

Supplementary Table 1. Incident pulmonary diagnoses by HIV status and coding source.

	HIV+			HIV-		
	Total diagnoses	ICD code source ¹	Self-report source ²	Total diagnoses	ICD code source ¹	Self-report source ²
Infectious diagnoses						
Influenza or viral pneumonia	231	217 (93.9)	14 (6.1)	189	184 (97.4)	5 (2.6)
Bacterial pneumonia	153	89 (58.2)	64 (41.8)	41	28 (68.3)	13 (31.7)
Other pneumonia	324	167 (51.5)	157 (48.5)	159	76 (47.8)	83 (52.2)
Other opportunistic infections ³	53	37 (69.8)	16 (30.2)	7	5 (71.4)	2 (28.6)
Non-infectious diagnoses						
Chronic bronchitis	238	46 (19.3)	192 (80.7)	192	35 (18.2)	157 (81.8)
COPD or emphysema	28	28 (100.0)	0 (0.0)	35	35 (100.0)	0 (0.0)
Lung cancer ³	10	10 (100.0)	0 (0.0)	7	7 (100.0)	0 (0.0)
Other non-infectious diagnoses ⁴	37	37 (100.0)	0 (0.0)	29	29 (100.0)	0 (0.0)

Data are n (%) of diagnoses. See Methods – Procedures and definitions for a detailed description of diagnosis coding and sources.

1 - Diagnoses obtained from variables provided as ICD9-CM, ICD10, or ICD-O-3 codes.

2 - Diagnoses obtained from binary categorical self-report variables.

3 - *Pneumocystis* pneumonia or tuberculosis.

4 - Pulmonary hypertension, alveolar pneumonopathy, pulmonary fibrosis, bronchiectasis, other lung disease (not otherwise specified).

Supplementary Table 2. Factors associated with risk of infectious pulmonary diagnoses among all HIV+ subjects.

	HIV+		Model 1 – current marijuana smoking		Model 2 – prior two-year average marijuana smoking	
	Univariate analysis HR (95% CI)	p value	HR (95% CI)	p value	HR (95% CI)	p value
Marijuana smoking - current						
Daily or weekly	1.40 (1.10-1.77)	0.0056	1.34 (1.06-1.71)	0.016	–	
Monthly or less	1.00 (Ref.)		1.00 (Ref.)		–	
Marijuana smoking - prior two-year average (per 10 days use/month increase, continuous variable)	1.08 (1.03-1.13)	0.012	-		1.06 (1.00-1.11)	0.041
Tobacco smoking - prior two-year average						
≥1/2 packs/day	1.39 (1.10-1.76)	0.0058	1.26 (0.99-1.61)	0.056	-	
>0 - <1/2 packs/day	1.10 (0.82-1.46)	0.53	1.05 (0.78-1.42)	0.73	-	
0 packs/day ¹	1.00 (Ref.)		1.00 (Ref.)		-	
Tobacco smoking - prior two-year average (per pack/day increase, continuous variable)	1.10 (1.05-1.15)	0.0059	-		1.04 (0.99-1.10)	0.069
Baseline calendar year						
2001-2014	0.64 (0.52-0.79)	<0.0001	0.70 (0.56-0.89)	0.0032	0.71 (0.56-0.89)	0.0035
1996-2000	1.00 (Ref.)		1.00 (Ref.)		1.00 (Ref.)	
CD4 count (cells/μL)						
<200	3.71 (2.86-4.81)	<0.0001	3.37 (2.58-4.41)	<0.0001	3.38 (2.59-4.41)	<0.0001
200-349	1.52 (1.16-2.00)	0.0026	1.44 (1.10-1.90)	0.0091	1.44 (1.10-1.90)	0.0089
350-499	1.40 (1.08-1.81)	0.011	1.36 (1.05-1.76)	0.020	1.36 (1.05-1.76)	0.019
500+	1.00 (Ref.)		1.00 (Ref.)		1.00 (Ref.)	
ART use						
Yes ²	0.67 (0.47-0.94)	0.022	0.83 (0.58-1.18)	0.31	0.83 (0.58-1.19)	0.31
No	1.00 (Ref.)		1.00 (Ref.)		1.00 (Ref.)	

Hazard ratios (HR) for first incident infectious pulmonary diagnosis (influenza or viral pneumonia, bacterial pneumonia, other pneumonia, acute bronchitis, *Pneumocystis* pneumonia, tuberculosis). All models were adjusted by race and education. All covariates were time-varying except baseline calendar year, race, and education; age was used as the time variable. Continuous variables for prior two-year average marijuana and tobacco smoking were square-root transformed to reduce skewness and reported as back-transformed estimates in their original scale. Models evaluated 421 diagnoses in 1,287 participants with 19,009 person-visits with no restriction on CD4 cell counts.

1 - Reference category includes former tobacco smokers.

2 - Includes person-visits with HIV viral load <400 copies/ml where ART data missing.