

Treatment prevalence of Rheumatoid Arthritis: 12-year evolution of Parana State, Brazil

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AIMS

Considering the relatively constant prevalence of Rheumatoid Arthritis (RA) in Latin-America (around 0.6%), our aim was to evaluate treatment prevalence (number of RA patients being treated) over time in southern Brazil.

METHODS

A 12-year evolution analysis (2007-2018) of treatment prevalence of RA in Parana State (Southern Brazil) was conducted. Medicines included in the clinical practice guideline for RA approved by the Ministry of Health and dispensed by the national healthcare system were evaluated. Data on patients' treated for RA was obtained from the Pharmaceutical Management System of Parana State registry. Population data was obtained from the Brazilian Institute of Geography and Statistics. Descriptive statistical and time-trends analyses were performed for the 22 regions comprising 399 municipalities in Parana State, Brazil.

RESULTS

A total of 3,503 patients were treated for RA in 2007, increasing to 17,147 in 2018 from a State population growing from 10.2 million to 11.3 million inhabitants, respectively. A linear trend in treatment prevalence of RA, with values beginning in 0.03% in 2007, reaching 0.15% in 2018 was observed (Figure 1).

A geographical asymmetry of treatment prevalence and trends among the regions was found, with slopes varying from 0.004 to 0.025 (Figure 2). The lowest values of treatment prevalence for RA were obtained for the coastal region (Eastern Parana) with values increasing from 0.007% in 2007 to 0.061% in 2018, while other peripheral regions (Northern, Southern and Western Parana) presented higher values with no clear geographical pattern (0.016%, 0.044% and 0.038% in 2007 and 0.278%, 0.332% and 0.231% in 2018, respectively) (Figure 3).

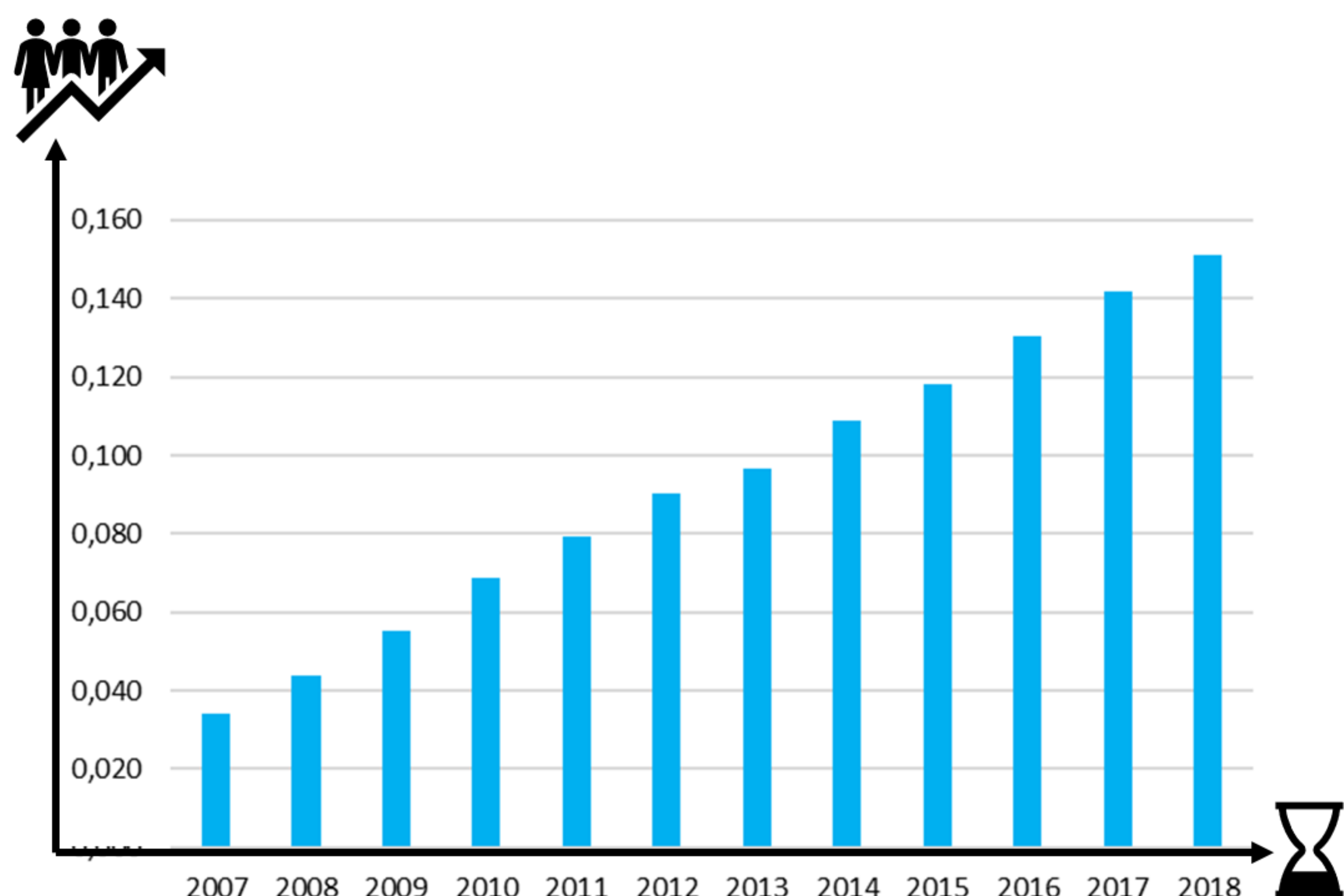


Figure 1. RA treated patients over the years in Parana State, Brazil

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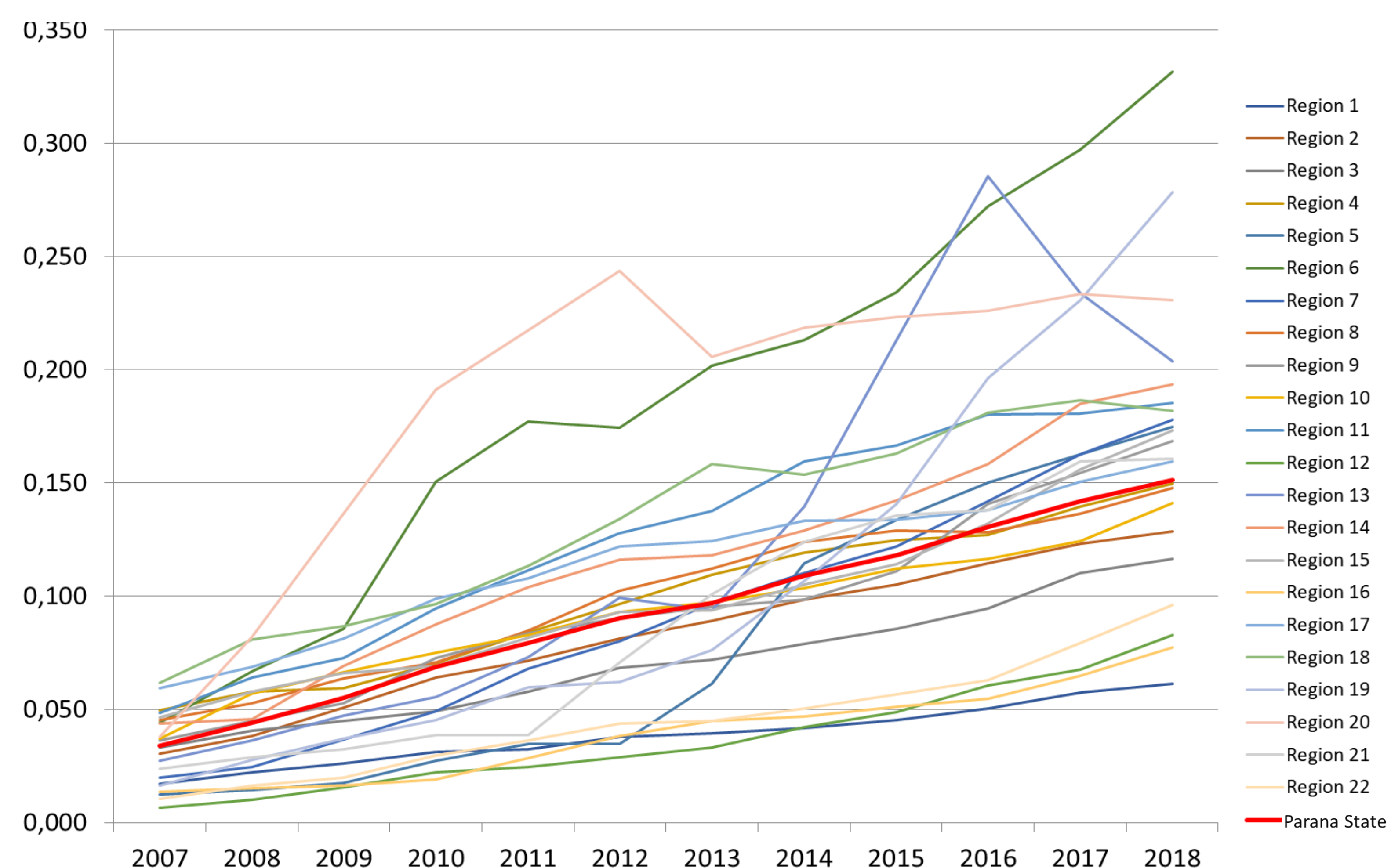
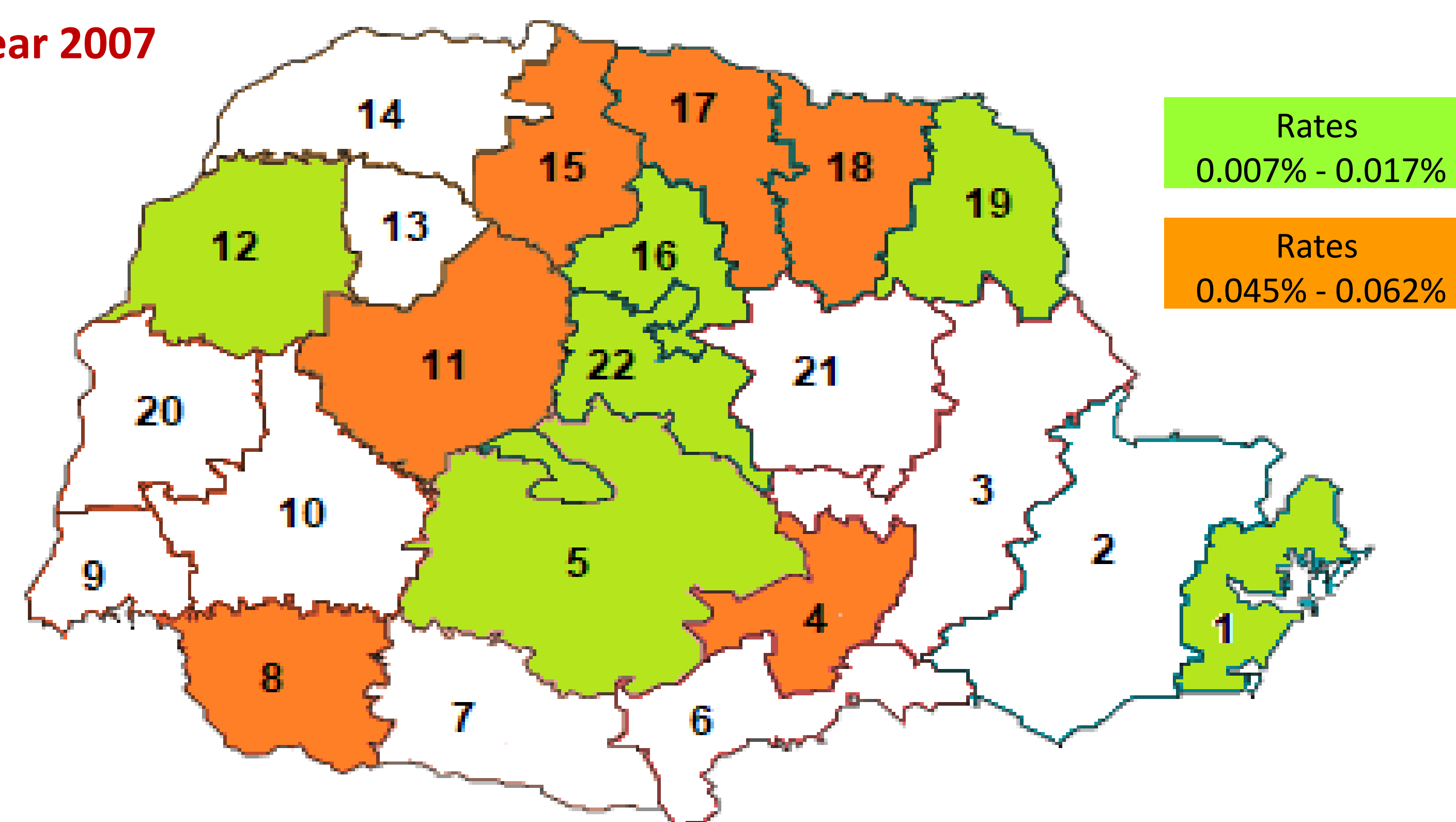


Figure 2. Rates of RA treated patients over the years according to geographical regions

Year 2007



Year 2018

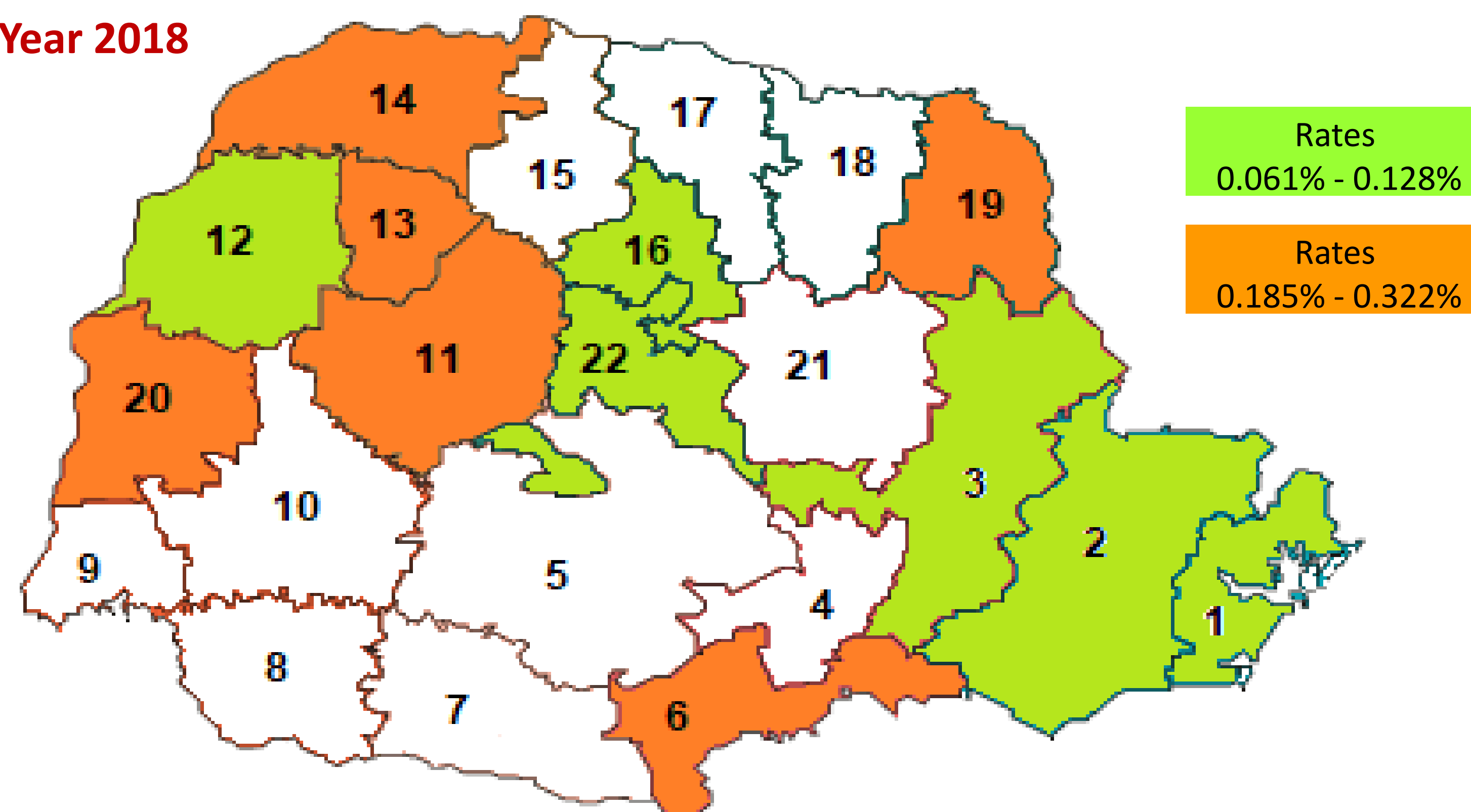


Figure 3. Geographical distribution of RA treated patients according to regions in Parana State, Brazil. Based-years: 2007 and 2018

CONCLUSIONS

Although there is an increasing evolution in the number of patients receiving treatment for RA, this percentage is still low, accounting for only one-fourth of the estimated prevalence of RA in Latin-America. Treatment prevalence varies substantially between geographic areas.