

# Global Trend of Liraglutide Role in treatment of Diabetes Mellitus Type 2: Bibliometric Analysis over the last two decades

Manar Ahmed Kamal <sup>1</sup>, Raneem Mahmoud Al-Arawi <sup>2</sup>

1. Faculty of Medicine, Benha University, Benha, Egypt., 2. Bachelor's degree, Faculty of Biotechnology, October University for Modern Sciences and Arts (MSA), Cairo, Egypt.

## Background

Type 2 diabetes mellitus (T2DM) is a chronic progressive metabolic disorder, and liraglutide is one of the glucagon-like peptide-1 (GLP-1) agonists used to decrease glucose levels in the blood to help in weight loss in patients with T2DM. Bibliometric analysis is one of the most common statistical methods used to evaluate scholarly work's credibility, quality, and impact.

## Aims

To introduce the ten most cited articles, journals, countries, and years about using liraglutide to treat patients with diabetes mellitus type 2.

## Methods

We performed a systematic review and bibliometric analysis over the last two decades (2000-2020) by search on the Web of Science (WOS) database for studies published in the literature in June 2021 by using relevant keywords ("Diabetes Mellitus, Type II") AND (Liraglutide). We extract the data of the most ten cited articles, journals, countries, and years. The bibliometric analysis was performed by HistCite software.

## Results

There are 2500 records entered the bibliometric analysis and divided into 1813 articles and 687 reviews. The highest cited paper was "Liraglutide and Cardiovascular Outcomes in Type 2 Diabetes". The LANCET was the top-cited journal with 7599 global citations. Novo Nordisk AS and USA were the most cited institutions, countries in order, and a maximum number of publication records. Among the most cited articles, 2016 was the first global citation year score (n=9585), while 2020 was the top in publication record number (n=310).

## Conclusion

Our bibliometric analysis provides quantitative and qualitative analyses and gives insight into the citation frequency of top-cited articles published using liraglutide to treat diabetes mellitus type 2.