

1 **Supplementary Table 1.** Smoking prevalence according to sex and age

Characteristics	n=2230	
Sex		
Male (%)	981(44.0%)	
Female (%)	1249(56.0%)	
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Median age (range)	68 (40-93)	
Age categories		
40-49 years (%)	112 (5.0%)	
50-59 years (%)	253 (11.3%)	
60-69 years (%)	899 (40.3%)	
70-79 years (%)	878 (39.4%)	
≥80 years (%)	88 (3.9%)	
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Smoking status		
Male		
40-49 years	Current (%)	31 (49.2)
	Former (%)	16 (25.4)
	Never (%)	16 (25.4)
50-59 years	Current (%)	125 (44.8)
	Former (%)	46 (36.8)
	Never (%)	23 (18.4)
60-69 years	Current (%)	101 (27.1)
	Former (%)	173 (46.4)
	Never (%)	99 (26.5)
70-79 years	Current (%)	48 (12.8)
	Former (%)	184 (48.9)
	Never (%)	144 (38.3)
≥80 years	Current (%)	4 (9.1)
	Former (%)	23 (52.3)
	Never (%)	17 (38.6)
total	Current (%)	240 (24.5%)
	Former (%)	442 (45.0%)

	Never (%)	299 (30.5%)
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Female		
40-49 years	Current (%)	2 (4.1)
	Former (%)	6 (12.2)
	Never (%)	41 (83.7)
50-59 years	Current (%)	7 (5.5)
	Former (%)	6 (4.7)
	Never (%)	115 (89.8)
60-69 years	Current (%)	8 (1.5)
	Former (%)	5 (1.0)
	Never (%)	513 (97.5)
70-79 years	Current (%)	5 (10)
	Former (%)	6 (1.2)
	Never (%)	491 (97.8)
≥80 years	Current (%)	0 (0.0)
	Former (%)	0 (0.0)
	Never (%)	44 (100)
total	Current (%)	22 (1.8%)
	Former (%)	23 (1.8%)
	Never (%)	1204 (96.4%)

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4 **Supplementary Figure 1**

5 **Age-stratified analysis of FEV₁/FVC differences across questionnaire**
6 **items among 727 smokers.**

7 Mean FEV₁/FVC values with 95% confidence intervals are shown for symptom-
8 positive and symptom-negative groups in each age category.

9 (A) Q5(1), cough in winter.

10 (B) Q5(2), sputum in winter.

11 (C) Q5(3), dyspnea when climbing stairs or slopes.

12 (D) Q6, chronic cough lasting more than 3 months.

13 (E) Q7, weather-related cough.

14 (F) Q8, chronic sputum lasting more than 3 months.

15 (G) Q9, sputum without a cold.

16 (H) Q10, morning sputum.

17 (I) Q11, exertional dyspnea.

18 (J) Q12, paroxysmal dyspnea.

19 (K) Q13, allergic symptoms such as rhinitis.

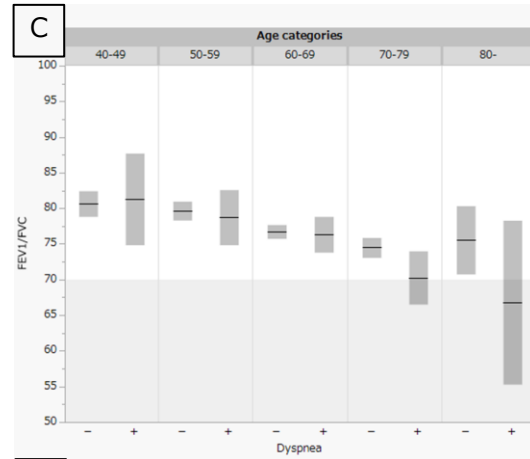
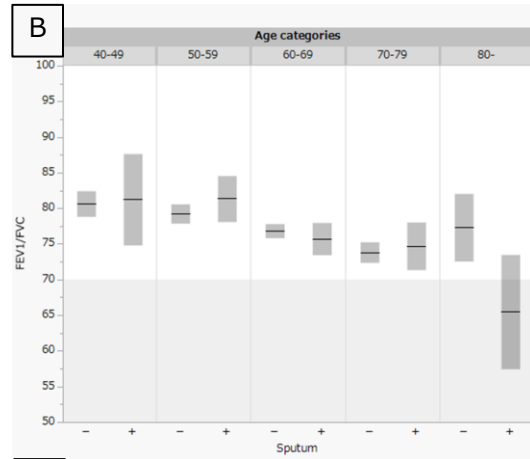
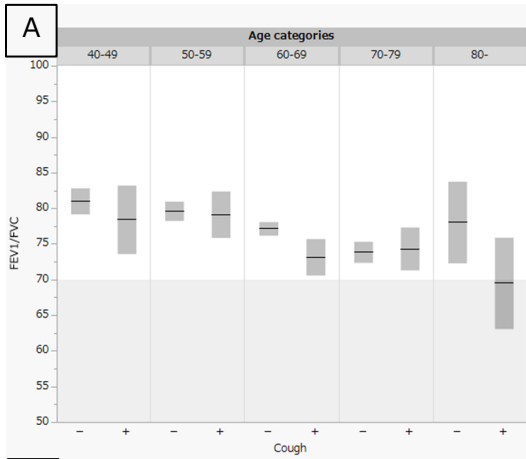
20 Results of 11 respiratory symptom questions (Q5–Q13) are displayed for 727
21 smokers. Mean FEV₁/FVC values and 95% confidence intervals are shown for
22 each age category (40–49, 50–59, 60–69, 70–79, and ≥80 years).

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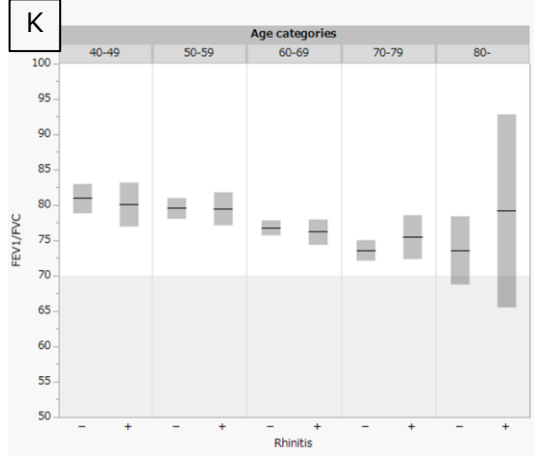
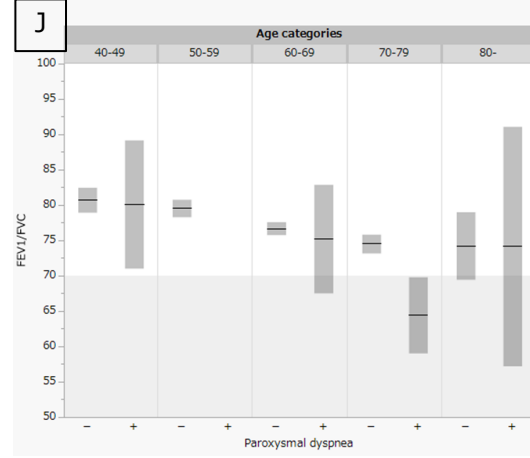
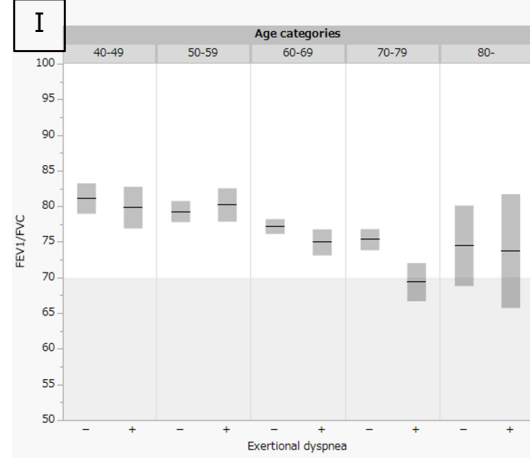
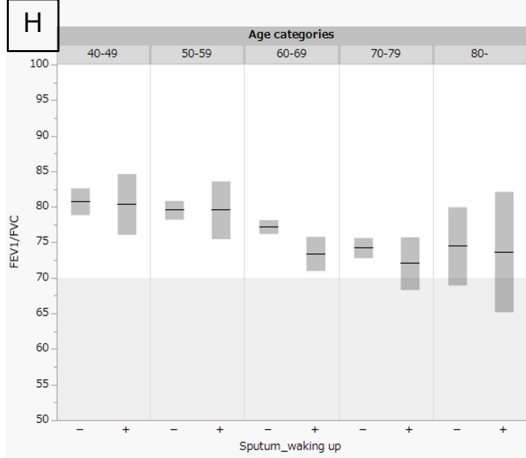
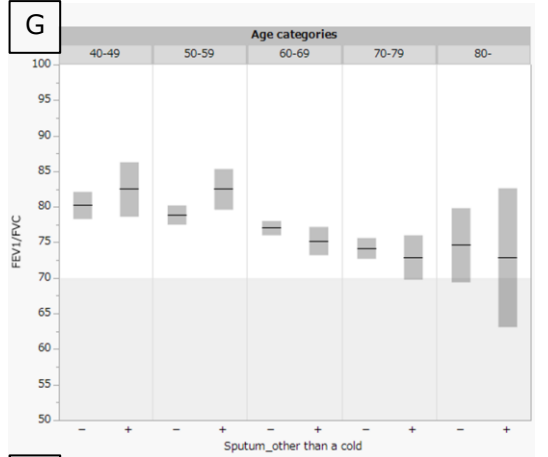
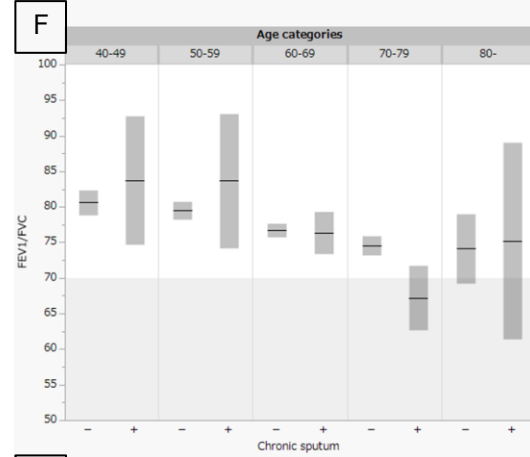
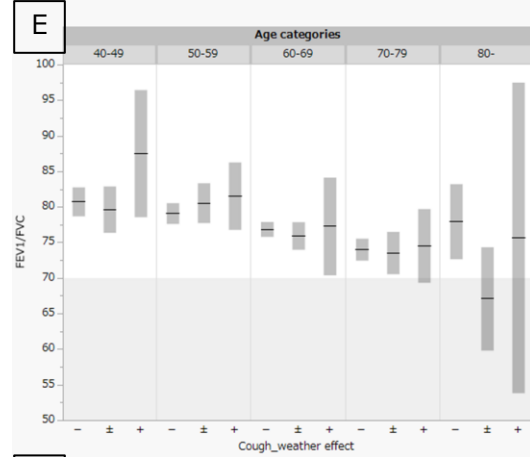
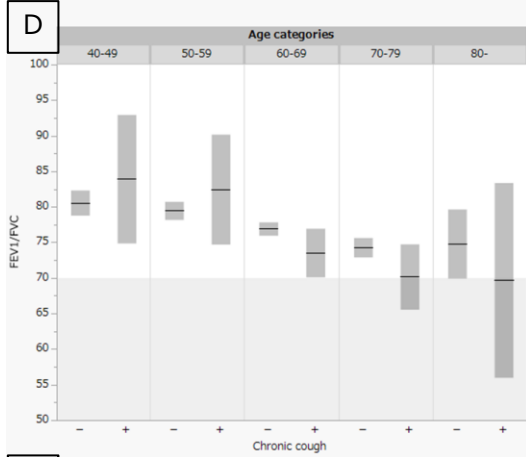
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95% confidence interval



27 **Supplementary Figure 2**

28 **Predicted FEV₁/FVC according to age, smoking intensity, and dyspnea**
29 **symptoms.**

30 Predicted values were calculated using the regression formula derived from four
31 explanatory variables: age, smoking intensity (pack-years), exertional dyspnea
32 (Q11), and paroxysmal dyspnea (Q12).

33 Panels represent combinations of symptom presence/absence:

34 (A) Q11(-)/Q12(-), (B) Q11(+)/Q12(-), (C) Q11(-)/Q12(+), (D) Q11(+)/Q12(+).

35 Gray-shaded cells indicate predicted FEV₁/FVC < 70%, suggesting probable
36 COPD.

37

A) Q11 No/ Q12 No
 C) Q11 No / Q12 Yes

B) Q11 Yes / Q12 No
 D) Q11 Yes / Q12 Yes

Q11 exertional dyspnea
 Q12 paroxysmal dyspnea

Predicted FEV1/EVC (%)	Pack-year																						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Age 40	85.2	84.8	84.3	83.8	83.4	82.9	82.4	82.0	81.5	81.0	80.6	80.1	79.7	79.2	78.7	78.3	77.8	77.3	76.9	76.4	75.9	75.5	75.0
45	84.2	83.7	83.3	82.8	82.4	81.9	81.4	81.0	80.5	80.0	79.6	79.1	78.6	78.2	77.7	77.2	76.8	76.3	75.8	75.4	74.9	74.4	74.0
50	83.2	82.7	82.3	81.8	81.3	80.9	80.4	79.9	79.5	79.0	78.5	78.1	77.6	77.1	76.7	76.2	75.7	75.3	74.8	74.3	73.9	73.4	72.9
55	82.2	81.7	81.2	80.8	80.3	79.8	79.4	78.9	78.4	78.0	77.5	77.0	76.6	76.1	75.6	75.2	74.7	74.2	73.8	73.3	72.9	72.4	71.9
60	81.1	80.7	80.2	79.7	79.3	78.8	78.3	77.9	77.4	76.9	76.5	76.0	75.5	75.1	74.6	74.2	73.7	73.2	72.8	72.3	71.8	71.4	70.9
65	80.1	79.6	79.2	78.7	78.2	77.8	77.3	76.8	76.4	75.9	75.5	75.0	74.5	74.1	73.6	73.1	72.7	72.2	71.7	71.3	70.8	70.3	69.9
70	79.1	78.6	78.2	77.7	77.2	76.8	76.3	75.8	75.4	74.9	74.4	74.0	73.5	73.0	72.6	72.1	71.6	71.2	70.7	70.2	69.8	69.3	68.8
75	78.1	77.6	77.1	76.7	76.2	75.7	75.3	74.8	74.3	73.9	73.4	72.9	72.5	72.0	71.5	71.1	70.6	70.1	69.7	69.2	68.7	68.3	67.8
80	77.0	76.6	76.1	75.6	75.2	74.7	74.2	73.8	73.3	72.8	72.4	71.9	71.4	71.0	70.5	70.0	69.6	69.1	68.7	68.2	67.7	67.3	66.8
85	76.0	75.5	75.1	74.6	74.1	73.7	73.2	72.7	72.3	71.8	71.3	70.9	70.4	70.0	69.5	69.0	68.6	68.1	67.6	67.2	66.7	66.2	65.8
90	75.0	74.5	74.0	73.6	73.1	72.7	72.2	71.7	71.3	70.8	70.3	74.5	69.4	68.9	68.5	68.0	67.5	67.1	66.6	66.1	65.7	65.2	64.7
95	74.0	73.5	73.0	72.6	72.1	71.6	71.2	70.7	70.2	69.8	69.3	68.8	68.4	67.9	67.4	67.0	66.5	66.0	65.6	65.1	64.6	64.2	63.7
100	72.9	72.5	72.0	71.5	71.1	70.6	70.1	69.7	69.2	68.7	68.3	67.8	67.3	66.9	66.4	65.9	65.5	65.0	64.5	64.1	63.6	63.2	62.7

Predicted FEV1/EVC (%)	Pack-year																						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Age 40	79.4	78.9	78.5	78.0	77.5	77.1	76.6	76.1	75.7	75.2	74.7	74.3	73.8	73.3	72.9	72.4	71.9	71.5	71.0	70.6	70.1	69.6	69.2
45	78.4	77.9	77.4	77.0	76.5	76.0	75.6	75.1	74.6	74.2	73.7	73.2	72.8	72.3	71.9	71.4	70.9	70.5	70.0	69.5	69.1	68.6	68.1
50	77.3	76.9	76.4	75.9	75.5	75.0	74.5	74.1	73.6	73.2	72.7	72.2	71.8	71.3	70.8	70.4	69.9	69.4	69.0	68.5	68.0	67.6	67.1
55	76.3	75.9	75.4	74.9	74.5	74.0	73.5	73.1	72.6	72.1	71.7	71.2	70.7	70.3	69.8	69.3	68.9	68.4	67.9	67.5	67.0	66.5	66.1
60	75.3	74.8	74.4	73.9	73.4	73.0	72.5	72.0	71.6	71.1	70.6	70.2	69.7	69.2	68.8	68.3	67.8	67.4	66.9	66.4	66.0	65.5	65.1
65	74.3	73.8	73.3	72.9	72.4	71.9	71.5	71.0	70.5	70.1	69.6	69.1	68.7	68.2	67.7	67.3	66.8	66.4	65.9	65.4	65.0	64.5	64.0
70	73.2	72.8	72.3	71.8	71.4	70.9	70.4	70.0	69.5	69.0	68.6	68.1	67.7	67.2	66.7	66.3	65.8	65.3	64.9	64.4	63.9	63.5	63.0
75	72.2	71.7	71.3	70.8	70.4	69.9	69.4	69.0	68.5	68.0	67.6	67.1	66.6	66.2	65.7	65.2	64.8	64.3	63.8	63.4	62.9	62.4	62.0
80	71.2	70.7	70.3	69.8	69.3	68.9	68.4	67.9	67.5	67.0	66.5	66.1	65.6	65.1	64.7	64.2	63.7	63.3	62.8	62.3	61.9	61.4	60.9
85	70.2	69.7	69.2	68.8	68.3	67.8	67.4	66.9	66.4	66.0	65.5	65.0	64.6	64.1	63.6	63.2	62.7	62.2	61.8	61.3	60.9	60.4	59.9
90	69.1	68.7	68.2	67.7	67.3	66.8	66.3	65.9	65.4	64.9	64.5	64.0	63.5	63.1	62.6	62.2	61.7	61.2	60.8	60.3	59.8	59.4	58.9
95	68.1	67.6	67.2	66.7	66.2	65.8	65.3	64.8	64.4	63.9	63.5	63.0	62.5	62.1	61.6	61.1	60.7	60.2	59.7	59.3	58.8	58.3	57.9
100	67.1	66.6	66.2	65.7	65.2	64.8	64.3	63.8	63.4	62.9	62.4	62.0	61.5	61.0	60.6	60.1	59.6	59.2	58.7	58.2	57.8	57.3	56.8

Predicted FEV1/EVC (%)	Pack-year																						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Age 40	83.4	82.9	82.5	82.0	81.5	81.1	80.6	80.1	79.7	79.2	78.7	78.3	77.8	77.3	76.9	76.4	75.9	75.5	75.0	74.6	74.1	73.6	73.2
45	82.4	81.9	81.4	81.0	80.5	80.0	79.6	79.1	78.6	78.2	77.7	77.3	76.8	76.3	75.9	75.4	74.9	74.5	74.0	73.5	73.1	72.6	72.1
50	81.3	80.9	80.4	79.9	79.5	79.0	78.6	78.1	77.6	77.2	76.7	76.2	75.8	75.3	74.8	74.4	73.9	73.4	73.0	72.5	72.0	71.6	71.1
55	80.3	79.9	79.4	78.9	78.5	78.0	77.5	77.1	76.6	76.1	75.7	75.2	74.7	74.3	73.8	73.3	72.9	72.4	71.9	71.5	71.0	70.5	70.1
60	79.3	78.8	78.4	77.9	77.4	77.0	76.5	76.0	75.6	75.1	74.6	74.2	73.7	73.2	72.8	72.3	71.8	71.4	70.9	70.4	70.0	69.5	69.1
65	78.3	77.8	77.3	76.9	76.4	75.9	75.5	75.0	74.5	74.1	73.6	73.1	72.7	72.2	71.7	71.3	70.8	70.4	69.9	69.4	69.0	68.5	68.0
70	77.2	76.8	76.3	75.8	75.4	74.9	74.4	74.0	73.5	73.1	72.6	72.1	71.7	71.2	70.7	70.3	69.8	69.3	68.9	68.4	67.9	67.5	67.0
75	76.2	75.7	75.3	74.8	74.4	73.9	73.4	73.0	72.5	72.0	71.6	71.1	70.6	70.2	69.7	69.2	68.8	68.3	37.8	67.4	66.9	66.4	66.0
80	75.2	74.7	74.3	73.8	73.3	72.9	72.4	71.9	71.5	71.0	70.5	70.1	69.6	69.1	68.7	68.2	67.7	67.3	66.8	66.3	65.9	65.4	64.9
85	74.2	73.7	73.2	72.8	72.3	71.8	71.4	70.9	70.4	70.0	69.5	69.0	68.6	68.1	67.6	67.2	66.7	66.2	65.8	65.3	64.9	64.4	63.9
90	73.1	72.7	72.2	71.7	71.3	70.8	70.3	69.9	69.4	68.9	68.5	68.0	67.5	67.1	66.6	66.2	65.7	65.2	64.8	64.3	63.8	63.4	62.9
95	72.1	71.6	71.2	70.7	70.2	69.8	69.3	68.9	68.4	67.9	67.5	67.0	66.5	66.1	65.6	65.1	64.7	64.2	63.7	63.3	62.8	62.3	61.9
100	71.1	70.6	70.2	69.7	69.2	68.8	68.3	67.8	67.4	66.9	66.4	66.0	65.5	65.0	64.6	64.1	63.6	63.2	62.7	62.2	61.8	61.3	60.8

Predicted FEV1/EVC (%)	Pack-year																						
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110
Age 40	77.6	77.1	76.6	76.2	75.7	75.2	74.8	74.3	73.8	73.4	72.9	72.4	72.0	71.5	71.0	70.6	70.1	69.6	69.2	68.7	68.2	67.8	67.3
45	76.5	76.1	75.6	75.1	74.7	74.2	73.7	73.3	72.8	72.3	71.9	71.4	70.9	70.5	70.0	69.5	69.1	68.6	68.1	67.7	67.2	66.8	66.3
50	75.5	75.0	74.6	74.1	73.6	73.2	72.7	72.2	71.8	71.3	70.8	70.4	69.9	69.4	69.0	68.5	68.1	67.6	67.1	66.7	66.2	65.7	65.3
55	74.5	74.0	73.5	73.1	72.6	72.1	71.7	71.2	70.8	70.3	69.8	69.4	68.9	68.4	68.0	67.5	67.0	66.6	66.1	65.6	65.2	64.7	64.2
60	73.4	73.0	72.5	72.1	71.6	71.1	70.7	70.2	69.7	69.3	68.8	68.3	67.9	67.4	66.9	66.5	66.0	65.5	65.1	64.6	64.1	63.7	63.2
65	72.4	72.0	71.5	71.0	70.6	70.1	69.6	69.2	68.7	68.2	67.8	67.3	66.8	66.4	65.9	65.4	65.0	64.5	64.0	63.6	63.1	62.6	62.2
70	71.4	70.9	70.5	70.0	69.5	69.1	68.6	68.1	67.7	67.2	66.7	66.3	65.8	65.3	64.9	64.4	63.9	63.5	63.0	62.6	62.1	61.6	61.2
75	70.4	69.9	69.4	69.0	68.5	68.0	67.6	67.1	66.6	66.2	65.7	65.2	64.8	64.3	63.9	63.4	62.9	62.5	62.0	61.5	61.1	60.6	60.1
80	69.3	68.9	68.4	67.9	67.5	67.0	66.6	66.1	65.6	65.2	64.7	64.2	63.8	63.3	62.8	62.4	61.9	61.4	61.0	60.5	60.0	59.6	59.1
85	68.3	67.9	67.4	66.9	66.5	66.0	65.5	65.1	64.6	64.1	63.7	63.2	62.7	62.3	61.8	61.3	60.9	60.4	59.9	59.5	59.0	58.5	58.1
90	67.3	66.8	66.4	65.9	65.4	65.0	64.5	64.0	63.6	63.1	62.6	62.2	61.7	61.2	60.8	60.3	59.8	59.4	58.9	58.4	58.0	57.5	57.1
95	66.3	65.8	65.3	64.9	64.4	63.9	63.5	63.0	62.5	62.1	61.6	61.1	60.7	60.2	59.7	59.3	58.8	58.4	57.9	57.4	57.0	56.5	5