

Online Supplemental Material for

Commanducci et al. <http://www.jem.org/cgi/doi/10.1084/jem.20020407>

Characteristics of the *N. meningitidis* strains analysed

ST	ET	Strain	Year	Serogroup:type:subtype	Country	Disease	<i>NadA</i> gene	Source
74	ET5	MC58	1985	B:15:P1.7,16b	UK	case	+	R.Moxon ^a
32	ET5	H44/76	1976	B:15:P1.7,16	Norway	case	+	R.Moxon
32	ET5	BZ169	1985	B:15:P1.16	Netherlands	case	+	R.Moxon
32	ET5	30/00	2000	B:15:P1.7,16	Norway	case	+	D.Caugant ^b
33	ET5	N44/89	1989	B:4,7:P1.19,15	Brazil	case	+	M.Tanizaki ^c
34	ET5	BZ83	1984	B:15	Netherlands	case	+	R.Moxon
-	ET5	72/00	2000	B:15:P1.7,13	Norway	case	+	D.Caugant
-	ET5	39/99	1999	C:15:P1.7,16	Norway	case	+	D.Caugant
-	ET5	M4102	1996	B:ND	USA	case	+	D.Caugant
-	ET5	95330	1995	B:4:P1.15	Canada	case	+	D.Caugant
-	ET5	220173I	1993	NG:4:P1.15	Iceland	carrier	+	D.Caugant
-	ET5	64/96	1996	NG:15:P1.7,16	Norway	carrier	+	D.Caugant
-	ET5	CU385	1980	B:4:P1.15	Cuba	case	+	D.Granoff ^d

-	ET5	8680	1987	B	Chile	case	+	D.Caugant
-	ET5	204/92	1992	B	Cuba	case	+	D.Caugant
-	ET5	EG329	1985	B	Germany	case	+	D.Caugant
-	ET5	NG080	1981	B	Norway	case	+	D.Caugant
-	ET5	NG144/82	1982	B	Norway	case	+	D.Caugant
-	ET5	NG PB24	1985	B	Norway	case	+	D.Caugant
-	ET5	196/87	1987	C	Norway	case	+	D.Caugant
-	ET5	Mk521/99	1999	B	Ivory Coast	case	+	D.Caugant
-	ET5	GR 4/00	2000	-	Greece	case	+	D.Caugant
11	ET37	FAM18	1983	C:2a:P1.5,2	USA	case	+	Sanger Center
11	ET37	L93/4286	1993	C	UK	case	+	R.Moxon
-	ET37	NGP165	1974	B:NT:P1.2	Norway	-	+	R.Moxon
-	ET37	M986	1963	B:2a:P1.5,2	USA	case	+	D.Granoff
-	ET37	C4678	1998	C:2a:P1.5,2	Germany	case	+	D.Caugant
-	ET37	95N477	1995	B:2a:P1.2	Australia	case	-	D.Caugant
-	ET37	BRAZ10	1976	C	Brazil	case	+	D.Caugant
-	ET37	F1576	1984	C	Ghana	case	+	D.Caugant

-	ET37	M597	1988	C	Israel	case	+	D.Caugant
-	ET37	500	1984	C	Italy	case	+	D.Caugant
-	ET37	D1	1989	C	Mali	case	+	D.Caugant
-	ET37	NG P20	1969	B	Norway	case	+	D.Caugant
-	ET37	MA-5756	1985	C	Spain	case	+	D.Caugant
-	ET37	38VI	1964	B	USA	carrier	+	D.Caugant
-	ET37	N1/99	1999	C:2a	Norway	case	+	D.Caugant
-	ET37	N28/00	2000	W-135:2a	Norway	case	+	D.Caugant
66	A4	973-1720	1997	C:2b:P1.2	Australia	case	+	G.Hogg ^e
153	A4	961-5945	1996	B:2b:P1.21,16	Australia	case	+	G.Hogg
-	A4	5/99	1999	B:2b:P1.5,2	Norway	case	+	D.Caugant
-	A4	312294	1995	C:2b:P1.5,2	UK	case	+	D.Caugant
-	A4	96217	1996	B:2b:P1.5,10	Canada	case	+	D.Caugant
-	A4	G2136	1986	B	UK	case	+	D.Caugant
-	A4	312 901	1996	C	UK	case	+	D.Caugant
-	A4	AK22	1992	B	Greece	case	+	D.Caugant
-	A4	BZ10	1967	B	Holland	case	+	D.Caugant

-	A4	BZ163	1979	B	Holland	case	+	D.Caugant
-	A4	B6116/77	1977	B	Iceland	case	+	D.Caugant
-	A4	94/155	1994	C	New Zealand	case	+	D.Caugant
-	A4	SB25	1990	C	South Africa	case	+	D.Caugant
-	A4	N53/00	2000	C:2b:P1.5,2	Norway	case	+	D.Caugant
-	A4	N62/00	2000	C:2b:P1.5,2	Norway	case	+	D.Caugant
41	Lin.III	BZ198	1986	B:NT	Netherlands	case	-	R.Moxon
42	Lin.III	M198/254	1998	B:4:P1.4	New Zealand	case	-	D.Caugant
158	Lin.III	972-0319	1997	B:NT:P1.4	Australia	case	-	G.Hogg
159	Lin.III	980-2543	1998	B:NT:P1.4	Australia	case	-	G.Hogg
1127	Lin.III	67/00	2000	B:4,7	Norway	case	-	D.Caugant
-	Lin.III	93/114	1993	C:4:P1.4	Belgium	case	-	D.Caugant
-	Lin.III	M198/172	1998	B:4:P1.4	New Zealand	case	-	D.Caugant
-	Lin.III	347/97	1997	B:4:P1.4	New Zealand	case	-	E.Rosenqvist ^f
-	Lin.III	386/98	1998	B:4:P1.4	New Zealand	case	-	E.Rosenqvist
-	Lin.III	389/98	1998	B:4:P1.4	New Zealand	case	-	E.Rosenqvist
-	Lin.III	392/98	1998	B:4:P1.4	New Zealand	case	-	E.Rosenqvist

-	Lin.III	394/98	1998	B:4:P1.4	New Zealand	case	-	E.Rosenqvist
-	Lin.III	400	1991	B	Austria	case	-	D.Caugant
-	Lin.III	M40/94	1994	B	Chile	case	-	D.Caugant
-	Lin.III	AK50	1992	B	Greece	case	-	D.Caugant
-	Lin.III	M-101/93	1993	B	Iceland	case	-	D.Caugant
-	Lin.III	931905	1993	B	Netherlands	case	-	D.Caugant
-	Lin.III	91/40	1991	B	New Zealand	case	-	D.Caugant
-	Lin.III	50/94	1994	B	Norway	case	-	D.Caugant
-	Lin.III	N45/96	1996	B	Norway	case	-	D.Caugant
-	Lin.III	88/03415	1988	B	Scotland	case	-	D.Caugant
1	s I	BZ133	1977	B:NT	Netherlands	case	-	R.Moxon
5	s III	F6124	1988	A	Chad	case	+	R.Moxon
4	s IV-1	205900	1990	A 4,21:P1.7:I	Mali	case	-	R.Moxon
4	s IV-1	Z2491	1983	A	Gambia	case	-	Sanger Center
12	other	NG3/88	1988	B:8(2):P1.1	Norway	case	-	R.Moxon
13	other	NG6/88	1988	B:NT:P1.1	Norway	case	-	R.Moxon
14	other	NGF26	1988	B:NT:P1.16	Norway	carrier	-	R.Moxon

15	other	NGE31	1988	B:NT	Norway	carrier	-	R.Moxon
18	other	528	1989	B: nd	Russia	case	-	R.Moxon
20	other	1000	1988	B: NT:P1.5	Russia	case	-	R.Moxon
22	other	A22	1986	W-135	Norway	carrier	-	R.Moxon
26	other	NGE28	1988	B:4	Norway	carrier	+	R.Moxon
29	other	860800	1986	Y	Netherlands	case	-	R.Moxon
31	other	E32	1988	Z	Norway	carrier	-	R.Moxon
35	other	SWZ107	1986	B:4:P1.2	Switzerland	case	-	R.Moxon
36	other	NGH38	1988	B:NT:P1.3	Norway	carrier	-	R.Moxon
38	other	BZ232	1964	B:NT:P1.2	Netherlands	case	-	R.Moxon
39	other	E26	1988	X	Norway	carrier	-	R.Moxon
43	other	NGH15	1988	B:8:P1.15	Norway	carrier	-	R.Moxon
47	other	NGH36	1988	B:8:P1.2	Norway	carrier	-	R.Moxon
48	other	BZ147	1963	B:NT	Netherlands	case	-	R.Moxon
49	other	297-0	1987	B:4:P1.15	Chile	carrier	-	R.Moxon
540	other	2996	1975	B:2b:P1.5-1,2	UK	case	+	R.Moxon
1034	other	96/1101	1996	C:14:P.1.1,7	Belgium	case	-	D.Caugant

-	other	15	1990	B:14,19:P1.9,15	Slovenia	case	-	D.Caugant
-	other	M1090	1996	B:4	Israel	case	-	D.Caugant
-	other	M1096	1996	C:NT:P1.5	Israel	case	-	D.Caugant
-	other	B3937	1995	B:22:P1.16	Germany	case	+	D.Caugant
-	other	31	1993	B:4	Finland	case	-	D.Caugant
-	other	95074	1995	B:NT:P1.13	Canada	case	+	D.Caugant
-	other	660/94	1994	B:4:P1.6	Algeria	case	-	D.Caugant
-	other	30/93	1993	B:14:P1.14	Argentina	case	-	D.Caugant
-	other	24370	1996	B:ND	South Africa	case	-	D.Caugant
-	other	241175I	1993	NG:21:P1.16	Iceland	carrier	-	D.Caugant
-	other	171274I	1993	NG:15:-	Iceland	carrier	-	D.Caugant
-	other	65/96	1996	B:4:P1.14	Norway	carrier	+	D.Caugant
-	other	66/96	1996	B:17:P1.15	Norway	carrier	-	D.Caugant
-	other	149/96	1996	B:1,19:P1.5,2	Belgium	carrier	+	D.Caugant
-	other	16060	1991	B:4:P1.14	Belgium	carrier	-	D.Caugant
-	other	16489	1991	NG:21:P.1.1	Norway	carrier	-	D.Caugant
-	other	16990	1991	NG:14:P1.5,2,6	Norway	carrier	-	D.Caugant

-	other	2022	1991	NG:4:P1.10	Norway	carrier	+	D.Caugant
-	other	M136	1968	B:11:P1.15	USA	case	-	D.Granoff
-	other	860060	1988	X	Holland	case	-	D.Caugant
-	other	NG H41	1986	B	Norway	carrier	-	D.Caugant
-	other	NG G40	1988	B	Norway	carrier	-	D.Caugant
-	other	NG4/88	1988	B	Norway	case	-	D.Caugant
-	other	EG 327	1985	B	DDR	case	-	D.Caugant
-	other	EG 328	1985	B	DDR	case	-	D.Caugant
-	other	3906	1977	B	China	case	-	D.Caugant
-	other	NG E30	1988	B	Norway	carrier	-	D.Caugant
-	other	71/94	1994	Y	Norway	case	-	D.Caugant
-	other	DK24	1940	B	Denmark	case	-	D.Caugant
-	-	C11	1965	C :16 :P1.7a,1	Germany	-	+	R.Moxon
-	-	pmc8	-	C	-	-	+	R.Moxon
-	-	NMB	1968	B:2b:P1.5,2	USA	case	+	D.Granoff
-	-	8047	1978	B:2b:P1.2	USA	case	+	D.Granoff
-	-	S3446	1972	B:14:P1.23,14	USA	case	-	D.Granoff

-	-	ISS 749	1996	B:14:P1.13	Italy	case	-	P.Mastrantonio ^g
-	-	ISS 759	1996	C:2b:P1.2	Italy	case	+	P.Mastrantonio
-	-	ISS 832	1997	B:15:P1.7	Italy	case	+	P.Mastrantonio
-	-	ISS 838	1997	C:2a:P1.5,2	Italy	case	+	P.Mastrantonio
-	-	ISS1001	1999	B:14:P1.13	Italy	case	-	P.Mastrantonio
-	-	ISS1024	2000	C:2b:P1.5	Italy	case	+	P.Mastrantonio
-	-	ISS1026	2000	B:4:P1.13	Italy	case	-	P.Mastrantonio
-	-	ISS1071	2000	B:15:P1.7,16	Italy	case	+	P.Mastrantonio
-	-	ISS1102	2000	B:15:P1.4	Italy	case	-	P.Mastrantonio
-	-	ISS1104	2000	B:15:P1.7,16	Italy	case	+	P.Mastrantonio
-	-	ISS1106	2000	B:4:P1.4	Italy	case	-	P.Mastrantonio
-	-	ISS1113	2000	C:2a:P1.5	Italy	case	+	P.Mastrantonio
-	-	N1002/90	-	-	Brazil	-	+	M.Tanizaki
-	-	IMC2135	-	-	Brazil	-	+	M.Tanizaki
-	-	NM001	-	B:4:P1.4	UK	case	-	S.Kroll ^h
-	-	NM002	-	B:NT:P1.16	UK	case	-	S.Kroll
-	-	NM004	-	B:NT:P1.14	UK	case	-	S.Kroll

-	-	NM008	-	B:4:P1.4	UK	case	-	S.Kroll
-	-	NM009/10	-	B:4:P1.3,6	UK	case	-	S.Kroll
-	-	NM021	-	B:4:P1.16	UK	case	-	S.Kroll
-	-	NM036	-	C:2a:P1.10	UK	case	+	S.Kroll
-	-	NM037	-	B:2b:P1.10	UK	case	+	S.Kroll
-	-	NM050	-	B:NT:P1.9	UK	case	-	S.Kroll
-	-	NM058	-	B:NT:NST	UK	case	-	S.Kroll
-	-	NM066	-	B:15:P1.7,16	UK	case	+	S.Kroll
-	-	NM067	-	C:2a:NST	UK	case	+	S.Kroll
-	-	NM069	-	B:15:P1.7,16	UK	case	+	S.Kroll
-	-	NM081	-	C:2a:P1.5,2	UK	case	+	S.Kroll
-	-	NM088	-	C:2a:P1.5,2	UK	case	+	S.Kroll
-	-	NM092	-	B:4:P1.4	UK	case	-	S.Kroll
-	-	NM106	-	B:NT:P1.4	UK	case	-	S.Kroll
-	-	NM107/8	-	B:4:P1.4	UK	case	-	S.Kroll
-	-	NM117	-	B:21:P1.9	UK	case	-	S.Kroll
-	-	NM119	-	B:4:P1.15	UK	case	+	S.Kroll

-	-	NM131	-	B	UK	case	-	S.Kroll
-	-	NM145	-	C	UK	case	+	S.Kroll
-	-	NM154	-	C:NT:P1.5,2	UK	case	+	S.Kroll
-	-	NM156	-	B:15:P1.16	UK	case	+	S.Kroll
-	-	NM167	-	B	UK	case	-	S.Kroll
-	-	NM184	-	B:NT:P1.5,2	UK	case	-	S.Kroll
-	-	NM186	-	B	UK	case	-	S.Kroll
-	-	NM188	-	B	UK	case	+	S.Kroll
-	-	NM200	-	B:4:P1.4	UK	case	-	S.Kroll

^a richard.moxon@paediatrics.ox.ac.uk; ^b dominique.caugant@folkehelsa.no; ^c tanizaki@usp.br; ^d dgranoff@chori.org; ^e g.hogg@mdu.unimelb.edu.au; ^f einar.rosenqvist@folkehelsa.no; ^g pmastran@iss.it; ^h s.kroll@ic.ac.uk