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## **GROWING USE OF mAbs**

## Sonay Aydin, Ozlem Celik Aydin and H Zafer Guney

Gazi University, Turkey

**Background & Aim:** Monoclonal antibodies (mAbs) have been growing and evaluating since last three decades as powerful human therapeutics. First mAb to be approved by FDA is Muromonab, a murine CD3 antibody, which is used to prevent kidney transplant rejection. First chimeric mAb was approved by FDA in 1997 for the treatment of lowgrade B cell lymphoma (Rituximab). Then, humanized and fully human monoclonal antibodies are presented into the drug markets. Since then, both the number of different mAbs, and the number of indications to use mAbs have been growing increasingly. As of Mar' 2017, FDA has approved approximately 60 therapeutic mAbs. Also, mAbs are approved for the treatment of diverse diseases related to various systems such as cardiovascular, respiratory, hematology, kidney, immunology and oncology. In this study, we aim to define the amount of mAb usage, and mAb usage trends in a single university hospital for a 17 years period (2001-2018).

Materials & Methods: We have evaluated the medical records of our tertiary center, retrospectively in order to define the changes of the amount of mAb usage, and mAb utilization trends. Also, we want to define the clinics which used mAbs most commonly.

**Results:** We have found that the amount of mAbs used have been increasing since 2001 (in 2001, only four packages of mAbs were used, meanwhile in 2018, 14653 packages of mAbs have been used). The biggest amount of mAbs is utilized by haematology clinics, both for pediatric population and adults (140017 packages adult haematology clinic, 2789 packages for paediatric haematology clinic). Haematology clinics are followed by nephrology, and oncology clinics, respectively.

**Conclusion:** With the advent of mAbs technology, the indications and usage of mAbs have been increasing every day. The invention of biosimilars can also increase the affordability, as well as the utilization of mAbs.

sonaydin89@hotmail.com