Prevalence and incidence of interstitial lung diseases in a multi-ethnic Parisian agglomeration

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Online Data Supplement

Table S1: Comparison of demographic characteristics of the population of Seine Saint Denis county and the French general population

	Seine Saint Denis	France
Geographic origin : n (%)		
- Europeans	1220817 (79.3)	62587691 (95.1)
- North-Africans	144957 (9.4)	1650788 (2.5)
- Afro-Caribbeans	94906 (6.2)	733151 (1.1)
- Others	78044 (5.1)	834836 (1.3)
- Total	1538724	65806466
Mean age (years)	35.3	40.5
Sex-ratio (Men/Women)	1.0	0,9

Table S2: Codes of the ICDs version 10 used to identify patients with ILD from the SS

Codes	Diagnoses	All SS cases* (n=588)	Cases from SS source only (n=339)
D86†, 860, 862, 863, 868, 869	Sarcoidosis	423	208
J60†	Coalworker pneumoconiosis	0	0
J61†	Pneumoconiosis due to asbestos and other mineral fibres	53	49
J62†	Pneumoconiosis due to dust containing silica	28	24
J628	Pneumoconiosis due to other dust containing silica	3	3
J63†, 630,631,633,634,635,638	Pneumoconiosis due to other inorganic dusts	2	2
J64†	Unspecified pneumoconiosis	7	2
J67†, 670, 671, 672, 673, 674, 675, 676, 677, 678,679	Hypersensitivity pneumonitis due to organic dust	1	0
J70†	Respiratory conditions due to other external agents	1	1
J70.1	Chronic and other pulmonary manifestations due to radiation	1	1
J70.2	Acute drug-induced interstitial lung disorders	0	0
J70.3	Chronic drug-induced interstitial lung disorders	0	0
J70.4	Drug-induced interstitial lung disorders, unspecified	0	0
J82†	Pulmonary eosinophilia, not elsewhere classified	1	0

J84†	Other interstitial pulmonary diseases	35	21
J840	Alveolar and parietoalveolar conditions	2	2
J841	Other interstitial pulmonary diseases with fibrosis	19	15
J84.8	Other specified interstitial pulmonary diseases	0	0
J849	Interstitial pulmonary disease, unspecified	1	0
J99†	Respiratory disorders in diseases classified elsewhere	2	2
J991	Respiratory disorders in other diffuse connective tissue disorders	2	2
M301	Polyarteritis with lung involvement	2	2
M313	Wegener granulomatosis	5	5

*Including duplicates with the clinical source
† The umbrella code was used when no more precise codes were recorded in the SS database.

Abbreviations: ICDs: international classification of diseases; IDL: interstitial lung disease, SS: social security

Table S3: Age and sex-standardized prevalence rates of the main etiological diagnoses (reviewed cases)

Sarcoidosis						
Age	Females	Total females	Females prevalence*	Males	Total males	Males prevalence*
15-24	5	102440	4,9	3	103051	2.9
25-34	33	121319	27,2	33	112285	29.4
35-44	47	110563	42,5	51	111619	45. 7
45-54	49	101188	48,4	27	98602	27.4
55-64	24	82804	29,0	18	81156	22.2
65-74	11	44159	24,9	7	42028	16.7
75-84	2	36127	5,5	1	24698	4.0
> 84	2	16116	12,4	1	6129	16.3
CTDs/Vasculitis						
Age	Females	Total females	Females prevalence*	Males	Total males	Males prevalence*
15-24	0	102440	0	0	103051	0
25-34	7	121319	5, 8	2	112285	1.8
35-44	5	110563	4,5	4	111619	3. 6
45-54	25	101188	24,7	10	98602	10.1
55-64	20	82804	24,2	15	81156	18.5
65-74	24	44159	54,3	7	42028	16.7
75-84	17	36127	47,1	4	24698	16.2
> 84	1	16116	6,2	0	6129	0
IPF						
Age	Females	Total females	Females prevalence*	Males	Total males	Males prevalence*

15-24	0	102440	0	0	103051	0
25-34	0	121319	0	0	112285	0
35-44	0	110563	0	2	111619	1. 8
45-54	1	101188	1,0	9	98602	9.1
55-64	1	82804	1,2	13	81156	16. 1
65-74	6	44159	13,6	31	42028	73.8
75-84	10	36127	27,7	18	24698	72.9
> 84	3	16116	18,6	0	6129	0

* Per 100.000

Table S4: Age and sex-standardized prevalence and incidence rates of the main etiological diagnoses (reviewed cases) of individuals with age of 65 and more.

Diagnosis	Prevalent cases	Incident cases	Standardized Prevalence Rate (per 100.000)	Standardized Incidence Rate (per 100.000 per years)
Sarcoidosis	22	5	14.0	3.0
IPF	66	27	39.0	16.0
CTDs/Vasculitis	46	23	27.2	13.6
All diseases	251	103	148.3	60.9

Table S5: Description of prevalent ILD cases for the whole cohort (reviewed and non reviewed)

ILD cases	All cases	Overall prevalence (per 100.000)	Reviewed cases	Reviewed cases prevalence (per 100.000)
ILDs of known cause	*353*	*29.55*	*260*	*21.76*
CTDs/vasculitis	157	13.14	145	12.14
Pneumoconioses	119	9.96	42	3.52
Drug-induced ILD	33	2.76	31	2.60
Hypersensitivity pneumonitis	28	2.34	28	2.34
Radiation induced pneumonitis	9	0.75	7	0.59
Others*	7	0.59	7	0.59
Idiopathic interstitial pneumonias	*183*	*15.31*	*145*	*12.14*
IPF	135	11.30	98	8.20
NSIP	20	1.67	20	1.67
Desquamative interstitial pneumonia	10	0.84	10	0.84
Organizing pneumonia	9	0.75	9	0.75
Unclassified (despite SLB)	6	0.50	6	0.50
Respiratory bronchiolitis with ILD	3	0.25	2	0.17
Lymphoid interstitial pneumonia	0	0.00	0	0.00
Sarcoidosis	*536*	*44.78*	*361*	*30.22*
Particular ILDs	*22*	*1.84*	*22*	*1.84*
Lymphangioleiomyomatosis	9	0.75	9	0.75
Chronic idiopathic eosinophilic pneumonia	5	0.42	5	0.42
Pulmonary Langerhans Cell Histiocytosis	4	0.33	4	0.33
Pulmonary alveolar proteinosis	2	0.17	2	0.17
Others†	2	0.17	2	0.17
Undetermined diagnosis	*76*	*6.36*	*60*	*5.02*
Differential diagnosis between IPF and NSIP	40	3.35	34	2.85
All cases	**1170**	**97.94**	**848**	**70.99**

Abbreviations: ILD: interstitial lung disease, CTDs: connective tissue disease, IPF: idiopathic pulmonary fibrosis, NSIP: non specific interstitial pneumonia, SLB: surgical lung biopsy.
*Including chronic inflammatory colitis (n=4), amyloidosis (n=1), IgG4 syndrome (n=1), and progeria

(n=1).
†Including alveolar microlithiasis (n=1), Erdheim Chester’s disease (n=1)

Table S6: Geographical origin-standardized prevalence and incidence rates of the main etiological diagnoses (reviewed cases)

	Prevalence (per 100.000) [95%CI]	Incidence (per 100.000 per years) [95%CI]
Sarcoidosis	*26.28 [23.46 - 29.36]*	*4.70 [3.54 - 6.09]*
Europeans	10.72 [8.66 - 13.12]	2.40 [1.48 - 3.66]
North-africans	60.02 [48.07 - 74.03]	9.66 [5.28 - 16.20]
Afro-caribbeans	112.74 [92.40 - 136.22]	16.86 [9.64 - 27.38]
Others	33.31 [21.76 - 48.81]	6.41 [2.08 - 14.95]
IPF	*7.95 [6.43 - 9.72]*	*2.76 [1.90 - 3.88]*
Europeans	5.82 [4.33 - 7.65]	1.60 [0.87 - 2.68]
North-africans	26.90 [19.13 - 36.78]	11.73 [6.83 - 18.78]
Afro-caribbeans	4.21 [1.15 - 10.79]	1.05 [0.027 - 5.87]
Others	1.28 [0.03 - 7.14]	1.28 [0.03 - 7.14]
CTDs/vasculitis	*11.80 [9.94 - 13.92]*	*3.43 [2.46 - 4.66]*
Europeans	5.70 [4.23 - 7.52]	1.83 [1.04 - 2.96]
North-africans	26.90 [19.13 - 36.78]	12.42 [7.36 - 19.62]
Afro-caribbeans	41.09 [29.22 - 56.17]	4.21 [1.15 - 10.79]
Others	16.66 [8.87 - 28.48]	3.84 [0.79 - 11.23]
All Diseases	*65.71 [61.20 - 70.47]*	*17.91 [15.59 - 20.48]*
Europeans	37.30 [33.37 - 41.57]	11.75 [9.59 - 14.25]
North-africans	160.74 [140.77 - 182.73]	49.67 [38.87 -62.55]
Afro-caribbeans	180.18 [154.20 - 209.27]	26.34 [17.05 - 38.88]
Others	69.19 [51.98 - 90.27]	17.94 [9.81 - 30.10]

Abbreviations: CI : confidence interval

Figure S1: Distribution of prevalent ILD cases according to underlying etiological diagnoses for the whole cohort (reviewed and non reviewed cases)