

SupplementaryTable and Legends

Primer Name	Sequence (5' → 3')	Source/reference
MexY2	CCGCTACAACGGCTATCCCT	1
MexY2b	AGCGGGATCGACCAGCTTTC	1
rpsL-S	CGGCACTGCGTAAGGTATGC	2
rpsL-AS	CCCGGAAGGTCCTTTACAC	2
MexZ2	CGGGAAAGGGCACCGCAACT	This Study
MexZ2b	CAAGGCGTCTGCAGCGTGGA	This Study
MexZ1F	GAGCGGCGCGACAGTAGCAT	This Study
MexZ1R	CAAGGCGTCTGCAGCGTGGA	This Study

Table S1. Primers used in this study for mexY and mexZ.

Figure Legends

Supplementary Figure 1. MexZ sequence of each *Pseudomonas aeruginosa* isolate that had a nonsynonymous mutation. Shown is the DNA sequence of the PAO1 and each clinical *P. aeruginosa* isolate that had a nonsynonymous amino acid sequence. A=chronically infected adult. C= chronically infected child. F=first-infected child.

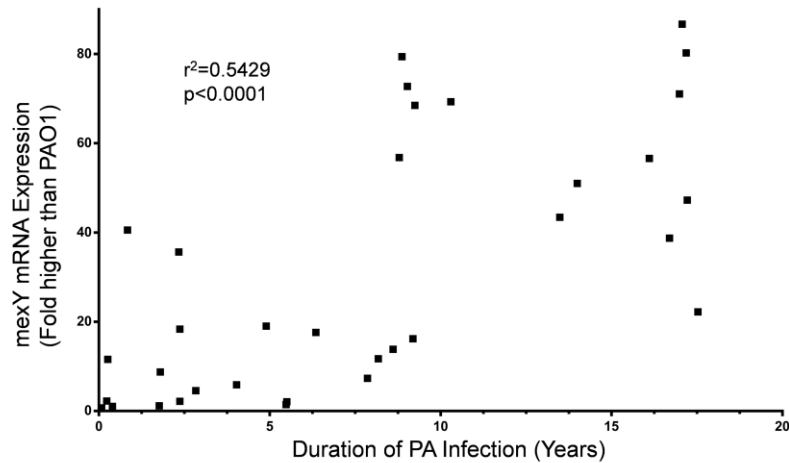
Supplementary Figure 2. There is positive correlation between duration of *P. aeruginosa* infection and mexY mRNA expression in chronically infected CF patients. Shown is the relationship between duration of *P. aeruginosa* infection and mexY mRNA expression, ($r^2=0.5429$, $p<0.0001$)

Supplementary Figure 3. In CF *Pseudomonas aeruginosa* infection there is no difference in mexY expression in isolates with synonymous and nonsynonymous non-conservative mexZ mutations. In Shown is mexY mRNA expression in *P. aeruginosa* isolates with synonymous mutations compared to nonsynonymous conservative mexZ mutations. ($p<ns$ for comparison of means)

Bibliography

1. Yoneda K, Chikumi H, Murata T, et al. Measurement of *Pseudomonas aeruginosa* multidrug efflux pumps by quantitative real-time polymerase chain reaction. *FEMS Microbiol Lett.* 2005;243(1):125-131.
2. Mesaros N, Glupczynski Y, Avrain L, Caceres NE, Tulkens PM, Van Bambeke F. A combined phenotypic and genotypic method for the detection of Mex efflux pumps in *Pseudomonas aeruginosa*. *J Antimicrob Chemother.* 2007;59(3):378-386.

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Supplementary Figure 3. In CF *Pseudomonas aeruginosa* infection there is no difference in mexY expression in isolates with synonymous and nonsynonymous non-conservative mexZ mutations. In Shown is mexY mRNA expression in *P. aeruginosa* isolates with synonymous mutations compared to nonsynonymous conservative mexZ mutations. ($p<ns$ for comparison of means)

