



LFB

A BIOPHARMACEUTICAL GROUP COMMITTED TO LIFE

Plasma Supply from a Fractionator's Perspective

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CONFLICT OF INTEREST

- I am an LFB employee

LFB GROUP OVERVIEW

(2021 data)

LFB is an historical leader on the French plasma medicines market

Key Figures

€ 458,8 M
of turnover

4 Bioproduction
plants, **3** of which
in France

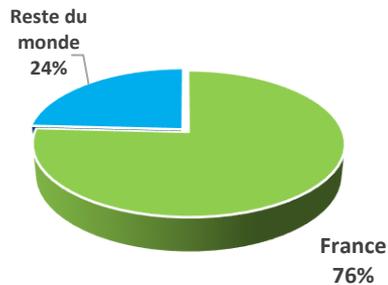
15
medicines

2,500 employees,
within nearly 2,050 in France

3
Therapeutic areas:
Immunology
Intensive care
Hemostasis

PDMPs turnover breakdown

By geography

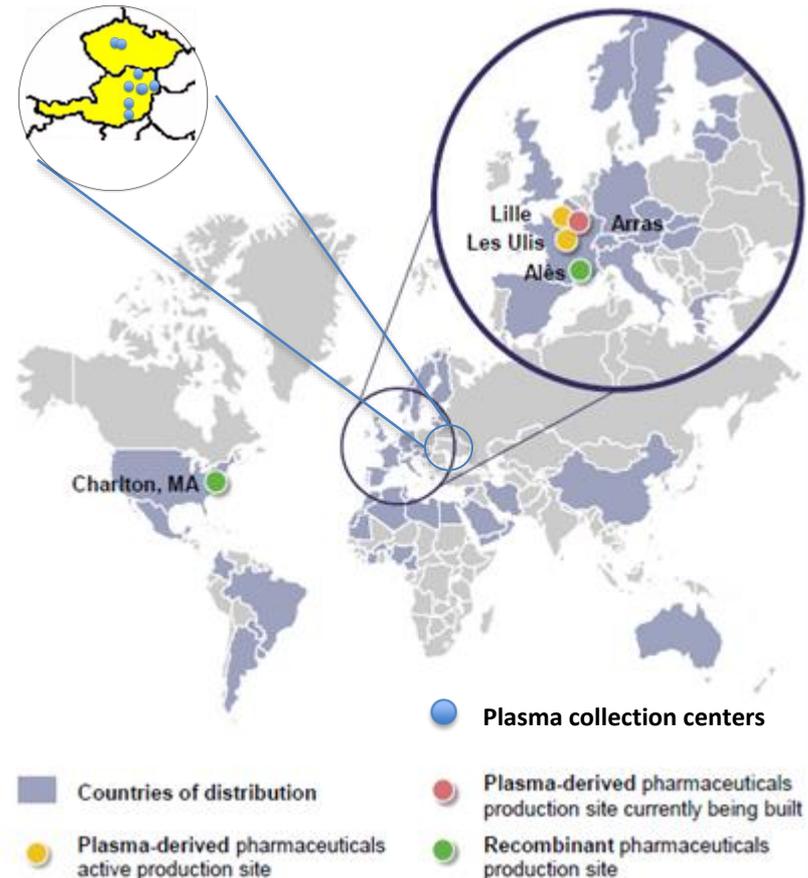


LFB Plasma collection centers in Europe

EUROPLASMA

Austrian company founded in 1986. Operates 7 plasma donation centers in Austria and 2 in the Czech Republic. Thrombocyte concentrates are also produced at the Vienna donation center in order to supply hospitals in Austria. Since 2010, Europlasma has been part of the LFB Group.

Geographical footprint



LFB SITUATION IN FRANCE

- Only the French Blood Establishment (EFS) and Armed Forces Blood Transfusion Centre (CTSA) collects blood and plasma;
- LFB fractionates recovered and source plasma collected by EFS and CTSA.
- To meet national needs, in particular those related to the treatment of rare diseases, LFB primarily distributes on French territory, the Plasma derived medicinal products (PDMPs) manufactured with this plasma.

LFB'S PLACE IN THE FRENCH MARKET

- **15 PDMPs are manufactured by LFB for 3 therapeutic domains :**
 - immunology,
 - intensive care,
 - hemostasis.
- **LFB coverage of hospital needs (tenders):**
 - 75% of patients are treated with an LFB PDMP;
 - Immunoglobulins (Igs) market share (in volumes): 35%

IMPACT OF COVID-19 PANDEMIC ON PDMPS SUPPLY IN FRANCE

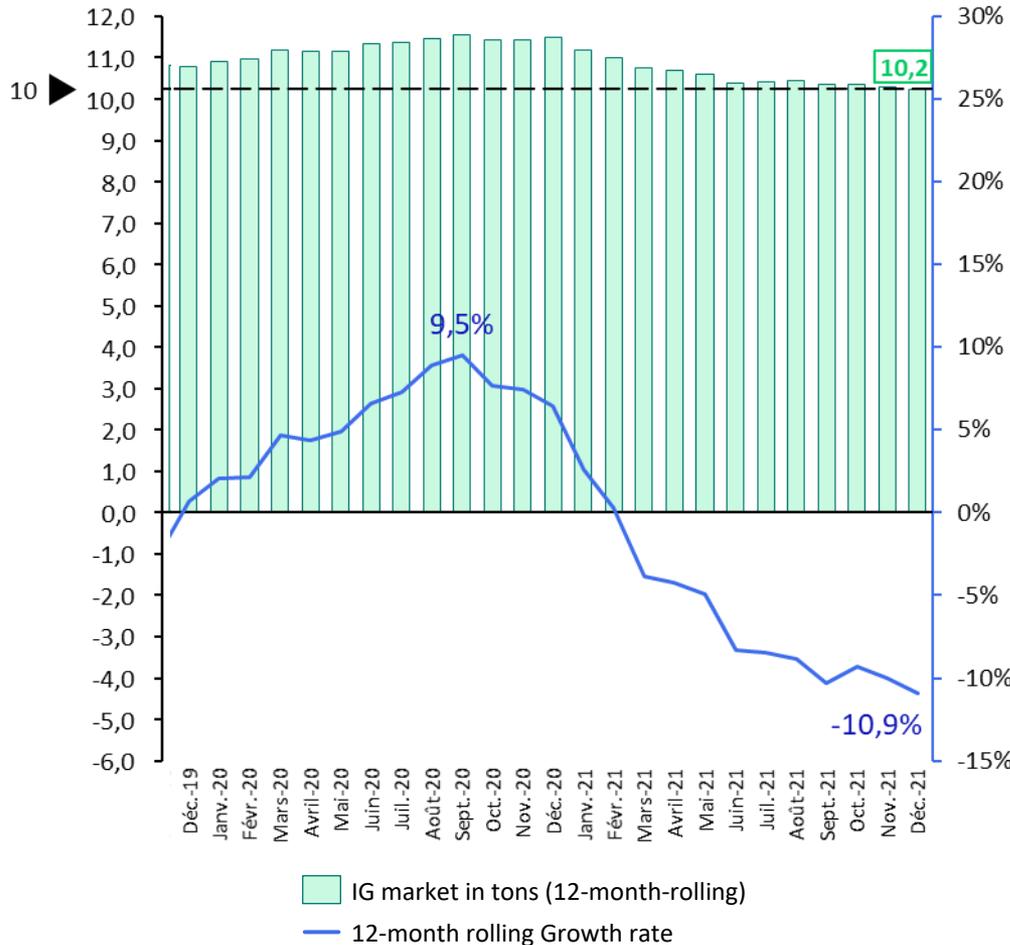
- We have observed:
 - A drop in plasma collection worldwide, including France;
 - A competition between Member states for Ig supply;
 - A drop in the Ig supply to French hospitals, especially during the late Covid-19 period;
- Due to the impact of production timelines linked to industrial constraints, and multi-years hospital contracts, this situation is likely to persist.

FRENCH IMMUNOGLOBULIN MARKET DURING THE COVID-19 PANDEMIC

Decline in the Immunoglobulin French market *
Rolling Cumulative Volume 12 months : -11%

IG Market in tons (12 months rolling)

IG Market Growth



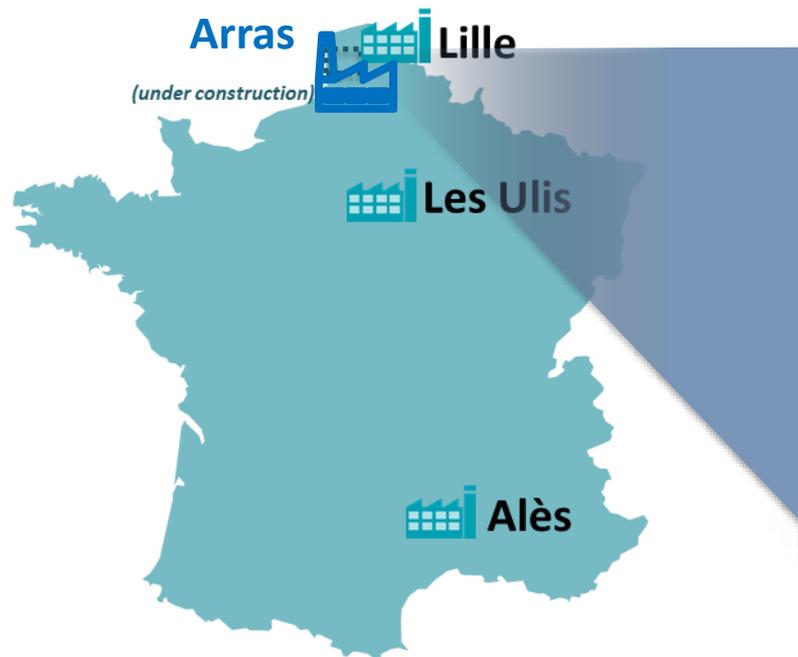
- Due to the lead time between collection and release of PDMPs, the effects of the Covid-19 pandemic was not observed until September 2020;
- Instead of having a yearly increase of 5 to 6 % , we have seen a decrease in supply of 11% in December 2021.

POST COVID-19 PANDEMIC LFB'S ACTION PLAN

- Immediate - we have mobilized our plasma stock to :
 - Meet our contractual obligations with the hospitals;
 - Be fractionated by a European manufacturing partner (toll manufacturing);
- The future challenges:
 - Plasma supply territorial issues post Sars CoV-2 pandemic (USA, Europe, France);
 - An industrial/economic equation in perpetual motion thanks to therapeutic innovation;

LFB MANUFACTURING PERSPECTIVES FROM 2024

- The future new generation plant in Arras (Pas-de-Calais) will house all the production steps for immunoglobulins, fibrinogen and albumin;
- LFB will triple its production capacity.



Plasma supply is already the ongoing challenge

THE CHALLENGES OF THE UPCOMING YEARS

- **Europe :**

- The use of RBC* has greatly decreased in the last decade → less recovered plasma supply;
- The volumes of plasma currently collected in Europe covers only about 62% of the needs, the rest being imported from the United States;
- The need for Ig is expected to grow (+5 to 6% per year) and Ig manufacturing remain the driver for fractionation;

→ **Reduce the dependance to US plasma**

- **France :**

- One third of plasma collected is source plasma;
- LFB covers 35% of the Ig hospital's need (in volumes) and 75% of patients receive an LFB PDMP;

→ **EFS: increase source plasma collection**

- 2021 – the European Commission is revising the "substances from the human body" Directives. This legislative revision is a unique opportunity to recognize the importance of plasma for the production of certain vital medicines for many patients in Europe and help Member States to improve collection.

SOME SUGGESTIONS OF WAYS TO INCREASE EUROPEAN PLASMA COLLECTION AND PRODUCTS MANUFACTURING

- Expand plasma collection areas to fractionate their plasma:
 - To access to plasma for fractionation in new countries (i.e. toll manufacturing agreement)
 - Help plasma collection centers to achieve the required level of quality;
- Plasma collection and quality harmonization at least at European level;
- Develop plasmapheresis in more blood/plasma collection centers:
- Better use of plasma :
 - Manufacture more products with one liter of plasma;

CONCLUSIONS

KEY TAKE HOME MESSAGES

- Covid-19 pandemic has reduced the plasma supply all over the world and particularly in Europe;
- The immunoglobulin manufacturing, driver of the fractionation, has decreased;
- It has created a competition in Europe for the acquisition of the immunoglobulins;
- To cope with supply tensions, ANSM has published a list prioritizing the immunoglobulin indications and has provided “temporary import authorization” for unregistered Ig;
- Work is underway between the EFS and French Ministry of Health (DGS) to define a "plasma plan” likely to mark a major change in the institution's missions.

It is therefore a public health issue, common to all Member States, that requires a common response to increase plasma collection and allow all patients who need it to benefit from adequate treatment.

THANK YOU

