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Introduction

- ❖ The biological medicines development was a major progress in treatment of chronicle diseases and cancers.
- ❖ Their high costs are a financial issue for hospital. The arrival of biosimilar drugs improved their accessibilities by reducing their prices. Nevertheless, in France, their consumptions are still low.
- ❖ PHARMAVIENNE is an order group for health products of 30 public healthcare institutions, located in the Auvergne – Rhône-Alpes region (France). In 2016, a first biosimilar Infliximab was referenced in this order group, whereas the first biosimilar Rituximab was referenced in 2018.



Objectives

- ❖ The purpose of this study was to **measure and analyse the penetration rate** of biosimilar **Infliximab** and biosimilar **Rituximab** in the PHARMAVIENNE hospitals in 2018.

Material and methods

- ❖ **Creation of a web survey** by a pharmacist resident, under the direction of pharmacists to collect :
 - ✓ **Consumptions** of Infliximab and Rituximab (biological reference products and biosimilar drugs) in the first 6 months of 2018
 - ✓ **Hospitals' initiation and switching** strategies of biosimilar drugs
 - ✓ **Associated measures adopted** by pharmacists to promote biosimilar drugs such as presentation in internal drug committee, education documents for patients and/or for healthcare professionals...
 - ✓ Opinions concerning a possible **switch from a biosimilar drug to an another** for the next PHARMAVIENNE tender
- ❖ The survey was on line the 28th august 2018 for **1 month**
- ❖ The survey link was sent to **hospital pharmacists** consuming Infliximab and/or Rituximab in PHARMAVIENNE
- ❖ The results were **analysed** with Excel®
- ❖ Determination of **penetration rate** : defined as the percentage of biosimilar drug of the total of biological medicine



Results

- ❖ From the 8 hospitals consumers of Infliximab and/or Rituximab, **7 replied to the survey** (from 300 to 700 beds) :
 - **All were consumers of Infliximab**
 - **4 were consumers of Rituximab**

INFlixIMAB

- Year of registration in PHARMAVIENNE : 2016
- PHARMAVIENNE registration strategy : biological reference product for Infliximab-non-naive patients and biosimilar drug for Infliximab-naive patients
- Hospitals' initiation and switching strategies : all had chosen to use biosimilar Infliximab only for Infliximab-naive patients and continuous therapy could be switched with doctor agreement

	Numbers of vials consumed	Penetration rates	Associated measures adopted
Hospital A	242	25%	EH
Hospital B	208	0	PC + EH
Hospital C	2056	58%	PC + EH + EP
Hospital D	512	33%	PC + EH + EP
Hospital E	24	0	PC + EP
Hospital F	54	45%	EH
Hospital G	1358	25%	PC

EH : Education documents for Healthcare professionals
EP : Education documents for Patients
PC : Presentation in internal drug Committee

RITUXIMAB

- Year of registration in PHARMAVIENNE : 2018
- PHARMAVIENNE registration strategy : biosimilar drug for Rituximab-naive and non-naive patients
- Hospitals' initiation and switching strategies : all had chosen to use biosimilar Rituximab for naive and non-naive patients

	Numbers of vials consumed	Penetration rates	Associated measures adopted
Hospital B	106	72%	PC
Hospital C	155	100%	PC + EH + EP
Hospital D	31	39%	none
Hospital G	314	100%	PC

EH : Education documents for Healthcare professionals
EP : Education documents for Patients
PC : Presentation in internal drug Committee

- ❖ Concerning a possible switch to an another biosimilar drug of Infliximab or Rituximab for the next tender :
 - 5 hospitals (71%) were in favour to switch
 - 2 hospitals (29%) were not in favour to switch

Discussion

- ❖ The **registration strategy** seemed to have an **influence on biosimilar drug penetration rate** : Rituximab's penetration rate was higher than Infliximab's penetration rate whereas Rituximab was registered more recently.
- ❖ None of the educational tools provided was linked to a greater biosimilar penetration rate in this study.
- ❖ The first biosimilar immunotherapy registered in PHARMAVIENNE was Infliximab : this could explain why doctors are reluctant to switch from this biological reference product to its biosimilar.

Conclusion

- ❖ Although these hospitals adopted the same strategy of biosimilar selection, the penetration rate were significantly different from one hospital to another.
- ❖ In France, to switch a biological reference product by a biosimilar drug, it is necessary to get **doctor's and patient's agreements**.
- ❖ Consensus of **national societies and experts recommendations** should help pharmacists to convince prescribers and patients of the biosimilar drugs safety.

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