

Χρόνοι θανάτου 22 ποντικών που πέθαναν από λέμφωμα

$i$	$t_i$	$S_n^0(t_i)$	$H_n^0(t_i) = -\ln S_n^0(t_i)$	$(n-i+1)^{-1}$	$\approx H_n^0(t_i)$
1	159	0.954	0.046	0.045	0.045
2	189	0.909	0.095	0.047	0.093
3	191	0.863	0.146	0.05	0.143
$\vdots$	$\vdots$	$\vdots$	$\vdots$	$\vdots$	$\vdots$
20	414	0.09	2.39	0.33	2.18
21	428	0.045	3.09	0.5	2.68
22	432	-	-	1	3.68

$$S_n^0(t) = \begin{cases} 1, & t < t_{(1)} \\ \frac{n-i}{n}, & t_{(i)} < t \leq t_{(i+1)} \\ 0, & t > t_{(n)} \end{cases}$$

$$S_1^0(t) = \frac{n-i}{n} = \frac{22-1}{22} = 0.954$$

$$H_n^0(t) = -\ln S_n^0(t) \approx \sum_{j=1}^i \frac{1}{n-j+1} = \frac{1}{n} + \frac{1}{n-1} + \dots + \frac{1}{n-j+1}$$

$$H_1^0(t) = \frac{1}{n} = \frac{1}{22} = 0.045$$