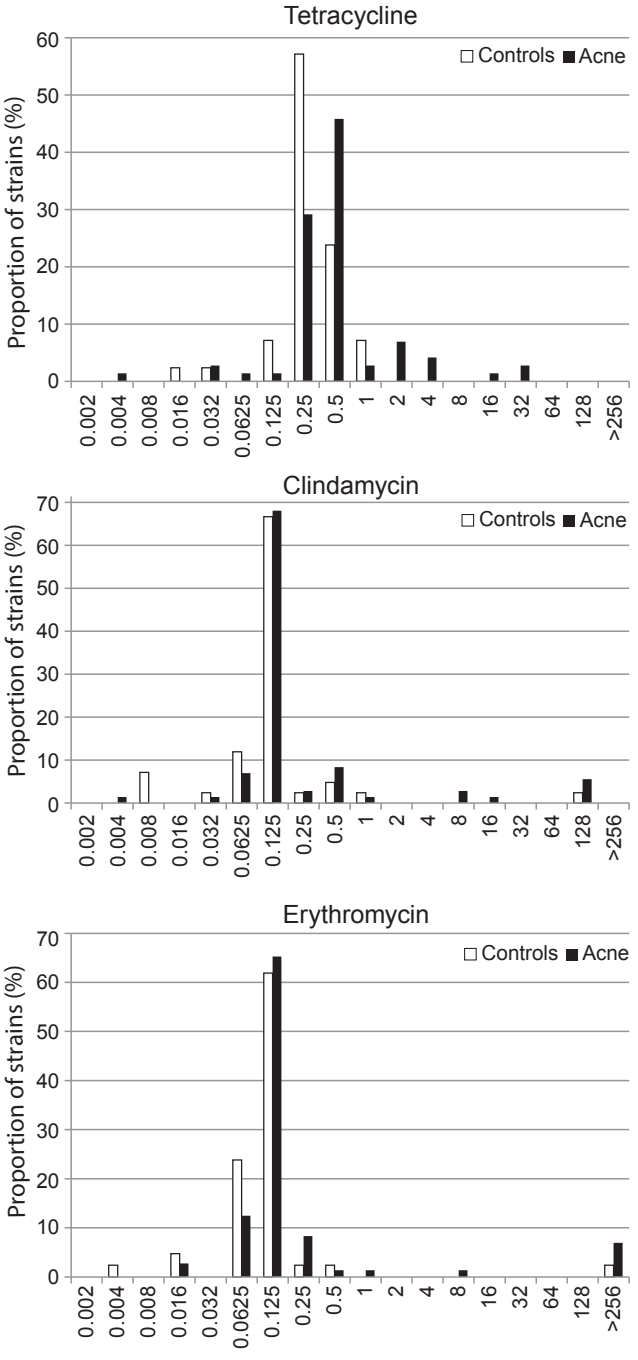
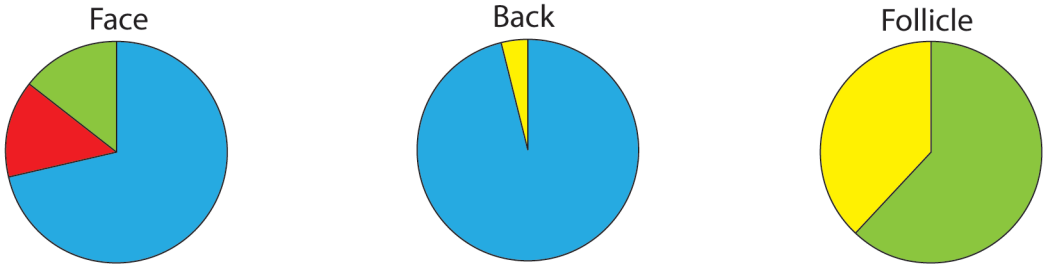


Fig. S1. Distribution of minimum inhibitory concentrations (MIC) of tetracycline, clindamycine, and erythromycin against 114 *P. acnes* isolates from Danish acne patients and healthy controls.

Patient A

Color	ST	23S rRNA	Ery	Clind	16S rRNA	Tet
	18	-	0.064-1	0.032-0.125	-	0.25-2
	20	2059A>G	>256	0.5-4	-	1-4
	56	-	0.064	0.032	-	0.125

Patient B



Color	ST	23S rRNA	Ery	Clind	16S rRNA	Tet
	3	2058A>G	>256	8-64	1058G>C, 1202A>C	2-32
	18	-	0.5-1	0.064-0.25	-	0.25-0.5
	29	2058A>G	>256	64	-	2-4
	31	-	0.064-1	0.064-8	-	0.125-0.25

Fig. S2. Anatomical differences in the clonal distribution and antibiotic susceptibility of *P. acnes* carried by 2 acne patients A and B. From patient A 30 isolates were collected from the face and back, respectively (Face 1 and Back 1), and an additional 20 isolates were collected from the face 6 months later (Face 2). From patient B 30 isolates were collected from the face, follicles and the back, respectively, on one occasion. The clonal distribution, STs and inhibition titres to erythromycin, clindamycin and tetracycline are given. Mutations in *23S* and *16S rRNA* are given as the position number in the corresponding *Escherichia coli rRNA* gene followed by the base change from wildtype base to (>) mutated base.

Table SI. *Characteristics of 23 high-level resistant isolates of* P. acnes *from Denmark*

Isolate	Source	Phylo-type	Clonal cluster	ST	Mutation *23S rRNA*	*ErmX*	MIC ERY	MIC CLIND	Mutation *16S rRNA*	MIC TET	Treatment before sampling
R124.2	Acne	I-1a	CC3	3	2058A>G	-	>256	8	1058G>C +1202A>C	32	TET
R67.1	Acne	I-1a	CC3	3	2058A>G	-	>256	16	1058+1202	32	TET
R60.2	Acne	I-1a	CC3	3	2058A>G	-	>256	16	1058+1202	32	TET
R53.1	Acne	I-1a	CC3	3	*	-	>256	16	1058+1202	32	TET and local CLIND/BENZ
R52.2	Acne	I-1a	CC3	3	2058A>G	-	>256	16	1058+1202	32	ND
R50.1	Acne	I-1a	CC3	3	2058A>G	-	>256	8	1058+1202	32	Isotretinoin
R7.1	Acne	I-1a	CC3	3	2058A>G	-	>256	16	1058+1160C>T+1202	8	TET
R3.1	Acne	I-1a	CC3	3	2058A>G	-	>256	8	1058+1202	32	TET
15.2.A1	Acne	I-1a	CC3	3	2058A>G	-	>256	32	1058+1202	32	Local adapalene
29.1.L1	Acne	I-1a	CC3	3	2059A>G	-	1	8	1058+1202	32	
R114.2	Acne	I-1a	CC18	18	2059A>G	-	>256	1	-	8	TET and local CLIND/BENZ
R111.1	Acne	I-1a	CC18	18	-	+	>256	128	-	0.5	No treatment
R50.2	Acne	I-1a	CC18	18	2058A>G	-	>256	16	-	2	Isotretinoin
R3.2	Acne	I-1a	CC18	18	2059A>G	-	>256	4	-	4	TET
35.1.R1	Acne	I-1a	CC18	18	2059A>G	-	>256	16	-	2	No treatment
12.1.A12	Acne	I-1a	CC18	20	2059A>G	-	>256	4	-	1	Local acelaic acid
R33.4	Acne	I-1a	CC28	28	-	-	>256	1	-	2	TET and local CLIND
R5.1	Acne	I-1a	CC18	29	2057G>A	+	>256	128	1108G>A	0.25	Local CLIND/BENZ
15.2.L1	Acne	I-1a	CC18	29	2058A>G	-	>256	128	-	4	Local adapalene
R92.2	Acne	I-1b	CC31	30	-	+	>256	128	-	0.5	Local CLIND/BENZ
8.1.A1	Dermatologist	I-1b	CC31	31	2058A>G	-	>256	128	-	0.25	No treatment
16.2.A1	Acne	I-2	CC36	36	2058A>T	-	>256	8	-	2	Local BENZ
R113.1	Acne	II	CC53	52	2058A>C	-	>256	0.5	-	2	Local BENZ

*(R53.1 showed a mixture of A and G at position 2058 of the *23S rRNA* gene corresponding to alleles with and without the mutation and indicating heterogeneity among the 3 loci).

ST indicates multilocus sequence type and CC the clonal cluster; MIC ERY, MIC CLIND and MIC TET is the minimal inhibitory concentrations for erythromycin (ERY), clindamycin (CLIND) and tetracyclin (TET), respectively. Mutations in *23S* and *16S rRNA* are given as the position number in the corresponding *Escherichia coli rRNA* gene followed by the base change from wildtype base to (>) mutated base. Treatment in the months before sampling are given as TET (tetracyclin), CLIND (clindamycin) and BENZ (benzoylperoxide).

Table SII. *Characteristics of 22 low-level resistant isolates of* P. acnes

Isolate	Source	Phylotype	Clonal cluster	ST	MIC ERY	MIC CLIND	MIC TET
42.1.R1	Control	I-1a	CC3	ST1	S	0.125	S
37.1.R1	Acne	I-1a	CC3	ST2	S	0.5	S
3.1.A1	Control	I-1a	CC3	ST3	S	0.25	S
18.1.L2	Control	I-1a	CC3	ST3	S	0.5	S
19.1.A1	Acne	I-1a	CC3	ST3	S	0.25	2
25.1.L1	Acne	I-1a	CC3	ST3	S	0.25	S
37.2.R1	Acne	I-1a	CC3	ST3	S	0.5	S
CCUG48370	Vaginitis	I-1a	CC3	ST3	S	0.5	S
19.1.L1(T)	Acne	I-1a	CC3	ST4	S	S	2
19.1.L1(F)	Acne	I-1a	CC3	ST4	S	0.5	S
8.2	Control China	I-1a	CC18	ST10	S	0.25	S
37.2.A1	Acne	I-1a	CC18	ST12	S	S	4
34.2.A1	Acne	I-1a	CC18	ST18	S	S	4
4.4.L1	Acne	I-1a	CC18	ST22	0.5	S	S
6.1	Control China	I-1a	Singleton	ST26	S	0.5	S
5.1.L1	Control	I-1a	CC27	ST27	0.5	S	S
14.1.A1	Acne	I-1a	CC18	ST29	S	0.5	S
27.1.R1	Acne	I-1a	CC18	ST29	S	1	S
35.1.A1	Acne	I-1a	CC18	ST29	S	0.5	S
CCUG33951	Blood 1995	II	CC53	ST48	S	0.25	S
10.1.R1	Control	II	CC53	ST52	S	1	S
CCUG33950	CSF Sweden	II	CC53	ST53	0.5	S	S

ST indicates multilocus sequence type and CC clonal cluster; MIC ERY, MIC CLIND, and MIC TET is the minimal inhibitory concentrations for erythromycin (ERY), clindamycin CLIND) and tetracycline, respectively. S indicates susceptible.