

Survival trends for HIV+ patients receiving first-line ART from the TREAT Asia HIV Observational Database (TAHOD-LITE)

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Background

- The expansion of combination antiretroviral treatment (ART) has substantially increased the survival of individuals diagnosed with HIV infection.
- Over time, there have been changes to treatment and patient management and monitoring.
- Describe time trends in, and risk factors for, overall survival in HIV-positive patients receiving first line ART from the Asia-Pacific region.

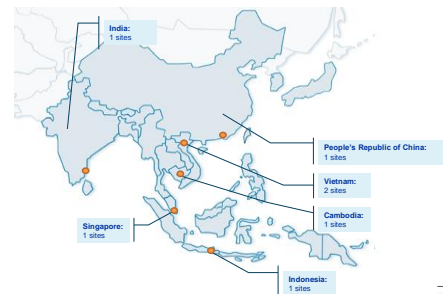


Methods

- TREAT Asia HIV Observational Database Low Intensity TransfER (TAHOD-LITE).
- All patients seen at the clinic from a certain time point are recruited.
- To date, over 30 000 HIV-positive adult patients from 8 clinical sites across 7 countries.
- Collect basic demographics, hepatitis serology, ART history and CD4 and viral load results.



Methods



Methods

- Included patients initiating ART with 3 or more drugs between 2003 and 2013, and at least one subsequent visit.
- Primary endpoint was mortality.
 - Kaplan-Meier curves to compare survival for each country and overall, by time period of ART initiation.
 - Cox proportional hazards to evaluate risk factors for mortality.
- Secondary endpoints:
 - First line ART regimen
 - CD4 cell count at ART initiation
 - CD4 and viral load testing rates

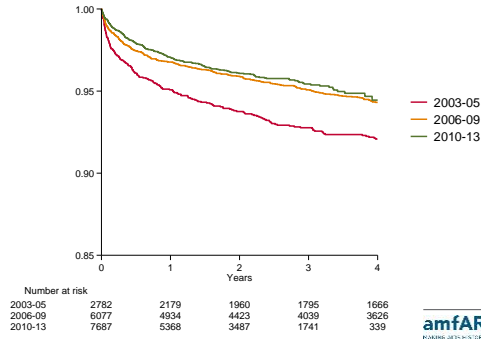


Results

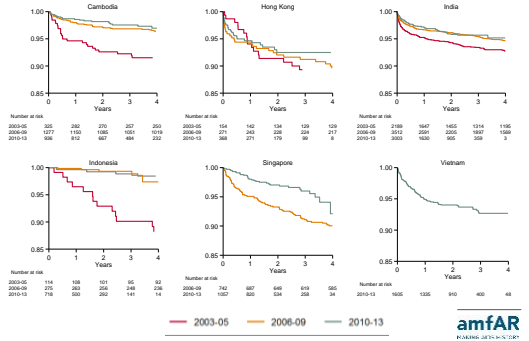
- 16546 patients.
- Majority were male (68%), initiated in 2010-13 (46%) and heterosexual contact exposure (82%).
- 880 deaths over 54 532 pys, 1.61 (95% CI: 1.51, 1.72).
- 63% HIV-related deaths.
- 40% occurred in first six months from ART initiation.



Overall survival by year of first-line ART initiation



Overall survival by country & year of first-line ART initiation



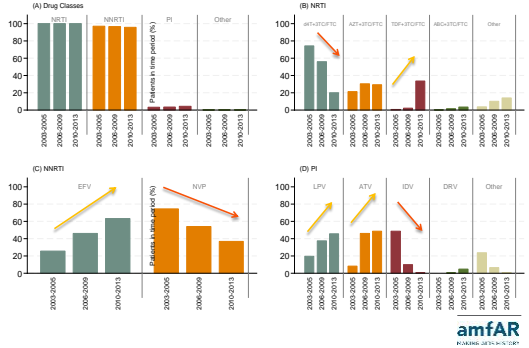
Risk factors associated with mortality

Characteristic	Unadjusted HR (95% CI)	Adjusted HR (95% CI)
Time period		
2006-09	0.68 (0.57-0.81)*	0.78 (0.65-0.93)*
2010-13	0.52 (0.42-0.64)*	0.73 (0.59-0.91)*
Age (yrs)		
41-50	1.47 (1.19-1.81)*	1.31 (1.06-1.63)**
≥51	2.62 (2.09-3.28)*	2.36 (1.86-2.99)*
Sex		
Female	0.58 (0.49-0.69)*	0.74 (0.62-0.89)*
HIV exposure		
Injecting drug use	2.30 (1.75-3.02)*	2.03 (1.44-2.87)*
Pre-ART CD4 cell count (cells/ μ L)		
101-200	0.46 (0.38-0.55)*	0.49 (0.41-0.60)*
>200	0.21 (0.16-0.27)*	0.26 (0.20-0.33)*

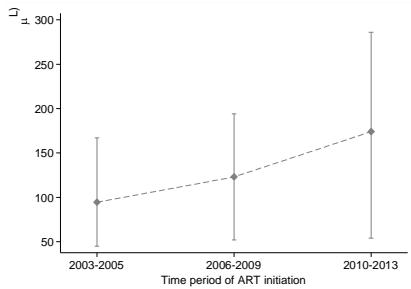
*p<0.01; **p<0.05

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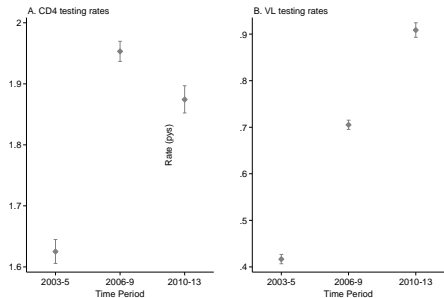
First-line ART regimen by year of ART initiation



Median CD4 cell count at ART initiation by year of ART initiation



Rates of CD4 and viral load testing by year of ART initiation



Conclusions

- HIV-positive patients from Asia-Pacific region have improved survival in more recent time periods.
- Move towards improved first-line ART regimens, earlier ART initiation and greater routine CD4 and viral load monitoring.
- Further advancements in treatment and care guidelines are likely to lead to continued improved survival.
 - Major improvement possible through earlier diagnosis of treatment.

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