

Participant ID	Observed time (yrs)	Status (1=death; 0=censored)	Treatment arm (1=intervention, 0=control)
1	1	1	1
2	2.5	1	1
3	3	1	1
4	4	1	1
5	4.5	1	1
6	5	0	1
7	0.5	1	0
8	0.75	1	0
9	1.25	1	0
10	1.5	0	0
11	2	1	0
12	3.5	1	0

$\text{var}(\log(\lambda_i) + \beta_1 Y_i) - \log(\lambda_i)$   
 Treatment arm

~~log(D<sub>0</sub>)~~

log

$\frac{1}{2}$

visual

Q4. For the treatment arm, we have the following survival ~~to~~ probability table, where  $t$  represents the time interval,  $c$  represents <sup>number of</sup> censored <sup>patients</sup> in that time interval,  $d$  represents number of death; and  $s$  represents survival probability at that interval.  $r$  represents number of at-risk patients.

Treatment arm:

$t$	$c$	$d$	$r$	$1 - \frac{d}{r}$	$s$	$t$	$c$	$d$	$r$	$1 - \frac{d}{r}$	$s$
$[0, 1)$	0	0	6	1	1	$\geq 5$	1	0	1	$1 - \frac{0}{1}$	0.17
$[1, 2.5)$	0	1	6	$1 - \frac{1}{6}$	0.83						
$[2.5, 3)$	0	1	5	$1 - \frac{1}{5}$	$0.83 \times 0.8 = 0.6644$						
$[3, 4)$	0	1	4	$1 - \frac{1}{4}$	$0.66 \times 0.75 = 0.495$						
$[4, 4.5)$	0	1	3	$1 - \frac{1}{3}$	$0.50 \times 0.67 = 0.34$						
$[4.5, 5)$	0	1	2	$1 - \frac{1}{2}$	$0.34 \times 0.50 = 0.17$						

✓ 8

control arm:

$t$	$c$	$d$	$r$	$1 - \frac{d}{r}$	$s$
$[0, 0.5)$	0	0	6	1	1
$[0.5, 0.75)$	0	1	6	$1 - \frac{1}{6}$	0.83
$[0.75, 1.25)$	0	1	5	$1 - \frac{1}{5}$	$0.83 \times 0.8 = 0.66$
$[1.25, 2)$	1	1	4	$1 - \frac{1}{4}$	$0.66 \times 0.75 = 0.50$
$[2, 3.5)$	0	1	2	$1 - \frac{1}{2}$	$0.5 \times 0.5 = 0.25$
$\geq 3.5$	0	1	1	0	<del>0.25</del> 0

✓

Q4 continued:

The solid line connected by  $\bullet$  is the KM curve for the treatment group.

The dashed line connected by  $x$  represents the KM curve for control arm.

"+" signs represents censoring

