

# Characteristics of the epidemiology and temporal trends of late presenters in Europe

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**COHERE**  
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**Collaboration of Observational HIV Epidemiological Research Europe**

Coordination: Copenhagen HIV Programme (CHIP) & Institut de Santé Publique, d'Epidémiologie et de Développement (ISPED)

# COHERE

- Collaboration of 33 cohorts
- Over 270,000 HIV-positive individuals are enrolled
- 35 European countries

## Mission

To conduct epidemiological research on the prognosis and outcome of HIV-positive people from across Europe requiring a large sample size of patients which the contributing cohorts cannot answer individually

# Late presenter project aims

- To report the characteristics of persons presenting late
- To investigate temporal trends in the proportion of persons presenting late
- To characterise the proportion of persons presenting late across different regions of Europe

# Inclusion criteria

- Adults (>16 years old)
- Presenting for care for the first time on or after 1/1/2000
- CD4 count available at or within 6 months of presentation

# Definition

## **Late presentation**

Persons presenting for care with a CD4 count below **350** cells/ $\mu$ L or presenting with an AIDS defining event, regardless of the CD4 count

## **Presentation with advanced HIV disease**

Persons presenting for care with a CD4 count below **200** cells/ $\mu$ L or presenting with an AIDS defining event, regardless of the CD4 count

# Results

- 87,262 individuals presented for care
- 46,733 (53.5%, 95%CI 53.2-53.9) late presentation
- 28,691 (32.9%, 95%CI 32.6-33.2) presentation with advanced disease
- 12,008 (14%) presented with AIDS
  - 2434 (20%) *Pneumocystis jirovecii* pneumonia (PCP)
  - 1752 (15%) Cytomegalovirus disease (CMV)
  - 1464 (12%) Oesophageal candidiasis

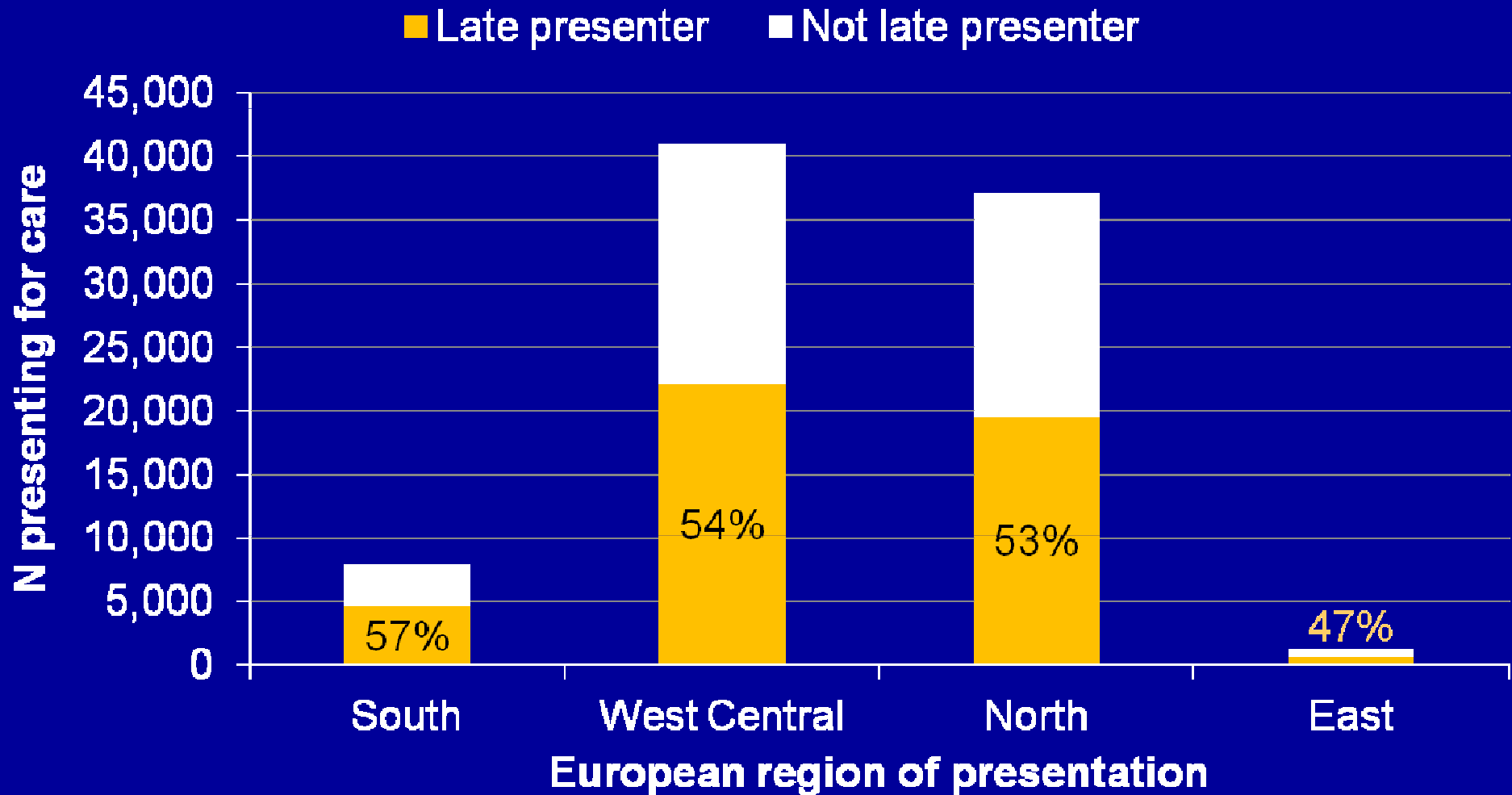
# Characteristics at presentation

		Individuals <b>not</b> presenting late		Individuals presenting late	
Total presenting for care (N, % of total)		40529	46.5	46733	53.5
Year of presentation, month/year (median, IQR)		8/05	12/02-12/07	1/05	8/02-8/07
Mode of infection (N,%)	MSM	18930	46.7	14617	31.3
	Heterosexual male	5848	14.4	11293	24.2
	Heterosexual female	8885	21.9	11648	24.9
	Male IDU	1958	4.8	2664	5.7
	Female IDU	772	1.9	801	1.7
	Other (male and female)	4136	10.2	5710	12.2
Age (Median, IQR)		34	28-41	38	31-45
Region of presentation (N,%)	South	3409	8.4	4543	9.7
	West Central	18842	46.5	22100	47.3
	North	17642	43.5	19522	41.8
	East	636	1.6	568	1.2
Region of origin (N,%)	Europe	15840	39.1	16770	35.9
	Africa	4181	10.3	7760	16.6
	Other	2545	6.3	3392	7.3
	Unknown	17963	44.3	18811	40.3

MSM: men who have sex with men, IDU: injection drug user

All p-values <0.0001

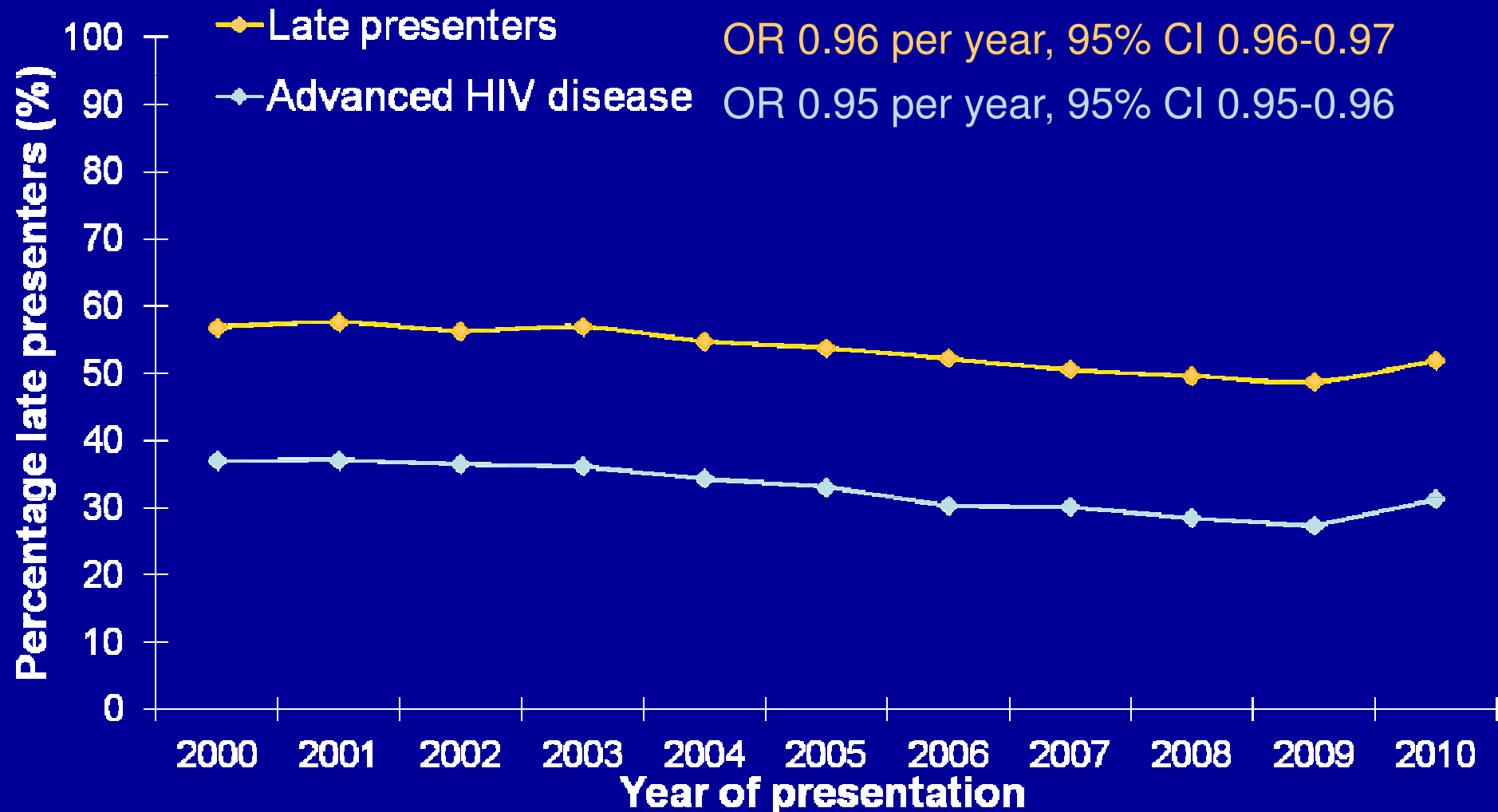
# Total individuals presenting for care by European region of presentation



**West Central:** Austria, Belgium, France, Germany, Luxemburg, Switzerland **South:** Argentina, Greece, Israel, Italy, Portugal, Spain. **North:** Denmark, Finland, Ireland, Netherlands, Norway, Sweden, UK. **East:** Belarus, Bosnia&Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Ukraine.



# Percentage of individuals presenting late by year of presentation



N

presenting  
for care

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

7707

7699

8378

8044

8947

9013

8493

8895

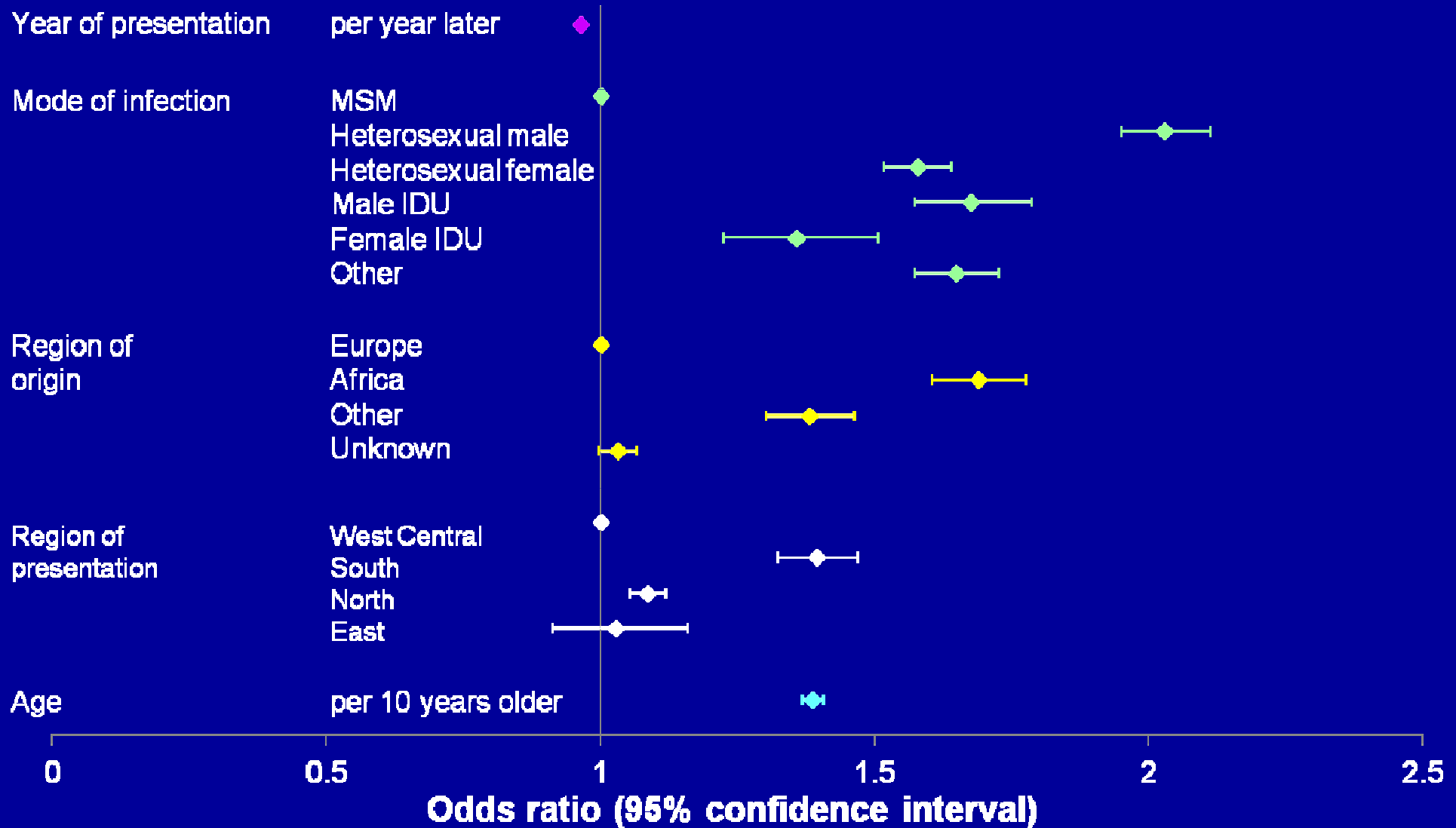
9337

7550

2879

# Characteristics associated with late presentation

◆ Year of presentation ◆ Mode of infection ◆ Region of origin ◆ Region of presentation ◆ Age

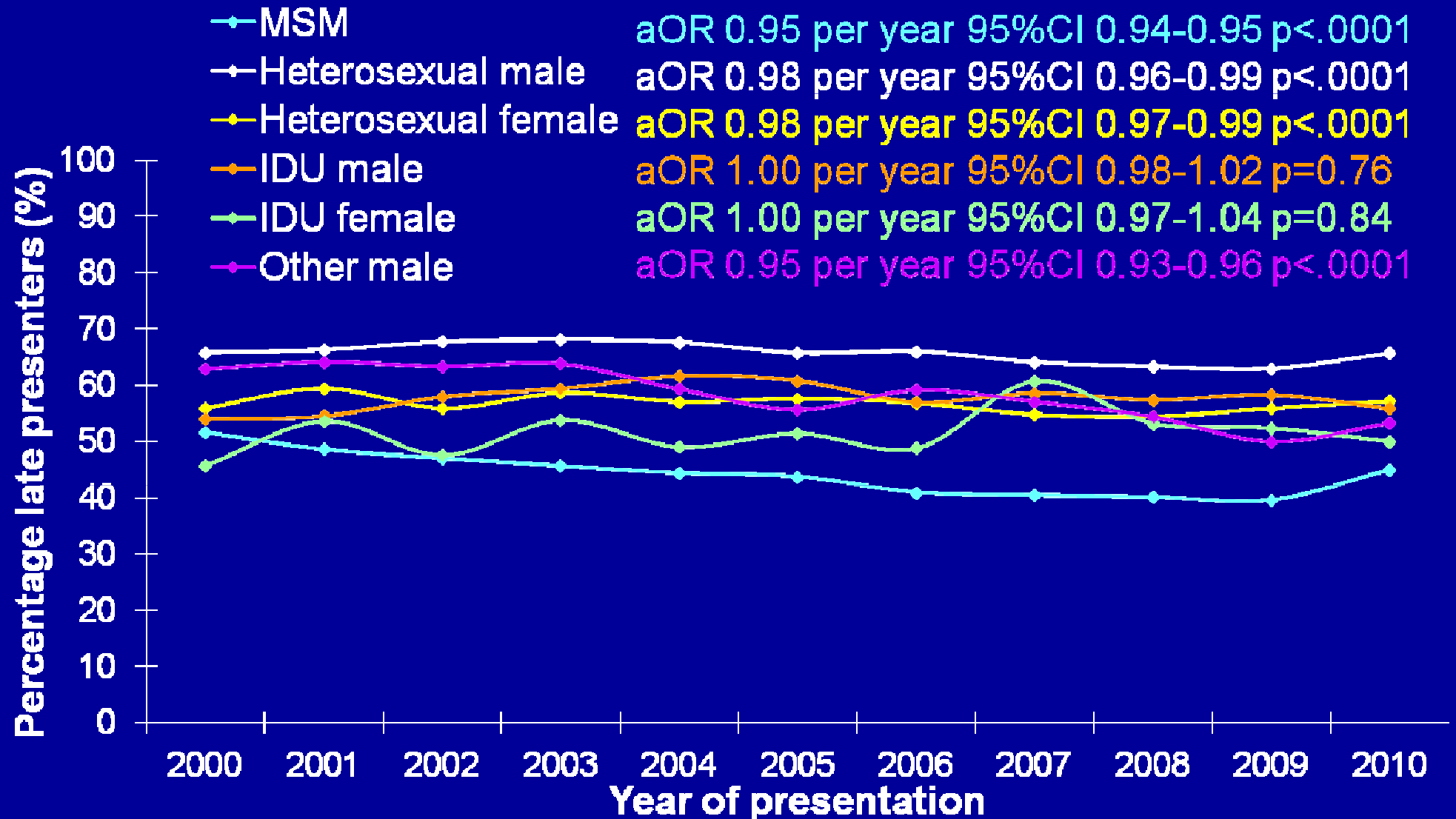


MSM: men who have sex with men IDU: injection drug use

# Characteristics by year of presentation

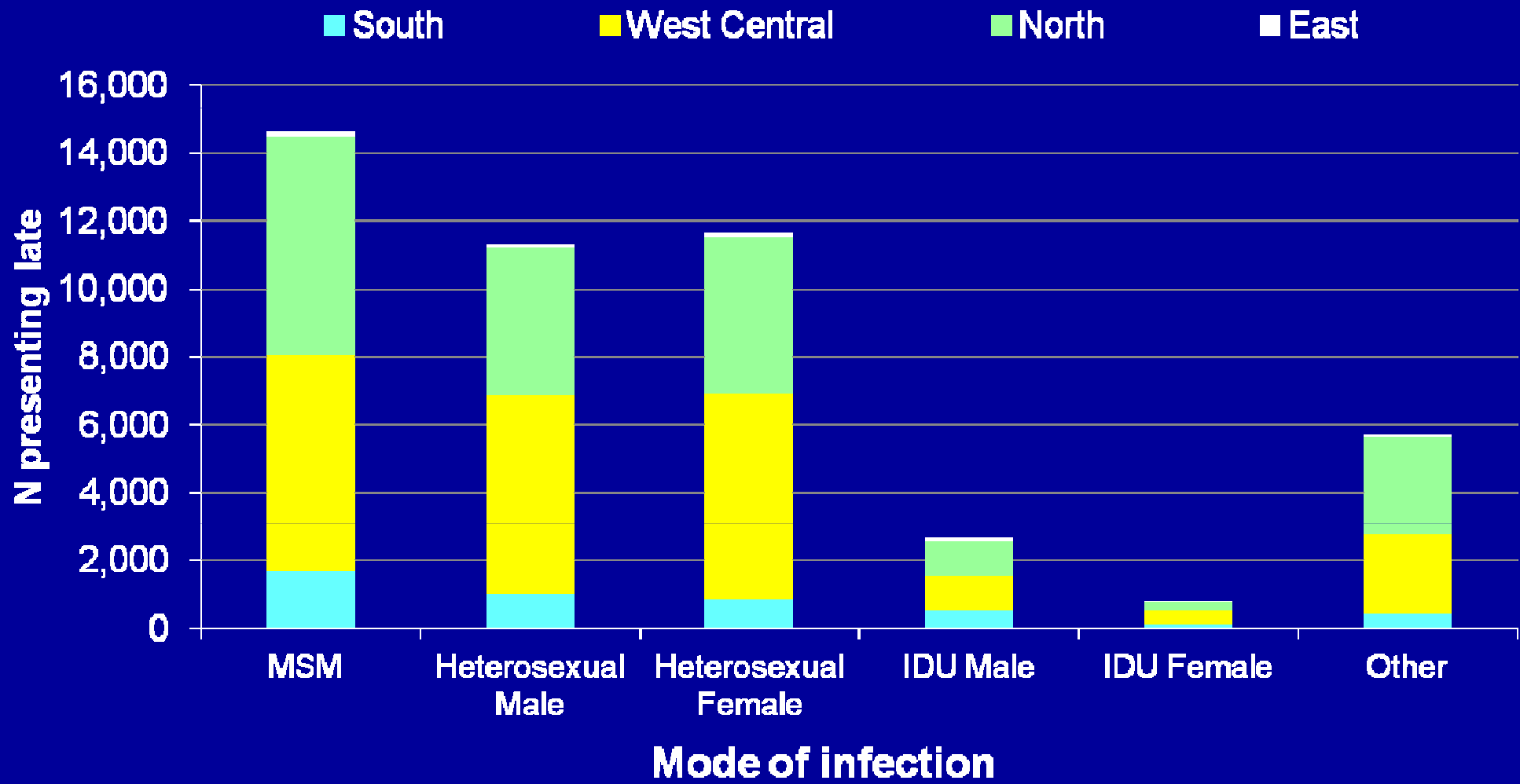
	Year of presentation		
	2000	2005	2009
Total presenting for care (N)	7707	9013	7550
Presenting late (N,% of total)	4380 (57%)	4844 (54%)	3682 (49%)
Presenting with advanced disease (N,% of total)	2852 (37%)	2979 (33%)	2061 (27%)
Mode of infection (N,% presenting late)			
MSM	1221 (52%)	1520 (44%)	1362 (40%)
Heterosexual male	1045 (69%)	1169 (66%)	816 (63%)
Heterosexual female	1085 (56%)	1305 (58%)	745 (56%)
Male IDU	424 (54%)	270 (61%)	119 (58%)
Female IDU	117 (46%)	72 (51%)	33 (52%)
Other (male and female)	488 (63%)	508 (56%)	607 (50%)
Region of presentation (N,% presenting late)			
South	367 (59%)	436 (56%)	415 (56%)
West Central	2371 (58%)	2309 (54%)	1460 (49%)
North	1607 (56%)	2000 (53%)	1807 (47%)
East	35 (44%)	99 (46%)	0 (0%)
Region of origin (N,% presenting late)			
Europe	1496 (54%)	1723 (52%)	1459 (47%)
Africa	691 (66%)	812 (67%)	567 (64%)
Other	236 (64%)	393 (58%)	296 (52%)
Unknown	1957 (56%)	1916 (51%)	1360 (46%)

# Percentage of individuals presenting late by mode of infection



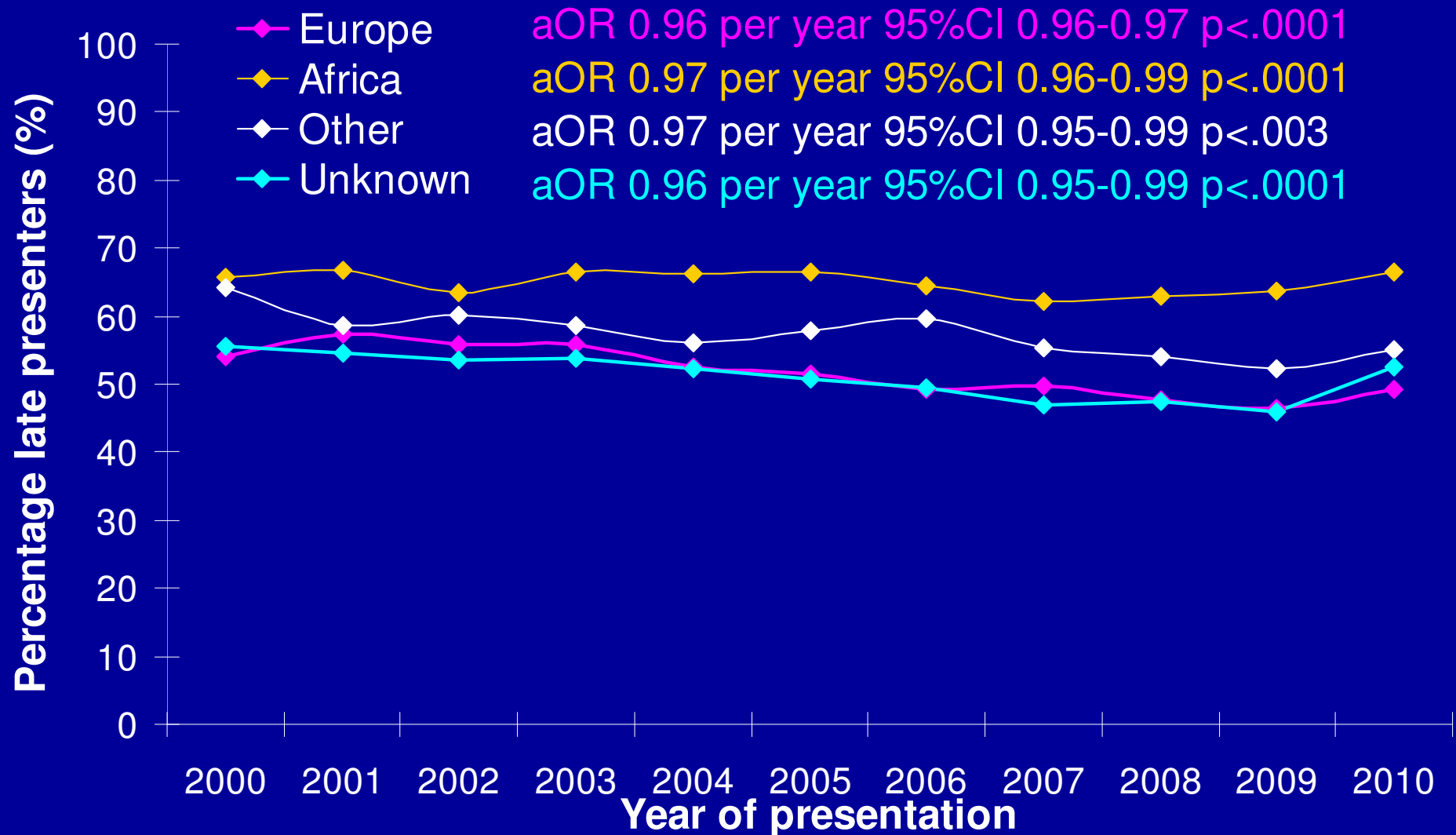
MSM: men who have sex with men IDU: injection drug use

# Number presenting late by mode of infection

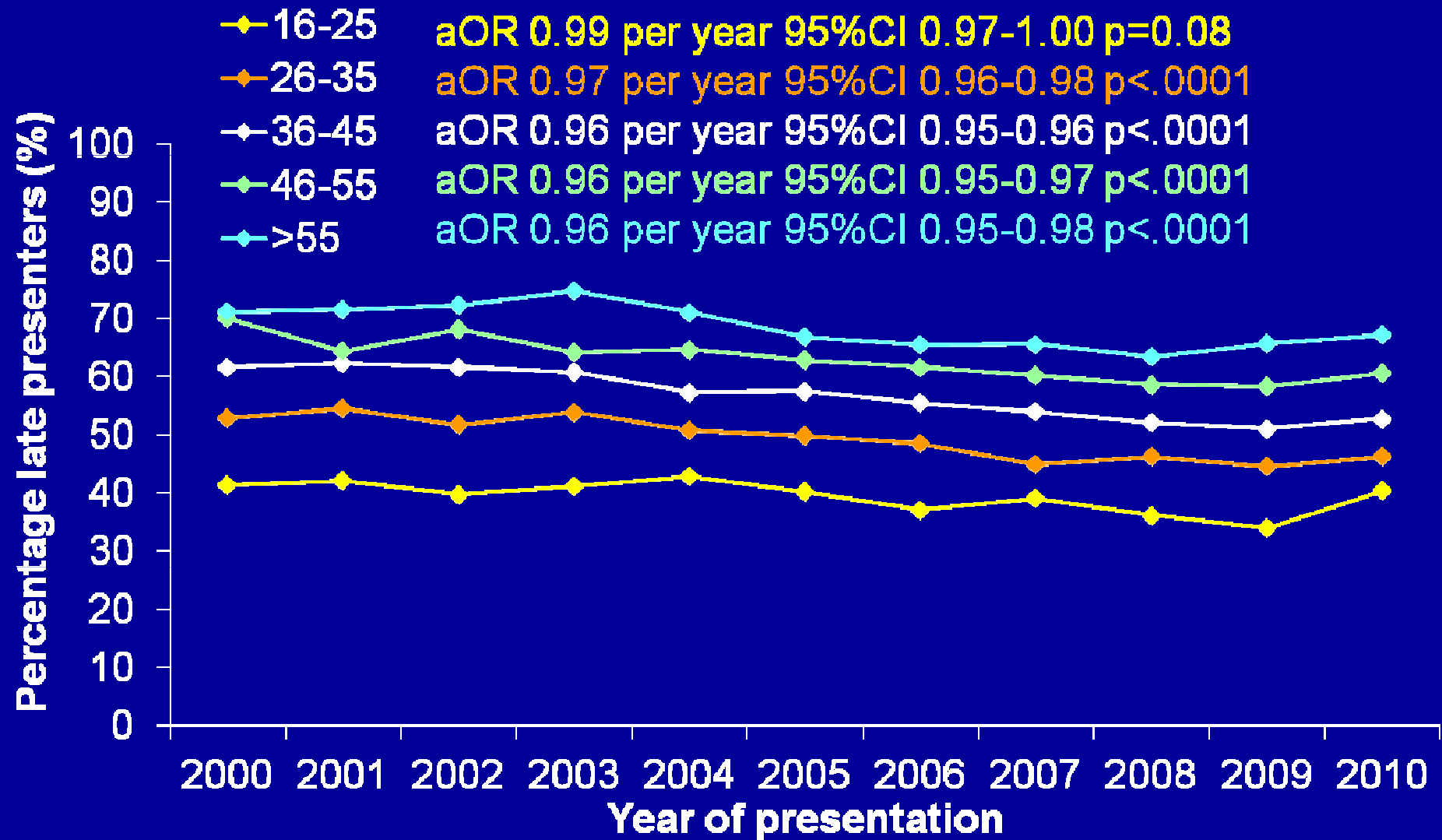


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# Percentage of individuals presenting late by region of origin

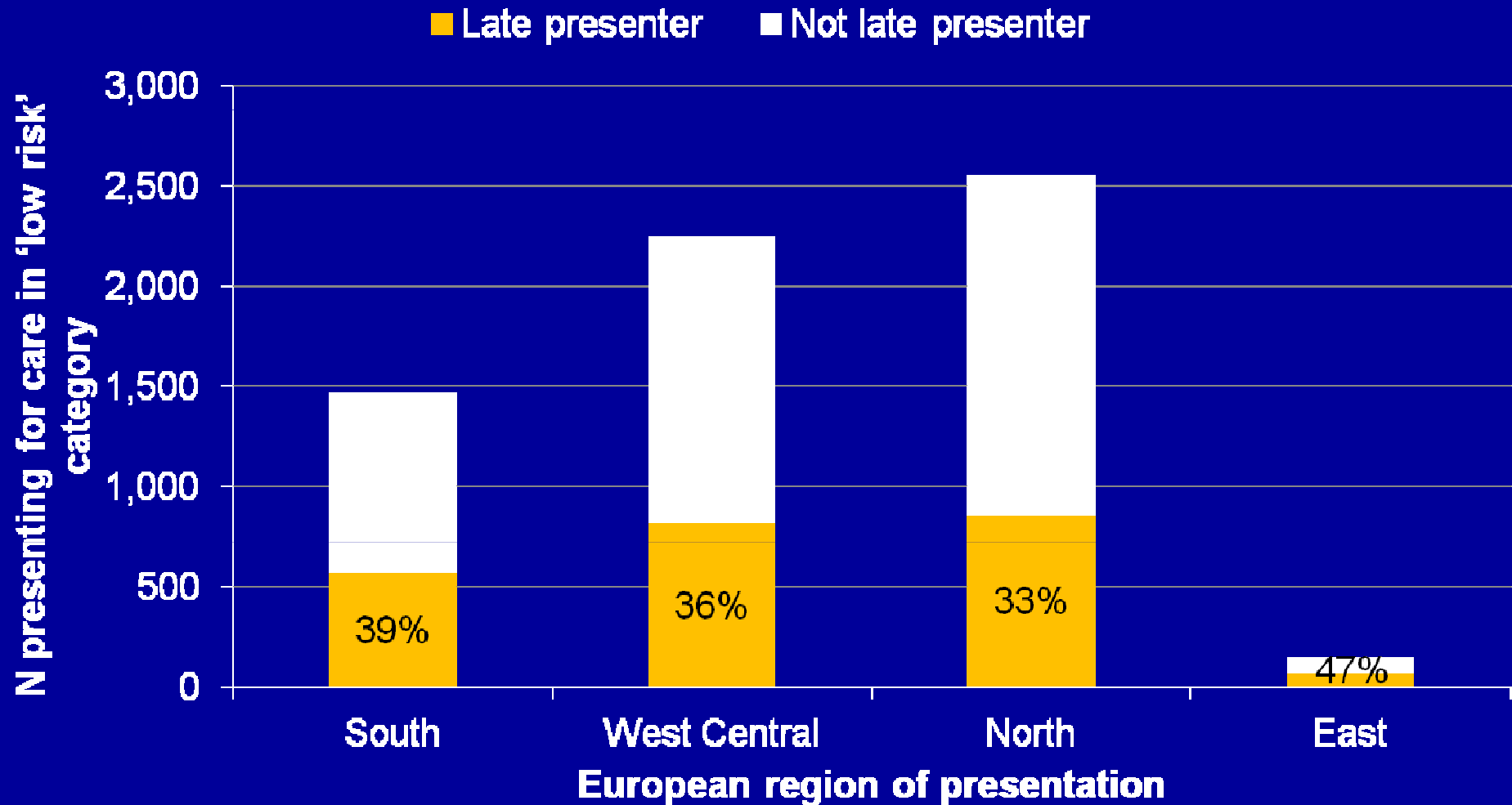


# Percentage of individuals presenting late by age category



# Total 'low risk' individuals presenting for care

Low risk: MSM, originating from Europe, aged  $\leq 35$



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# Limitations

- 87,262 (19%) excluded due to no CD4 counts
- Clinics enrolled in COHERE not necessarily representative of rest of Europe
- Limited data from East Europe (only one cohort)

# Conclusions

- Over 50% of individuals with CD4 counts measured at presentation are presenting late for care across Europe
- The proportion of individuals presenting late has decreased slightly over time
- Individuals whose mode of infection was not MSM, originating from outside of Europe, presenting in South or North Europe, and who are older are more likely to present late
- However, a substantial number of 'low risk' individuals continue to present late

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## Steering committee:

- **Executive committee:** Ian Weller (Chair, University College London), Manuel Battegay (SHCS, MoCHIV), Jordi Casabona (PISCIS), Dominique Costagliola (FHDH), Antonella d'Arminio Monforte (ICONA), Frank de Wolf (ATHENA), Maria Prins (CASCADE), Jesper Grarup (Head, Copenhagen Regional Co-ordinating Center), Genevieve Chene (Head, Bordeaux Regional Co-ordinating Centre).
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