

Online supplement - **Causes of death in endovascularly treated acute stroke patients**

**Table 1:** Time between stroke onset and death depending on cause of death.

Cause of death	Onset to death - all (n=326) [median days]	Onset to death - curative (n=37) [median days]	Onset to death – secondary palliative (n=289) [median days]	P-value (curative vs. secondary palliative)
Cerebrovascular	4 (IQR, 2-8)	2.5 (IQR, 1-3.75)	4 (IQR, 2-8)	0.016*
Pneumonia, sepsis	11 (IQR, 4-17)	3 (IQR, 2.5-24.5)	12 (IQR, 3-17)	0.293
Cardiovascular	7 (IQR, 3-14)	2 (IQR, 0-11.25)	8 (IQR 5-15)	0.027*
Other	7 (IQR, 3-21.5)	7 (IQR, 2.75-19)	8 (IQR 3-23.5)	0.82
Combination	7 (IQR, 3-11)	-	7 (IQR 3-11)	-

\*statistically significant

**Table 2:** Trend analysis 2010-2019 - causes of deaths in secondary palliative and curative treatment concept

	EST* overall					Secondary palliative EST*					Curative EST*				
Cause of death	Cerebrovascular	Pneumonia, sepsis	Cardiovascular	Other	Combination	Cerebrovascular	Pneumonia, sepsis	Cardiovascular	Other	Combination	Cerebrovascular	Pneumonia, sepsis	Cardiovascular	Other	Combination
P-value	0.818	0.607	0.026	0.423	0.721	0.141	0.398	0.656	0.539	0.531	0.003	0.286	0.002	0.627	-
Trend	No trend	No trend	Lower proportion with time	No trend	No trend	No trend	No trend	No trend	No trend	No trend	Lower proportion with time	No trend	Lower proportion with time	No trend	-

\*\*EST – endovascular stroke therapy = mechanical thrombectomy and/or intra-arterial thrombolysis, in combination or not with intravenous thrombolysis

**Table 3:** Trend analysis 2010-2019 – Baseline characteristics in different treatment groups

	EST overall*				Secondary palliative				Curative			
Characteristic	Age	NIHSS**	mRS at admission***	LOS****	Age	NIHSS	mRS	LOS	Age	NIHSS	mRS at admission	LOS
P-value	<0.001	<0.001	<0.001	<0.001	0.069	<0.001	<0.001	0.738	0.898	0.809	0.028	0.698
Trend	Increase s with time	Decrease s with time	Decreases with time	Decreases with time	Increases es with time	Decreases with time	Decreases with time	No trend	No trend	No trend	Decreases with time	No trend

\* EST – endovascular stroke therapy = mechanical thrombectomy and/or intra-arterial thrombolysis, in combination or not with intravenous thrombolysis

\*\*National Institutes of Health Stroke Scale

\*\*\*Modified Rankin Scale

\*\*\*\*Length of stay

**Table 4:** Direct comparison between 2010/11 and 2019 – causes of death and reasons for palliation

Year	Cause of death/reason for palliation	Curative treatment group	Secondary palliative treatment group
		Cause of death n/N	Reason for palliation n/N
2010, 2011	Cerebrovascular	2/3	13/16
	Pneumonia, sepsis	0/3	1/16
	Cardiovascular	1/3	0/16
	Other	0/3	0/16
	Combination	0/3	3/16
2019	Cerebrovascular	1/3	32/46
	Pneumonia, sepsis	1/3	3/46
	Cardiovascular	0/3	3/46
	Other	1/3	3/46
	Combination	0/3	5/46
	Cause of death/reason for palliation	Compared p-value	Compared p-value

		Curative treatment group 2010/11 versus 2019	Secondary palliative treatment group 2010/11 versus 2019
	Cerebrovascular	0.414	0.680
	Pneumonia, sepsis	0.273	0.970
	Cardiovascular	0.273	0.295
	Other	0.273	0.295
	Combination	Not calculable	0.418