

## ECONOMIC IMPACT OF BIOLOGICAL TREATMENTS IN RHEUMATIC DISEASES

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### BACKGROUND

Due to the high cost of biological drugs, the evaluation of the direct costs has a considerable importance in the treatment of rheumatic diseases.

### PURPOSE

To evaluate the **dose patterns** of Etanercept (ETN), Adalimumab (ADA) and Infliximab (IFX) for the treatment of patients with Rheumatoid Arthritis (RA), Ankylosing Spondylitis (AS) or Psoriatic Arthritis (PsA) in a tertiary hospital. To calculate the **yearly average cost per patient** of each drug according to clinical practice.

### MATERIALS AND METHODS

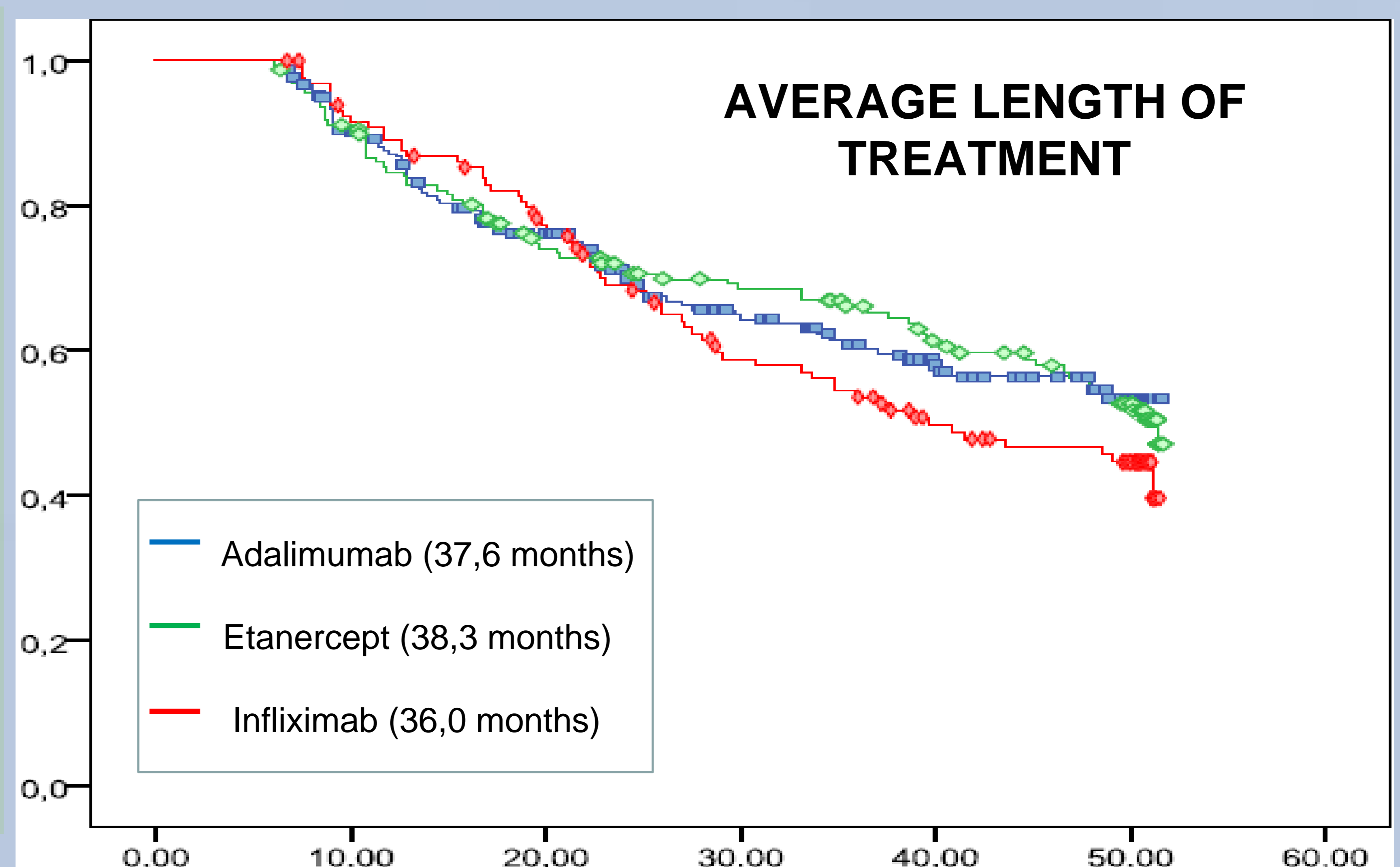
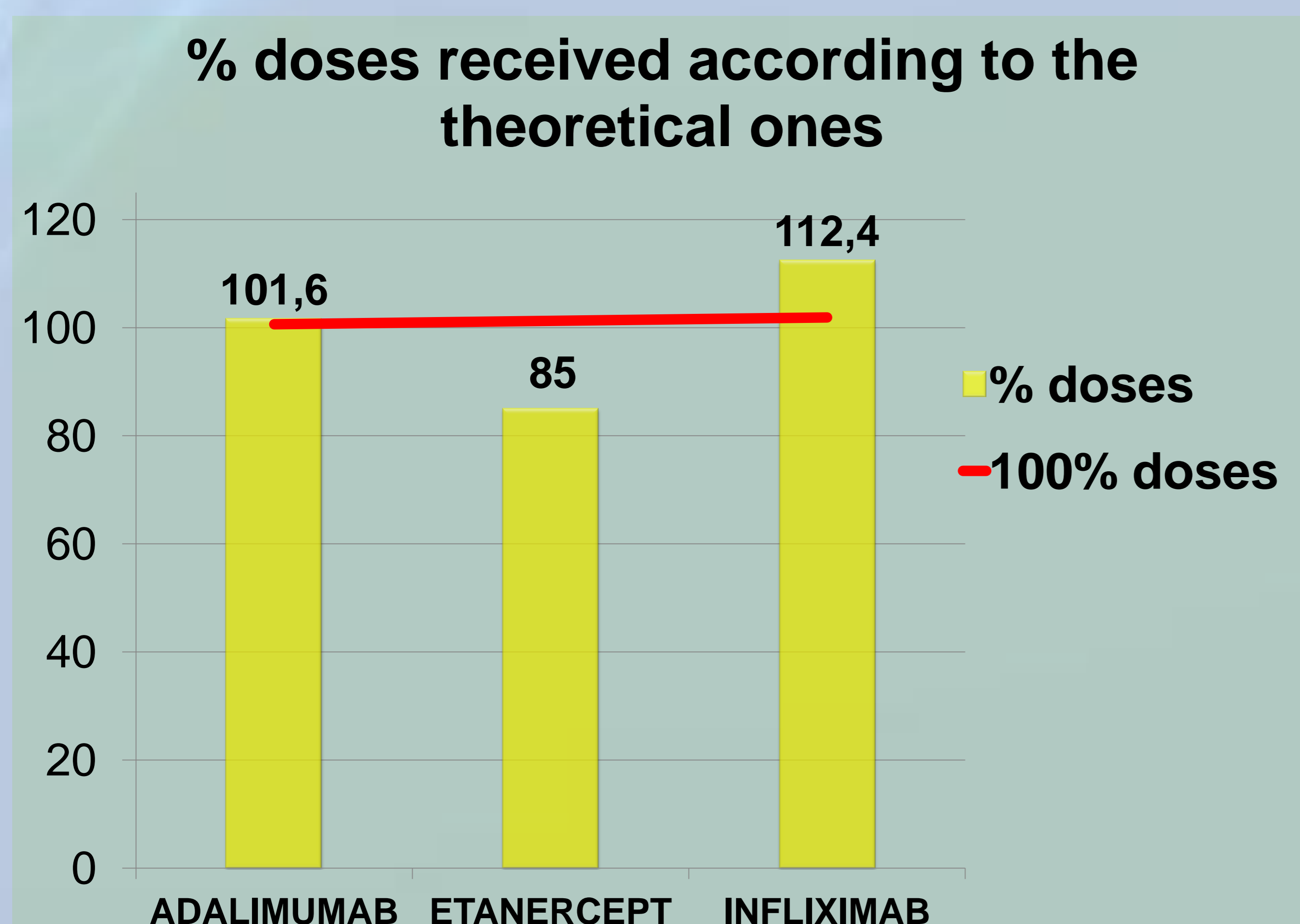
Retrospective study of patients treated with ETN, ADA and/or IFX, for at least six months between January/2009 and April/2013 and diagnosed of RA, AS or PsA by the Rheumatology Department. Periods of treatment, doses dispensed in hospital pharmacy office and periods of temporary interruption, were obtained. The cost of each drug (official data) was: ADA 40 mg, 494.6€; ETN 50 mg, 227.8€; ETN 25 mg, 113.9€; and IFX 100 mg, 516€. Administration costs of the infusion of IFX (173.7€) were added.

### RESULTS

507 patients, 200 men/307 women, with a mean age of 57 years were included. 73.2% (371) of the patients had RA, 14.8% (75) PsA and 12% (61) AS.

#### COST PER PATIENT/ YEAR OF BIOLOGIC TREATMENT

	Adalimumab	Etanercept	Infliximab	Total
<b>N</b>	216	159	132	507
<b>Mean</b>	13,073.19€	10,172.64€	12,283.52€	11,957.96€
<b>P_value (biologic treatment)</b>	< 0.001 (S)			
<b>P_value (ADA vs ETN)</b>	< 0.001 (S)			
<b>P_value (ADA vs INF)</b>	0.065 (N.S)			
<b>P_value (ETN vs INF)</b>		< 0.001 (S)		



### CONCLUSIONS

**Etanercept** compared to the most common biological therapies, has proved to be the **most cost-effective treatment** in these rheumatic diseases. Because there is a lack of studies evaluating the safety and efficacy between these drugs, **establishing a cost-usefulness algorithm in the selection of these drugs should be considered**, paying always attention to the presence of possible contraindications. This would result in a **containment of the healthcare expenditure and in an improvement of the efficiency of these treatments**.