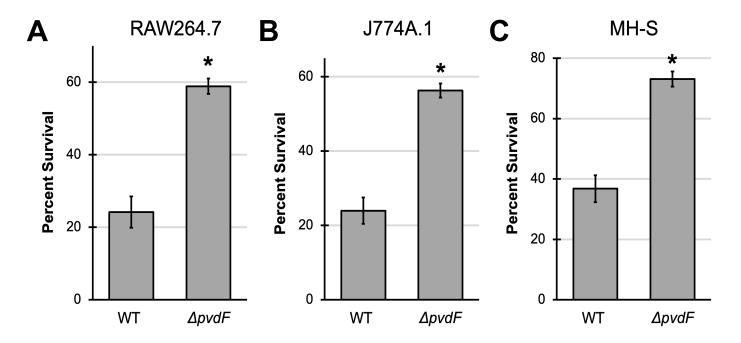
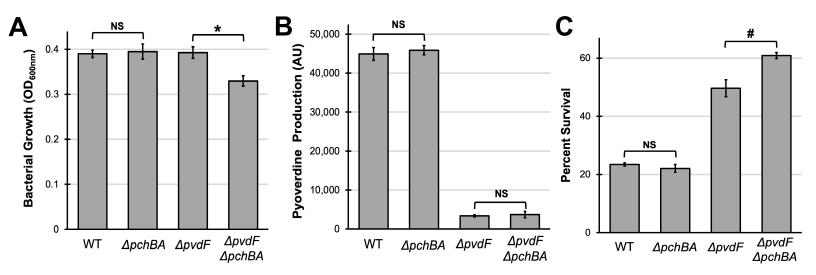


**Figure S1.** *P. aeruginosa* **produces pyoverdine in serum-free cell culture medium.** Bacterial growth **(A)**, pyoverdine production **(B)**, or pyoverdine production normalized to growth **(C)** by wild-type PAO1 or  $PAO1\Delta pvdF$  in M9 medium or Eagle's Minimal Essential Medium (EMEM).



**Figure S2.** Pyoverdine production is important for virulence in different murine macrophage cell lines. Viability of RAW264.7 **(A)**, J774A.1 **(B)**, or MH-S **(C)** murine macrophages after 1.5 h exposure to filtrates from wild-type PAO1 or PAO1 $\Delta pvdF$ . Error bars represent SEM from four biological replicates. \* corresponds to p < 0.01, as determined by Student's t-test.



**Figure S3.** *P. aeruginosa* **filtrate toxicity is independent of pyochelin production. (A, B)** Bacterial growth **(A)** and pyoverdine production **(B)** of wild-type *P. aeruginosa* PAO1, pyochelin biosynthetic mutant PAO1 $\Delta pvdF\Delta pchBA$ , pyoverdine biosynthetic mutant PAO1 $\Delta pvdF\Delta pchBA$  after 16 h incubation in EMEM. **(C)** Murine macrophage viability after 1.5 h exposure to bacterial filtrates. Error bars represent SEM from four biological replicates. \* corresponds to p < 0.01, # corresponds to p < 0.05, and NS corresponds to p > 0.05, as determined by Student's t-test.

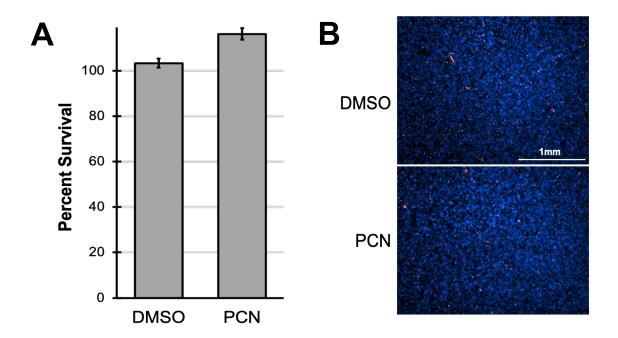
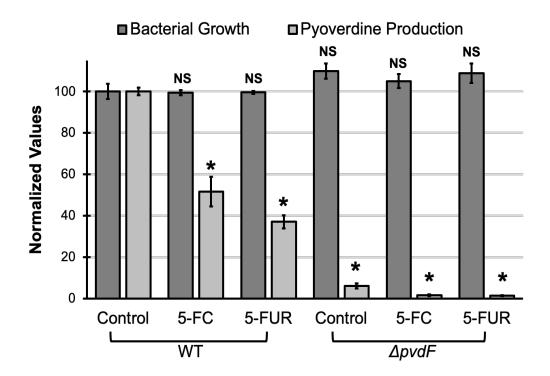
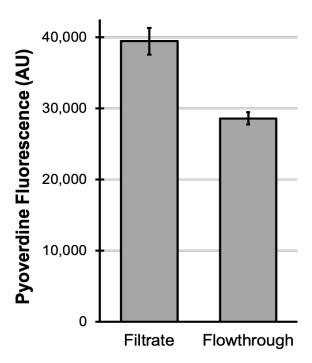


Figure S4. Pyocyanin does not contribute to filtrate toxicity. (A) Murine macrophage viability after 1.5 h exposure to EMEM supplemented with 5  $\mu$ M pyocyanin (PCN) or DMSO solvent control. Cell viability was measured using an alamarBlue assay. Error bars represent SEM from three biological replicates. (B) Macrophages labeled with Hoechst 33342 (blue) or Sytox Orange (red) following 1.5 h exposure to EMEM supplemented with 5  $\mu$ M PCN or solvent control.



**Figure S5. Fluoropyrimidines function as pyoverdine antivirulents.** Relative bacterial growth and pyoverdine production of wild-type PAO1 or PAO1 $\Delta pvdF$  in the presence of 50  $\mu$ M 5-fluorocytosine (5-FC) or 10  $\mu$ M 5-fluorouridine (5-FUR) in EMEM. Error bars represent SEM from three biological replicates. \* corresponds to p < 0.01 and NS corresponds to p > 0.05, as determined by Student's t-test.



**Figure S6. Pyoverdine is present in the low-molecular-weight fraction of the filtrate (flowthrough).** Pyoverdine fluorescence in wild-type *P. aeruginosa* PAO1 filtrate before and after centrifugal filtration to remove molecules heavier than 5 kDa. Error bars represent SEM from six biological replicates.

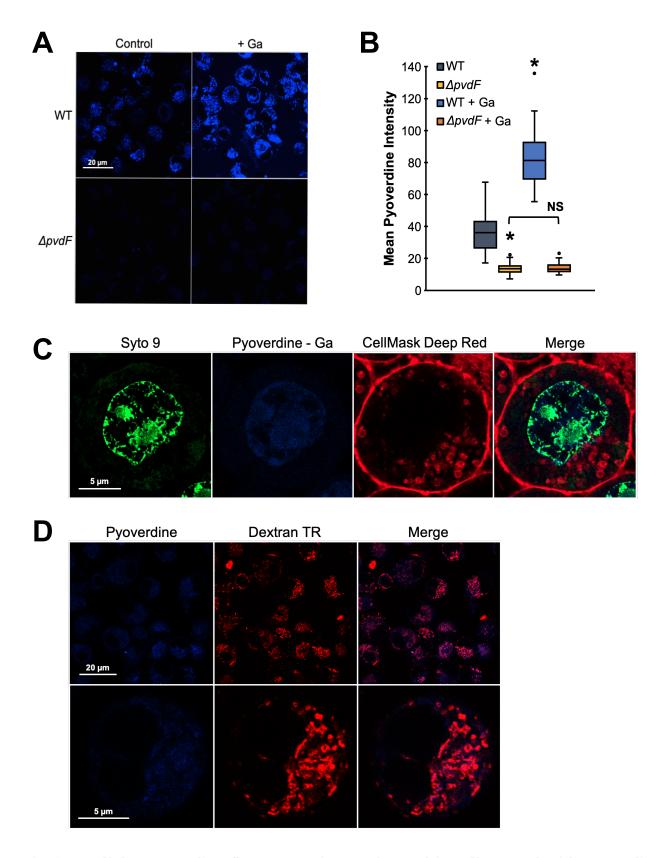


Figure S7. Intracellular pyoverdine fluorescence is not observed in cells treated with pyoverdine-deficient material. (A) Confocal laser-scanning microscopy of macrophages exposed to flowthrough materials containing pyoverdine or gallium (III)-complexed pyoverdine for 1.5 h. Flowthrough was pretreated with gallium (III) nitrate or solvent control. (B) Quantification of pyoverdine fluorescence within 50 individual cells. (C) Intracellular fluorescence of gallium (III)-complexed pyoverdine in cells treated with PAO1 $\Delta pvdF$  flowthrough supplemented with gallium (III) nitrate. Cells were counterstained with Syto9 nucleic acid stain (green) and CellMask plasma membrane stain (red). (D) Macrophages treated with PAO1 $\Delta pvdF$  flowthrough and 10,000 MWCO dextran labeled with Texas Red for 1.5 h. The bottom row shows enlarged micrographs of one representative cell. \* corresponds to p > 0.01 and NS corresponds to p > 0.05, as determined by Student's t-test.