

Registro Tumori
ASL Lecce

Excess of risk for different morphologies of Lung Cancer In Taranto and Lecce Provinces (Apulia, Southern Italy)

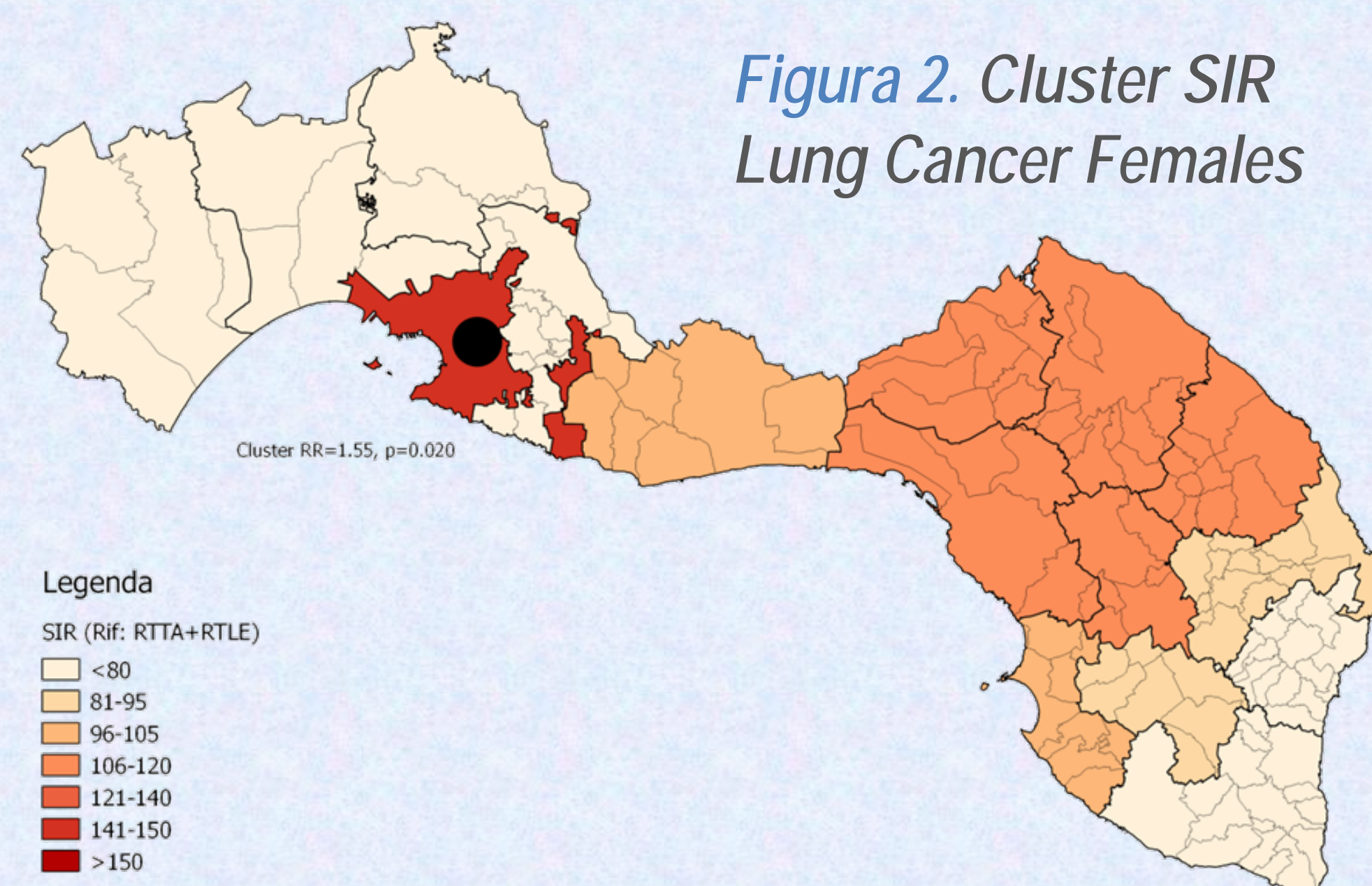
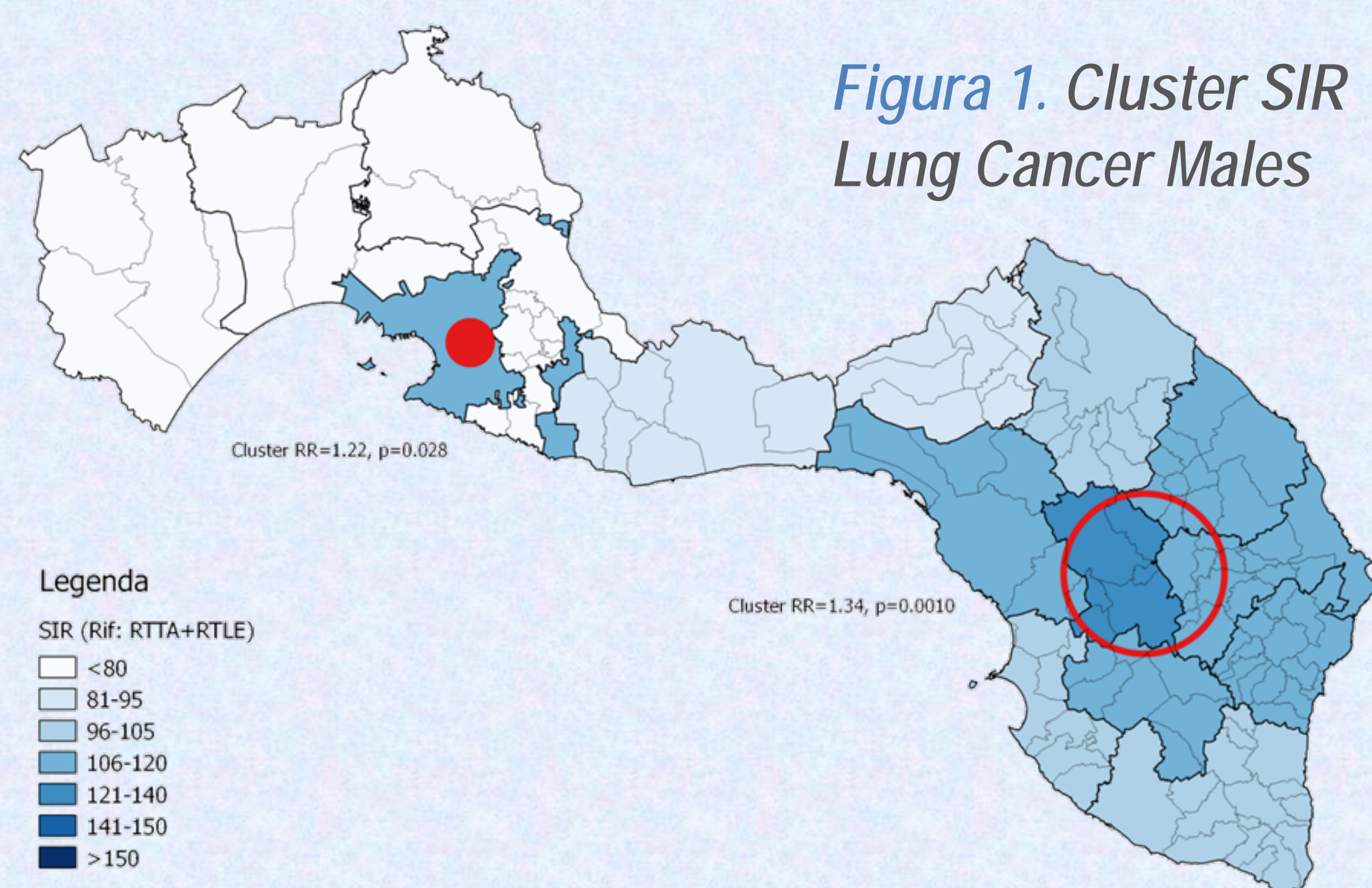


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1- Cancer Registry of Taranto 2- Cancer Registry of Lecce 3- Coordination of Cancer Registry Apulia

OBJECTIVES. Several epidemiological studies carried out in the area of Taranto and Lecce showed excesses in mortality and incidence for Lung Cancer, suspected to be related to the presence of one of the most important industrial area in Europe. Since cancer registries are increasingly mapping the residences of patients at time of diagnosis, the objective of this study was to investigate the geographical distribution of different morphologies of lung cancer in the Provinces of Lecce and Taranto in order to assess potential spatial heterogeneity.

METHODS. A list of annually diagnosed cancer cases (incidences) from the Taranto and Lecce cancer registry databases was obtained that complies with quality standards of the Italian Association of Cancer Registries - AIRTUM. The ICD-O morphology included: adenocarcinoma, squamous, large cell, small cell and other. Data analysis consisted of two procedures: preliminary data analysis (descriptive statistics) and spatial cluster analysis (CA), the latter performed with the free software Sat Scan v 9.3.



RESULTS. Standard Incidence Ratio (SIR; IC 95%) calculated for total lung cancer cases showed an excess for males (SIR= 130.4; 112-151_Fig.1) in the district of Galatina (LE); in the district of Taranto an excess for females (SIR=143.7; 118-173_Fig2) and males too (SIR=118; 108-129_Fig.1). The CA revealed an excess of risk for the adenocarcinoma for males both in the area of Galatina (RR= 1.97; p=0.00067) and Taranto (RR=1.62; p=0.00032) Fig 3; in Galatina also an excess of risk of squamous morphology for males came out (RR=1.78 p=0.00079) Fig 4.

Figura 3. Cluster Sir Lung Cancer - Adenocarcinoma Males
Non a piccole cellule adenocarcinomi

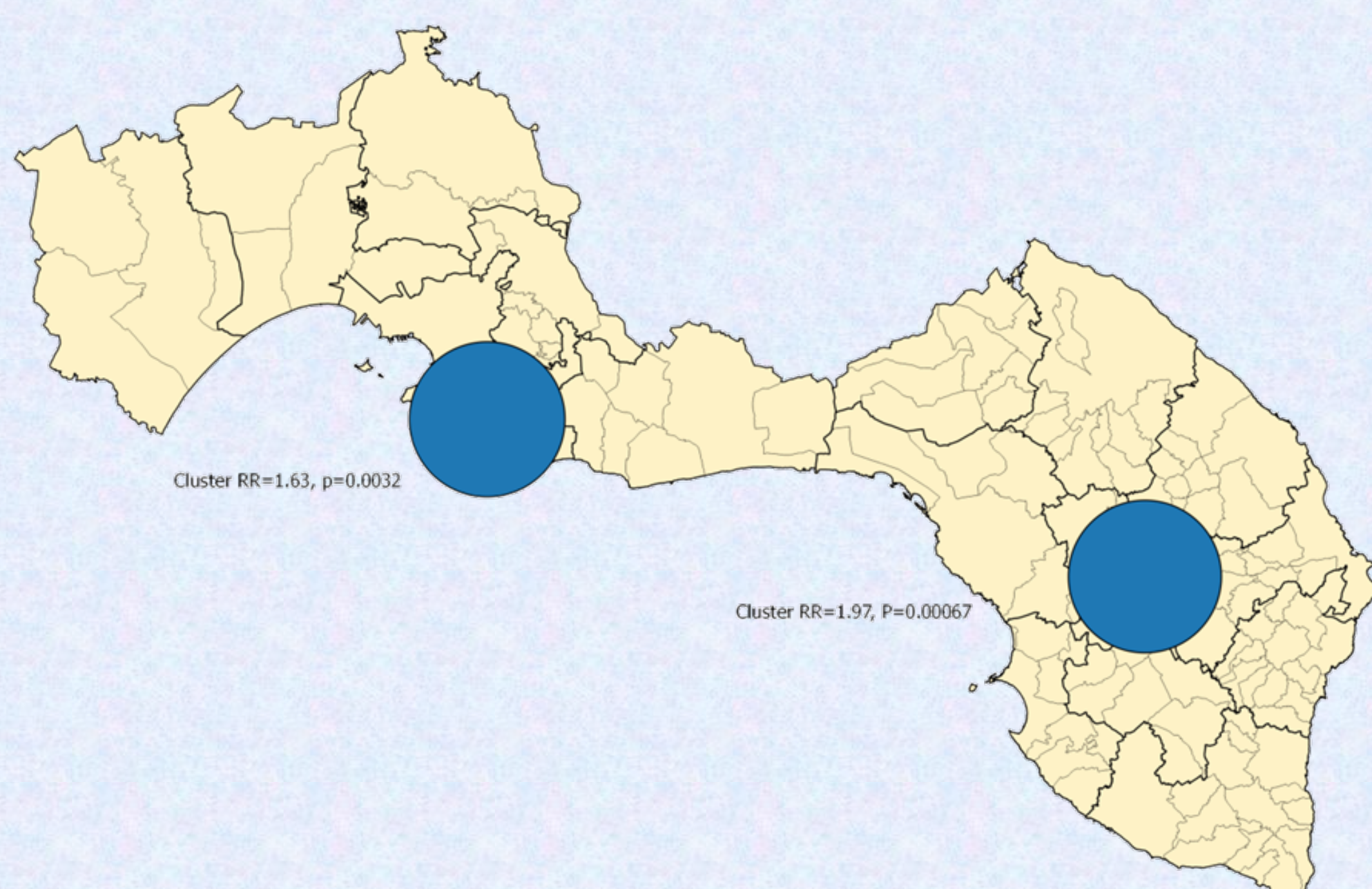


Figura 4. Cluster SIR Lung Cancer - Squamous Males.
Non a piccole cellule squamosi



CONCLUSIONS. Spatial variations in morphologies of lung cancer cases in the study area were found: results indicate the need to further investigate the issue in order to define effective strategies of treatment and prevention, also related to environmental exposure to industrial air pollution.