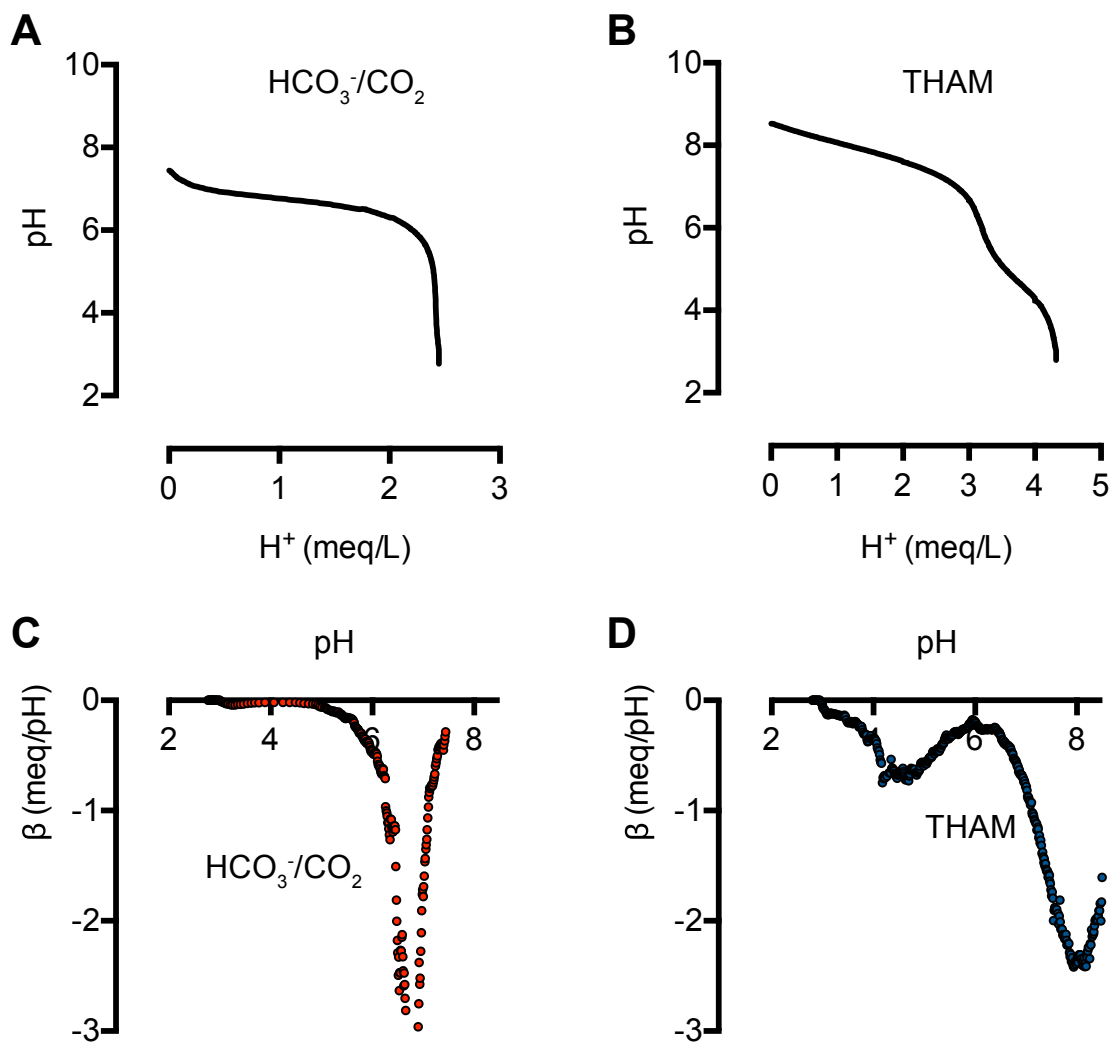


SUPPLEMENT

**Supp. 1. Buffering capacity of $\text{HCO}_3^-/\text{CO}_2$ buffer and tromethamine.**

(A and B) Data are acid titration curves and represent drop in pH after addition of acid. **A.** $\text{HCO}_3^-/\text{CO}_2$ and **B.** tromethamine. (**C and D**) amount of acid (in meq) needed to drop pH by 1 unit or buffering capacity (β) **C.** $\text{HCO}_3^-/\text{CO}_2$ and **D.** tromethamine. Results are from a single experiment. Each experiment was repeated at least 3 times with similar results.

Supp. 2. Demographics and lung function of the subjects that contributed sputum for the in vitro studies

	Age	Gender	FEV1 (L)	Meds
Fig. 1				
1	21	F	2.25	azithromycin
2	41	F	1.21	azithromycin, colistin
3	24	F	0.93	colistin, minocycline, ciprofloxacin
4	50	M	1.51	azithromycin, tobramycin
5	44	M	1.73	azithromycin, tobramycin
6	42	M	2.05	azithromycin
Fig. 7				
1	21	F	0.71	azithromycin, tobramycin
2	57	F	1.64	azithromycin, cayston
3	43	M	1.79	azithromycin
4	48	M	2.00	azithromycin
5	44	M	1.31	azithromycin, colistin
6	25	F	2.69	azithromycin, tobramycin