INTRODUCTION

- Ankylosing spondylitis (AS) predominantly affects axial skeleton with the involvement of sacroiliac joints, and leads to irreversible structural changes causing a decrease in spinal mobility.1
- The disease onset often occurs during adolescence or in young adulthood. It can cause impaired function and activity limitation affecting negatively patients’ during their working life. From a social and patient perspective, this loss of productivity due to the physical impairment causes a significant economic burden.2,3

OBJECTIVE

- To appraise literature referred to direct and indirect costs of ankylosing spondylitis in Europe.
- To investigate the effect of biological treatment in disease activity.

METHODS

- A systematic review of the literature performed.
- Electronic databases [Medline/Pubmed, Cochrane Library, ISI Web, DARE, NHSEED, HTA] and Google Scholar were searched. Bibliographic references were hand searched.
- European studies, published in English or Spanish until May 2015, regarding direct and indirect costs of AS in Europe were selected.
- Editorials, letters, commentaries, opinion papers, congress proceedings and studies related to specific treatments were excluded.
- Costs were updated to €, 2015 using the ‘CCEMG – EPPI-Centre Cost Converter’ tool.4

RESULTS

Characteristics of the selected publications
- Of the 799 records identified initially, 10 publications were reviewed (Figure 1).
- Two systematic reviews, one cost-effectiveness study and seven observational studies (n=5 cross-sectional and n=2 retrospective), were included.
- Half of them (n=5) evaluated the economic burden related to AS from patient perspective. Most of them assessed the predictors of work impairment (absenteeism [time lost from work] and presentism [reduced productivity at work]) (Table 1).

Economic burden related to ankylosing spondylitis
- The indirect cost associated to work impairment was the most important determinant of the total cost of patients with AS. From the societal perspective, the indirect cost represented between 53.4% to 62% of the total cost.
- Several studies reported the association between disease severity and cost, showing that AS severity increased 2 times the direct cost and 4 times the indirect cost.
- The total cost increased 18.4 times from BASFI (Bath Ankylosing Spondylitis Disease Activity Index)=1 to BASFI=10, and 1.6 times form BASDAI (Bath Ankylosing Spondylitis Functional Index)=1 to BASDAI=10 (Figure 2).

CONCLUSIONS

- Although cost estimations related to AS varied across European countries, the results showed that economic burden of AS in Europe is substantial, being the indirect cost due to productivity loss the main component of total cost. Worse physical function and higher disease activity were the main determinants of total costs. Disease activity and depression were associated with absenteeism and presentism.

REFERENCES