



Malignancy Onset After Acute Coronary Syndrome: Geographic distribution.

The ABC-7* Study on Heart Disease.

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Background:

- Our previous (ABC-4*) study, reported a higher incidence of neoplasia in patients long after ACS compared to the general population

Purpose:

- To investigate the possible difference in neoplastic incidence in 6 geographic areas in Veneto region.

Methods:

- 527 patients admitted with ACS to hospitals in province of Treviso, Vicenza and Rovigo then discharged alive and free from malignancy .
- Neoplasia were recorded prospectively.
- Residency was divided into 6 areas: 3 urban areas (North, middle and south areas) and 3 nearby rural areas in each province.

Results:

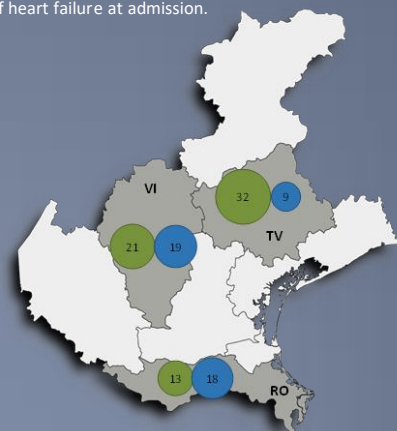
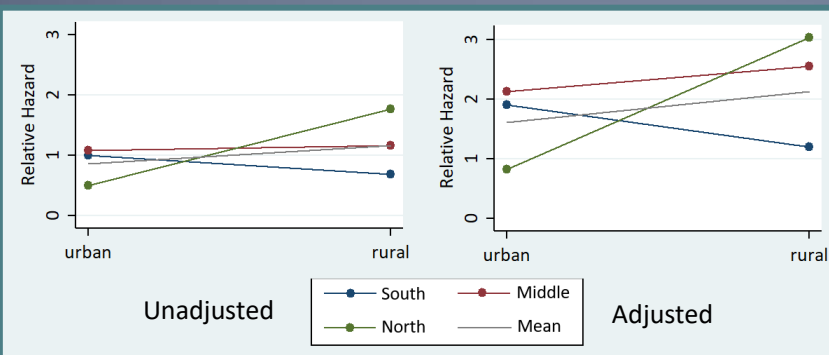
- Patients completed 22 years of follow-up virtually without drop-outs.
- 54% were living in rural areas.
- No difference in most of clinical characteristics between urban and rural residents.
- 106 (20%) patients developed neoplasia during follow-up.
- Total follow-up years= 5698 person-years.
- The incidence rate (IR) of malignancy was 18.6 /1000 person-years and it was lower in urban compared to rural areas (16 and 21/1000 person-years, respectively)

	Unadjusted model			Fully adjusted model*		
	HR (95%CI)	Z	P	HR (95%CI)	Z	P
Cox regression analysis (n=526)						
Urban-rural areas	3.0(1.5-6.2)	3.1	0.002	3.2(1.6-6.6)	3.2	0.001
North-south provinces	1.3(1.0-2.0)	1.5	0.14	1.4(1.0-2.1)	1.8	0.08
Interaction (urban/rural areas & south to north provinces)	2.1(1.3-3.5)	3.1	0.002	2.2(1.4-3.6)	3.2	0.001

CI, confidence interval; HR, hazard ratio.

*Adjusted for age, gender, smoking, alcohol consumption, education level, baseline serum cholesterol, presence of heart failure at admission.

Hazard ratios of neoplasia in 22 years of follow-up



Incidence rate of malignancy (per 1000 person years)

Conclusions:

- This prospective study of unselected real-world patients showed a significant geographic difference in malignancy risk with the highest risk in the north-rural area in lifelong ACS patients.