







# **AEMPS PROJECTS**

Facultad de Informática Universidad Politécnica de Madrid Campus de Montegancedo s/n 28660 Boadilla del Monte, Madrid, Spain

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## Biomedical resources in Natural Language

# **Drug fact sheet**

- Official document of the drug with the essential information
- In Natural Language
- No common format

# Drug Name Asenapina Therapeutical information For patients with schizophrenia. Adverse reactions May produce headaches.

Drug fact sheet of Asenapina

In collaboration with the Spanish Drug Regulatory Agency (AEMPS)



# **Project 1**

Identification of **diseases** for which the drug is prescribed in order to obtain more control over the national demand

# **Project 2**

Identification of **adverse reactions** to automatize pharmacological surveillance processes over the population



## **Performed tasks**

### Natural Language Processing

- Disease identification based on lexicalsyntactic patterns and dictionaries
- Patterns are dependent of the semantic
   value of the disease (Prescribed for or adverse reaction)

#### **Drug Name**

Asenapina

#### **Therapeutical information**

For patients with schizophrenia.

#### Adverse reactions

May produce headaches.

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Drug fact sheet of Asenapina

## Mapping

- Homogeneous term search on terminologies or dictionaries
- Unique representation for a disease
- Algorithms to provide best candidates without false positives

**SNOMED-CT** 

Mappina



Systematized Nomenclature of Medicine – Clinical Terms

MedDRA Dictionary



Medical Dictionary for Regulatory Activities