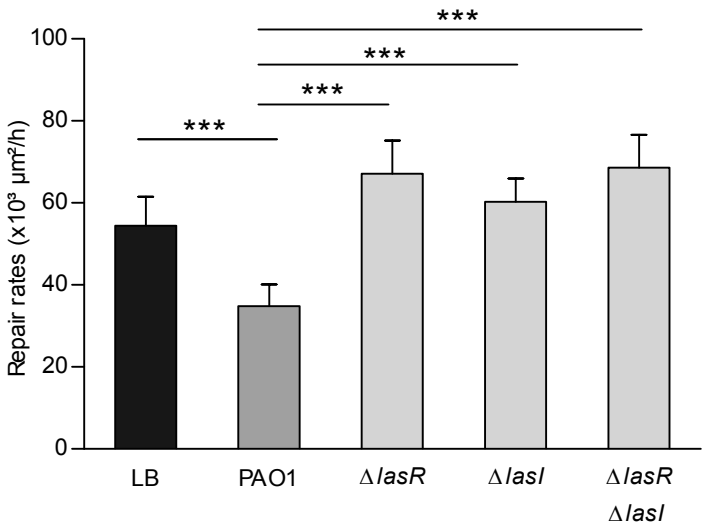

Figure S1. Role of LasR/LasI quorum sensing in the deleterious effect of *P.aeruginosa* PsaDM on airway epithelial repair. Non-CF hAEC monolayers were injured mechanically and repair rates were measured over a 6-h period. Cells were exposed to LB or PsaDM from wt PAO1 and PAO1 mutants of *lasR* (Δ*lasR*), *lasI* (Δ*lasI*) or double mutant of *lasI* and *lasR* (Δ*lasI* Δ*lasR*) (n=7).

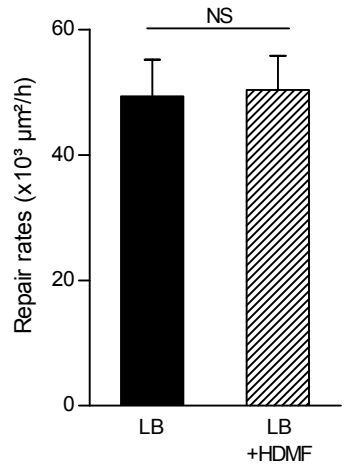

Figure S2. Absence of direct impact of HDMF on non-CF hAEC repair rates. Non-CF hAEC monolayers were injured mechanically and repair rates were measured over a 6-h period in the absence (LB) or presence of HDMF (0.125mg/mL) (LB+HDMF, n=6).

Movie S1. Impact of HDMF treatment during *P. aeruginosa* cultures on repair of highly differentiated epithelia from healthy and CF subjects.

Non-CF (upper movies) and CF (lower movies) highly differentiated epithelia grown at the air-liquid interface were exposed to LB+HDMF (movies on the left panels), PsaDM from untreated PAO1 (movies in the middle panels) or PsaDM from PAO1 treated with HDMF (movies on the right panels) and then injured mechanically. Time-lapse imaging was performed through a 5x objective; images were acquired every 15 minutes for 30 hours. Videos were performed at 10 fps (frames per second) from the saved images using Image J software.