Supplementary tables for:

A minimally invasive bronchoscopic approach for direct delivery to murine airways and application to models of pulmonary infection.

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Sup. table 1. Difference in mean weight change and standard deviation for the groups being compared. Numbers are used for the power calculations in Table 1.

Comparing CFU doses		Bronchoscope		Surgery	
Inoculum 1	**Inoculum 2**	**Difference in mean**	**Std.dev.**	**Difference in mean**	**Std.dev.**
25,000	50,000	4.7	4.9	8.1	8.5
50,000	100,000	5.9	6.5	5.9	9.5
25,000	100,000	10.6	7.1	14.0	7.8

Sup. table 2. Power calculations to detect significant changes in weight for studies involving different bacterial inocula administered by bronchoscopic or surgical procedures. Three different levels of power (70%, 80% and 90%) were estimated. The difference in mean weight change for each procedure was used together with standard deviation to calculate the

number of mice needed to perform the analysis of the studies at a significance level of 0.05.

*For the surgical procedure, mean and std. dev. values represent the linear imputated values to compensate for the number of mice that died before day 3. For the bronchoscopic procedure, no mice died before day 3, so no linear imputation was done. Because of bacterial dose-dependent mortality observed for mice undergoing the surgical procedure, the number of mice needed has been mortality-corrected, hence the number of mice needed for inoculation at day 0 is higher than the number needed for the analysis.

Comparing CFU doses		Bronchoscope		Surgery*	
Inoculum 1	Inoculum 2	Mean difference	Std.dev	Mean difference	Std.dev
25,000	50,000	4.7	4.9	6.6	7.9
50,000	100,000	5.9	6.5	6.4	8.9
25,000	100,000	10.6	7.1	13.0	7.9

Power	Comparing CFU doses		Bronchoscope	Surgery*		
	Inoculum 1	Inoculum 2	Needed sample size for analysis	Needed sample size for analysis	Mortality-corrected sample size	
					Inoculum 1	Inoculum 2
70%	25,000	50,000	15	19	22	24
	50,000	100,000	16	25	31	38
	25,000	100,000	7	6	7	9
80%	25,000	50,000	19	24	27	30
	50,000	100,000	20	32	39	48
	25,000	100,000	9	7	8	11
90%	25,000	50,000	25	32	36	39
	50,000	100,000	27	42	51	63
	25,000	100,000	11	9	10	14