

Appendix Table. Death within 7 days after diagnosis of severe *Streptococcus pyogenes* infection, by variable, England and Wales, 2003–2004

Variable	No. (%) who died	Hazard ratio (95% confidence interval)*	p value
Patient characteristics			
Age, y (n = 3,422)			
<1	118 (8)	0.21 (0.07–0.60)	<0.01
1–14	292 (4)	0.21 (0.11–0.43)	<0.01
15–44	1,226 (6)	0.32 (0.21–0.50)	<0.01
45–64	525 (18)	0.46 (0.32–0.66)	<0.01
65–74	416 (24)	0.68 (0.46–0.99)	0.04
≥75	845 (32)	Reference	
Sex (n = 3,419)			
Male	1,849 (15)	Reference	
Female	1,570 (18)	0.89 (0.69–1.16)	0.39
Predisposing risk factors (n = 2,124)			
Admitted from an institution†	142 (35)	1.57 (1.06–2.31)	0.02
Alcoholism	79 (27)	1.94 (1.10–3.41)	0.02
Diabetes	145 (27)	1.01 (0.64–1.59)	0.97
Healthcare-associated infection	185 (18)	0.88 (0.55–1.39)	0.58
Injecting drug use	436 (4)	0.68 (0.33–1.38)	0.29
Malignancy	153 (31)	1.54 (1.04–2.27)	0.03
Nonsteroidal antiinflammatory drug use	42 (28)	1.37 (0.72–2.60)	0.34
Recent childbirth	81 (2)	0.51 (0.07–3.85)	0.52
Skin lesion	650 (20)	1.23 (0.91–1.67)	0.18
Steroid use	69 (28)	1.39 (0.78–2.49)	0.26
Varicella	41 (2)	0.37 (0.05–2.73)	0.33
Month of diagnosis (n = 3,422)			
January	367 (19)	Reference	
February	311 (17)	1.01 (0.61–1.67)	0.98
March	411 (18)	0.92 (0.57–1.49)	0.74
April	403 (18)	0.80 (0.49–1.31)	0.38
May	304 (17)	1.07 (0.62–1.85)	0.80
June	257 (13)	0.93 (0.48–1.78)	0.82
July	282 (17)	0.88 (0.51–1.51)	0.63
August	205 (14)	0.82 (0.41–1.66)	0.59
September	186 (12)	0.69 (0.32–1.52)	0.36
October	209 (6)	0.18 (0.04–0.75)	0.02
November	226 (15)	1.18 (0.66–2.09)	0.57
December	261 (21)	1.14 (0.65–2.00)	0.64
Clinical features (n = 2,407)			
Nonfocal bacteremia	519 (21)	1.28 (0.87–1.89)	0.21
Cellulitis	811 (16)	0.73 (0.52–1.04)	0.08
Erysipelas	20 (25)	2.36 (0.82–6.77)	0.11
Meningitis	28 (21)	2.27 (0.78–6.61)	0.13
Necrotizing fasciitis	125 (34)	2.22 (1.42–3.47)	<0.01
Pneumonia	438 (31)	1.73 (1.18–2.55)	0.01
Puerperal sepsis‡	55 (2)		
Septic arthritis	204 (7)	0.50 (0.20–0.97)	0.04
Streptococcal toxic shock syndrome*	178 (46)		
Gastrointestinal symptoms	71 (28)	2.00 (1.10–3.63)	0.02
emm/M-type (n = 2,345)§			
emm/R28	136 (17)	Reference	
emm/M1	414 (28)	1.14 (0.66–1.97)	0.65
emm/M3	305 (33)	1.70 (0.97–1.98)	0.06
emm/M4	91 (11)	0.42 (0.14–1.27)	0.12
emm/M5	86 (23)	1.36 (0.65–2.83)	0.42
emm/M6	45 (20)	1.03 (0.40–2.65)	0.95
emm/M12	113 (16)	1.21 (0.58–2.50)	0.61
emm/M18	50 (16)	1.01 (0.39–2.63)	0.98
emm/M22	38 (11)	0.48 (0.11–2.12)	0.33

<i>emm</i> /M33	31 (6)	0.55 (0.12–2.48)	0.44
<i>emm</i> /M43	48 (8)	0.88 (0.25–3.16)	0.85
<i>emm</i> /M81‡	40 (8)		
<i>emm</i> /M82	51 (10)	0.42 (0.09–1.95)	0.27
<i>emm</i> /M83	133 (7)	0.44 (0.14–1.37)	0.16
<i>emm</i> /M87	229 (17)	0.75 (0.39–1.44)	0.39
<i>emm</i> /M89	192 (17)	0.54 (0.27–1.08)	0.08
Other	343 (11)	0.55 (0.28–1.09)	0.09

*Adjusted for all variables in the table except streptococcal toxic shock syndrome.

†Data available for 1,767 case-patients.

‡Dropped from the model owing to complete prediction of failure because of small number of case-patients.

§*emm*/M-types identified from ≥ 30 case-patients.

