BACKGROUND:

- Rheumatoid arthritis (RA) is the most common chronic inflammatory rheumatic joint disease in industrialized countries [1,2].
- This study provides information on the current supply with biological agents and its related costs (other medication, outpatient care, hospital admission) in Germany.

METHODS:

- The design is a retrospective claims data analysis.
- The data source is the database of the Institute for Applied Health Research (InGef) Berlin, formerly HRI Health Risk Institute, which includes the structure of the German statutory health insured population (Destatis, Dec 31st, 2013).
- The target population consists of patients who met following criteria with regard to the observation period from 2012 to 2016:
  1. Main diagnosis of RA (using relevant ICD-10 codes according to Table 1), and/or
  2. Treatment with approved biological agent for RA at least for three months if if the diagnosis occurred before 2012 patients were only selected if they were already on treatment at the beginning of the observation period in 2012.
- The relevant patient sample was then split into three groups with regard to the observation period from 2012 to 2016:
  1. Patients who start a biological treatment (“New”)
  2. Patients who get continuous treatment with the same biological (“Repeater”)
  3. Patients who switch biological (“Switcher”)
- In sum, 233 patients could be included in the sample.
- The study evaluated direct medical costs (drugs, outpatient care and hospital admission), hospital admission and change in medication.
- Treatment costs included costs for biological agents which were approved for the treatment of RA (as of April 2017, see also Table 2). Furthermore, the following medication groups were considered to be RA related (see also Table 3): Corticosteroids acting locally (ATC-Code A02EA), Aminosyrin and similar agents (ATC-Code A02EC), Selective immunosuppressants (ATC-Code L04AA), and analgesics (ATC-Code N02BB). Frequency of hospital admissions and related costs are based on DRG which are relevant for RA.
- In case that a patient changed therapy during the observation period, he was further included only if he continued receiving a biological agent.
- Figure 1 depicts an overview of the analysis of the sample.

RESULTS:

- Most patients with RA are aged above 46, thereby the proportion below 17 years’ age costs for less than 2%. The average age of all age cohorts is 54.8 years, with the subgroup of men slightly younger than women (53.8 yr men vs. 55.2 yr women).
- The proportion of women is more than twice as high as men (68.5% male vs 31.5% female) (see also Figure 2).

CONCLUSIONS:

- Elanercept and abalumumab are administered mostly to patients who are already on treatment (in 2015 etanercept 32.7% vs. abalumumab 28.9%).

REFERENCES: