

**Table S1. Characteristics of the stable cohort at the enrollment in the study.**

Study ID <sup>a</sup>	Age (years)	Gender	CFTR Genotype	FEV <sub>1</sub> (%predicted)	BMI	Microflora	Maintenance antimicrobial therapy
BS1 (I)	32	M	F508del/N1303K	94	23.8	<i>Pseudomonas aeruginosa</i> , <i>Aspergillus</i> spp.	aerosolized aztreonam aerosolized colistimethate,
BS2 (I)	11	F	F508del/F508del	78	17.0	<i>P. aeruginosa</i>	aerosolized tobramycin
BS4 (I)	29	F	G542X/S549R(A>C)	79	21.0	<i>Staphylococcus aureus</i> , <i>Serratia marcescens</i> , <i>Scedosporium prolificans</i>	aerosolized colistimethate, azithromycin
BS5 (I)	12	M	F508del/G91G	103	19.5	<i>S. aureus</i> , <i>Candida albicans</i>	none
BS6 (I)	17	F	F508del/R117H	112	22.0	<i>P. aeruginosa</i> , <i>Prevotella melaninogenica</i> , <i>Veillonella parvula</i> , <i>Neisseria perflava</i> , <i>Neisseria flavescens</i> , <i>Haemophilus parainfluenzae</i> , <i>Streptococcus salivarius</i>	aerosolized tobramycin
BS7 (I)	12	M	F508del/G91G	103	19.5	<i>S. aureus</i> , <i>P. melaninogenica</i> , <i>Haemophilus influenzae</i> , <i>N. perflava</i> , <i>Streptococcus</i> spp.	none
BS17 (I)	28	F	F508del/W1282X	112	25.0	<i>P. aeruginosa</i> , <i>Staphylococcus epidermidis</i> , <i>Staphylococcus haemolyticus</i> , <i>Granulicatella adiacens</i> , <i>C. albicans</i>	aerosolized colistimethate
BS26 (I)	20	F	F508del/2789+5G>A	80	21.1	<i>Stenotrophomonas maltophilia</i> , <i>Corynebacterium durum</i> , <i>Actinomyces odontolyticus</i> , <i>Capnocytophaga sputigena</i> , <i>H. parainfluenzae</i> , <i>S. parasanguinis</i> , <i>C. albicans</i>	aerosolized colistimethate
BS29 (I)	24	F	F508del/L1077P	72	23.1	<i>S. maltophilia</i> , <i>S. aureus</i> , <i>A. odontolyticus</i>	aerosolized tobramycin
BS32 (I)	11	M	N1303K/G1244E	115	16.0	<i>S. maltophilia</i> , <i>S. aureus</i> , <i>V. parvula</i> , <i>Veillonella dispar</i> , <i>Veillonella atypica</i> , <i>Prevotella denticola</i> , <i>P. melaninogenica</i> , <i>Lactobacillus</i> spp., <i>S. salivarius</i> , <i>S. parasanguinis</i>	aerosolized tobramycin, azithromycin
BS33 (I)	8	F	N1303K/G1244E	120	21.9	<i>S. aureus</i> , <i>V. dispar</i> , <i>C.</i>	aerosolized tobramycin

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						<i>sputigena, Rothia aeria, Streptococcus pneumoniae, Streptococcus sanguinis, N. perflava</i>	
GS1 (I)	13	M	R1162X/UK	100	20.1	<i>S. aureus, Propionibacterium acnes, Gemella haemolysans, C. albicans</i>	aerosolized colistimethate, azithromycin
GS2 (I)	44	F	F508del/R334W	72	20.7	<i>P. aeruginosa, S. aureus, A. odontolyticus, V. atypica, G. haemolysans, Streptococcus oralis</i>	none
GS3 (I)	30	F	F508del/F508del	87	21.0	<i>S. aureus, Achromobacter xylosoxydans, P. denticola, S. oralis, Streptococcus pseudopneumoniae, Streptococcus peroris</i>	none
GS4 (I)	40	F	F508del/F508del	84	19.2	<i>P. aeruginosa, S. aureus, Enterobacteriaceae, V. atypica, C. albicans</i>	aerosolized colistimethate, azithromycin
GS16 (I)	38	M	F508del/F508del	81	22.2	<i>S. aureus, Prevotella nanceiensis, A. odontolyticus, C. albicans, Aspergillus fumigatus</i>	aerosolized tobramycin
MS1 (I)	30	F	G1244 E/G1244 E	83	22.9	<i>P. aeruginosa, S. aureus, P. acnes, S. oralis, S. pseudopneumoniae, S. peroris</i>	aerosolized colistimethate
BS8 (II)	19	M	W1282X/621+IG>T	43	15.3	<i>A. xylosoxidans, Fusobacterium necrophorum</i>	aerosolized tobramycin
BS21 (II)	30	M	N1303K/M1V	68	23.8	<i>P. aeruginosa, S. epidermidis, P. denticola, Rothia dentocariosa, S. pseudopneumoniae</i>	aerosolized colistimethate, azithromycin
BS24 (II)	26	F	N1303K/3849+10kbC>T	50	19.8	<i>P. aeruginosa, S. epidermidis, V. parvula, S. peroris, S. sanguinis</i>	aerosolized colistimethate, azithromycin
BS30 (II)	25	M	F508del/UN	43	18.1	<i>P. aeruginosa, S. epidermidis, R. dentocariosa, A. odontolyticus, S.</i>	aerosolized colistimethate

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GS10 (II)	50	M	F508del/ F508del	57	19.2	<i>pseudopneumoniae</i> <i>Staphylococcus</i> coagulase negative, <i>Streptococcus viridans</i> , <i>P. aeruginosa</i> , <i>A. odontolyticus</i> , <i>Bifidobacterium longum</i> , <i>G. haemolysans</i> , <i>A. fumigatus</i>	aerosolized colistimethate, aerosolized tobramycin, azithromycin
GS11 (II)	24	M	F508del/N1303K	42	24.4	<i>P. melaninogenica</i> , <i>Gemella sanguinis</i> , <i>S. parasanguinis</i> , <i>S. salivarius</i> , <i>P. denticola</i>	azithromycin
GS20 (II)	20	F	3849+10KbC>T/2118DEL4	67	19.7	<i>S. aureus</i> , <i>S. viridans</i> , <i>P. nanceiensis</i> , <i>P. melaninogenica</i>	aerosolized tobramycin, azithromycin
GS21 (II)	42	M	F508del/F508del	55	22.5	<i>S. aureus</i> , <i>S. viridans</i> , <i>Prevotella oris</i> , <i>P. nanceiensis</i> , <i>P. nigrescens</i> , <i>C. albicans</i>	none
MS3 (II)	25	F	F508del/G178R	56	21.4	<i>P. aeruginosa</i> , <i>S. aureus</i> , <i>Pseudomonas</i> spp, <i>Prevotella pallens</i> , <i>P. melaninogenica</i> , <i>S. parasanguinis</i> , <i>S. oralis</i>	aerosolized tobramycin,
MS4 (II)	42	M	F508del/3199del6/1148T	47	23.1	<i>S. aureus</i> , <i>P. aeruginosa</i> , <i>V. parvula</i>	aerosolized colistimethate
MS5 (II)	30	M	F508del/F508del	43	20.7	<i>P. aeruginosa</i> , <i>V. parvula</i> , <i>P. salivae</i> , <i>S. peroris</i> , <i>Streptococcus infantis</i>	aerosolized tobramycin, azithromycin
MS6 (II)	54	M	2789+5G >A/2789+5G >A	52	26.7	<i>P. aeruginosa</i> , <i>Abiotrophia defectiva</i>	azithromycin
MS7 (II)	52	M	2789+5G>A/1602delICT	55	24.3	<i>P. aeruginosa</i> , <i>A. odontolyticus</i> , <i>Lactobacillus gasseri</i> , <i>A. fumigatus</i>	azithromycin
MS14 (II)	11	F	F508del/G85Ee	44	15.4	<i>P. aeruginosa</i> , <i>S. aureus</i>	aerosolized tobramycin, azithromycin
BS3 (III)	26	F	F508del/F508del	29	22.0	<i>Burkholderia cepacia</i> complex, <i>S. aureus</i>	aerosolized colistimethate, aerosolized tobramycin, azithromycin
BS19 (III)	35	M	F508del/W1282X	37	24.9	<i>S. aureus</i> , <i>P. denticola</i> , <i>S. oralis</i> , <i>S. sanguinis</i> , <i>H.</i>	aerosolized colistimethate, azithromycin

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						<i>parainfluenzae, Candida parapsilosis, C. albicans, A. fumigatus</i>	
BS25 (III)	29	F	F508del/G551D	39	25.5	<i>B. cepacia complex, S. aureus, S. marcescens, R. mucilaginosa, G. sanguinis, G. bergeri, N. mucosa, H. parainfluenzae, H. influenzae, S. oralis</i>	none
BS39 (III)	21	M	F508del/F508del	28	20.5	<i>S. aureus, A. xylosoxidans, S. epidermidis, Haemophilus parahaemolyticus, S. sanguinis, Streptococcus constellatus, S. pseudopneumoniae, Neisseria subflava, R. dentocariosa, R. mucilaginosa, C. sputigena, G. haemolysans, C. albicans</i>	aerosolized colistimethate, aerosolized tobramycin, azithromycin
BS51 (III)	36	M	2789+5G>A/F508del	38	21.0	<i>A. xylosoxidans, P. aeruginosa, S. epidermidis, N. mucosa, A. odontolyticus, C. albicans</i>	aerosolized colistimethate, azithromycin
BS71 (III)	18	F	F508del/F508del	23	18.0	<i>P. aeruginosa, S. aureus, C. albicans</i>	aerosolized colistimethate, azithromycin
BS85 (III)	34	M	F508del/1259insA	21	18.8	<i>P. aeruginosa, Enterococcus faecalis, C. albicans, Aspergillus flavus, A. fumigatus</i>	aerosolized colistimethate, azithromycin
GS14 (III)	26	M	F508del/G85E	37	22.1	<i>S. aureus, A. xylosoxydans</i>	aerosolized colistimethate, azithromycin
MS10 (III)	29	M	F508del/F508del	25	24.3	<i>P. aeruginosa, S. maltophilia, V. parvula, S. pneumoniae, S. peroris</i>	aerosolized colistimethate, azithromycin

<sup>a</sup>In parenthesis, the FEV<sub>1</sub> group: I = normal/mild (FEV<sub>1</sub>% > 70); II = moderate (70 ≥ FEV<sub>1</sub>% ≥ 40); III = severe (FEV<sub>1</sub>% < 40).