

1 **IL-17A impairs host tolerance during airway chronic infection by *Pseudomonas***
2 ***aeruginosa***

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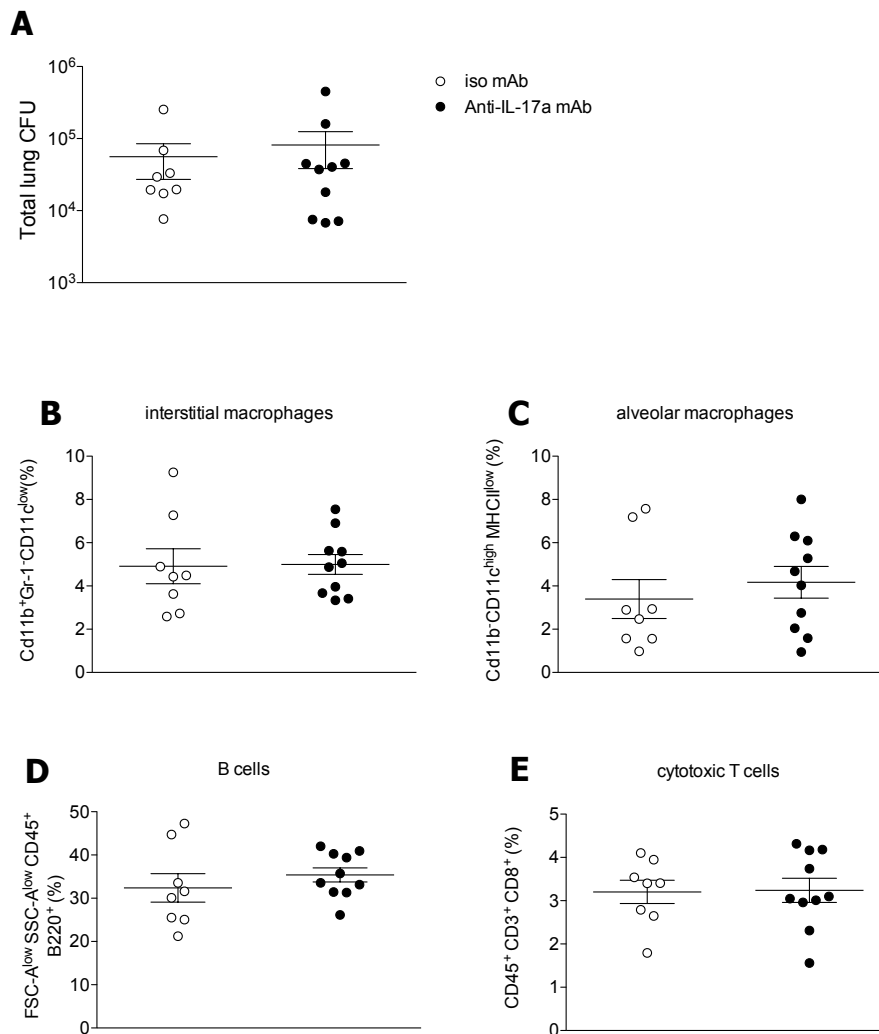
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29 **Fig. S1. *P. aeruginosa* bacterial load and host response in the lung after anti-IL-**
 30 **17A mAb treatment in the murine model of chronic airways infection.**

31 C57Bl/6NCrIBR mice were infected with 1 to 2x10⁶ CFU/lung of the *P. aeruginosa*
 32 strain AA43 embedded in agar beads. Every three days starting from the tenth day
 33 from infection, a group of mice was treated i.p. with 100µg/mouse of anti-IL-17A
 34 mAb, while the other group was treated i.p. with 100µg/mouse of control isotypic IgG
 35 and analyzed after 28 days of infection. Bacterial load (A), interstitial macrophages
 36 (B), alveolar macrophages (C), B cells (D) and cytotoxic T cells (E) were measured

37 by flow cytometric analysis in cell suspensions of murine lungs. Dots represent cells
38 in individual mice, horizontal lines represent mean values and the error bars represent
39 the SEM. The data are pooled from at least two independent experiments (n=8-10).
40 Values represent the mean \pm SEM.

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63 **Table S1. Characteristics of CF patients enrolled for the study.**

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Patients characteristics	CF patients (n=55)
Age (years)*	20,5 (5-36,1)
Gender, male (%) [§]	23 (41,8%)
FEV ₁ (% predicted)^	64,3 (21,2-120)
F508del/F508del homozygotes (%)	18 (32,7%)
<i>P. aeruginosa</i> only [§]	15 (27%)
<i>P. aeruginosa</i> and other bacteria [§]	33 (60%)
Colonized < 2 years by <i>P. aeruginosa</i> [§]	11 (20%)
Chronically colonized by <i>P. aeruginosa</i> > 6 years (%) [§]	26 (47,3%)
No <i>P. aeruginosa</i>	18 (32,7%)

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66 Data are expressed as * mean, ^ median or [§] positive events.

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80 **Table S2. Levels of IL-17A, IL-4 and IFN- γ in the sera of CF patients**

81 **intermittently or chronically colonized by *P. aeruginosa*.**

	Levels (mean\pmSEM)	Number of Patients*
IL-4	11,90 \pm 0,53	27
IL-17	5,08 \pm 2,11	5
IFN-γ	180,80 \pm 41,47	25

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83 * patients in whose sera the marker was detectable (28 patients analyzed)

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100 **Table S3. Frequencies of T cells subtypes in the spleen of C57Bl/6 mice after 28**
 101 **days of chronic infection by *P. aeruginosa* AA43 isolate.**

	2 days			28 days		
	Ctrl (mean ± SEM; n=6)	AA43 (mean ± SEM; n=4)	Ctrl vs AA43 (P value)	Ctrl (mean ± SEM; n=4)	AA43 (mean ± SEM; n=12)	Ctrl vs AA43 (P value)
Total cells	8,42x10 ⁷ ±1,46x10 ⁷	3,93x10 ⁷ ± 7,92x10 ⁶	≥ 0,05	1,2x10 ⁸ ± 1,44x10 ⁷	1,11x10 ⁸ ± 6,33x10 ⁶	≥ 0,05
Frequency/CD45⁺						
CD3⁺	26,03 ± 0,78	27,93 ± 0,69	≥ 0,05	35,33 ± 1,38	31,4 ± 1,9	≥ 0,05
CD4⁺	16,37 ± 0,46	16,7 ± 0,54	≥ 0,05	21,64 ± 0,65	19,51 ± 1,26	≥ 0,05
CD8⁺	8,08 ± 0,38	9,25 ± 0,16	≥ 0,05	11,81 ± 0,71	10,06 ± 0,62	≥ 0,05
Frequency/CD4⁺						
IL-17A⁺	0,47 ± 0,19	0,28 ± 0,08	≥ 0,05	0,51 ± 0,14	0,54 ± 0,07	≥ 0,05
IFN-γ⁺	2,13 ± 0,37	1,25 ± 0,15	≥ 0,05	2,34 ± 0,20	2,46 ± 0,21	≥ 0,05
IL-4⁺	0,54 ± 0,14	0,42 ± 0,10	≥ 0,05	0,14 ± 0,08	0,14 ± 0,03	≥ 0,05
Frequency/CD8⁺						
IL-17A⁺	0,22 ± 0,11	0,13 ± 0,03	≥ 0,05	0,09 ± 0,03	0,12 ± 0,02	≥ 0,05
IFN-γ⁺	12,54 ± 2,17	9,67 ± 1,7	≥ 0,05	10,21 ± 1,02	15,86 ± 2,08	≥ 0,05

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