

# MAPPING PHARMACY JOURNALS THROUGH LEXICOGRAPHIC ANALYSIS OF ARTICLE TITLES

Antonio M. Mendes<sup>1</sup>, Fernanda S. Tonin<sup>1</sup>, Roberto Pontarolo<sup>2</sup>, Fernando Fernandez-Llimos<sup>3,4</sup>

<sup>1</sup>Postgraduate Program of Pharmaceutical Sciences, Federal University of Parana, Curitiba, Brazil

<sup>2</sup>Department of Pharmacy, Federal University of Parana, Curitiba, Brazil

<sup>3</sup>Department of Social Pharmacy, Faculty of Pharmacy, University of Lisboa

<sup>4</sup>Research Institute for Medicines (iMed.ULisboa), University of Lisboa, Lisbon, Portugal

CONTACT: f-llimos@ff.ulisboa.pt

## INTRODUCTION

Pharmacy, as an area of knowledge, encompasses both technological, analytical and care components, which challenges its categorization into a single Subject Area.

## AIM

To map the available pharmacy journals as regards their scope.

## METHODS

Journals publishing in English and with titles including pharmacy-related terms (i.e. pharmacy, pharmacist\*, pharmaceuti\*, pharmacol\*, pharamacotherap\*) were identified in four electronic databases: the National Library of Medicine Catalog; PubMed Central Journal list; Scopus CiteScore Metrics; and Journal of Citation Reports. The titles of all articles (published between 2006-2016) were extracted and gathered in a single textual corpus.



The following analyses were performed (Iramuteq 0.7 alpha 2): lexicographic analysis to determine the text segments (ST) and frequency of words; descending hierarchical classification (DHC) to categorize words and journals with similar lexical groups; and correspondence analyses (CA) to obtain bidimensional graphs.

## RESULTS

A total of 285 journals were identified. In the lexicographic analysis, 316,089 article titles were analyzed with a satisfactory performance. The DHC generated a dendrogram with six distinct lexical classes. The classes were separated into three main branches: Group A (classes 2 and 6), Group B1 (classes 1 and 5) and Group B2 (classes 3 and 4). The three most representative words and journals for each class are listed in the Figure 1 (p-value <0.01 in DHC analysis). The two cartesian planes obtained in the CA showed a clear separation between groups A and B, but without clear distinction between the classes of the same groups.

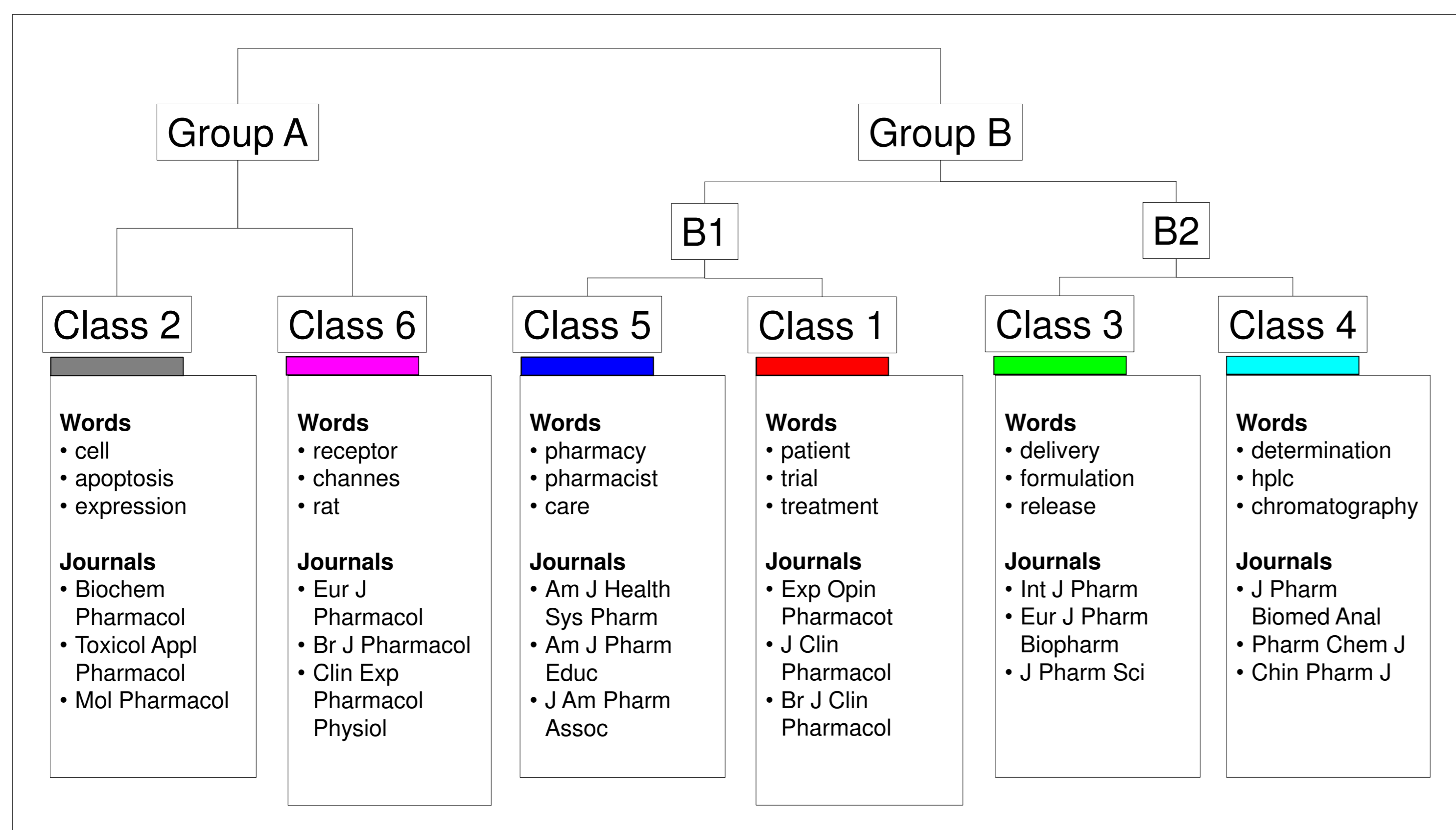


Figure 1. Dendrogram of lexical classes and the most representative words and journals

Figures 2 and 3 show CA results for the active words and journals titles, respectively. The colors correspond to the lexical classes identified in the DHC analysis. The distance between words indicates the level of lexical similarity.

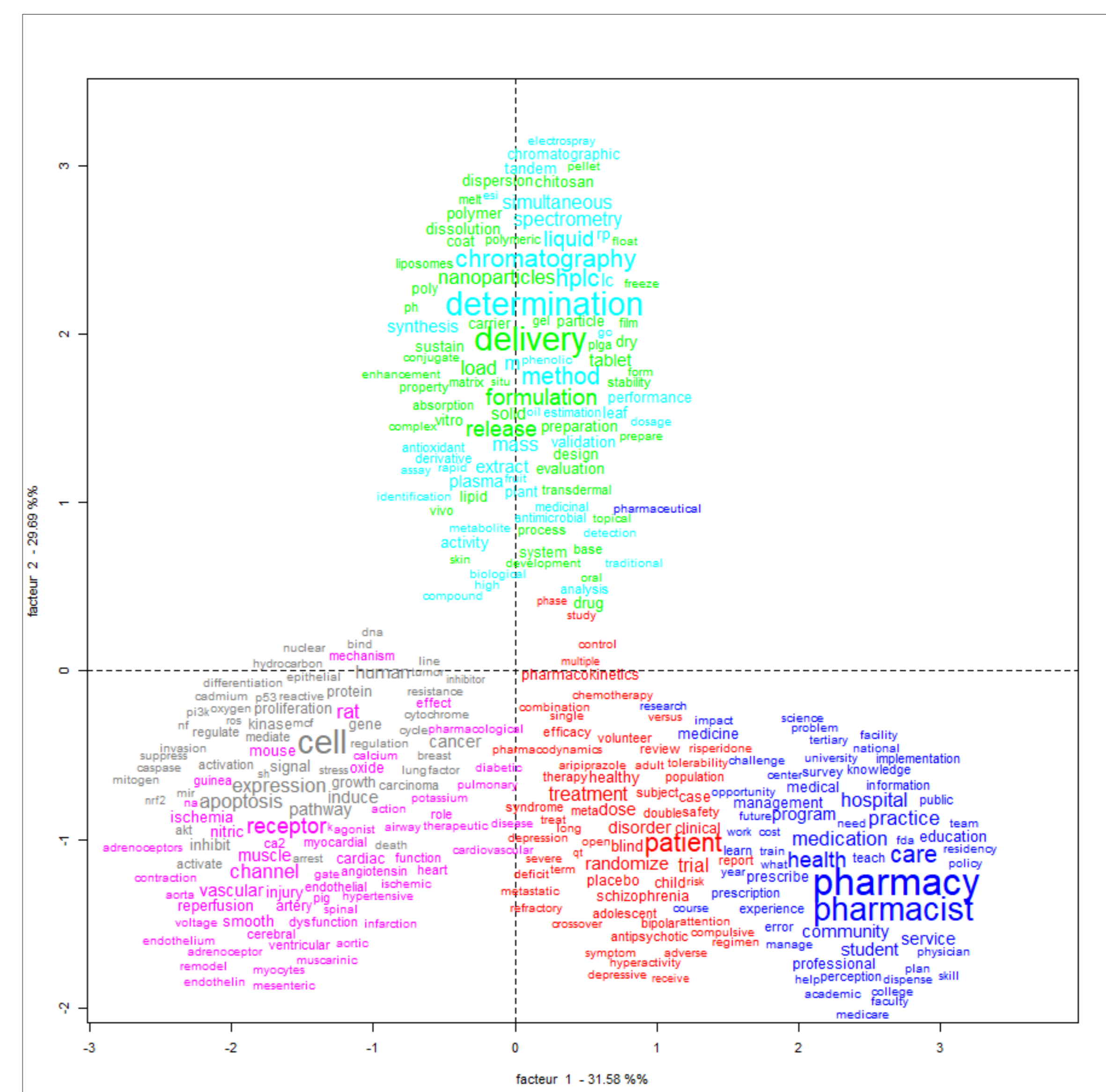


Figure 2. Bidimensional graph of active words

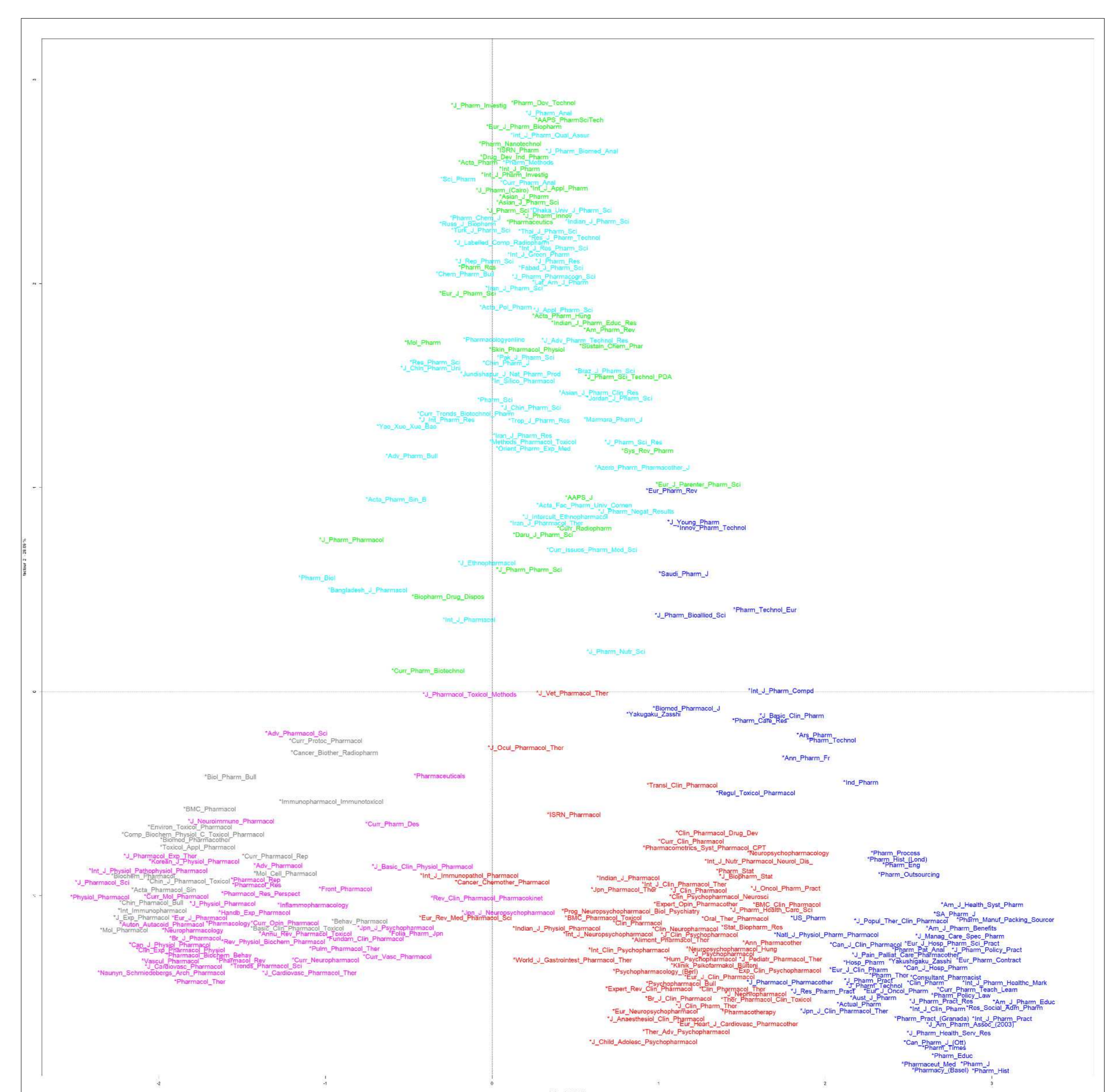


Figure 3. Bidimensional graph of Pharmacy Journals

## CONCLUSIONS

Through an objective method of textual analysis, we were able to classify the Pharmacy Journals into three groups and sub-areas: Group A: (2) Cell Pharmacology; (6) Molecular Pharmacology; Group B1: (1) Clinical Pharmacology; (5) Pharmacy Practice; Group B2: (3) Pharmaceutics; (4) Pharmaceutical analysis

## REFERENCES

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