

Table S1. FEV1 evolution in the different *Mutation groups*

	Both class I, II		Both F508del		At least one of class III		At least one of class IV		At least one of class V		One of class I-II, other unknown		Both unknown or of unknown class		Genetic test not performed	
Age at FEV1	Mean	Rate	Mean	Rate	Mean	Rate	Mean	Rate	Mean	Rate	Mean	Rate	Mean	Rate	Mean	Rate
6	93.1	-1.43	92.1	-1.31	87.0	-0.50	97.5	-0.83	97.2	-1.04	94.2	-1.09	88.7	-0.80	93.4	-2.45
10	87.3	-1.49	86.8	-1.37	84.9	-0.59	94.1	-0.83	93.1	-1.07	89.8	-1.15	85.4	-0.89	83.8	-2.33
15	79.1	-1.84	79.0	-1.78	80.7	-1.15	90.0	-0.83	87.3	-1.25	83.2	-1.49	79.5	-1.51	73.9	-1.52
20	69.9	-1.71	70.2	-1.60	75.1	-0.86	85.7	-0.87	81.2	-1.09	76.1	-1.22	72.0	-1.27	67.6	-1.12
30	56.7	-0.99	58.0	-0.99	71.8	-0.04	78.2	-0.51	73.2	-0.60	68.2	-0.53	64.0	-0.58	58.5	-0.60
35	52.3	-0.79	53.3	-0.87	72.0	0.09	76.2	-0.30	70.5	-0.49	65.9	-0.42	61.3	-0.51	56.1	-0.35
40	48.6	-0.70	49.1	-0.82	72.6	0.14	75.0	-0.21	68.2	-0.44	64.0	-0.36	58.9	-0.48	54.7	-0.24
45	45.1	-0.69	45.1	-0.81	73.4	0.15	74.0	-0.20	66.0	-0.44	62.2	-0.36	56.5	-0.47	53.6	-0.23
50	41.7	-0.69	41.0	-0.81	74.1	0.15	73.0	-0.20	63.8	-0.44	60.4	-0.36	54.2	-0.47	52.4	-0.23

Mean=mean predicted FEV1

Rate=yearly rate of change

Note that the yearly rate of change is by definition constant before 7.40 and after 41.88 years, since by using restricted cubic splines, the relation is assumed to be linear in the outer intervals (defined by quantiles .05 and .95, respectively)

Difference in evolution (p-value <.0001). Main effect (p-value <.0001)

Table S2. The distribution of age at diagnosis within each mutation group

<i>Mutation</i>	<i>Age at diagnosis</i>				
<i>Frequency (N)</i>					
<i>Row percentage</i>	<i><1 yrs</i>	<i>1-10 yrs</i>	<i>11-18yrs</i>	<i>>18yrs</i>	<i>Total</i>
<i>Both class I-II</i>	5695	2203	228	105	8231
	69.19	26.76	2.77	1.28	
<i>Both F508del</i>	10507	4477	313	155	15452
	68.00	28.97	2.03	1.00	
<i>At least one of class 3</i>	663	494	78	42	1277
	51.92	38.68	6.11	3.29	
<i>At least one of class 4</i>	808	622	358	760	2548
	31.71	24.41	14.05	29.83	
<i>At least one of class 5</i>	526	587	423	603	2139
	24.59	27.44	19.78	28.19	
<i>One of class 1-2 other mutation</i>	2880	1763	475	776	5894
<i>in class unknown / or mutation unknown</i>	48.86	29.91	8.06	13.17	
<i>Both unknown or of unknown class</i>	721	774	238	246	1979
	36.43	39.11	12.03	12.43	
<i>Genetic test not performed</i>	112	108	25	25	270
	41.48	40.00	9.26	9.26	
<i>Total</i>	21912	11028	2138	2712	37790

Table S3. Effect of age at diagnosis on mean FEV1pp – Multivariable model

Age	<i>Age at diagnosis</i>			
	0 yrs	1-10 yrs	11-18yrs	>18yrs
6	94.1 (93.5;94.6)	95.2 (94.3;96.1)	N/A	N/A
10	89.6 (89.2;90.0)	90.0 (89.4;90.6)	N/A	N/A
15	82.7 (82.3;83.2)	83.5 (82.9;84.2)	81.6 (79.7;83.5)	N/A
20	74.5 (73.9;75.1)	76.8 (75.9;77.6)	77.2 (75.3;79.0)	71.6 (66.3;76.9)
25	67.5 (66.7;68.2)	69.6 (68.5;70.7)	71.6 (69.5;73.7)	72.5 (69.5;75.5)
30	61.7 (60.6;62.8)	63.4 (61.9;64.9)	66.8 (64.1;69.4)	69.0 (66.3;71.7)
35	56.8 (55.2;58.3)	58.7 (56.6;60.7)	63.0 (59.7;66.4)	66.1 (63.0;69.2)
40	52.3 (49.8;54.7)	54.8 (51.7;57.9)	60.0 (55.3;64.6)	63.6 (59.7;67.5)
45	47.9 (44.3;51.5)	51.2 (46.6;55.7)	57.1 (50.5;63.6)	61.2 (56.0;66.4)
50	43.6 (38.7;48.4)	47.5 (41.5;53.5)	54.2 (45.5;62.8)	58.8 (52.0;65.6)

Mean FEV1, as predicted marginal means over a population with the same distribution of all other baseline characteristics as in the sample. N/A: not applicable