

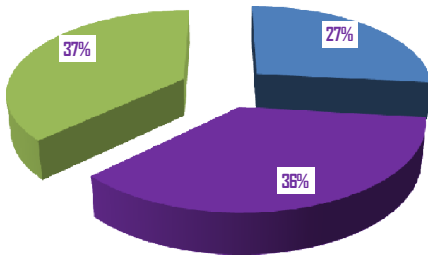
# ROLE OF THE CLINICAL PHARMACIST IN THERAPEUTIC OPTIMISATION OF BIOLOGIC MOLECULES IN RHEUMATOLOGY, GASTROENTEROLOGY AND DERMATOLOGY



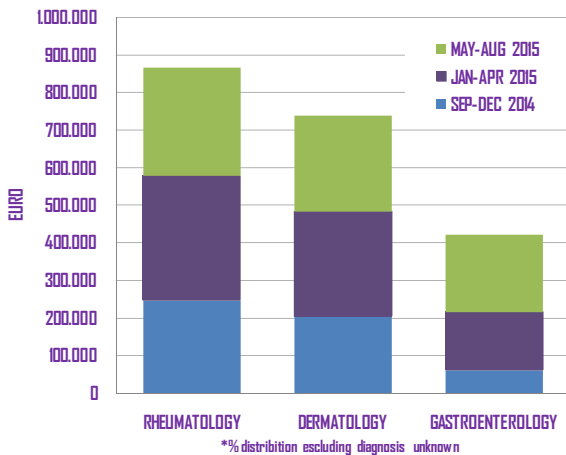
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Pic. 1-EXPENDITURE TREND

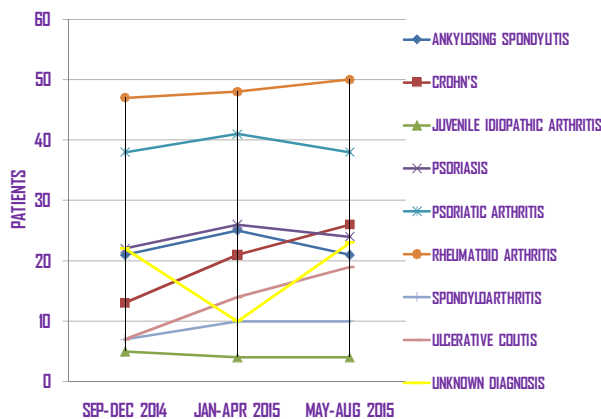
■ SEPTEMBER-DECEMBER 2014 ■ JANUARY-APRIL 2015 ■ MAY-AUGUST 2015



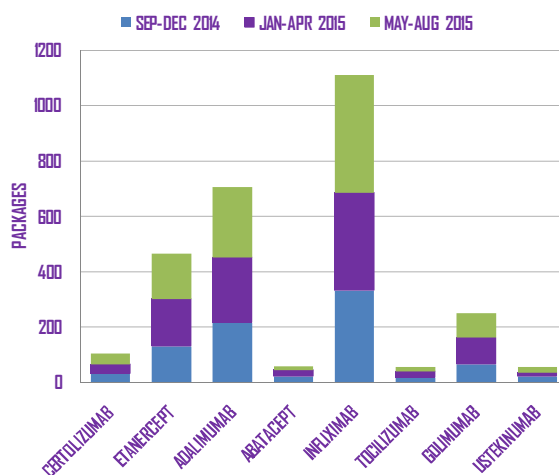
Pic. 2-EXPENDITURE PER DIAGNOSIS\*



Pic. 3-TREND OF DIAGNOSIS BASED ON PATIENTS



Pic. 4-DRUGS CONSUMPTION



## Background

Biologic molecules for rheumatologic, gastroenterological and dermatologic diseases are expensive treatments. Marche Region Resolution 974/2014 aims to estimate Health Care use of these drugs by introducing (since August 2014) a treatment plan for molecules not enlisted in the National (i.e. AIFA-Italian Drug Agency) monitoring registry.

## Purpose

To optimize biologic drugs use through adherence evaluation of patients who visited the Pharmacy of Macerata General Hospital (136.750-inhabitants-catchment-area).

## Material and methods

We drafted a review of certolizumab, etanercept, adalimumab, abatacept, infliximab, tocilizumab, golimumab and ustekinumab prescriptions received by the Hospital Pharmacy from September 2014 to August 2015. Diseases treated were: rheumatoid arthritis, ankylosing spondylitis, spondyloarthritis, psoriasis, psoriatic arthritis, juvenile idiopathic arthritis, ulcerative colitis and Crohn's. Data collection produced a database with patients' information, prescriber, diagnosis, doses provided by the Pharmacy and therapy adherence. Dosage, dosing schedule and administrations frequency (first or second year of treatment) were compared with data in the Summary of Product Characteristics (SPC). Body weight and year of treatment (first or following) were unknown.

## Results

During one-year-treatment 2.207.239,03 € (picture 1 and 2) had been spent to treat 229 patients (0,17% of inhabitants). Adalimumab, infliximab and etanercept had the highest costs (respectively 27,7%, 24%; 21,4%). Database displayed that: rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis were the main diseases (picture 3), respectively 53 (23,1%), 25 (10,9%), 24 (10,5%) cases; 4.354 doses had been provided (2.795 packages) (picture 4). Leaving out treatment failures (interruptions and switches), number of administrations was consistent with SPC data. A total of 28,8% patients (66/229) were non-adherent: 45 interruptions (68,2%) with 33,3% due to rheumatoid arthritis; 21 switches (31,8%) with 33,3% of rheumatoid arthritis and 23,8% of psoriatic arthritis. Adalimumab had the major number of switches (9 vs. 21) in the treatment of psoriatic arthritis (33,3%) and ankylosing spondylitis (22,2%).

## Conclusion

Treatment plans allowed monitoring biologic prescriptions over one-year-time and promoted clinician-pharmacist collaboration. Monitoring leads to a multidisciplinary approach and analysis of switching reasons (i.e. inefficacy or adverse drug reactions) will be the next step to enhance the quality of care in rheumatologic, gastroenterologic and dermatologic patients.

## References

Marche Region Resolution 974/2014