age	E_x	d_x	$\hat{q}_x = d_x/E_x$	q_x^s	z_x	$\mathring{q}_x$
84	200	34	0.17	0.122	2.074	0.144
85	166	23	0.139	0.133	0.211	0.157
86	143	21	0.147	0.143	0.132	0.168
87	122	21	0.172	0.156	0.491	0.183
88	101	19	0.188	0.169	0.513	0.198
89	82	16	0.195	0.18	0.356	0.210
90	66	16	0.242	0.195	0.972	0.228
91	50	12	0.24	0.202	0.669	0.236
92	38	9	0.237	0.215	0.328	0.251
93	29	12	0.414	0.236	2.255	0.275
94	17	3	0.176	0.261	-0.794	0.303

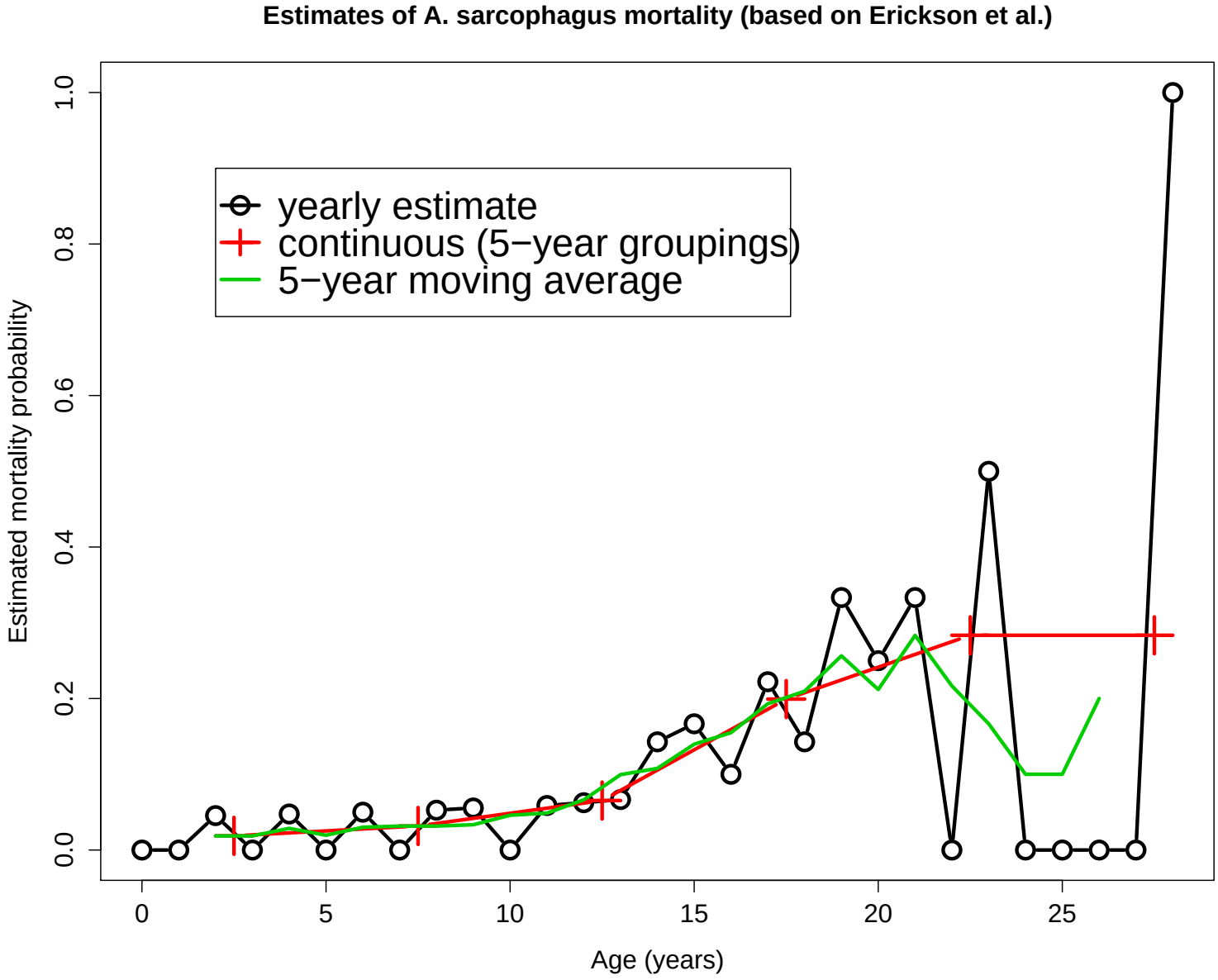
Table of mortality rates for a retirement home.

$n = 11$
$\sum z_x^2 = 12.21$. Compare to $\chi^2(11)$: $p = 0.43$.
$\sum z_x = 7.21$. Compare to $N(0, 11)$: $p = 0.015$ (1-sided), 0.030 (2-sided).
$\#\{z_x > 0\} = 10$. Compare Bin$(11, 1/2)$: $p = 0.006$ (1-sided), 0.012 (2-sided).

age	E_x	d_x	$\hat{q}_x = d_x/E_x$	q_x^s	z_x	$\mathring{q}_x$	$\mathring{z}_x$
84	200	34	0.17	0.122	2.074	0.144	1.050
85	166	23	0.139	0.133	0.211	0.157	-0.638
86	143	21	0.147	0.143	0.132	0.168	-0.677
87	122	21	0.172	0.156	0.491	0.183	-0.309
88	101	19	0.188	0.169	0.513	0.198	-0.245
89	82	16	0.195	0.18	0.356	0.210	-0.341
90	66	16	0.242	0.195	0.972	0.228	0.286
91	50	12	0.24	0.202	0.669	0.236	0.072
92	38	9	0.237	0.215	0.328	0.251	-0.196
93	29	12	0.414	0.236	2.255	0.275	1.678
94	17	3	0.176	0.261	-0.794	0.303	-1.138

Table of mortality rates for a retirement home.

$n = 11$. We took $\mathring{q}_x = a + bq_x^s$ and chose a and b to minimize $\sum \mathring{z}_x^2$, giving $a = 0.004, b = 1.147$.
Here $\sum \mathring{z}_x^2 = 6.48$. We compare to $\chi^2(9)$, giving $p = 0.692$.



Different smooothings for *A. sarcophagus* mortality.