

SUPPLEMENTARY TABLE

Supplementary Table S1 – Comparison of clinical features between subjects with and without residual function when stimulated with 0.8μM of forskolin.

	Residual function	No residual function	p value
Genotypes (patients)	13 (17)	20 (62)	
AUC at 0.8μM forsolin alone	1416 ± 262.5 (n=17)	-11.73 ± 6.560 (n=62)	0.0002 <sup>a</sup>
age (yrs)	25.29 ± 4.185 (n=17)	17.92 ± 1.572 (n=62)	0.1 <sup>b</sup>
Age at diagnosis (yrs)	12.37 ± 4.066 (n=13)	1.519 ± 0.5689 (n=54)	0.0003 <sup>c</sup>
Sweat [Cl-] (mmol/L)	63.10 ± 5.945 (n=15)	102.5 ± 1.298 (n=57)	< 0.0001 <sup>b</sup>
Pancreatic sufficiency (n [%])	10 [59%] <sup>d</sup>	3 [5%] <sup>e</sup>	< 0.0001 <sup>f</sup>
FEV1 % predicted	81.27 ± 9.723 (n=11)	77.74 ± 3.805 (n=43)	0.7 <sup>b</sup>

Data are shown as mean ± SEM and/or percentage. <sup>a</sup>Unpaired t test with Welch's correction. <sup>b</sup>Unpaired t test. <sup>c</sup>Mann–Whitney test. <sup>d</sup>For 4 [24%] subjects with residual function the value of pancreatic status was not available. <sup>e</sup>For 4 [6%] subjects without residual function the value of pancreatic status was not available. <sup>f</sup>chi-square test

Supplementary Table S2 – Baseline characteristics of subjects included in supplementary Fig.S4, whose organoids were tested with tezacaftor and lumacaftor.

Genotype	n	Sex	age (yrs) Median (range)	Sweat [Cl-] (mmol/L) Median (range)	PS/PI	FEV <sub>1</sub> % predicted Median (range)	CFTR1 info	CFTR2 info; n reported
F508del/F508del	15	M(7) F(8)	18 [2-44]	107 [83-127]	PI	71.2 [36-124]	yes	CF-causing; n=33983
F508del/S1251N	1	M	55	91	PI	45	yes	CF-causing; n=92
I507del/N1303K	1	M	22	102	PI	50-60	yes	CF-causing; n=14
E60K/I507del <sup>a</sup>	1	F	25	73	PI	32	yes	CF-causing; n=1

a-This 25-year-old pancreatic sufficient woman was diagnosed with CF at the age of 5.4 years due to chronic respiratory symptoms, bronchiectasis and Pseudomonas aeruginosa colonization. Despite intensive symptomatic treatment, she had recurrent hemoptysis during many years and a steep downhill course in FEV1 from 80% in 2008 to 32% in 2017.