



## USE CASE - ADVERSE DRUG REACTIONS DETECTION FROM DISCHARGE SUMMARIES



### CONTEXT

A major Swiss hospital and medical research center wanted to test NLP approaches in a country-wide research project they were leading.

The hospital commissioned Effixis to develop NLP models for tagging and classifying Electronic Health Records (EHR) based on adverse reaction to antithrombotic drugs and associated events.

### SOLUTION

An annotation protocol was designed in collaboration with the hospital's pharmacologists and produced a dataset of annotated medical records.

This dataset, along with pre-trained models and other medical datasets for NLP, enabled us to build a Named Entity Recognition model for the automatic annotation of drugs, events, risk factors, etc.

The model is the first of its kind for EHR in French.

This project is still ongoing and will lead to a scientific publication in collaboration with the hospital.

### BUSINESS IMPACT

- Enabling physicians to make data-driven decisions when releasing patients from hospitals
- Findings for treatment of hemorrhages

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