BIOACTIVE COMPOUNDS FROM *Artemisia vulgaris* AND POTENTIAL INTERACTIONS WITH TARGETS OF GASTRIC ULCER BASED ON NETWORK PHARMACOLOGY

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INTRODUCTION
Artemisia vulgaris Linnaeus (Asteraceae), native to Asia and Europe, has a widespread global distribution. In Brazil, its common names vary by region, including "mãe-das-ervas" and "artemisia," with its leaves traditionally used for treating inflammation and gastrointestinal disorders. However, the mechanisms underlying its gastroprotective activities in silico have not yet been explored. In this context, the present study aimed to employ network pharmacology approaches to elucidate the pharmacological mechanisms involved in the treatment of gastric ulcers, using compounds identified in the Hydroalcoholic Extract of *A. vulgaris* (HEAv).

MATERIAL AND METHODS
The compounds present in the hydroalcoholic extract of *A. vulgaris* (HEAv) were identified through Mass Spectrometry (ES-IT-MS). The prediction of biological targets was conducted using a database (SwissPredict and SuperPred). Additionally, a Venn diagram was constructed to identify the common targets of *A. vulgaris* as well as the specific targets associated with gastric ulcers. For the construction of the pharmacological interaction network, the Stitch and Cytoscape servers were used to identify and classify the targets, thereby enabling the observation of significant interactions.

RESULTS
The chemical analysis resulted in the identification of quercetin, caffeic acid, p-coumaric acid, gallic acid, and epigallocatechin. The isolated compound sabinene, selected from the literature was also included in the research. Through the Venn diagram, the compounds in question showed 17 common biological targets. Among the 5.010 disease-associated targets, only 10 targets were identified as shared between the pathological condition and the plant compounds. In constructing the interaction network, the targets with the highest-ranking scores were BCL3, RELA, CHUK, IKBKB, NFKB1, and NFKBIA.

CONCLUSIONS
A. vulgaris demonstrated a strong association with the targets involved in inflammatory processes, indicating its considerable potential for gastroprotection.

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