

Lung function decline can be defined as the change in FEV<sub>1</sub> expressed in L/year as well as the change in the % predicted FEV<sub>1</sub> expressed as %/year. In this work, we explored if the different definitions have an impact on the results when classifying slow (change in FEV<sub>1</sub> (L/year) > -0.15 L or change in % predicted FEV<sub>1</sub> (%/year) > -4.4%) and fast (change in FEV<sub>1</sub> (l/year) < -0.15 L or change in % predicted FEV<sub>1</sub> (%/year) < -4.4%) decliners in lung function.

**Table 1SI. Linear Regression Analysis With lnDES Levels (Ng/Mg Creatinine) as Dependent Variable and Different Clinical Parameters as Independent Variables**

Independent variable	Dependent variable: lnDES (mean, standard deviation, number of subjects)	Model 1 $\beta$ (p-value)	Model 2 $\beta$ (p-value)
<b>Lung function decline expressed as change in FEV<sub>1</sub> (l/year)</b>	<i>Controls</i>		
	Slow (0.01, 0.13, 58) vs. fast decliners (-0.32, 0.15, 88)*	-0.174 (0.036)	-0.110 (0.134)
	<i>COPD</i>		
	Slow (0.03, 0.13, 107) vs. fast decliners (-0.32, 0.15, 111)*	0.001 (0.990)	0.024 (0.715)
	<i>COPD current smokers</i>		
	Slow (0.01, 0.11, 38) vs. fast decliners (-0.35, 0.17, 55)	0.114 (0.276)	0.150 (0.134)
<i>COPD former smokers</i>			
Slow (0.05, 0.14, 69) vs. fast decliners (-0.29, 0.13, 56)	-0.101 (0.264)	-0.067 (0.427)	
<b>Lung function decline expressed as change in % predicted FEV<sub>1</sub> (%/year)</b>	<i>Controls</i>		
	Slow (1.75, 0.33, 57) vs. fast decliners (1.65, 0.36, 89)*	-0.136 (0.101)	-0.126 (0.080)
	<i>COPD</i>		
	Slow (1.87, 0.31, 96) vs. fast decliners (1.94, 0.42, 122)*	0.087 (0.198)	0.093 (0.144)
	<i>COPD current smokers</i>		
	Slow (1.88, 0.28, 36) vs. fast decliners (1.98, 0.43, 57)	0.126 (0.229)	0.147 (0.141)
<i>COPD former smokers</i>			
Slow (1.87, 0.33, 60) vs. fast decliners (1.90, 0.42, 65)	0.049 (0.586)	0.085 (0.295)	

\* In these cases smoking habits are also included as correction factors

Model 1, independent variable = individual membership to group under investigation.

Model 2, independent variable = individual membership to group under investigation + gender, age and BMI as correction factors.

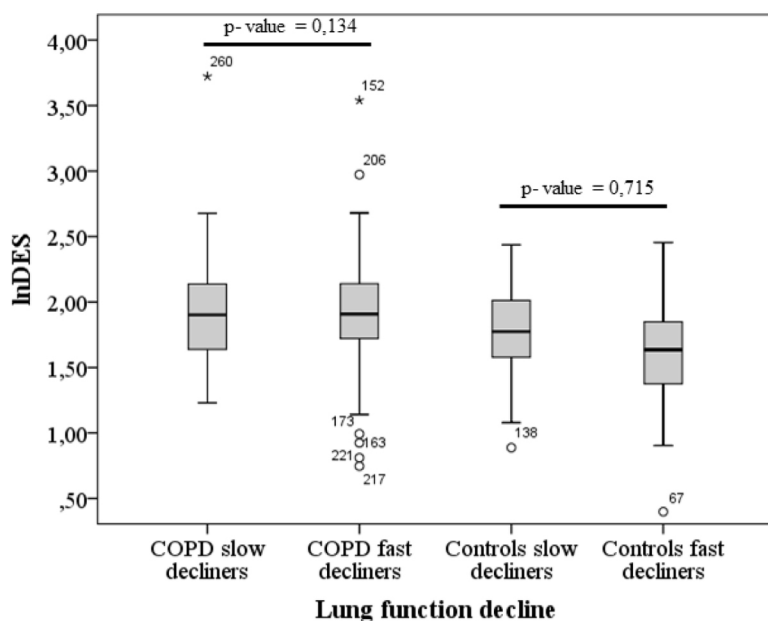
Standardized coefficient ( $\beta$ ) and corresponding regression significance ( $p$ -value) are shown in the table

**Figure 1SI. Box Plot Representation of lnDES Levels (Ng DES/Mg Creatinine) for Controls and COPD Individuals Grouped on the Basis of Lung Function Decline**

A. Lung function decline defined as change in FEV<sub>1</sub> (L/year)

B. Lung function decline defined as change in % predicted FEV<sub>1</sub> (%/year). Model 2-based  $p$ -values are displayed.

**A**



**B**

