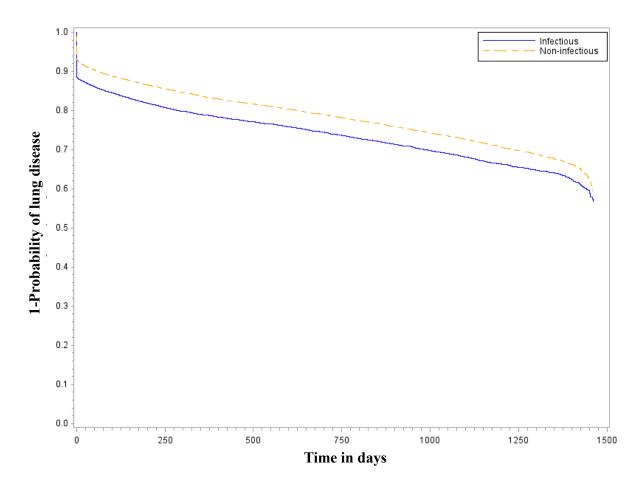
ONLINE SUPPLEMENT

Lung diseases	ICD-10 codes		
Community-acquired pneumonia	J10, J11, J12, J13, J14, J15, J16, J17, and J18		
Pneumocystis pneumonia	B206 and B59		
Lung tuberculosis	A15, A16 and A19		
Legionella pneumonia	A481		
Aspergillosis pneumonia	B44.0 and B44.1		
Pleural empyema	J86		
Lung abscess	J85		
Cytomegalovirus pneumonia	B250		
Pneumothorax	J93		
Chronic respiratory failure	J961		
Lung cancer	C34 and C45		
Pulmonary arterial hypertension (PAH)	I270		
Sleep apnea	G473		
Chronic obstructive pulmonary disease (COPD)	J40, J41, J42 and J44		
Emphysema	J43 and J982		
Asthma	J45 and J46		
Pulmonary sarcoidosis	D86		
Lung fibrosis	J841		
Drug-induced pneumonia	J702 and J703		
Pulmonary embolism	I26		

Online supplement 1: Lung disease and respective ICD-10 codes identified in main or related diagnosis



Online supplement 2: Survival curve over time of 2010 prevalent hospitalized PLHIV with lung disease

Hazard ratios in PLHIV					
Gender	Female		Male		
HIV infection	Without AIDS	With AIDS	Without AIDS	With AIDS	
At least one lung disease	1.5 (1.4-1.7)	3.8 (3.4-4.2)	1.3 (1.2-1.4)	2.8 (2.6-3.0)	
At least one infectious lung disease	3.1 (2.7-3.6)	10.5 (9.4-11.8)	2.0 (1.8-2.2)	5.8 (5.3-6.2)	
At least one non-infectious lung disease	1.2 (1.1-1.4)	2.0 (1.8-2.3)		1.8 (1.6-1.9)	
COPD	1.4 (1.2-1.8)	2.0 (1.6-2.5)		1.3 (1.1-1.5)	
Emphysema	2.3 (1.5-3.5)	3.1 (2.0-4.8)	2.1 (1.7-2.6)	2.5 (2.1-3.1)	
Chronic respiratory failure	1.8 (1.4-2.4)	2.5 (1.8-3.4)		1.6 (1.4-2.0)	
Lung fibrosis		3.4 (1.6-7.2)		3.5 (2.3-5.8)	
PAH*	3.8 (2.6-5.8)	3.1 (1.8-5.4)	2.0 (1.4-2.8)	2.1 (1.4-3.1)	
Lung cancer		2.0 (1.3-3.2)		1.7 (1.4-2.1)	
Sleep apnea**		0.6 (0.3-0.9)	0.5 (0.4-0.6)	0.3 (0.2-0.4)	

* after adjusting for COPD and left heart dysfunction

** after adjusting for obesity

Online supplement 3: Incident analysis over time for 2010 prevalent hospitalized HIV-AIDS to identify the effect of PLHIV with AIDS on lung disease, according to gender (after adjusting for age, and HBV or HBC infection) (Only statistically significant HRs are reported)

	Hazard ratio in PLHIV with AIDS				
18-29	30-49	50-69	over 70		
9.1 (6.1-13.6)	7.2 (6.2-8.4)	5.2 (4.2-6.5)	5.7 (3.6-9.1)		
25.3 (16.1-40.0)	17.8 (14.9-21.2)	12.3 (9.6-15.9)	8.5 (4.7-15.3)		
2.7 (1.3-5.7)	2.6 (2.0-3.3)	2.0 (1.4-2.7)	2.4 (1.0-5.6)		
_	9.1 (6.1-13.6) 25.3 (16.1-40.0)	9.1 (6.1-13.6) 7.2 (6.2-8.4) 25.3 (16.1-40.0) 17.8 (14.9-21.2)	9.1 (6.1-13.6) 7.2 (6.2-8.4) 5.2 (4.2-6.5) 25.3 (16.1-40.0) 17.8 (14.9-21.2) 12.3 (9.6-15.9)		

with AIDS on lung disease, according to age group (after adjusting for gender, and HBV or HBC infection) (Only statistically significant HRs are reported)

Hazard ratio i	Hazard ratio in smoker PLHIV without AIDS				
Age (in years)	18-29	30-49	50-69	over 70	
At least one lung disease		1.2 (1.1-1.4)			
At least one infectious lung disease	4.0 (1.5-11.1)	1.8 (1.5-2.3)	1.3 (1.0-1.6)		
At least one non-infectious lung disease		1.5 (1.2-1.8)			
COPD					
Emphysema		1.6 (1.1-2.5)	1.5 (1.1-2.3)		
Chronic respiratory failure		1.6 (1.1-2.4)			
Lung fibrosis					
РАН					
Lung cancer					
Sleep apnea			0.4 (0.2-0.8)		

reported)

Hazard ratio in smoker PLHIV with AIDS				
Age (in years)	18-29	30-49	50-69	over 70
At least one lung disease		1.7 (1.5-2.0)		
At least one infectious lung disease	3.7 (1.2-11.5)	3.8 (3.2-4.5)	2.4 (1.9-3.0)	
At least one non-infectious lung disease		1.5 (1.2-1.8)		
COPD				
Emphysema		2.0 (1.4-3.0)		
Chronic respiratory failure		2.1 (1.5-3.1)		
Lung fibrosis		4.9 (2.0-12.4)		
РАН		4.2 (2.3-7.5)		
Lung cancer		2.2 (1.4-3.4)		
Sleep apnea		0.2 (0.1-0.6)	0.3 (0.1-0.8)	

Online supplement 6: Incident analysis over time on smokers to identify the effect of PLHIV with AIDS on lung diseases, according to the age group (after adjusting for gender, and HBV or HBC infection) (Only statistically significant HRs are reported)