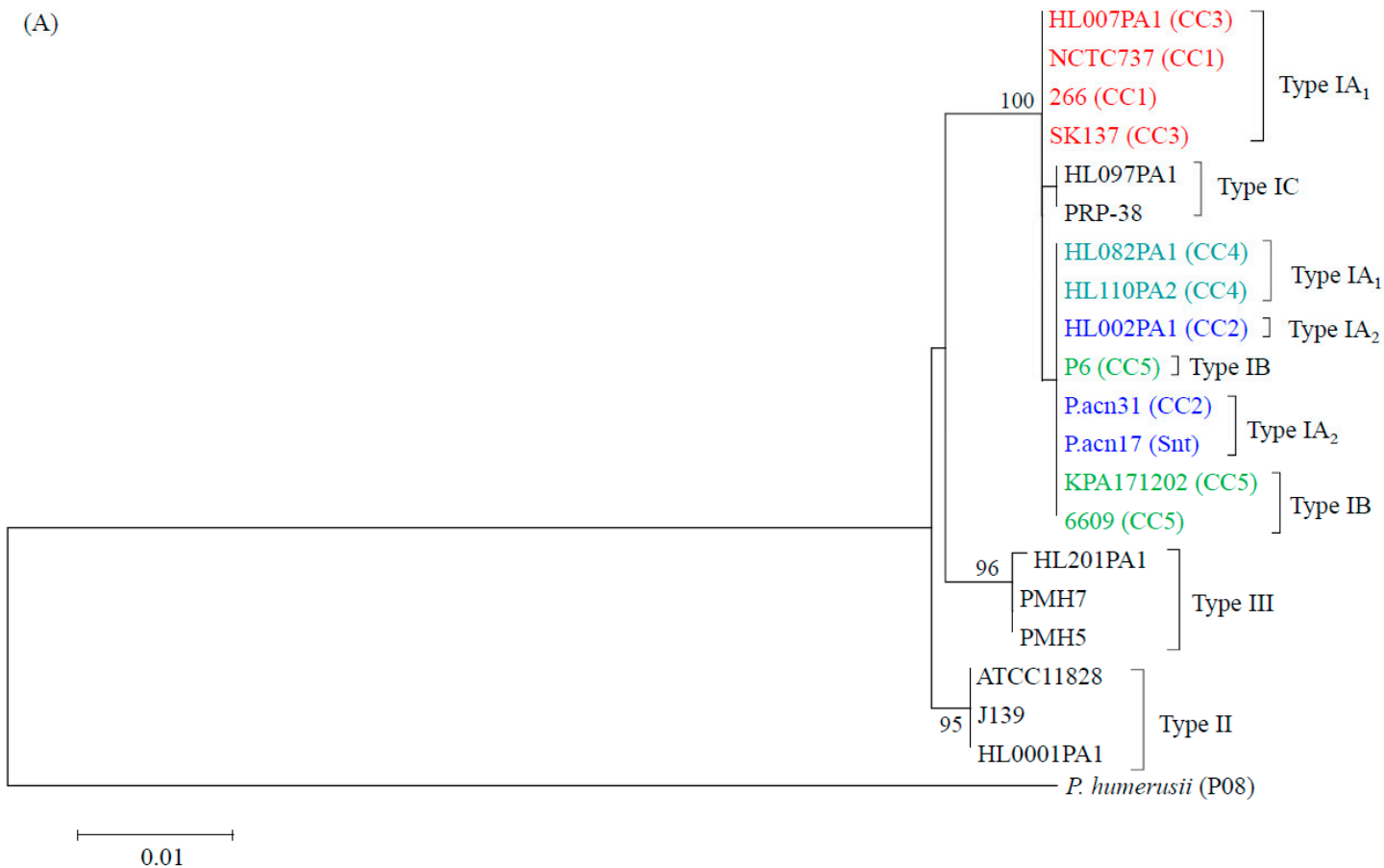
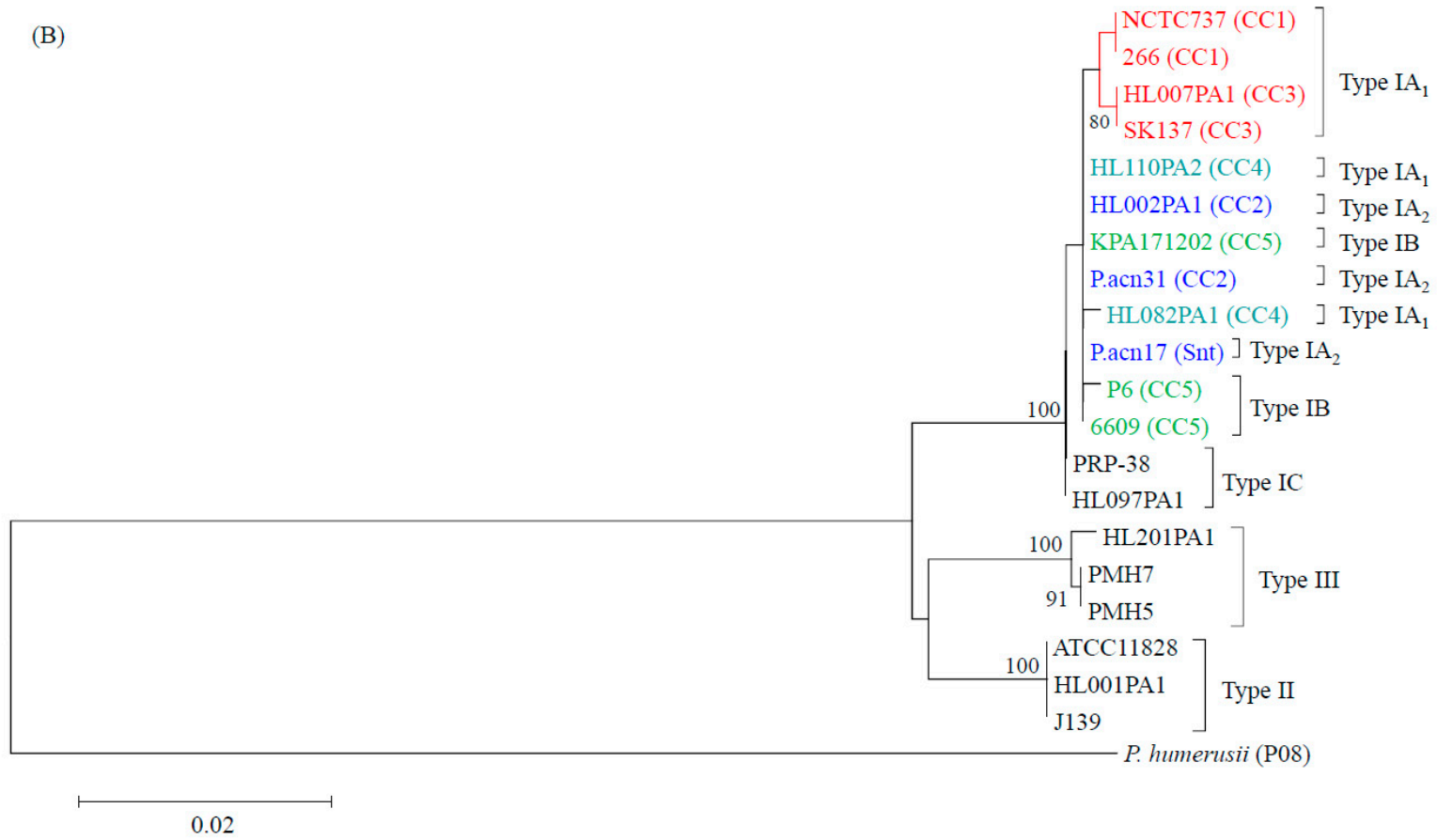


**Figure S1.** Minimum evolution phylogenetic trees for *recA* (A) and *tly* (B) sequences from isolates selected to represent all known phylogroups. Bootstrapping statistics were performed using 500 data sets, and only bootstrap values  $\geq 70\%$  are shown. The *recA* and *tly* sequences from the sister species *Propionibacterium humerusii* were used as an outgroup to root the trees (CC = Clonal Complex; Snt = singleton).



(B)



**Table S1.** Updated MLST and SLST data for *P. acnes* isolates from complete and draft WGS projects and previously published studies.

Isolate <sup>a</sup>	Region	Source	Phylogroup	MLST <sub>8</sub> scheme <sup>g</sup>			SLST type <sup>h</sup>
				Allelic profile	ST	CC	
NCTC737 <sup>b</sup>	UK	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL072PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A6
HL072PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A6
J165	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL013PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL087PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL063PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL027PA2	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL002PA3	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
HL002PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
HL046PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
HL036PA3	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
HL036PA2	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
HL036PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A2
5U42AFAA <sup>c</sup>	Canada	ND	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
KPL2003 <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
DSM1897	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
NTS_31306190	France	Bone tissue	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
12.1.R1	Denmark	[10]	IA <sub>1</sub>	5-1-1-3-1-1-1-1	20	1	A1
15.2.L1	Denmark	[10]	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
26.1.L1	Denmark	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
27.1.R1	Denmark	[10]	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
32.1.L2	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
37.1.L1	Denmark	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
43.1.L1	Denmark	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
44.1.L1	Denmark	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
46.1.L1	Denmark	Acne	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1

48.1.L1	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
49.1.L1	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
50.1.L1	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-12-1-1-1	126	1	A1
52.1.L4	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A1
HL096PA3	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-3-1	8	1	A1
HL020PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-4-1	9	1	A1
HL005PA2	USA	Skin	IA <sub>1</sub>	1-1-10-3-1-1-6-1	15	1	A1
HL005PA3	USA	Skin	IA <sub>1</sub>	1-1-10-3-1-1-1-1	16	1	A1
266	Germany	Pulmonary	IA <sub>1</sub>	5-1-1-3-1-1-1-1	20	1	A1
HB	France	Skin	IA <sub>1</sub>	5-1-1-3-1-1-1-1	20	1	A1
12.1.L1	Denmark	[10]	IA <sub>1</sub>	5-1-1-3-1-19-1-1	127	1	A1
51.1.L1	Denmark	Skin	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A3
HL099PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL056PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C2
HL096PA2	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL053PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C2
HL074PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C2
HL007PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL043PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL043PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL083PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL096PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
15.1.R1	Denmark	[10]	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
KPL2009 <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-2-2	3	3	C1
HL005PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-5-2	11	3	C2
HL038PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-2-4	10	3	C1
HL078PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-14-2-3	14	3	B1
HL045PA1	USA	Acne	IA <sub>1</sub>	1-10-1-3-1-1-2-2	17	3	C2
SK137	USA	Skin	IA <sub>1</sub>	8-1-1-3-1-1-2-5	18	3	C1
FZ1/2/0	Hungary	Skin	IA <sub>1</sub>	1-1-1-3-1-1-2-3	31	3	B1
C1	Japan	Sarcoidosis	IA <sub>1</sub>	1-1-1-3-1-1-22-2	115	3	A5

NTS_2004_10708	France	Bone tissue	IA <sub>1</sub>	1-1-1-3-1-1-1-1	1	1	A26
KPL1854 <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-17-2-2	120	3	C3
SK182	USA	Skin	IA <sub>1</sub>	1-13-1-3-1-1-2-5	29	S	C1
HL025PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	D1
HL086PA1	USA	Skin	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	E4
HL092PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	E1
HL110PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	E1
HL053PA2	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	E1
30.2.L1	Denmark	[10]	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	D1
MB3007 <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	D1
NTS_2003_1719	France	Bone tissue	IA <sub>1</sub>	1-1-1-3-1-1-8-6	4	4	D1
HL082PA1	USA	Acne	IA <sub>1</sub>	1-1-1-3-1-1-7-6	13	4	E5
HL110PA2	USA	Acne	IA <sub>1</sub>	1-1-1-1-1-1-8-6	21	4	E3
409-HCl <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-8-41	133	4	D1
CC003-HC2 <sup>c</sup>	USA	ND	IA <sub>1</sub>	1-1-1-3-1-1-8-41	133	4	D1
SK187	USA	Skin	IA <sub>1</sub>	16-1-1-15-1-4-8-6	19	S	E2
HL037PA1	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F4
HL025PA2	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F4
HL059PA2	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL059PA1	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL005PA4	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL002PA1	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL027PA1	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL083PA2	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F3
HL046PA1	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL013PA1	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL050PA3	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL087PA1	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL087PA3	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
P.acn33	France	Endophthalmitis	IA <sub>2</sub>	1-1-1-5-1-4-8-2	2	2	F1
HL067PA1	USA	Acne	IA <sub>2</sub>	1-1-1-5-1-4-8-9	24	2	F2

P.acn31	France	Endophthalmitis	IA <sub>2</sub>	1-1-1-13-1-4-8-2	36	2	F4
HL030PA2	USA	Skin	IA <sub>2</sub>	1-1-1-5-3-5-8-7	22	S	F4
20.2.L1	Denmark	[10]	IA <sub>2</sub>	1-1-1-5-3-5-8-7	22	S	F4
P.acn17	France	Keratitis	IA <sub>2</sub>	1-1-1-5-3-5-8-7	22	S	F5
HL063PA2	USA	Skin	IA <sub>2</sub>	1-18-1-5-3-5-8-8	23	S	F4
25.1.R1	Denmark	[10]	A <sub>2</sub>	1-1-1-18-1-4-8-2	57	2	F1
HL050PA1	USA	Skin	IA <sub>2</sub>	1-1-1-5-1-4-9-2	91	2	F1
HL030PA1	USA	Acne	IB	1-1-1-4-1-4-8-6	5	5	H1
KPA171202 <sup>d</sup>	Germany	Contaminant	IB	1-1-1-4-1-4-8-6	5	5	H2
6609	Hungary	Skin	IB	1-1-1-4-1-4-8-6	5	5	H1
CCUG32901 <sup>e</sup>	Sweden	Blood	IB	1-1-1-4-1-4-8-6	5	5	H1
434-HC2 <sup>c</sup>	USA	ND	IB	1-1-1-4-1-4-8-6	5	5	H1
KPL2008 <sup>c</sup>	USA	ND	IB	1-1-1-4-1-4-8-6	5	5	H1
LYR_BL	France	Bone tissue	IB	1-1-1-4-1-4-8-6	5	5	H1
NLAE-z1-G260	USA	ND	IB	1-1-1-4-1-4-8-6	5	5	H1
21.1.L1	Denmark	[10]	IB	1-1-12-4-1-4-8-6	56	5	H1
P6	Germany	Prostate	IB	1-1-1-4-1-4-29-6	118	5	H1
PA2	USA	Prostate	IB	1-1-13-4-1-4-8-6	119	5	H1
HL097PA1	USA	Acne	IC	9-1-4-8-6-8-14-14	70	107	G1
PRP-38	UK	Acne	IC	9-1-4-8-6-8-14-14	70	107	G1
PV66	UK	Acne	IC	9-1-5-8-6-8-14-6	85	107	G1
5-1-3	France	Acne	IC	9-1-4-8-6-8-14-6	107	107	G1
HL082PA2	USA	Acne	II	17-4-2-4-2-3-10-10	6	6	K6
HL060PA1	USA	Acne	II	17-4-2-4-2-3-10-10	6	6	K1
HL042PA3	USA	Acne	II	17-4-2-4-2-3-10-10	7	6	K2
HL110PA3	USA	Acne	II	15-4-2-4-2-3-10-10	7	6	K2
HL110PA4	USA	Acne	II	15-4-2-4-2-3-10-10	7	6	K2
HL103PA1	USA	Acne	II	17-9-2-4-2-3-10-10	25	6	K1
HL050PA2	USA	Skin	II	17-4-2-17-2-3-11-11	26	S	K4
J139	USA	Skin	II	17-4-2-16-2-12-10-12	28	72	K8
HL001PA1	USA	Skin	II	17-4-2-4-2-6-10-12	30	72	K1

ATCC11828 <sup>f</sup>	USA	Abscess	II	17-4-2-4-9-12-10-13	27	S	K9
KCOM1861	Korea	Osteomyelitis	II	17-4-2-4-2-12-10-28	79	72	K2
KPL1847 <sup>c</sup>	USA	ND	II	17-4-2-4-2-3-11-11	121	6	K4
KPL1849 <sup>c</sup>	USA	ND	II	17-4-2-4-2-3-11-11	121	6	K4
PMH5	Denmark	PMH	III	7-6-3-7-5-9-13-16	33	77	L1
PMH7	Denmark	PMH	III	7-6-3-7-5-9-13-16	33	77	L1
Asn12	UK	Spinal disc	III	7-6-3-7-5-9-13-16	33	77	L1
Asn10	UK	Prosthetic hip joint	III	7-6-7-7-5-9-12-16	81	77	L4
					N=48		N=32

<sup>a</sup>Isolates comprising the HMP and other WGS projects listed at <http://www.ncbi.nlm.nih.gov/genome/genomes/1140>

<sup>b</sup>Type strain purchased from the National Collection of Type Cultures (Colindale, UK)

<sup>c</sup>HMP isolates classified as novel *Propionibacterium* spp, but clearly *P. acnes* based on MLST analysis

<sup>d</sup>Strain purchased from the German Collection of Microorganisms and Cell Cultures (DSMZ; Braunschweig, Germany)

<sup>e</sup>Strain from Culture Collection, University of Göttingen

<sup>f</sup>Strain purchased from American Type Culture Collection

<sup>g</sup>Allelic profiles and STs assigned using database at <http://pubmlst.org/pacnes/>

<sup>h</sup>SLST types assigned using database at <http://medbac.dk/slst/pacnes>