## **Supporting Information**

## Köhler et al. 10.1073/pnas.0811741106



Fig. S1. RAPD and elastase activity of isolates from patients 16101 and 21107. (A) RAPD analysis and determination of the genotype were performed as described in *Materials and Methods*. (B) Elastase activities of isolates were determined by the ECR assay and results (mean of 2 determinations) are given as percentage of strain PAO1.



Fig. S2. RAPD and elastase activity of isolates from patients 15101 and 15108. (A) RAPD analysis and determination of the genotype were performed as described in *Materials and Methods*. (B) Elastase activities of isolates were determined by the ECR assay and results (mean of 2 determinations) are given as percentage of strain PAO1.

DN A C



**Fig. S3.** LasR wild-type and mutant populations in aspirates from patient 21107. To determine qualitatively the proportion of *lasR* wt/mut alleles at the level of the bacterial population, we amplified the *lasR* gene in the total genomic DNA preparations from the aspirates of patient 21107. Sequencing of the PCR-amplicon confirmed the presence of both *lasR* wt and A231V mutant populations in aspirates from day -1 and 3 ( $\nabla$ , Day 1 and 3; *Upper Left*). As shown in Fig. 3*B* (reproduced here, *Lower*) the A231V population was dominant on day 5, whereas the *lasR* wt population was dominant on day 6 ( $\nabla$ , Day 5 and 6; *Upper Left*). The occurrence of the nonsynonymous mutation at codon 231 of *lasR* could be linked to the genotype 6D92 because of a synonymous nt substitution (C > T) occurring at codon 214 in the *lasR* sequence of this clone ( $\nabla$ , *Upper Right*).