

# Safety and effectiveness of reperfusion therapies for acute ischemic stroke in patients with current malignancy – a single center experience.



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## Background and purpose

Epidemiological correlations between incident cancer and acute ischemic stroke (AIS) are well established [1], hiding multiple etiopathogenic factors involved, especially in patients with current malignancy (CM) [2]. However, safety and effectiveness of i.v. thrombolysis and intra-arterial treatment (IAT) for AIS in patients with cancer are not accurately determined [3]. Our aim is to evaluate the relationship between CM and functional outcome, mortality and haemorrhagic transformation (HT) in patients with AIS treated or untreated with i.v. thrombolysis and/or IAT.

## Methods

We retrospectively evaluated the demographic and clinical data of consecutive 45 AIS patients with concurrent CM (55.5% male, mean age 68.5% ±10.6) admitted on our stroke centre from 2006 to 2015. We distinguished between patients treated (22/45; 48.8%) or untreated (23/45; 51.1%) with i.v. thrombolysis (9/22; 40.9%) or IAT (12/22; 54.5%), one receiving both.

## Results

	Treated n=22	Untreated n=23	p-value
HT	9/22 (40%)	4/23 (17%)	0.1
In-Hospital Mortality	1/22	1/23	1
Baseline NIHSS (median)	16.5	10	<0.05
Mortality at 3 months	7/22 (31.8%)	9/23 (39.1%)	0.75
Independent patients at 3 months (mRS 0-2)	11/22 (50%)	9/23 (39.1%)	0.55
Δ NIHSS onset-discharge (mean)	-4.8 ± 8.9	-0.6 ± 6.5	0.07
Clinical improvement at discharge	16/22 (72.7%)	10/23 (43.4%)	0.07

No difference in mean age, sex and main classic vascular risk factors. Only in 27.7% of patients, cause of death within 3 months was clearly correlated to stroke complications.

## Conclusions

- 1.Our study support the previous data revealing that thrombolysis for AIS in patients with CM is not associated with increased risk of HT or in-hospital mortality. Interesting, this is confirmed also in a copious sub-group of IAT treated patients.
- 2.We further observed that functional outcome is significantly modified by treatment, and mortality after 3 months was attributable largely to cancer progression and medical comorbidities.

Even if, life expectancy of AIS patients with CM should be estimated before making quick decision on the treatment, intravenous and endovascular therapies can be safe and effective. Further research is warranted.

## Bibliography

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