

## Identification of Drugs for the Simultaneous Treatment of Type 2 Diabetes *Mellitus* and *Helicobacter pylori* Infection

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Diabetes is a highly prevalent disease worldwide, affecting approximately 10% of the global population, with type 2 diabetes mellitus (T2DM) accounting for 95% of cases. In Mexico, a similar prevalence is observed, particularly among individuals over 60 years old. Similarly, *Helicobacter pylori* infection represents a significant public health challenge, affecting nearly half of the global population and reaching prevalence rates as high as 70% in Mexico. T2DM and *H. pylori* infection are typically treated independently, however, several epidemiological studies have suggested a potential association between the two conditions.

In light of this, the present project aimed to identify pharmaceutical agents with therapeutic potential for the simultaneous management of T2DM and *H. pylori* infection. To this end, a bidirectional bibliometric analysis was conducted, focusing on medications commonly used in Mexico. This analysis identified metformin as a promising candidate with potential efficacy against both conditions.

The discovery of such dual-purpose drugs offers the opportunity to optimize existing treatment protocols, reduce polypharmacy, and ultimately improve clinical outcomes for affected patients.