



Contents lists available at ScienceDirect

# Transfusion and Apheresis Science

journal homepage: [www.elsevier.com/locate/transci](http://www.elsevier.com/locate/transci)



## Review

# The use of a medico economic database as a part of French apheresis registry



T. Kanouni <sup>a,c,\*</sup>, P. Aubas <sup>b</sup>, F. Heshmati <sup>c,d</sup>

<sup>a</sup> *Unité d'aphérèse thérapeutique et Hémostase, Service d'hématologie, CHU de Montpellier, 191 avenue du Doyen Gaston Giraud, 34090 Montpellier, France*

<sup>b</sup> *Département de l'Information Médicale, Unité d'analyse Médico-Economique des Processus de Soins, CHU de Montpellier, 191 avenue du Doyen Gaston Giraud, 34090 Montpellier, France*

<sup>c</sup> *Société Française d'Hémathèse, Hôpital Cochin, 27 rue du Faubourg Saint-Jacques, 75014 Paris, France*

<sup>d</sup> *Unité de Médecine Transfusionnelle, Hôpital Cochin, 27 rue du Faubourg Saint-Jacques, 75014 Paris, France*

## ARTICLE INFO

**Keywords:**  
Apheresis  
Registry  
Health insurance  
Medico-administrative databases  
France  
ECP

## ABSTRACT

An apheresis registry is a part of each learned apheresis society. The interest in this is obvious, in terms of knowledge of the practice of apheresis, adverse events, and technical issues. However, because of the weight of data entry it could never be exhaustive and some data will be missing. While continuing our registry efforts and our efforts to match with other existing registries, we decided to extend the data collection to a medico-economic database that is available in France, the Programme de Médicalisation du Système d'Information (PMSI) that has covered reimbursement information for each public or private hospital since 2007. It contains almost all apheresis procedures in all apheresis fields, demographic patient data, and primary and related diagnoses, among other data. Although this data does not include technical apheresis issues or other complications of the procedures, its interest is great and it is complementary to the registry.

From 2003–2014, we have recorded 250,585 apheresis procedures, for 48,428 patients. We showed that the data are reliable and exhaustive. The information shows a perfect real life practice in apheresis, regarding indications, the rhythm and the duration of apheresis treatment. This prospective data collection is sustainable and allows us to assess the impact of healthcare guidelines. Our objective is to extend the data collection and match it to other existing databases; this will allow us to conduct, for example, a cohort study specifically for ECP.

© 2016 Elsevier Ltd. All rights reserved.

## Contents

1. Introduction.....	82
2. French health insurance databases.....	83
3. Results.....	83
4. Advantage, limitation and interest of the MED.....	84
5. Future and prospects.....	85
6. Conclusion.....	85

## 1. Introduction

The French plasma exchange registry is one of the oldest apheresis registries. It has existed since 1995, created by cf publications.

The interest in this registry is obvious and doesn't need to be demonstrated.

Moreover, the registry had some difficulties due to several problems like the weight of data entry, and the replacement of the first generation of motivated apheresis physician to fill the registry, and the multiple different computer systems makes it more time consuming.

\* Corresponding author.  
E-mail address: [t-kanouni@chu-montpellier.fr](mailto:t-kanouni@chu-montpellier.fr) (T. Kanouni).

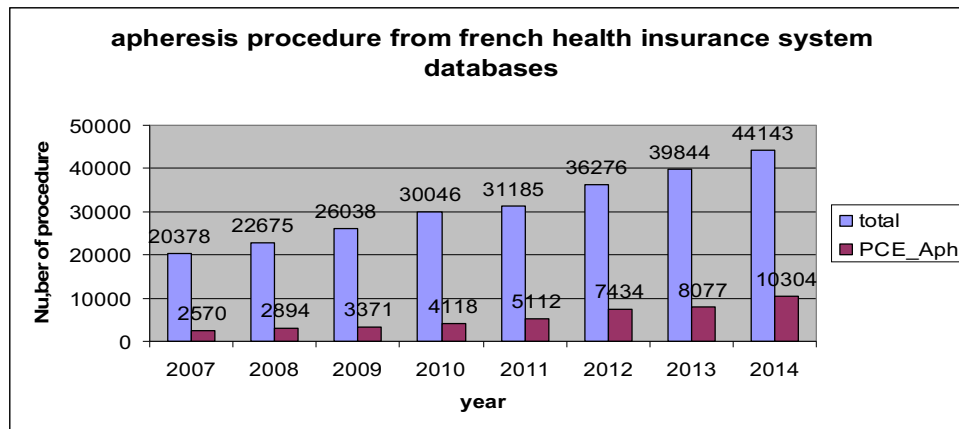


Fig. 1. Apheresis procedures from French healthcare Insurance database.

Table 1

Overall activity from 2007 to 2014 regarding to Apheresis procedures.

	2014	2013	2012	2011	2010	2009	2008	2007
Overall procedure	44143	39844	36276	31185	30046	26038	22675	20378
Plasma Exchange	17354	16988	15423	13563	13396	11735	9674	7886
Plasma.Filtration	744	616	816	635	841	344	292	178
immunoabsorption	1978	1246	705	300	171	72	311	979
Erythr_Aph	3832	3552	2908	2708	2390	2093	1478	1230
LDL_Aph	3314	3093	2886	2761	2574	2181	1712	1543
Red Cell Exchange	984	1109	1157	1233	1481	1349	1626	1825
HSC collection	4739	4445	4318	4336	4579	4381	4271	3777
CMN_collection	166	162	95	130	98	107	108	107
WBC depletion	241	313	383	375	339	354	236	216
Platelet depletion	37	63	13	12	26	23	23	18
ECP	10304	8077	7434	5112	4118	3371	2894	2570
UF	450	180	138	20	33	28	50	49

73 centers were registered in 2015; only 20 centers entered the data representing 15% from the center, and plasma exchange is the most represented procedure.

However, because of its lack of exhaustiveness, there are many questions in apheresis practice that the registry does not answer. We decided, with the agreement of the general assembly of the French society of Apheresis (SFH), to extend the data collection to the medico-economic database that is available in France.

## 2. French health insurance databases

The French universal health care insurance system manages all reimbursements of healthcare cost to all people affiliated with different health insurance schemes in France covering nearly 65 million persons. In 2003, a huge anonymous digital data warehouse was organized.

In this Study we focus on a specific part of this database, named PMSI (Programme de Médicalisation du Système d'Information) whose objective is to describe the activity of hospitals for budget allocations. Since 2007 each hospital stay, whether in public or private should be recorded. For each stay it contains the institution in which the patient was admitted, entry date and release date, an anonymous patient number, age, sex, primary, related and associated diagnoses, and medical and technical procedures including apheresis.

Apheresis procedures available are: plasma exchange, immunoabsorption, plasma filtration, red cell exchange, red cell depletion, stem cell collection, CMN collection WBC depletion platelet depletion, and ECP.

We have extracted all Apheresis procedures from 2003 to 2014 with all the related data.

Table 2

ECP procedures: medical indication, duration and regiment.

Main diagnosis	Total number of procedure	Number of patient	Mean Duration month	Mean rythme per month
a GVHD	5772	259	8.0	4.3
C GVHD	24,620	855	11.8	3.3
Solide Organe rejection	4352	194	12.3	2.5
T Cell Lymphoma	9959	294	18.8	2.2
Auto Immune disease	5700	142	20.7	2.7

## 3. Results

### a) Global results

From 2003–2014, 250,585 apheresis procedures were entered, for 48,428 patients; including 25,802 pediatric procedures for 3911 patients.

Overall activity increased, more particularly, for ECP, immunoabsorption, and TPE [Table 1, Fig. 1].

### b) A focus on one specific procedure: ECP:

We extracted 43,440 ECP procedures related to 1744 patients. According to the main diagnosis we classified the indications for an ECP regiment as acute GVHD, Chronic GVHD, T cell lymphoma, solid organ rejection and auto immune disease We were also able to evaluate the average duration of ECP treatment and the rhythm of the sessions [Table 2, Fig. 2].

Download English Version:

<https://daneshyari.com/en/article/5664583>

Download Persian Version:

<https://daneshyari.com/article/5664583>

[Daneshyari.com](https://daneshyari.com)