# TUBERCULOSIS SAFETY MONITORING OF THE USE OF TNF INHIBITORS IN PORTUGUESE RHEUMATOID ARTHRITIS PATIENTS BASED ON AN ELECTRONIC MEDICAL CHART AND REGISTRY (BioRePortAR): EXPERIENCE OF A SINGLE CENTRE.



J Polido-Pereira \*1,2, Ferreira Al<sup>1</sup>, Rodrigues AM <sup>1,2</sup>, Carvalho AM<sup>1</sup>, Saavedra MJ<sup>2</sup>, Barros R<sup>2</sup>, Catita C<sup>2</sup>, Marques A<sup>2</sup> Canhão H<sup>1,2</sup>, Viana de Queiroz M<sup>2</sup>, Fonseca JE<sup>1,2</sup>

1- Rheumatology Research Unit, Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa 2 – Serviço de Reumatologia e Doenças Ósseas Metabólicas, Hospital de Santa Maria, Lisboa, Portugal \* Both authors contributed equally for this work



Research Unit

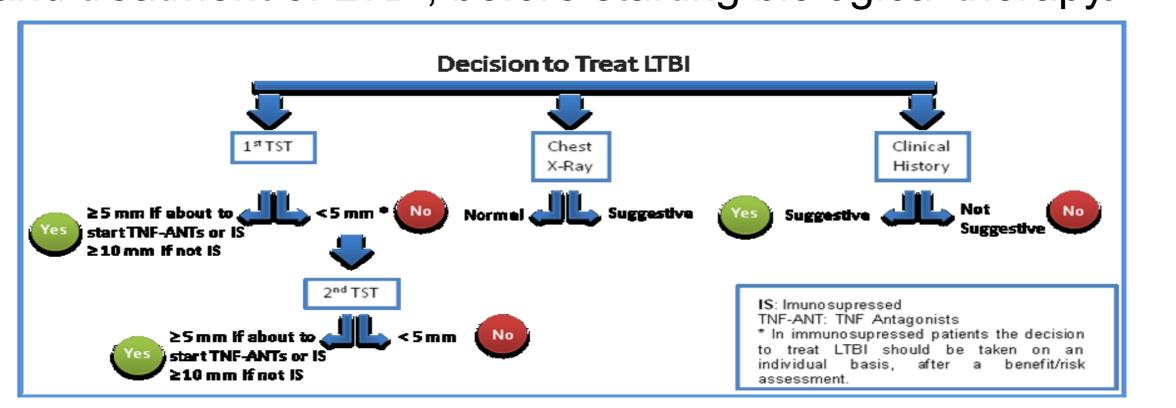
Rheumatology

e-mail address: polidopereira@gmail.com

## Introduction

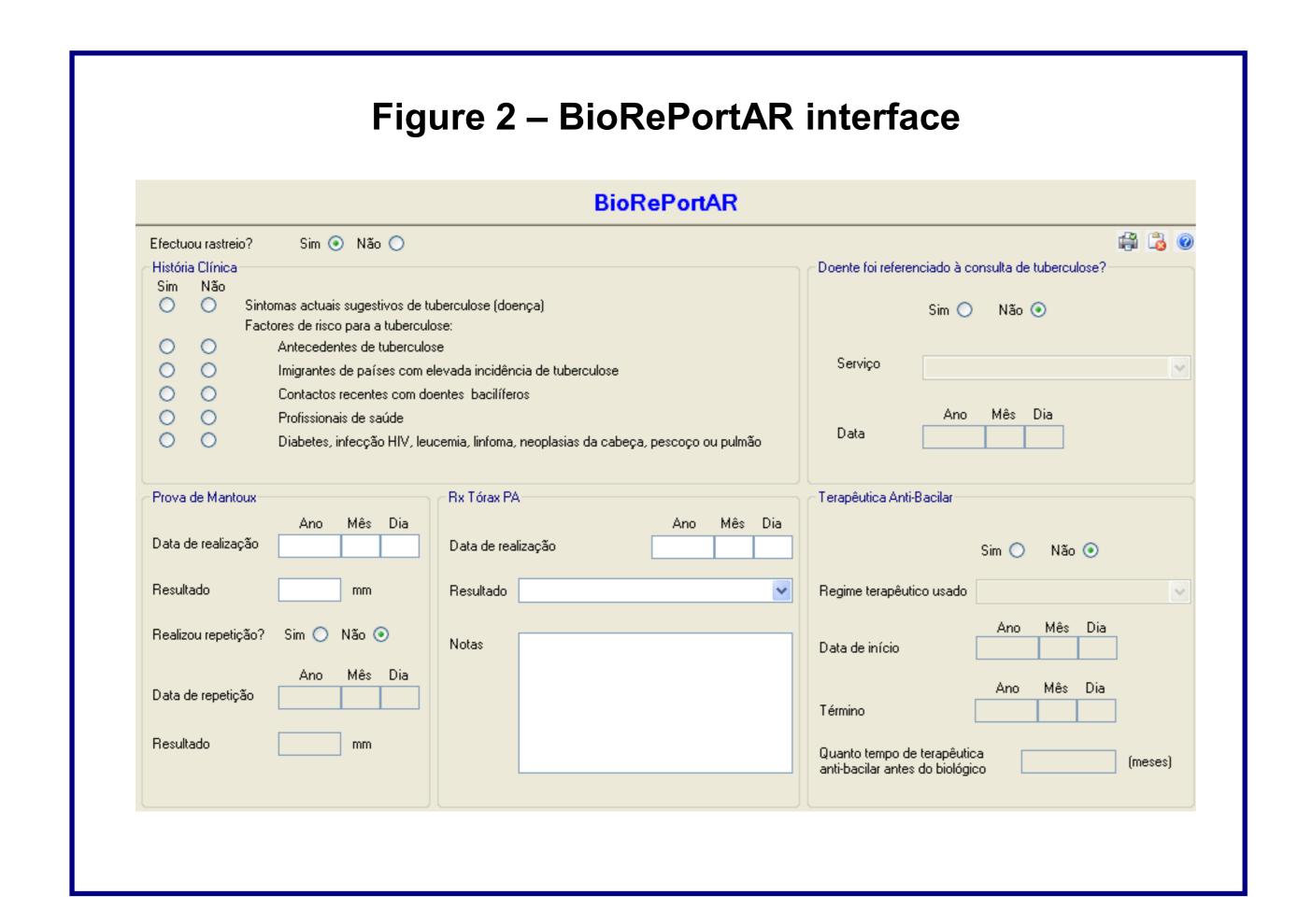
TNF inhibitors have been associated to the occurrence of reactivation of latent tuberculosis (TB), particularly monoclonal antibodies. Due to the higher prevalence of TB in Portugal, the Portuguese Society of Rheumatology developed guidelines for the screening and treatment of latent TB in patients treated with biologics. Electronic medical charts that automatically download data into a registry can provide a structured approach to the medical practice and improve the surveillance of adverse effects.

Figure 1: Algorithm of recommendations of SPR, for the screening and treatment of LTBI, before starting biological therapy.



## Aim

To present the results of TB screening of rheumatoid arthritis (RA) patients treated with anti-TNF agents using an electronic database registry developed by the Portuguese Society of Rheumatology - BioRePortAR.



## **Patients and Methods**

RA patients treated with TNF inhibitors in our centre were followed up and the data was introduced in BioRePortAR.

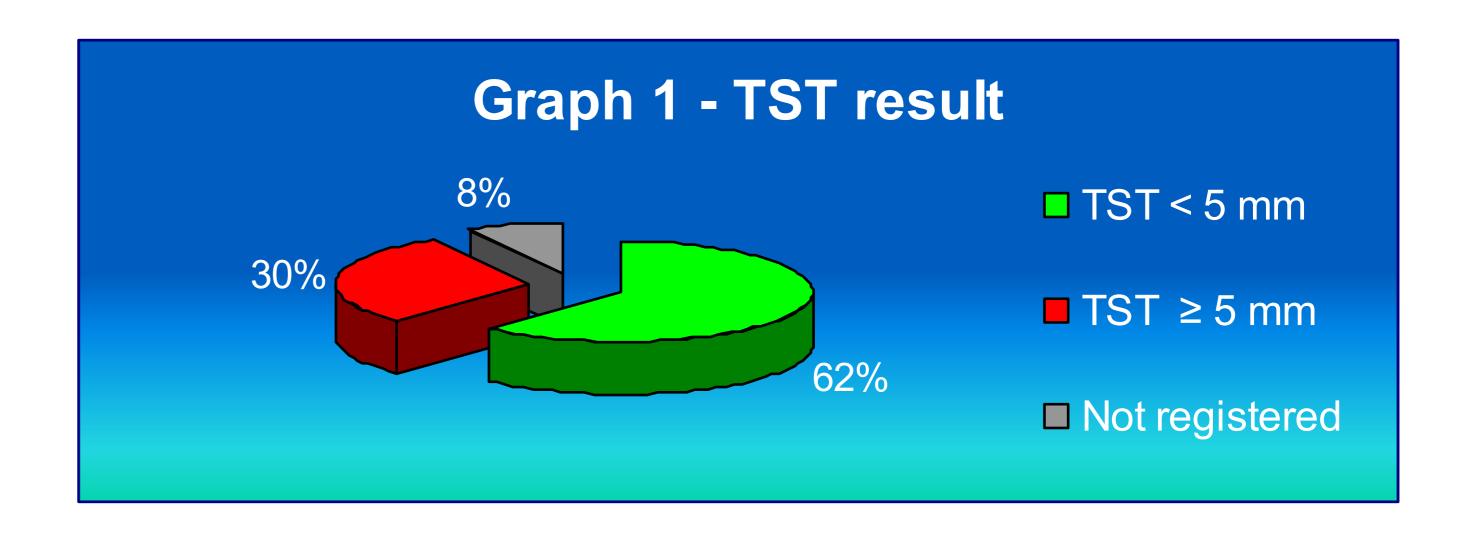
TB screening was performed at baseline and consisted of clinical history, chest radiograph and tuberculin skin test (TST). All severe adverse events related with latent TB therapy were reported, as well as eventual cases of active TB.

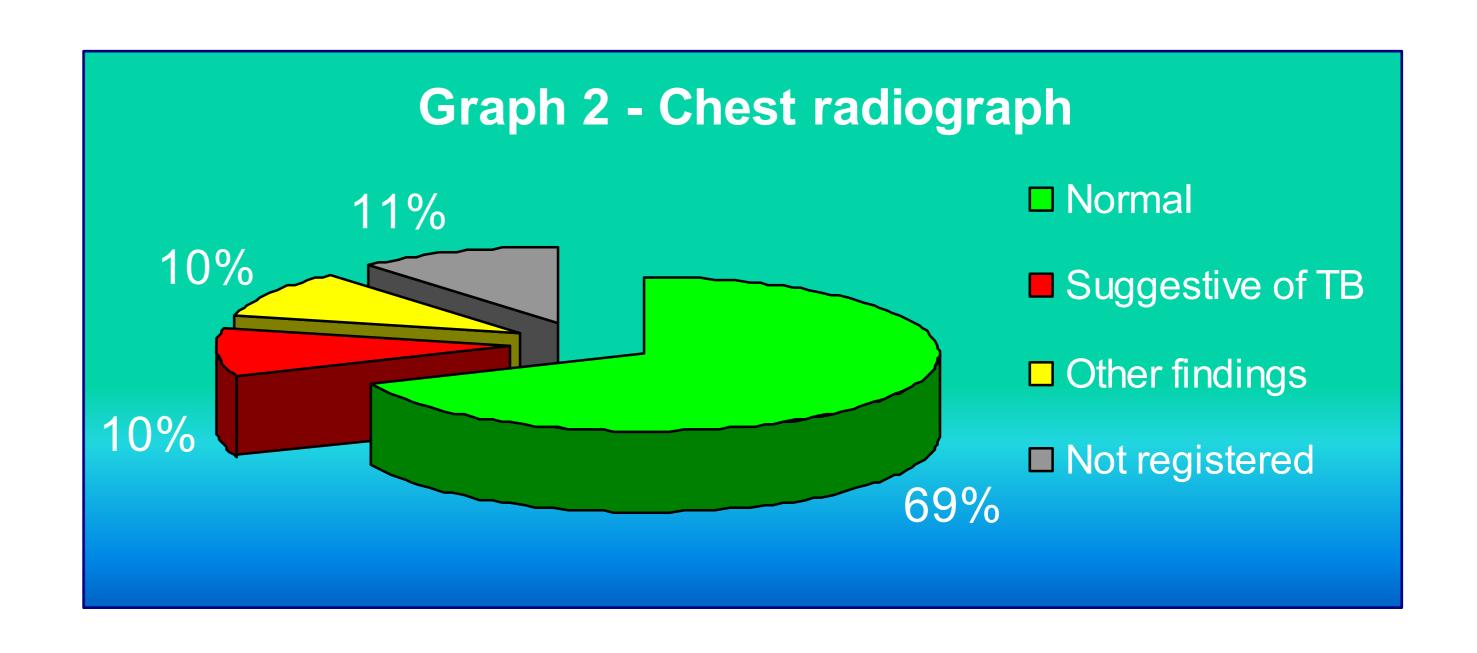
Patients included started anti-TNF therapy no later than March 2010 and were followed up for at least 9 months.

## Results

Population characteristics: 82 patients, 85,4% female, mean age 57,6±13 years, followed up during 298,7 patient.years

- Thirty-two (39%) patients were treated for latent TB
- Nine (28%) of the patients treated for latent TB were TST negative (Of these, 4 were treated due to chest radiograph findings, 3 due to epidemiological factors and 2 became TST positive after a second test)
- No severe adverse effects related to isoniazide were reported
- There were no cases of TB reactivation
- A *Mycobacterium avium* infection was reported in a patient with longstanding RA treated with infliximab.





### Discussion

Thirty nine percent of patients were treated for latent TB before starting TNF inhibitors and a third of them were TST negative.

Neither isoniazid severe adverse events nor TB reactivation cases were reported.

BioRePortAR is a useful tool for the quality assessment of medical practice.

#### References

- 1. Fonseca JE, Lucas H, Canhão H, Duarte R, Santos MJ, Villar M, Faustino A, Raymundo E. Recommendations for the diagnosis and treatment of latent and active tuberculosis in patients with inflammatory joint diseases treated with tumour necrosis factor alpha inhibitors. Acta Reumatol Port. 2006 Jul-Sep;31(3):237-45. Portuguese.
- 2. Tubach F et al, Arthritis and Rheumatism 2009; 60: 1884-94.
- 3. Fonseca JE, Lucas H, Canhão H, Duarte R, Santos MJ, Villar M, Faustino A, Raymundo E. Recommendations for the diagnosis and treatment of latent and active tuberculosis in inflammatory joint diseases candidates for therapy with tumor necrosis factor alpha inhibitors: March 2008 update. Acta Reumatol Port. 2008 Jan-Mar;33(1):77-85. Review.
- 4. Fonseca JE, Lucas H, Canhão H, Duarte R, Santos MJ, Villar M, Faustino A, Raymundo E. Guidelines for the diagnosis and treatment of latent tuberculosis infection and active tuberculosis in patients with inflammatory joint diseases proposed for treatment with tumour necrosis factor alpha antagonist drugs. Rev Port Pneumol. 2006 Sep-Oct;12(5):603-13.