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- **Abstract title:** ARE GENDER DISPARITIES CORRELATED WITH ONSET SYMPTOMS LAND USE TYPE AMONG PATIENTS TREATED WITH R-TPA?

- **Abstract text:**

**Background.** Proportion of stroke patients treated with tissue plasminogen activator (r-tPA) is higher in urban than in rural hospitals. Does the land use type play a role in the management of treated patients according to gender? Our study evaluates if a disparity in management and functional prognosis between thrombolized women and men depends on the onset symptoms land use type.

**Methods.** Patients treated with r-tPA between 2010 and 2016 in Primary Stroke Centers (PSC) of RESUVal network were included. Age-adjusted analyses and multivariate models were performed. Multivariate analysis determines whether the place of occurrence (rural/urban) has an impact on mortality and disability at 3 months (mRS), depending on the patient gender.

**Results.** 2790 patients were thrombolized, with 45.7% of women. Women who made a stroke in an urban area were more likely to be admitted directly to PSC (34.28% vs 29.58%,  $p=0.0169$ ). With age adjusted analysis this finding was less pronounced (33.83% vs 29.68%,  $p=0.0546$ ), explained by the higher proportion of elderly women. In multivariate models, the territory type does not influence patient mortality. However, rural areas' symptoms are a risk factor for women (RR 1.26[1.03;1.55],  $p=0.0219$ ), with lower mRS at 3 months.

**Conclusion.** A difference in patients' access to treatment and prognosis at 3 months depending on gender and onset symptoms. Indeed, rural areas are an explanatory factor for poorer direct access to UNV and poorer functional recovery at 3 months for women. An explication can be the higher proportion of single women and longer travel times to the nearest PSC.