



Organization of Transfusion System in Catalonia

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Catalonia



Area: 32,114 km²

Population (2012): 7,565,603

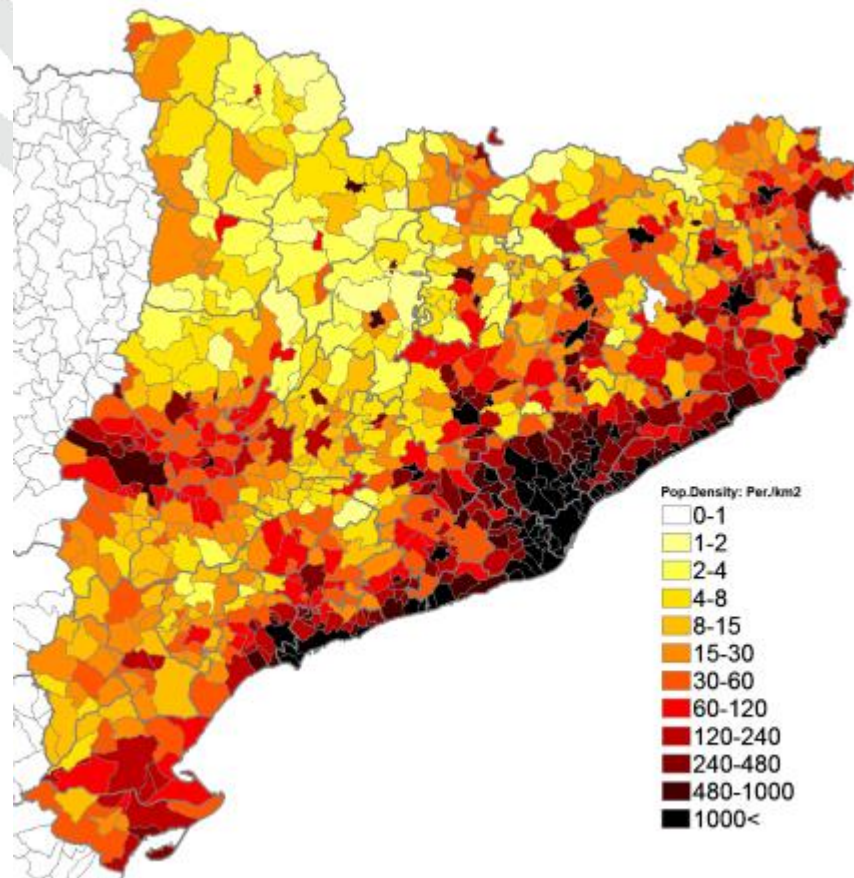
Density 240 /km²

Rank in Spain: 2nd most populated (16%)

Official languages: Catalan and Spanish

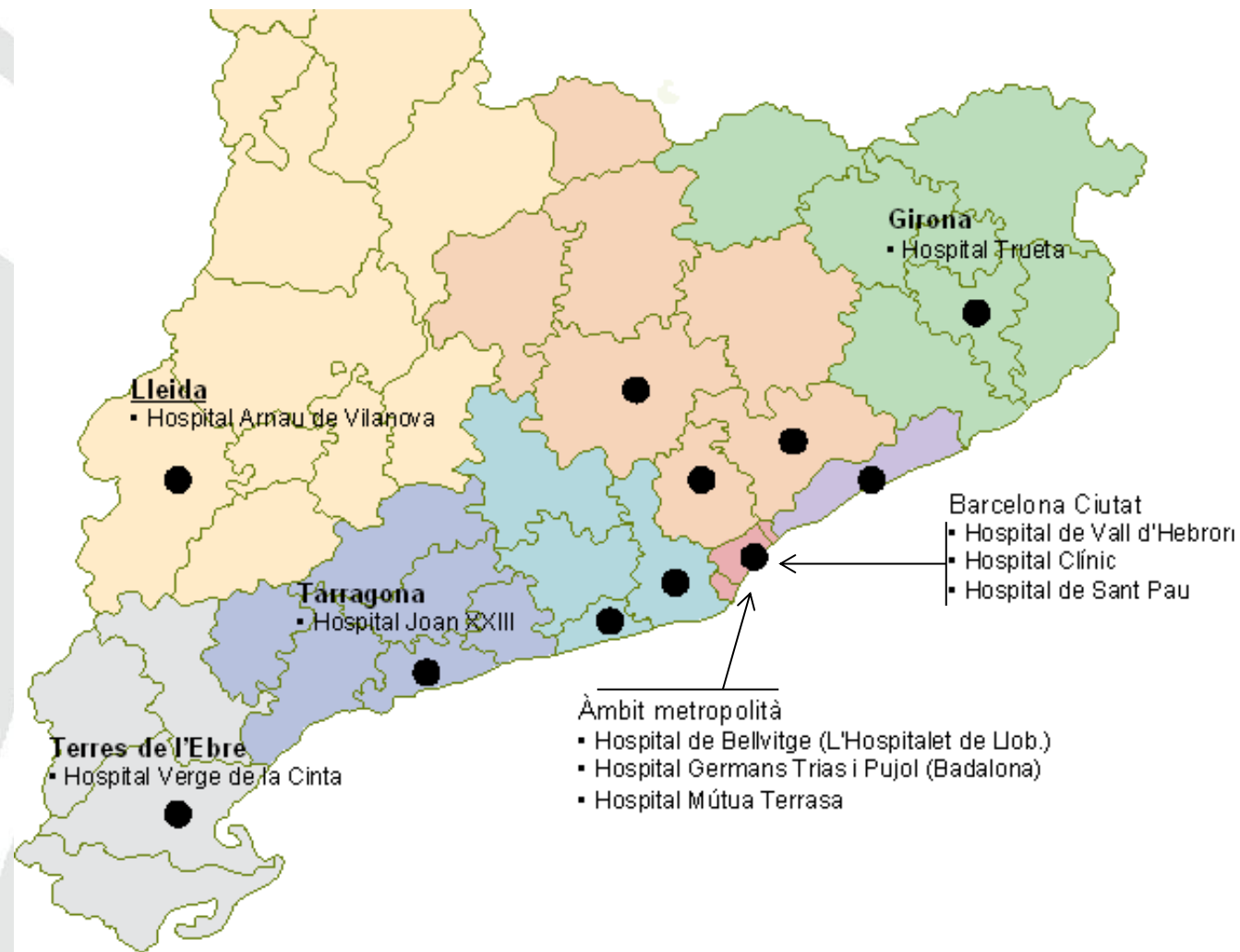


Catalonia: Population Density





Main hospitals in Catalonia



Spain: Autonomous Communities



- In Spain in 1978, 17 autonomous communities were created with its own executive, legislative and judicial power



DEPARTAMENT DE SALUT

RESOLC:

Article únic

Ampliar en 98.409,65 euros l'import màxim a liquidar en concepte de preus públics per matrícula en programes de doctorat, tutela de tesi i per als cursos de formació del personal experimentador en animals, fixat a l'article 3 de la Resolució UNI/2418/2004, de 6 de setembre, que queda establert en 479.509,65, a càrrec de la partida 480.0001 del pressupost de l'AGAUR per a l'any 2006.

DECRET

298/2006, de 18 de juliol, pel qual es regula la Xarxa d'Hemoteràpia i es crea el Sistema d'Hemovigilància a Catalunya.

Els protocols de tractament d'un nombre creixent de malalties incorporen l'ús de la sang i els seus derivats, de manera que l'hemoteràpia s'ha convertit, progressivament, en un recurs cada vegada més essencial per al funcionament de la xarxa assistencial.

tes i components sanguinis, fan necessari crear un Sistema d'Hemovigilància que permeti la detecció, el registre i l'anàlisi de la informació relativa als efectes adversos i a les reaccions adverses inesperats de la transfusió sanguínia i que garanteixi unes pautes homogènies per a tots els processos d'obtenció, emmagatzematge i tractament de la sang i els productes hemoderivats en el conjunt del sistema sanitari.

L'article 40 de la Llei 25/1990, de 20 de desembre, del medicament, estableix que la sang, el

Transfusion Network of Catalonia

- Blood and Tissue Bank of Catalonia: responsible for the promotion, collection, screening, preparation and distribution of blood components for transfusion in Catalonia.
- Hospital Transfusion Services: responsible for the compatibility testing, and transfusion of components at hospital level. Under the direction of a specialist in Hematology and Hemotherapy.
 - Overseen by the BTBC



Current Situation in Catalonia

- Blood Center: 1
 - Hospital Blood Transfusion Services:
 - Barcelona
 - City: 41
 - Province: 32
 - Girona: 14
 - Tarragona: 8
 - Lleida: 7
- » Total: 102

Blood and Tissue Bank of Catalonia



Memòria de Sostenibilitat i Competitivitat. Banc de Sang i Teixits. 2010

Blood and Tissue Bank of Catalonia

Centres fixos d'activitat del BST

DT Vall d'Hebron/Clinic

1 Hospital de la Vall d'Hebron

2 Hospital Clínic

DT Sant Pau

3 Hospital de Sant Pau

DT Bellvitge

4 Hospital de Bellvitge

DT Badalona

5 Hospital Germans Trias i Pujol

DT Catalunya Central

6 Fundació Althaia

7 Mútua de Terrassa

DT Girona

8 Hospital Universitari Dr. Josep Trueta

DT Lleida

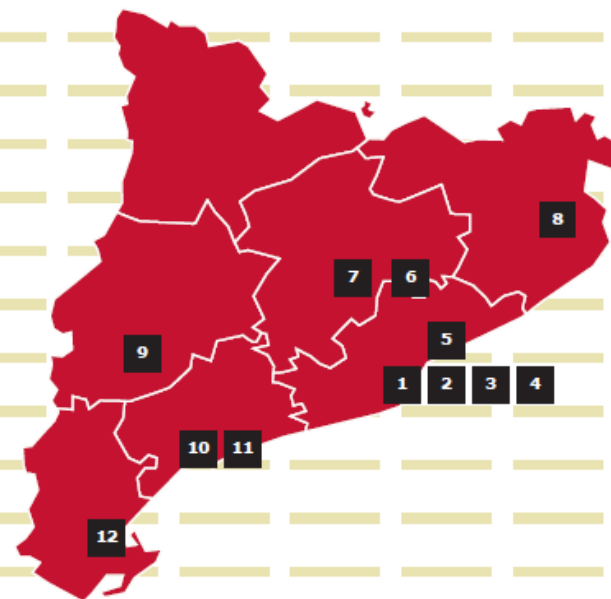
9 Hospital Arnau de Vilanova

DT Tarragona/Terres de l'Ebre

10 Hospital Universitari Sant Joan de Reus

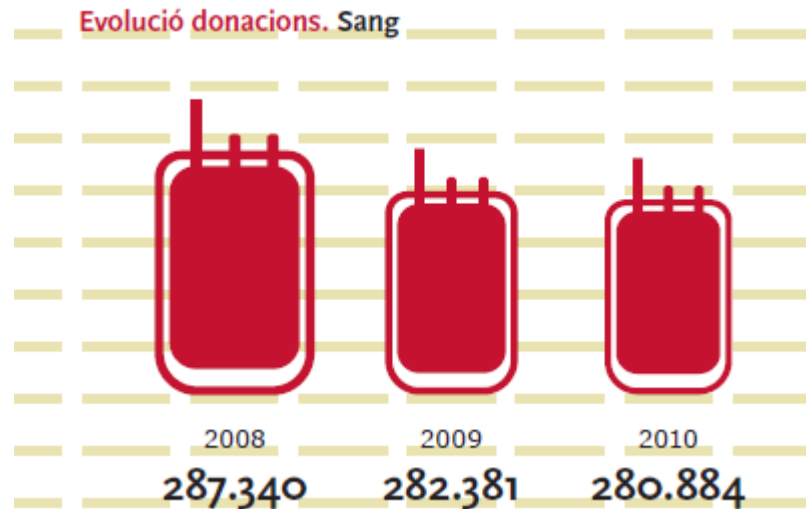
11 Hospital Universitari Joan XXIII

12 Hospital Verge de la Cinta





Blood and Tissue Bank of Catalonia



Memòria de Sostenibilitat i Competitivitat. Banc de Sang i Teixits. 2010

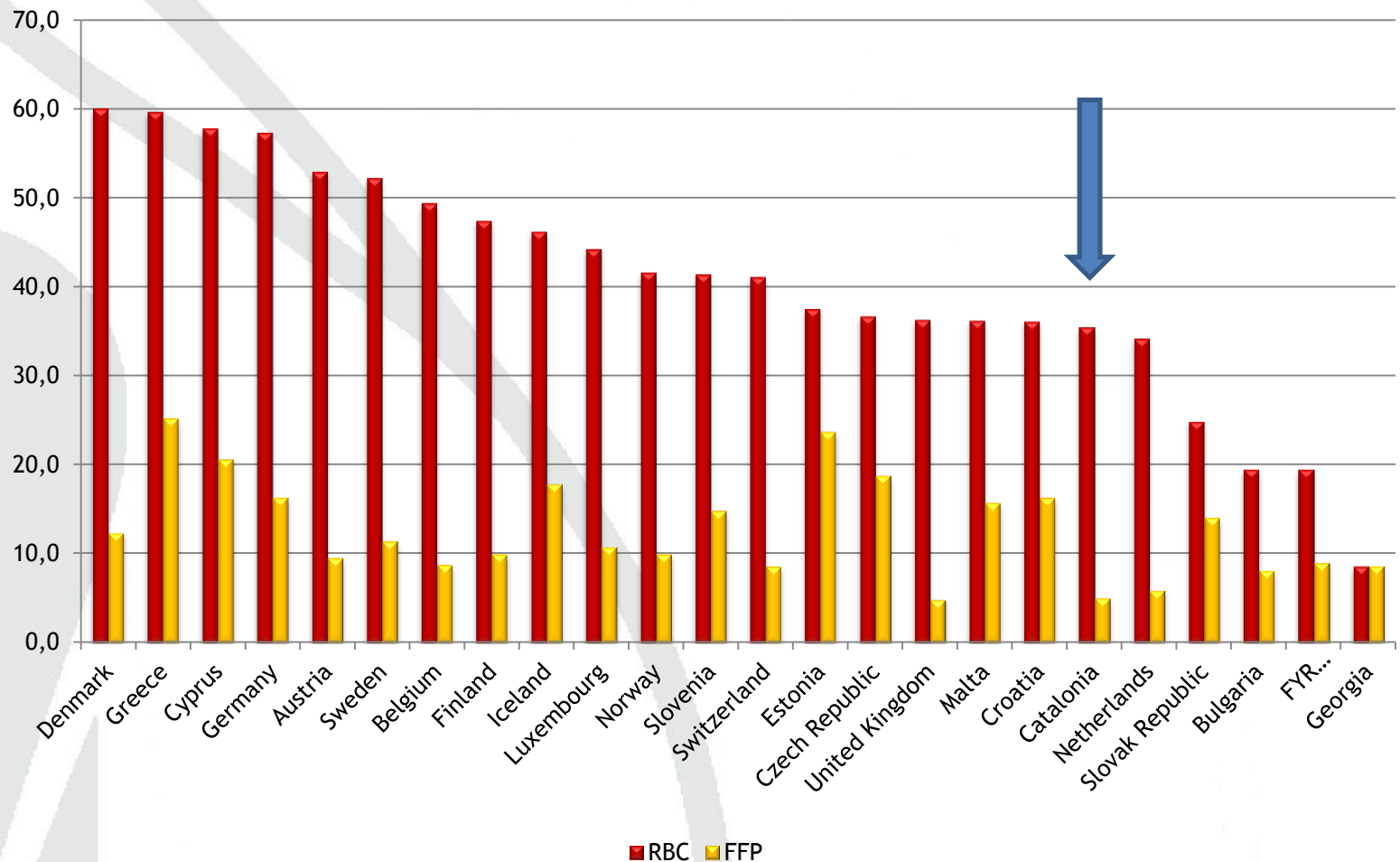


Blood Components distributed to Hospitals in Catalonia in 2013

• Red Blood Cells concentrates	247,910
• Platelet concentrates (adult doses)	36,681
• Units of plasma	33,745



RBC and FFP Transfusion in Europe in 2008 (units/1,000 inhabitants)





Healthcare System in Catalonia

- Public system under the control of the autonomous government of the region (Generalitat de Catalunya)
- Universal healthcare coverage. About 20% of population have also private healthcare insurance.
- Hospital network:
 - High complexity, university, hospitals are of public ownership
 - Medium and low complexity, private ownership although most of them treat also patients from the public insurance under special contracts
- Blood and tissue bank of Catalonia is also of public ownership
- Hospitals and BTBC receive the money directly from the Generalitat of Catalonia.



Blood Transfusion in Catalonia

- Since 1993 the Blood and Tissue Bank of Catalonia started taking over the hospital transfusion services of the University Hospitals.
- With BTBC staff (doctors, nurses and technicians) working at the transfusion services of the hospitals
- Currently, of the 10 university hospitals, 8 of them are run by the BTBC
- Only the Hospital del Mar and the University Clínic Hospital, both in Barcelona, have hospital transfusion services run by hospital staff



Efficacy of aminocaproic, tranexamic acids in the control of bleeding during total knee replacement: a randomized clinical trial

M. A. Camarasa^{1*}, G. Ollé¹, M. Serra-Prat², A. Martín¹, M. Sánchez¹, P. Ricós¹, A. Pérez¹ and L. Opisso¹

¹Servicio de Anestesiología, Reanimación y Clínica del Dolor, Hospital de Mataró, Mataró, Barcelona, Spain. ²Unidad de Investigación, Consorci Sanitari del Maresme, Mataró, Barcelona, Spain

BLOOD CONSERVATION AND TRANSFUSION ALTERNATIVES

TRANSFUSION 2008;48:519-525.

Tranexamic acid reduces blood transfusion in total knee arthroplasty even when a blood conservation program is applied

Juan C. Álvarez, Francisco X. Santiveri, Isabel Ramos, Enrique Vela, Lluís Puig, and Fernando Escolano

From the Department of Anesthesiology and the Department of Orthopedic Surgery, University Hospital of Mar, Barcelona, Spain.

Vox Sanguinis (2008) **95**, 39–44

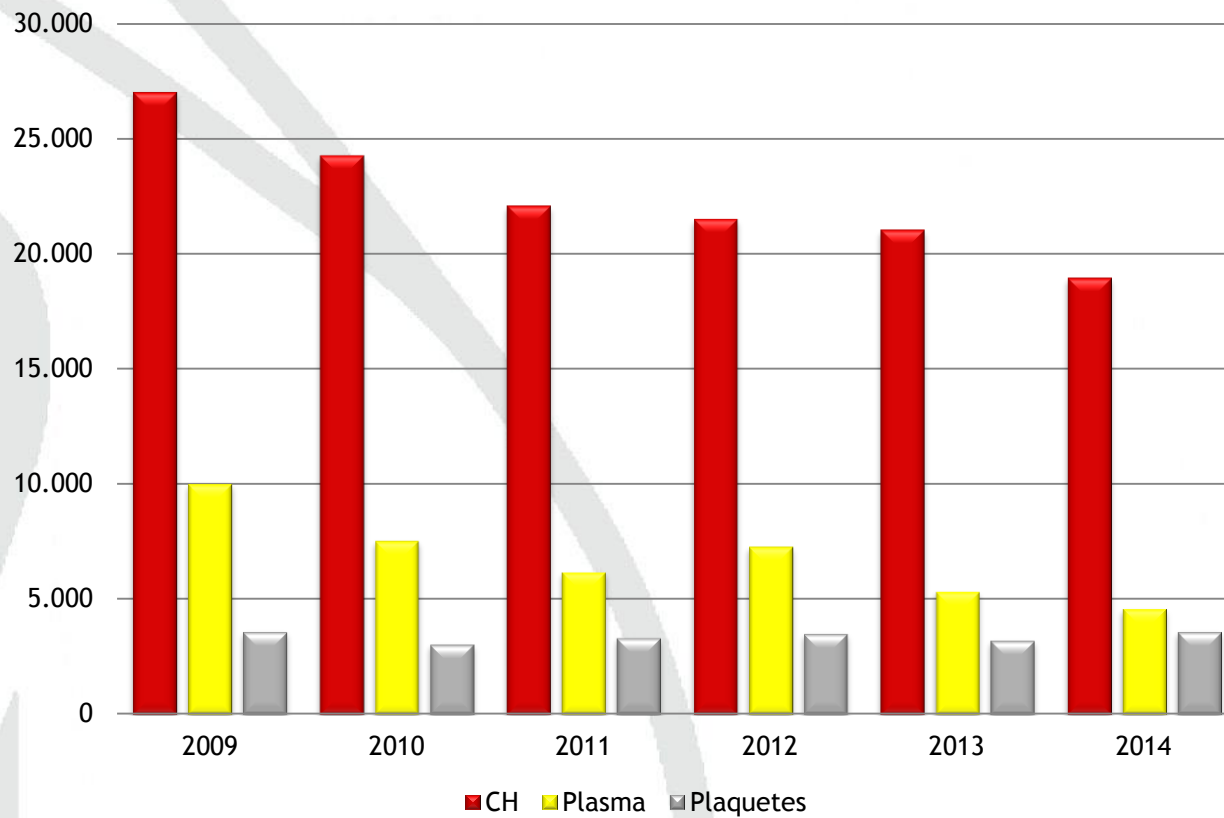
Effectiveness and safety of tranexamic acid administration during total knee arthroplasty

M. Lozano,¹ M. Basora,² L. Peidro,³ I. Merino,² J. M. Segur,³ A. Pereira,¹ F. Salazar,² J. Cid,⁴ L. Lozano,³ R. Mazzara¹ & F. Maculé³

Departments of ¹Hemotherapy and Hemostasis, ²Anesthesiology, ³Traumatology and Orthopedic, August Pi i Sunyer Biomedical Research Institute (IDIBAPS), Hospital Clínic Provincial, University of Barcelona, Barcelona, Spain, and ⁴Department of Hematology, Joan XXIII University Hospital, Tarragona, Spain

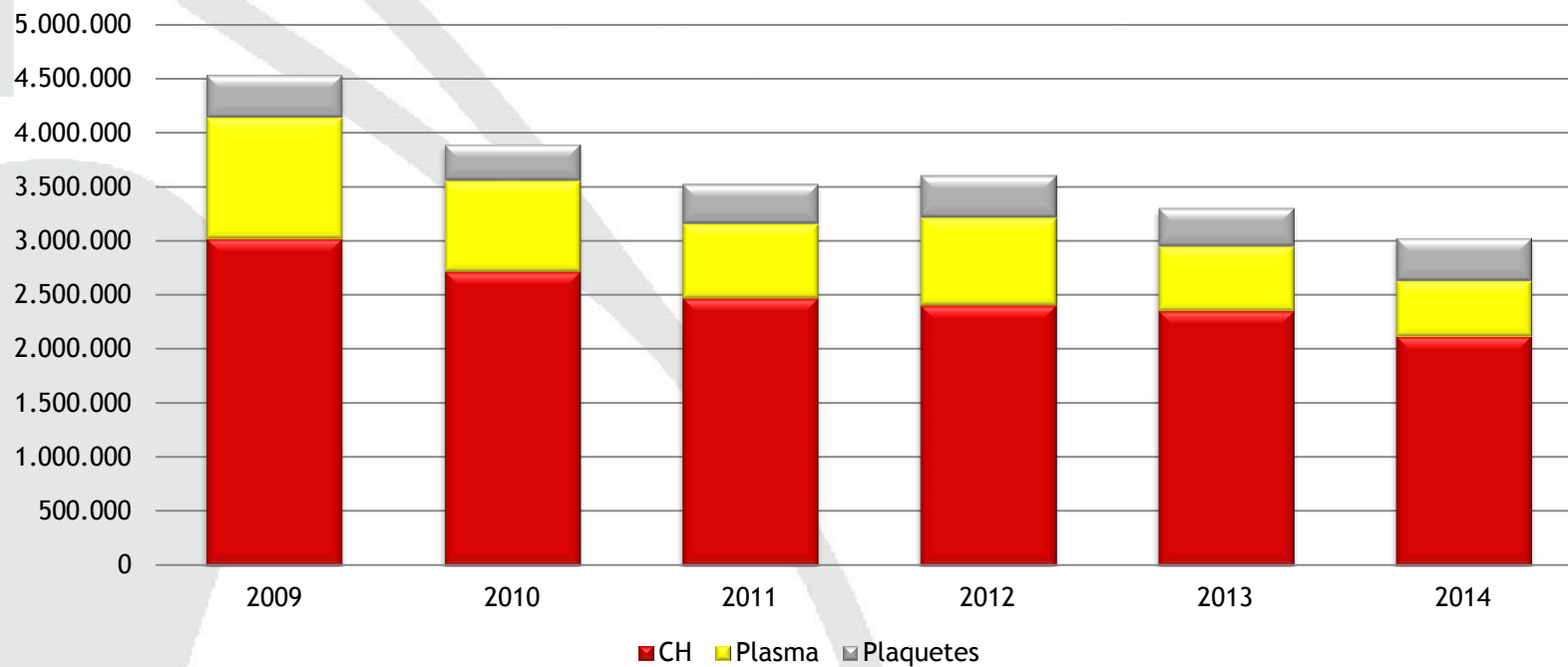


University Clinic Hospital: Transfusional Activity in units





University Clinic Hospital: Transfusional Activity in euros





Trasplante renal ABO incompatible: de un sueño a una realidad. Experiencia del Hospital Clínic de Barcelona

F. Oppenheimer^{1,*}, I. Revuelta^{1,*}, N. Serra¹, M. Lozano², A. Gutiérrez-Dalmau^{1,3}, N. Esforzado¹, F. Cofán¹, M.J. Ricart¹, J.V. Torregrosa¹, M. Crespo^{1,4}, D. Paredes⁵, J. Martorell⁶, A. Alcaraz⁷, J.M. Campistol¹

entrevista

actualidad

Dres. Miguel Lozano y Daniel Zambón
Unidad de Aféresis y Unidad de Lípidos.
Hospital Clínic de Barcelona

“La mayoría de casos de hipercolesterolemia familiar no están diagnosticados”

Max Ortega



Conclusions

- Merging of Blood Centers is supported by reasons of efficiency, standardization, quality and cost savings due to economies of scales.
- In Catalonia consolidation of blood centers was completed 9 years ago.
- Some of the hospital transfusion services were also taken over by the Blood Center.
- Although the standard transfusion needs of Hospitals are fully met, the adaptation to its emerging needs and the inclusion of new technologies might be hampered by the organizational complexity of large institutions.



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