# **Comparison Report**

Abstract: This report compares the results of two different runs on the same query set.

**Baseline run:** ALLSTEPS\_1\_bm25\_article\_stop671\_porter\_k1\_b0.5.txt **Test run:** NOSTEPS\_3\_bm25\_article\_stop671\_porter\_k1\_b0.5.txt.

## **Correlation Metrics**

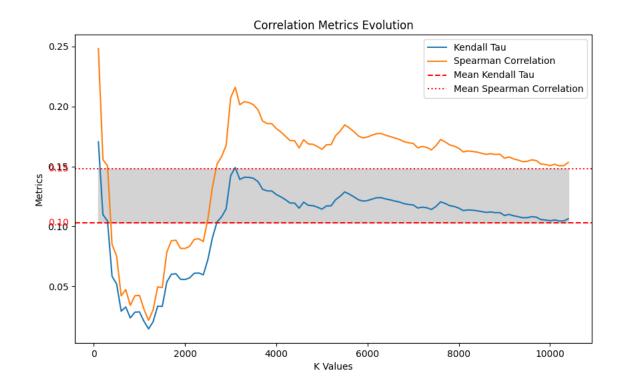
Correlation Metrics: **Kendall's Tau** and **Spearman's Rank Correlation** are two metrics that measure the similarity between two rankings. The values of these metrics are shown below. The correlation metrics are calculated using the first **1500** documents of the ranking.

#### Exact values:

Metric	Value
Kendall's Tau	0.0332
Spearman's Rank Correlation	0.0489

#### Correlation Metrics Evolution:

Let's observe how the correlation metrics evolve as we consider more documents in the ranking. Larger values of **K** means that more documents are considered in the ranking. The evolution of the correlation metrics is shown below.



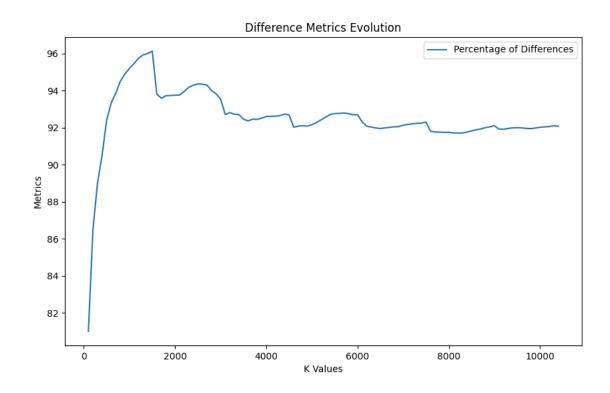
## **Difference Metrics**

The difference metrics are calculated using the first 1500 documents of the ranking.

Metric	Value
Number of differences	1442.0000
Percentage of differences	96.1333

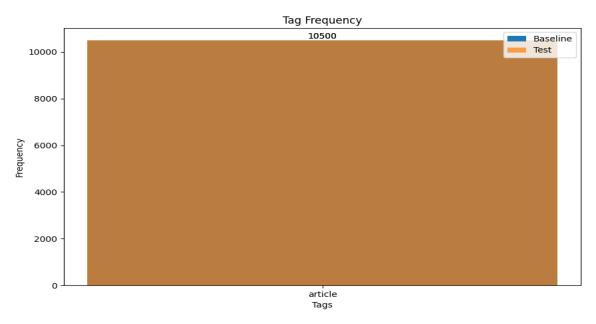
### Difference Metrics Evolution:

Let's observe how the difference metrics evolve as we consider more documents in the ranking. Larger values of  $\mathbf{K}$  means that more documents are considered in the ranking. The evolution of the difference metrics is shown below.



# **Tag Frequency**

The tag frequency is calculated on the whole ranking. In this section we will try to indentify the tags that are more frequent in the test run.



Let's say we should only consider the tags that are present in more than **10%** of the results. Then we should only consider the following tags: **article** 

### Tag Frequency Evolution:

The objective is to be sure the evolution of the tag frequency is linear, which means that a query is not biased by a particular tag.

