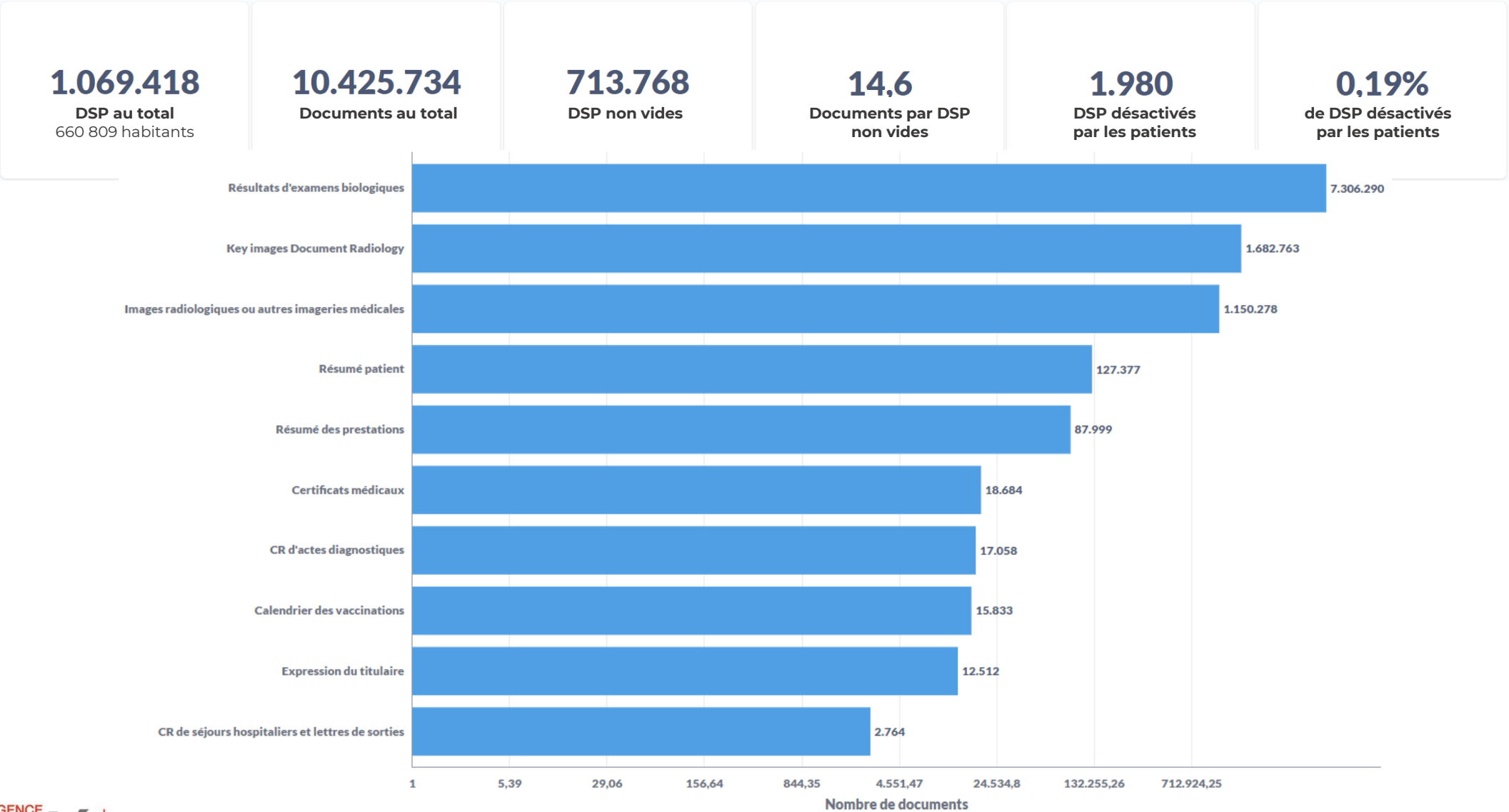




# Statistiques SmartDSP

# **SMARTDSP (DSP v3)**

# Types of documents and consultations

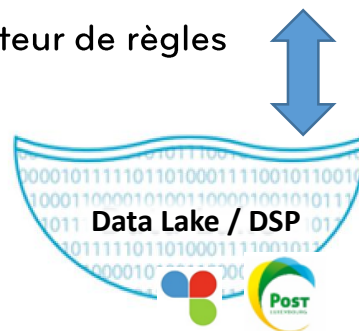


# A Data Lake serving the DSP?

The DSP serves as a storage space for "passive data"



Moteur de règles



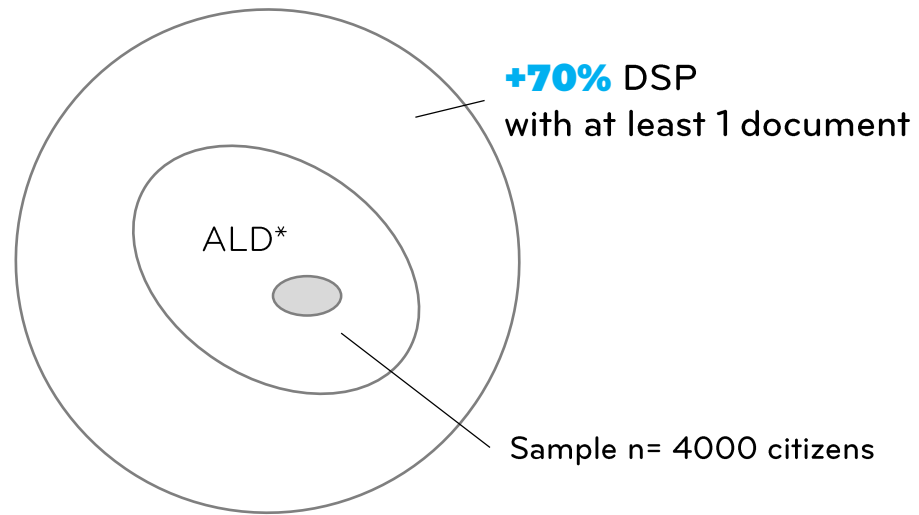
Smart DSP  
Intelligent utilization of "passive data"



# Intelligent analysis of DSP'S Data

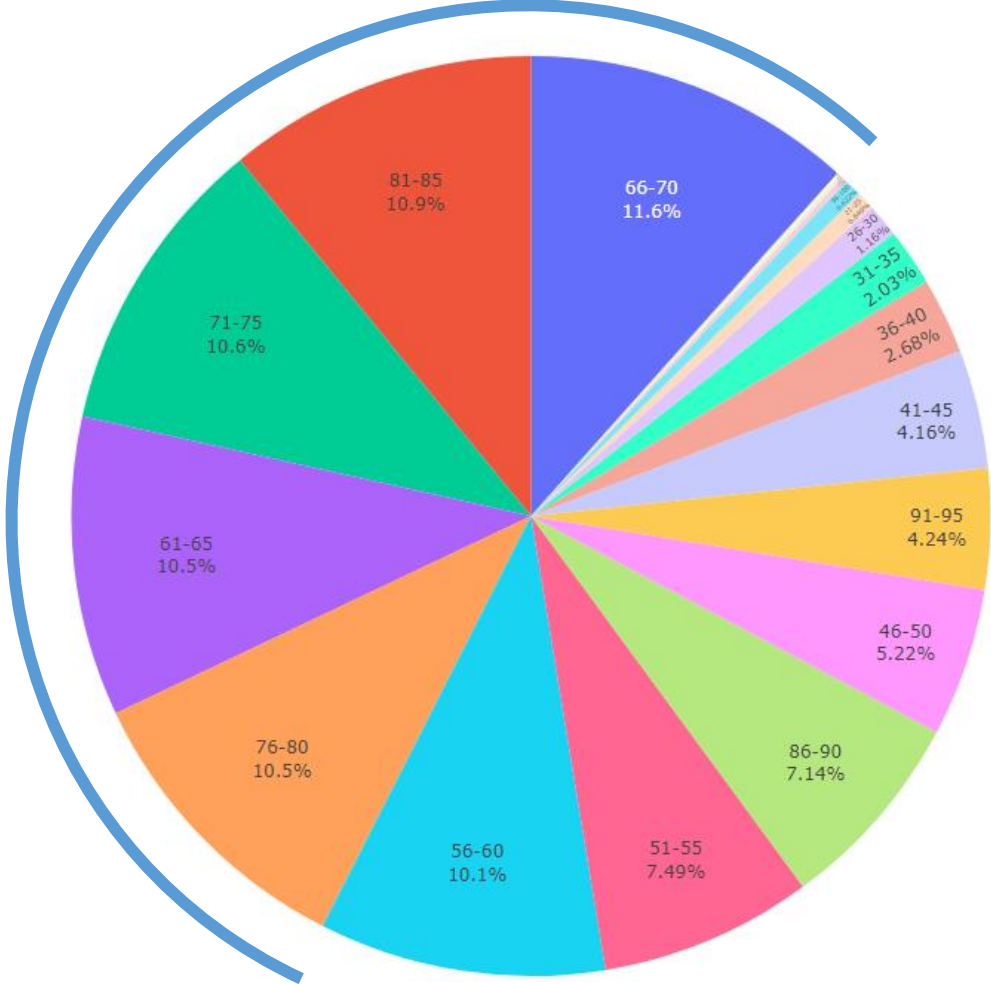


**+ 1 million DSP for a population of 660 809 residents**



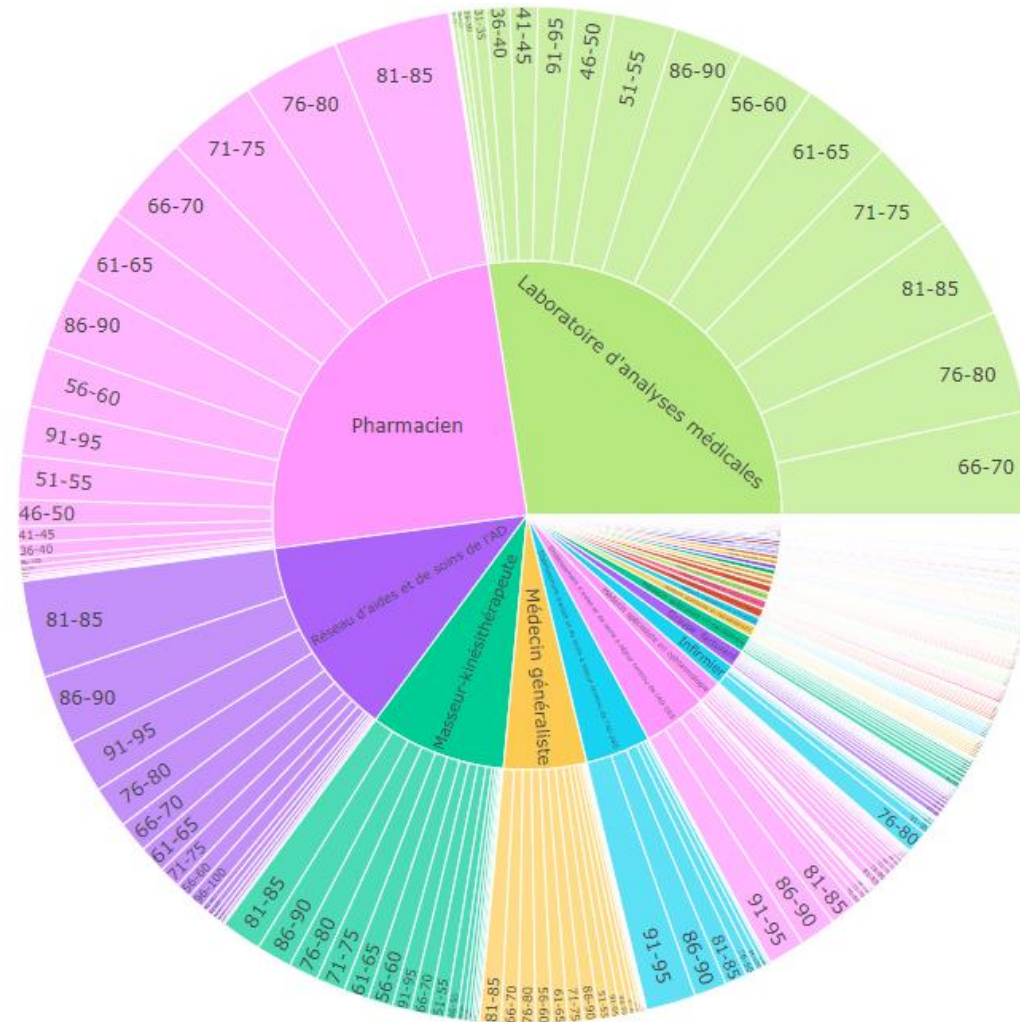
\*Affection de Longue Durée

# Age group 60-85: 50% ALD





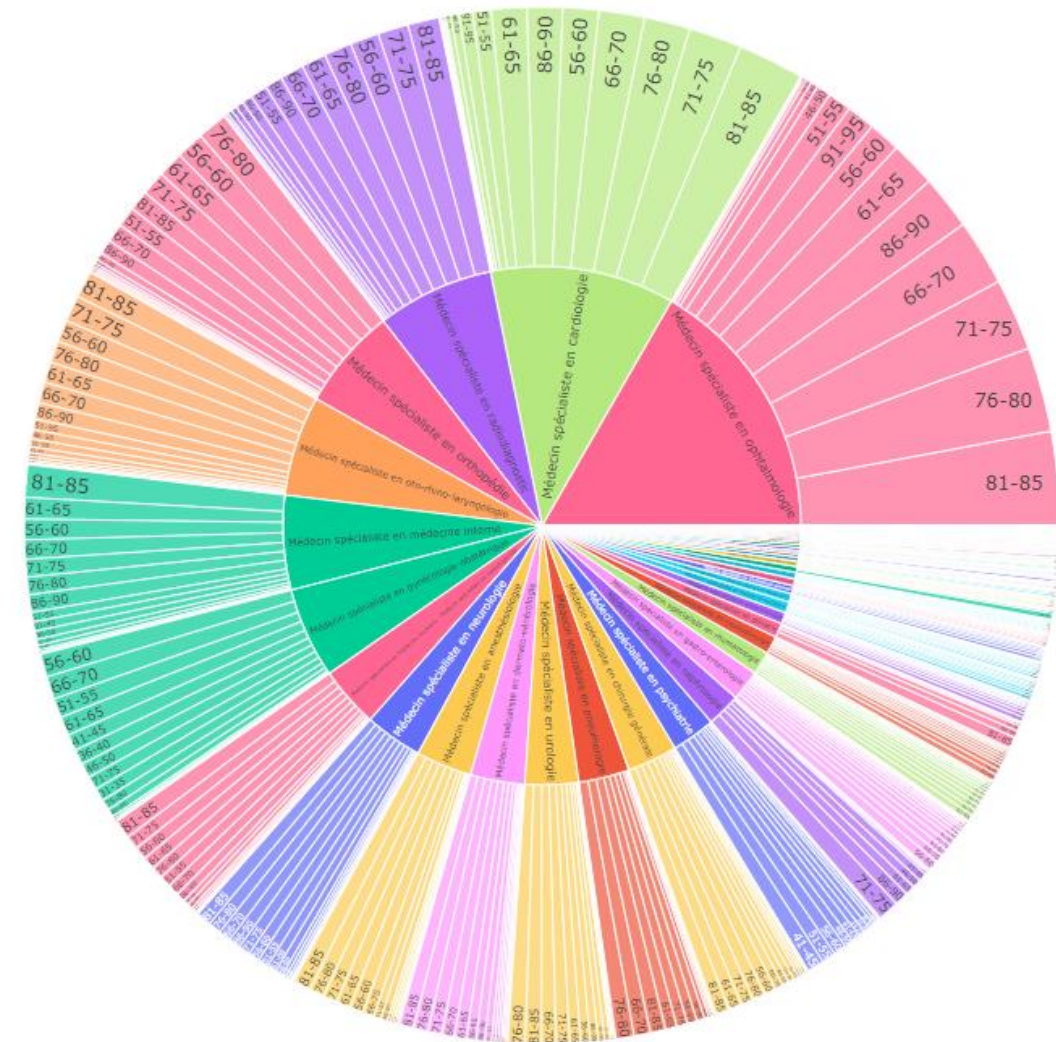
# Distribution of healthcare procedures by age group





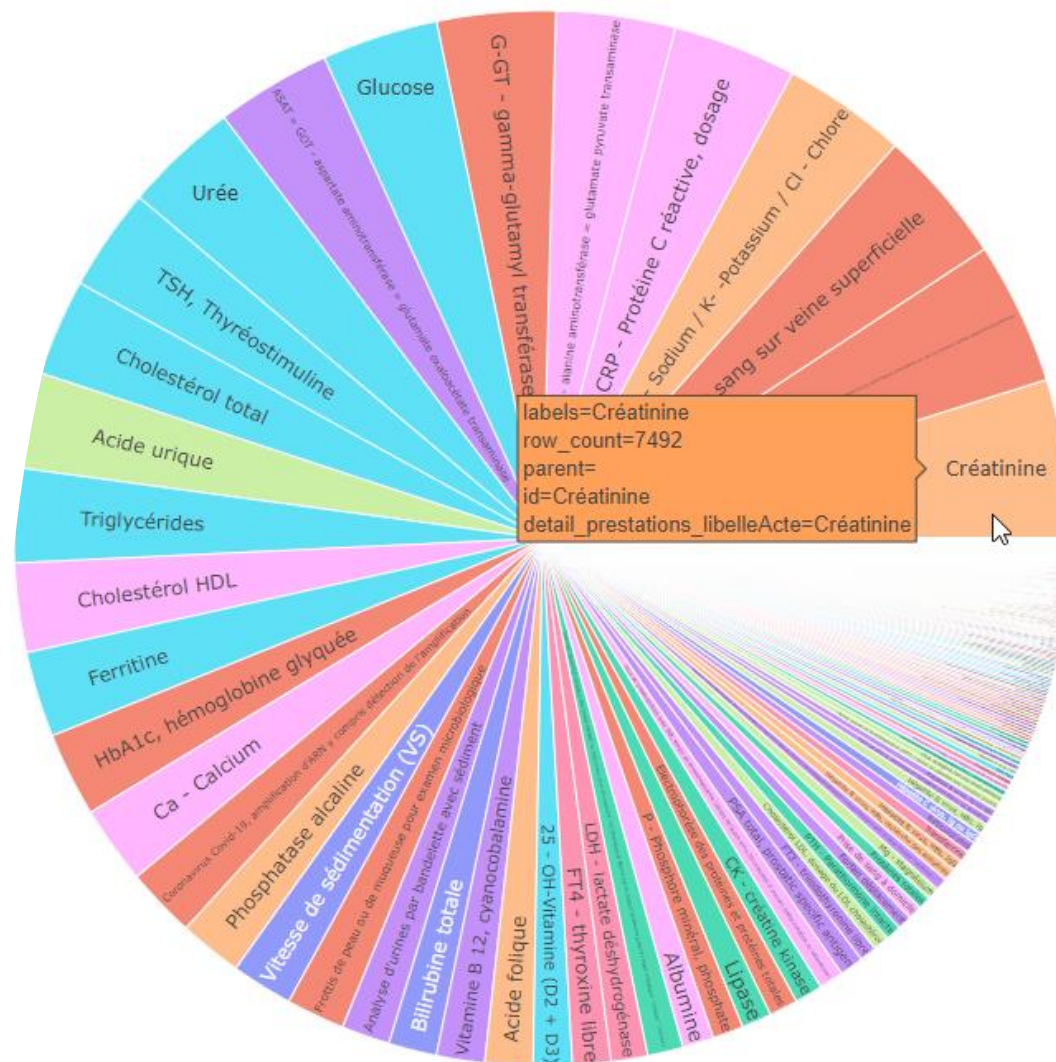
# Most consulted specialty?

Specialist in ophthalmology



# Most popular biological analysis?

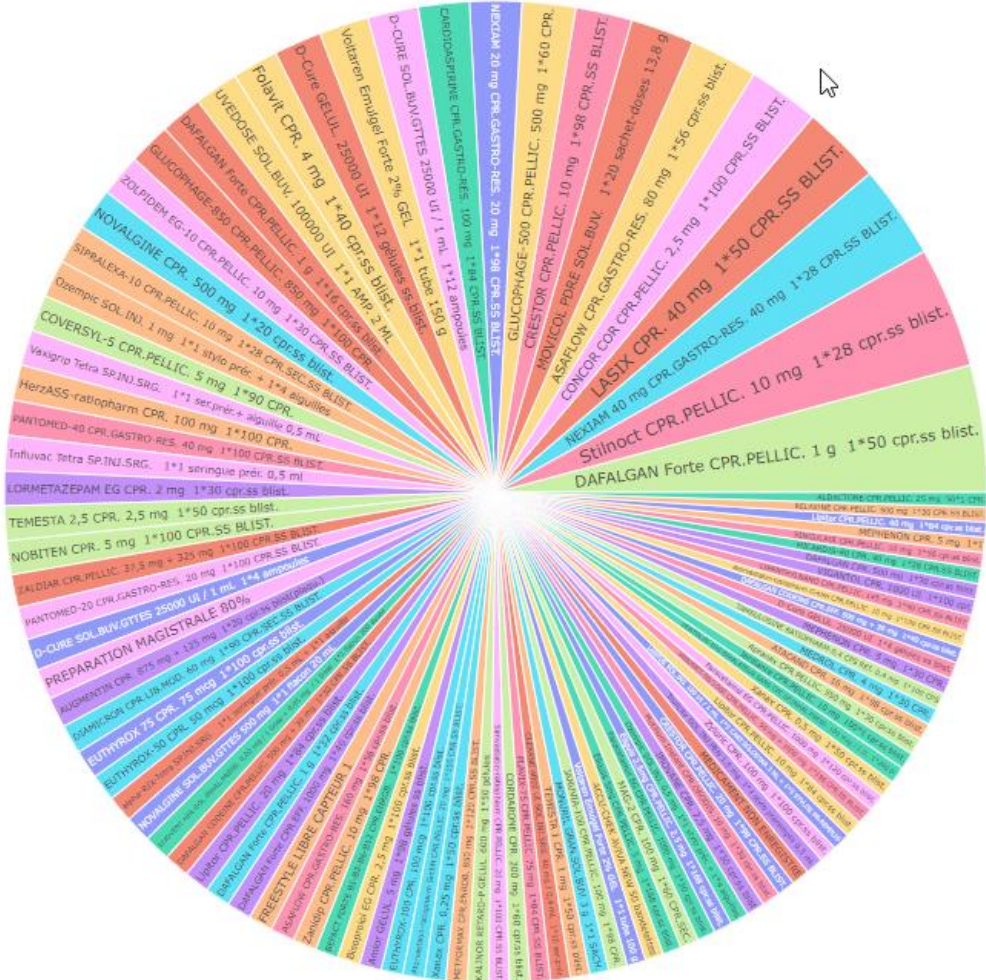
Creatinine





# Most popular drug?

Dafalgan



# Hereditary Hemochromatosis (HH)

Hereditary hemochromatosis is a **broad term encompassing several rare genetic disorders** that affect 1 in 300 individuals in the United States. However, this condition often goes undiagnosed, partly due to its nonspecific symptoms. The classical form of hemochromatosis is more common in white males of Northern European descent

A study published in 2018 in the American Journal of Hematology titled "Hereditary Hemochromatosis: Insights from the Hemochromatosis and Iron Overload Screening (HEIRS) Study" focused on blood screening for hemochromatosis. The study aimed to identify individuals at risk for this iron overload disorder by measuring serum transferrin saturation and ferritin levels, enabling early detection and intervention.

## Rules:

- A high transferrin saturation level
- A high ferritin level



Alerte DSP

# Cystic fibrosis (CF)

Cystic fibrosis (CF) is a **rare genetic disease that reduces life expectancy**. It affects **1 in every 2,500 to 3,500 white newborns**. There are approximately 30,000 individuals with cystic fibrosis in the United States and around 70,000 individuals worldwide.

Research in this field continues, and new biomarkers may emerge over time. Here are some examples of blood biomarkers that have been studied for their potential relevance in CF:

1. C-reactive protein (CRP): CRP is an inflammation marker that can be elevated in individuals with CF.
2. Neutrophil elastase: Neutrophil elastase is an enzyme released by white blood cells (neutrophils) and is associated with lung inflammation and tissue damage. High levels of neutrophil elastase have been observed in CF patients.
3. Interleukin 8 (IL-8): IL-8 is a pro-inflammatory cytokine. Elevated levels of IL-8 have been associated with CF-related lung inflammation.
4. Fecal elastase-1: Fecal elastase-1 is an enzyme produced by the pancreas. Low levels of fecal elastase-1 in the blood may indicate pancreatic insufficiency, a common complication of CF.
5. Serum markers of liver function: Some individuals with CF may suffer from CF-related liver disease. Serum markers such as alanine aminotransferase (ALT) and gamma-glutamyltransferase (GGT) can be monitored to assess liver health.

## → Rule:



Alerte DSP

- High level of CRP
- High level of IL/de cytokines (BC068)
- Presence d'ALT/GGT
- (Low level/présence d'élastase (BC407)) ?

## Agence eSanté Luxembourg

Agence nationale des informations dans le domaine de la santé

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Site Internet: [www.esante.lu](http://www.esante.lu)



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