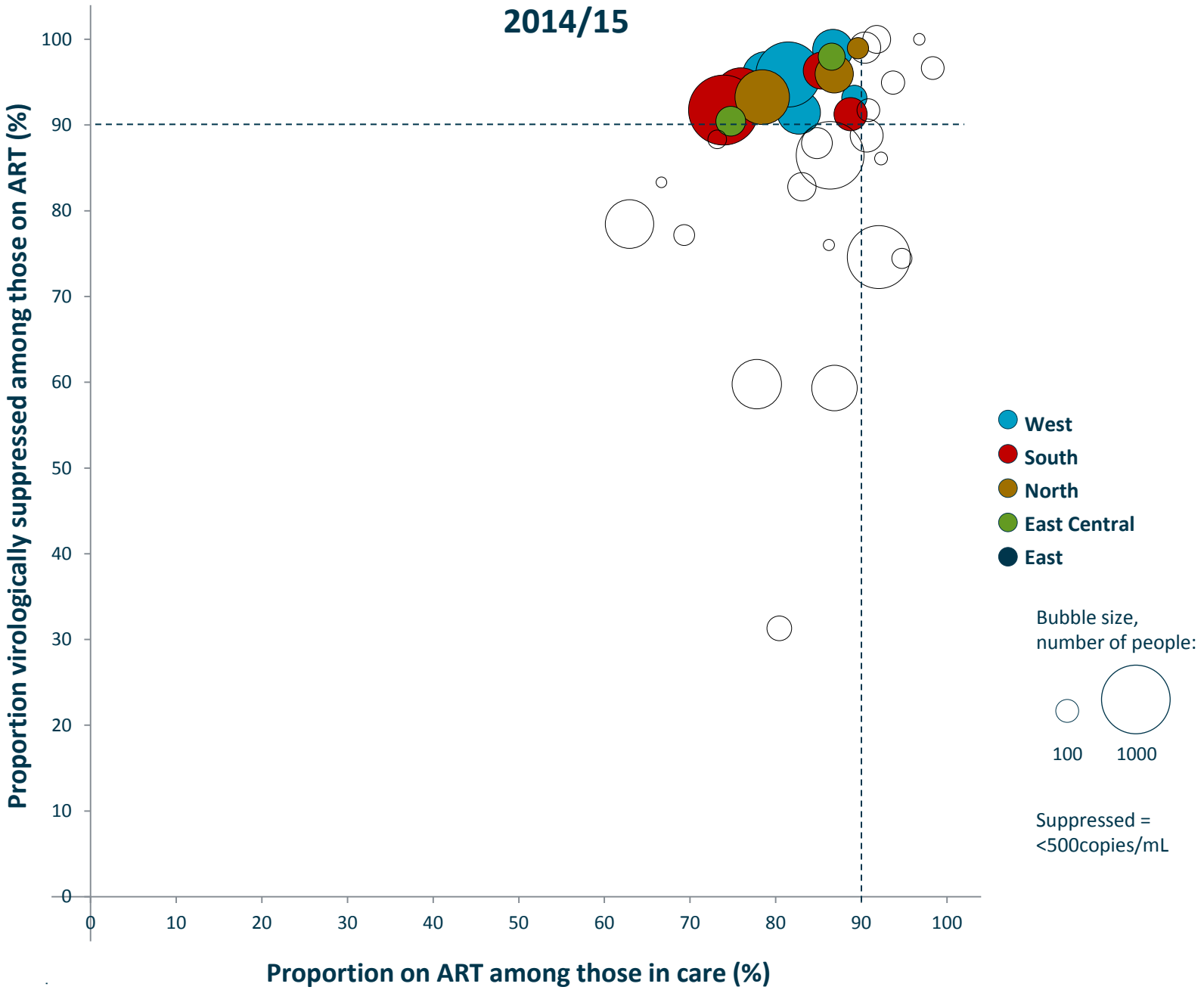

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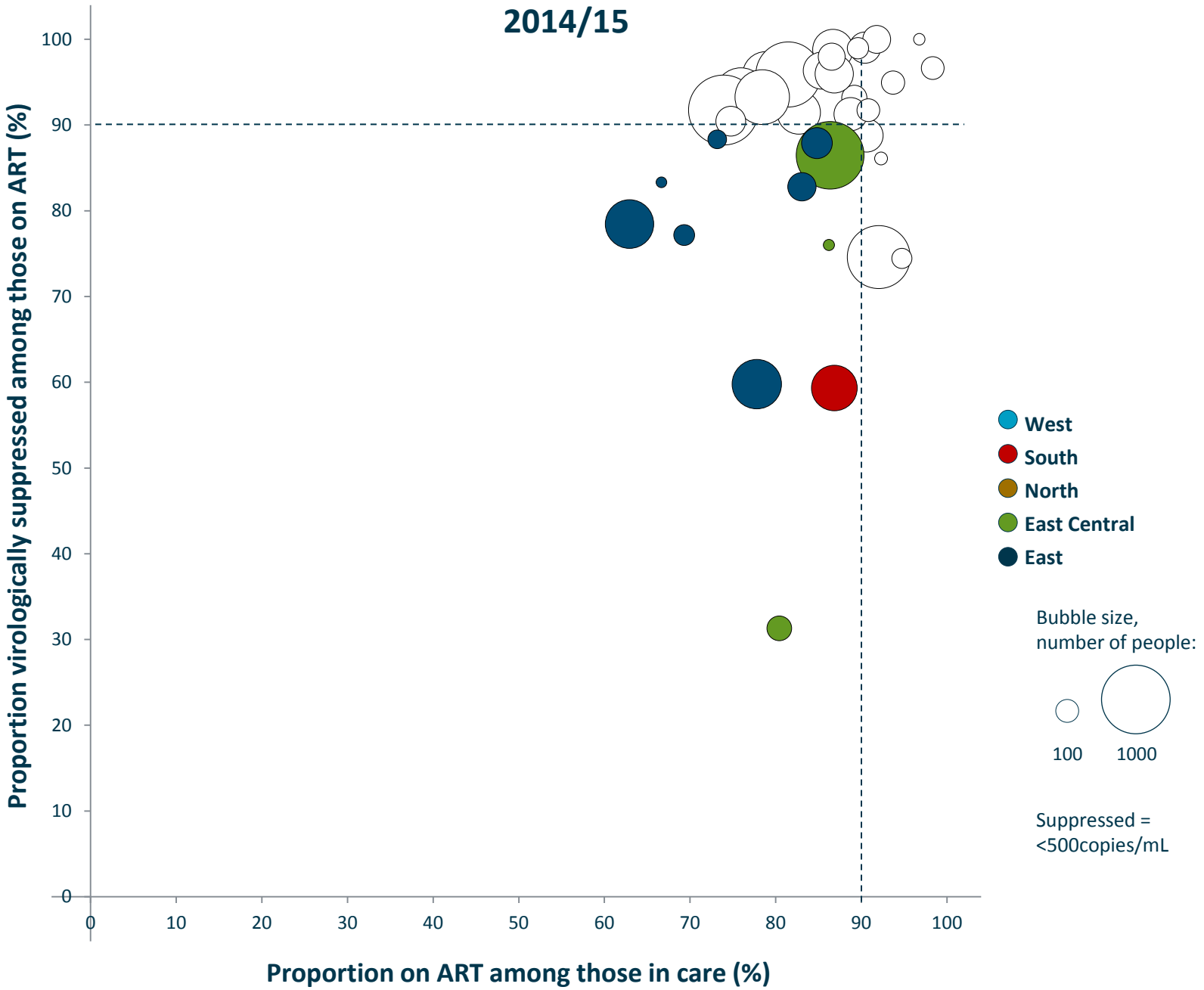

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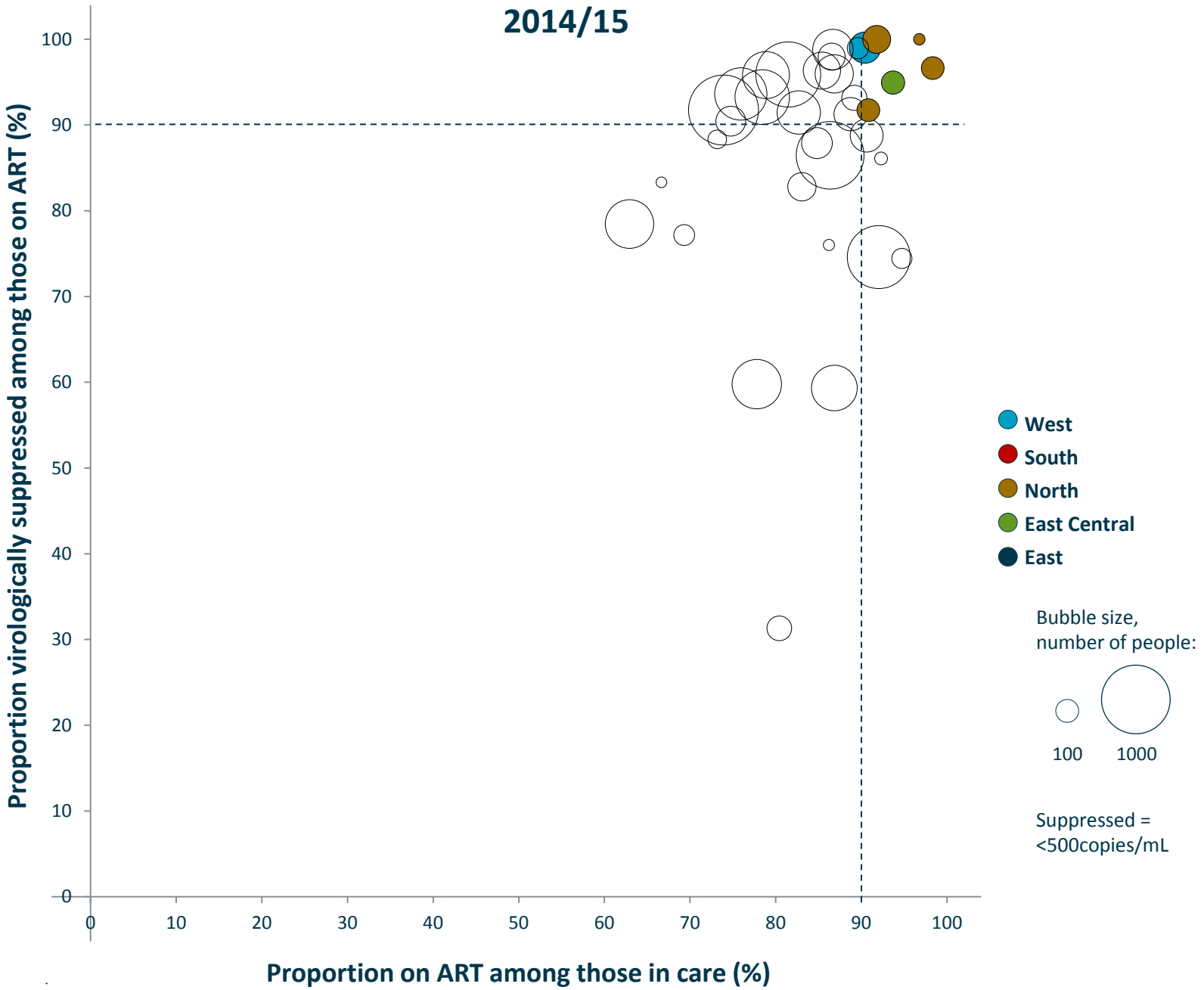
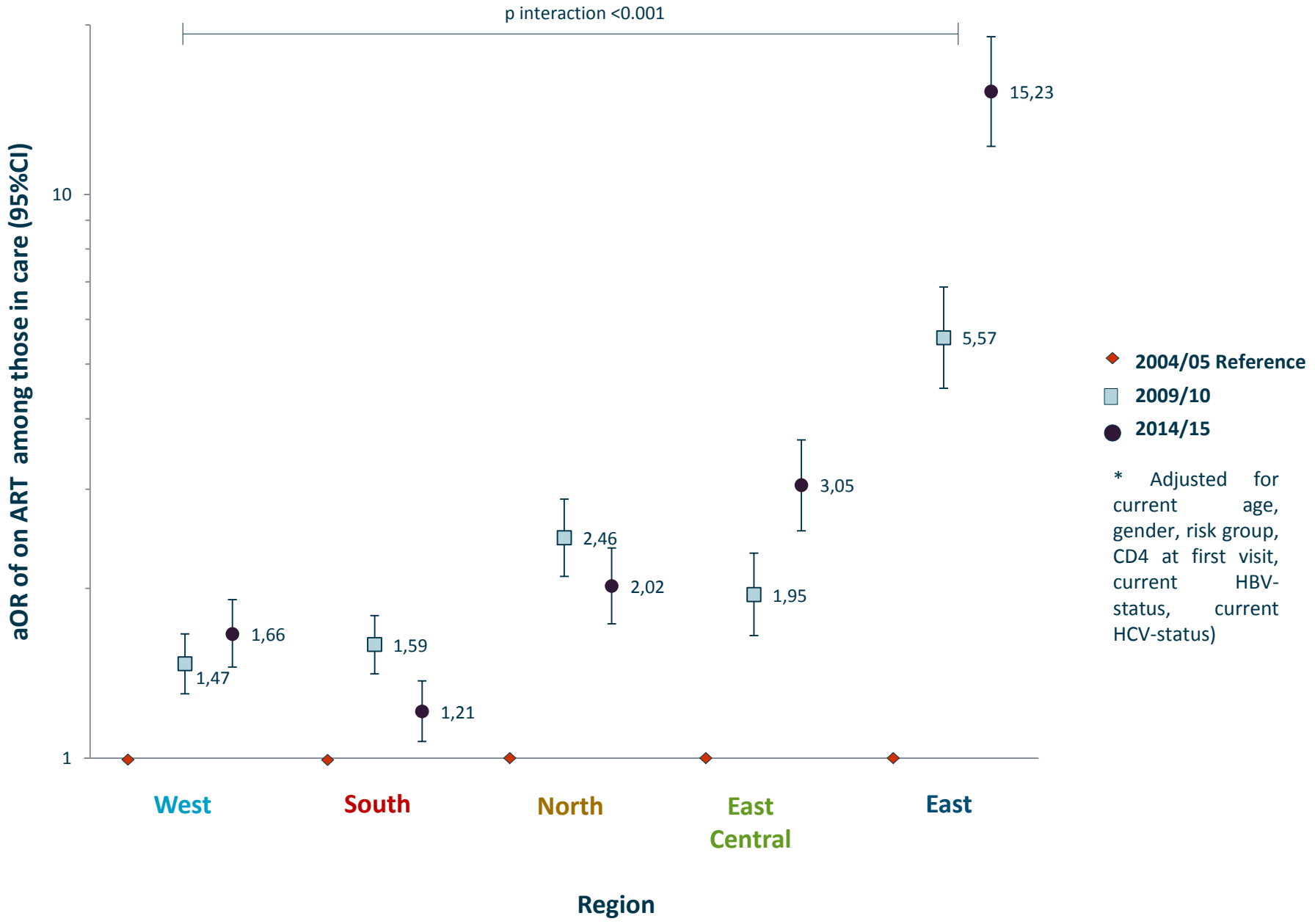
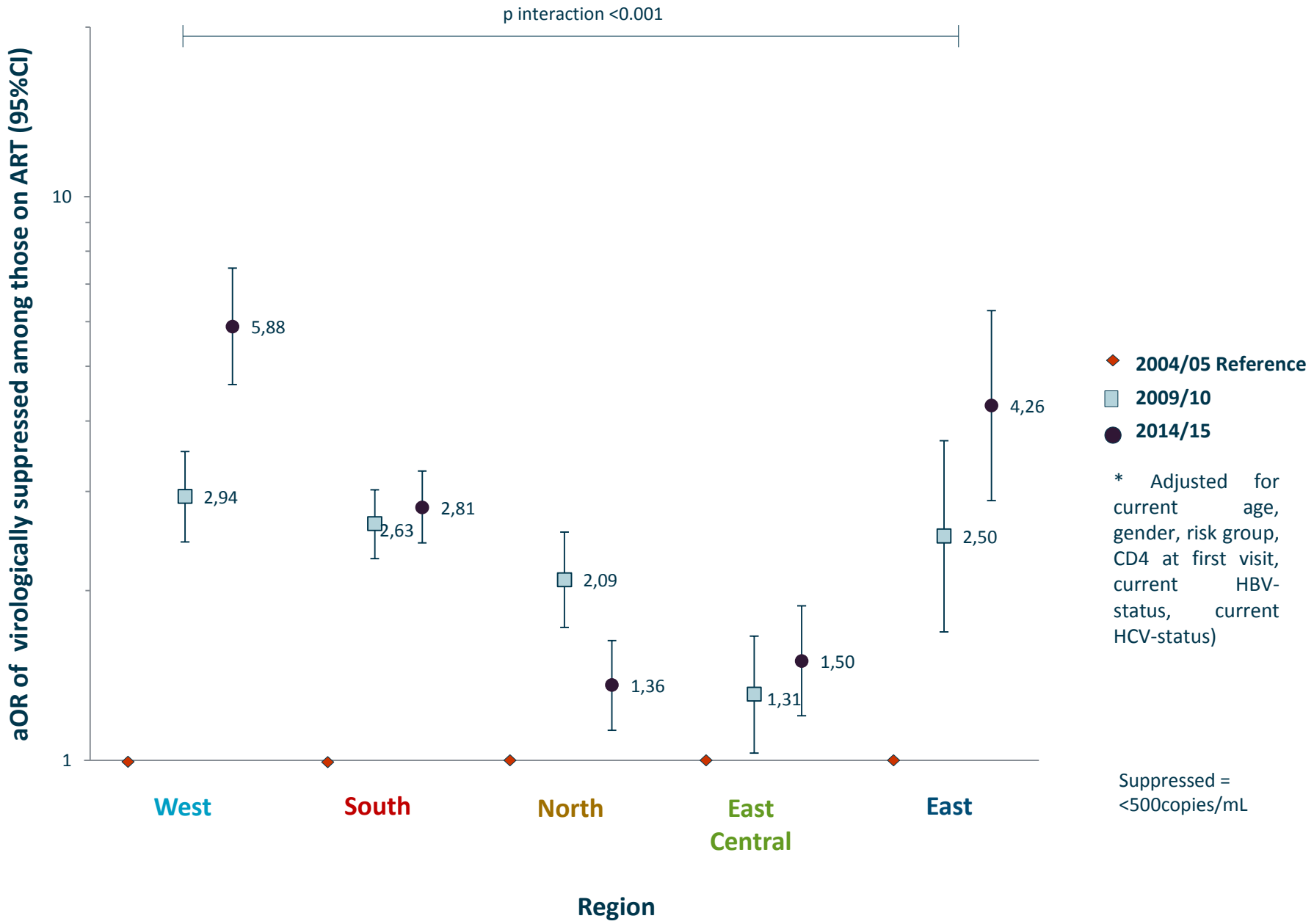


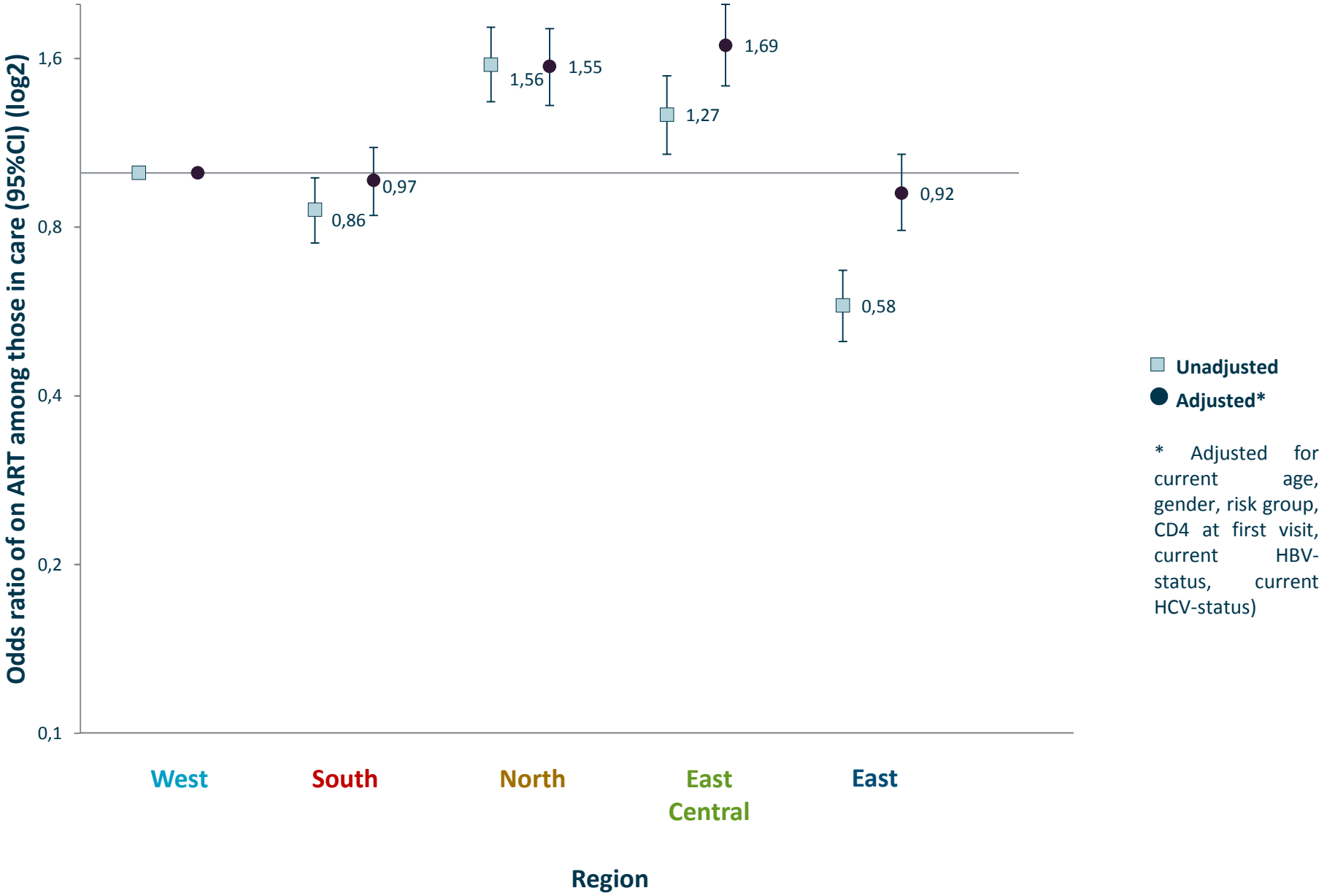
Adjusted* odds ratio (aOR) of being on ART over time



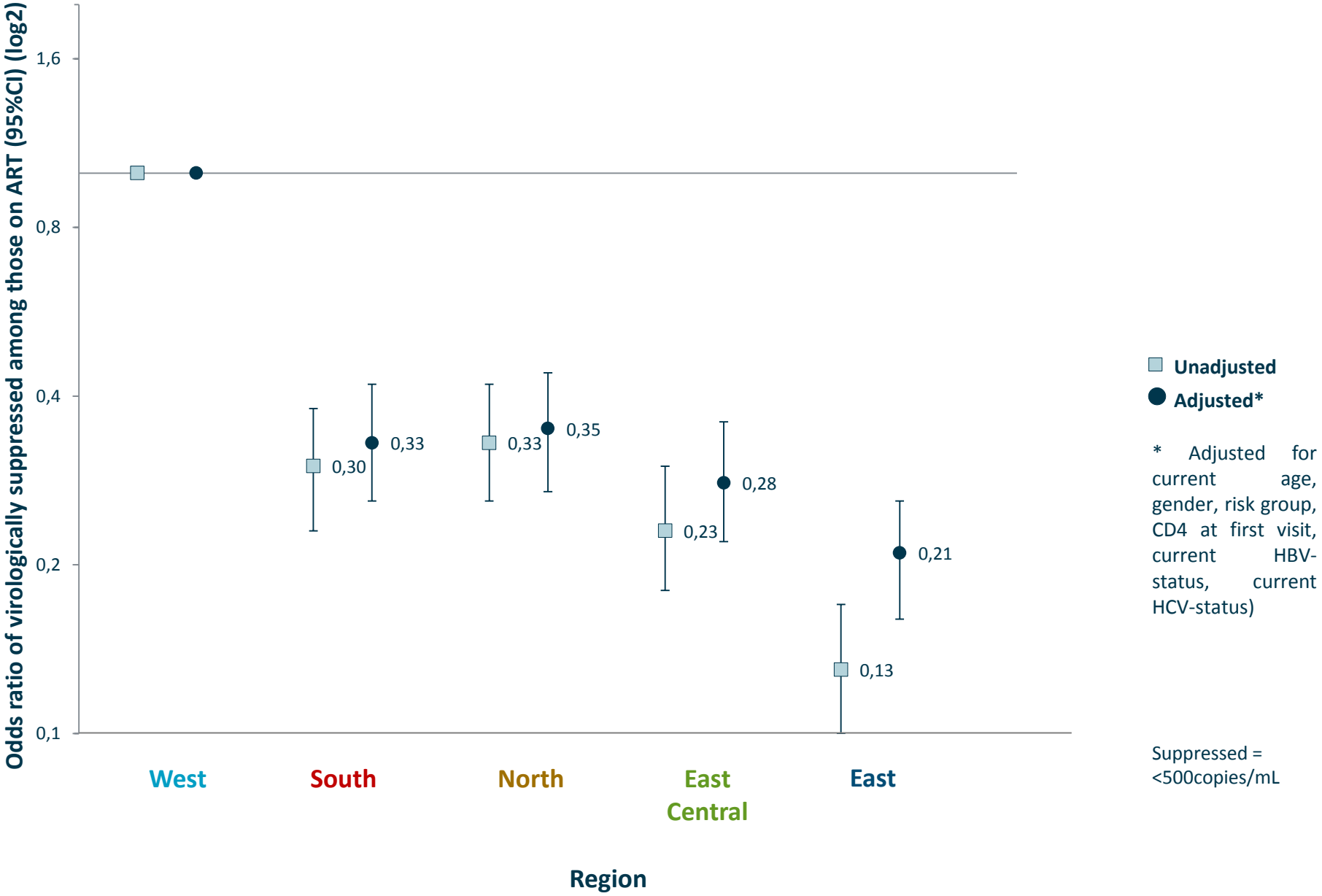
Adjusted* odds ratio (aOR) of being virologically suppressed over time



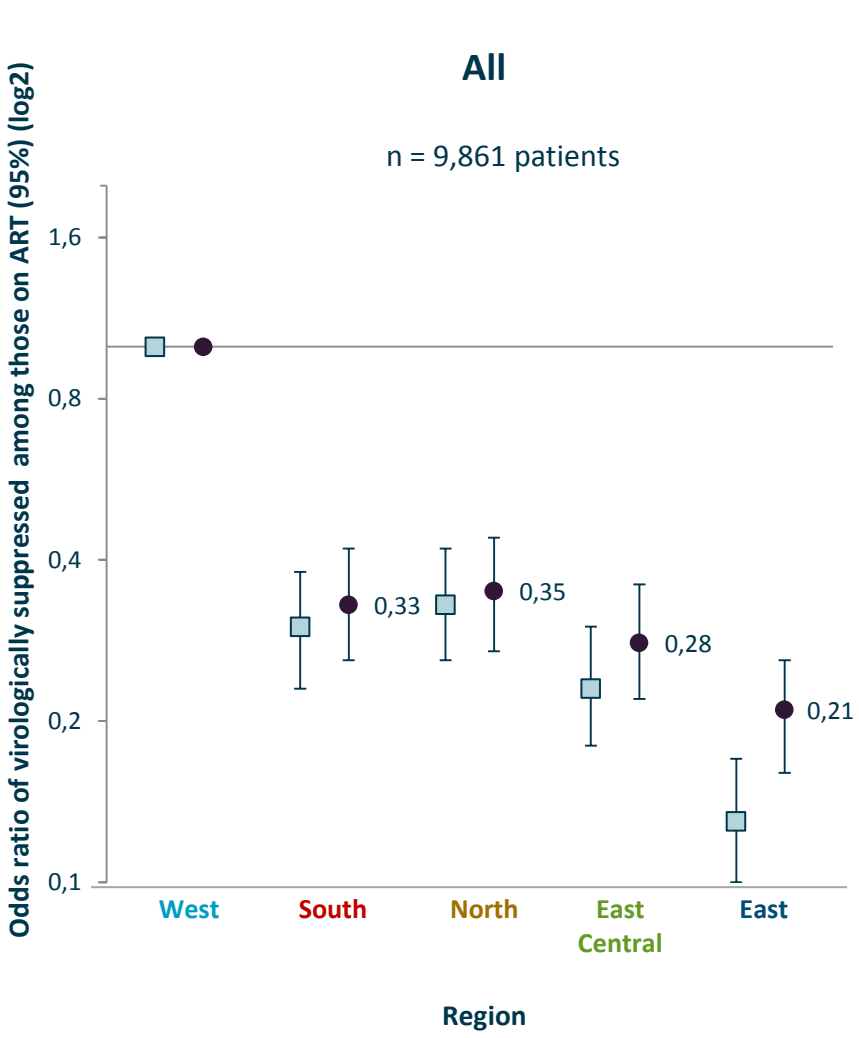
Odds ratio of being on ART in 2014/15 by region

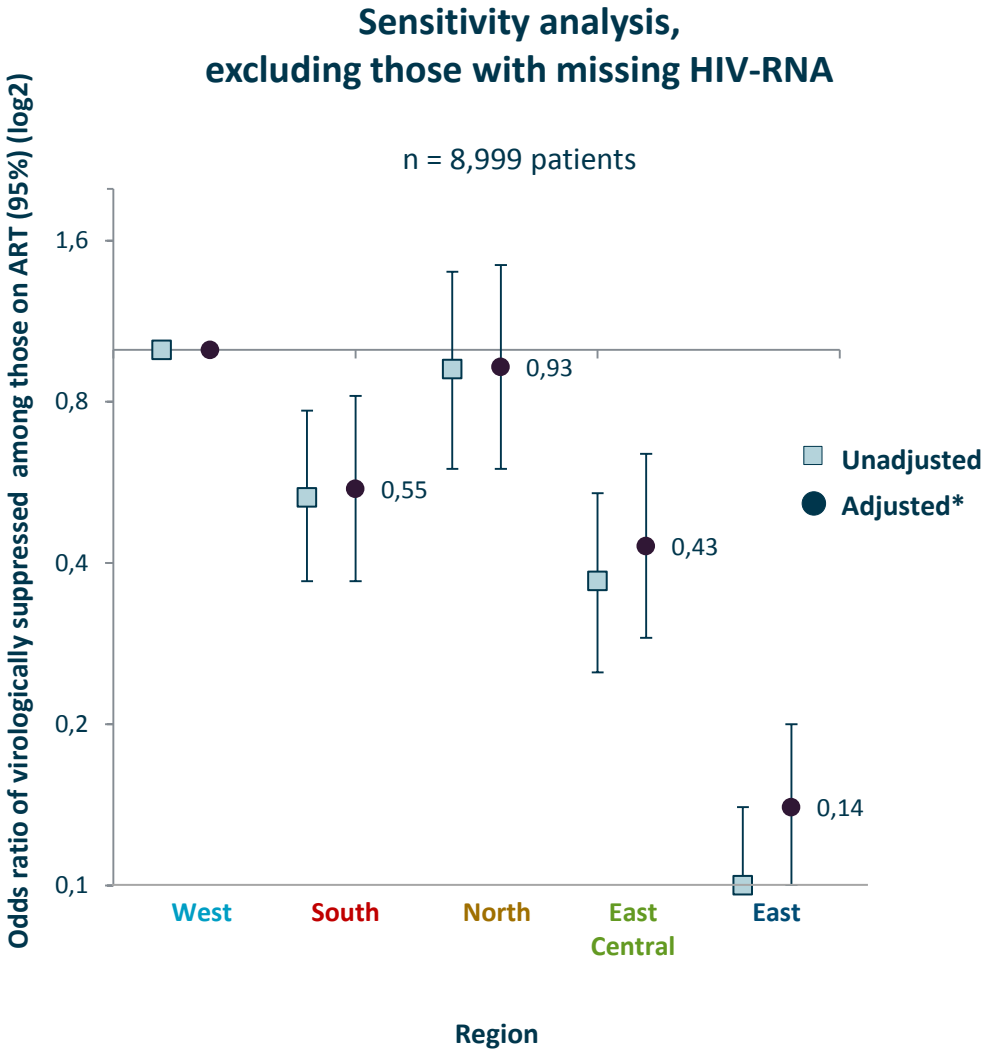


Odds ratio of being virologically suppressed among those on ART in 2014/15 by region



Odds ratio of being virologically suppressed among those on ART in 2014/15 by region





* Adjusted for current age, gender, risk group, CD4 at first visit, current HBV-status, current HCV-status

Strengths

- Access to data from large number of countries
- Data from countries without national registries
- Access to complete data on ART-coverage
- Standardized data collection allows direct comparison between countries
- Possibility of comparing temporal trends

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Discussion

- EuroSIDA participants not necessarily representative of HIV care and management in the whole country
- ”On ART among those in care” rather than among those diagnosed. Allows direct comparison of clinic performance without the impact of variation in linkage to care
- Not an adherence to guidelines study. Goal of virological suppression remains unchanged

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Conclusions

- Overall increase in
  - Proportion on ART among those in care
  - Proportion virologically suppressed among those on ART
- Large variation across Europe, Israel and Argentina
- Level and rate of improvement varied between countries and regions

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Perspectives

- Identify potential gaps in HIV care and management to explore underlying reasons
- We offer a method to assess two HIV quality of care parameters in a cohort
- EuroSIDA will continue surveillance
- Wish to use and expand existing infrastructure

The EuroSIDA Study Group

The multi-centre study group, EuroSIDA (national coordinators in parenthesis).

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