SIMPOSIO SIBO

Worldwide Eye Banking (WEB) Project: overview nel campo dell'eye banking e del trapianto di cornea. Raccolta ed analisi dati per la banca di Saint Etienne.

Bari, 22 Febbraio 2013

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per conto della segreteria SIBO

Worldwide Eye Banking (WEB) project: international survey of demand and supply.

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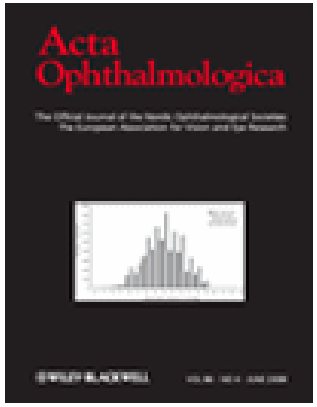

ABSTRACT

Purpose The whole eye banking (EB) process, from corneal retrieval to surgery, is improving. Paradoxically, corneal blindness worldwide is still increasing. Supply seems lagging far behind global demand but only partial data of the worldwide situation is available. We therefore launched an international survey on the balance of demand and supply, called the "Worldwide Eye Banking" (WEB)-project. Our goal is to identify suitable solutions in countries willing to improve their corneal supply.

Methods Descriptive epidemiological worldwide transversal study. A questionnaire was designed and e-mailed to EB staff and ophthalmologists involved in corneal grafts using mailing lists from local and international ophthalmological societies or by face to face interview during international ophthalmology, eye research or EB congresses.

ABSTRACT

Results Significant disparities were highlighted. Developed countries tended to satisfy corneal demand. EBs in the United-States use short term storage and are exporters, while Europeans use long-term organoculture and nearly satisfy local demand. Keratoplasty indications have 2 profiles: infections, mainly trachoma, for developing countries and keratoconus, endothelial dystrophy or iatrogenic edema in developed countries.

Conclusion This demand/supply disparity, at this stage of the study (ongoing), is severe in most developing countries. Decreasing demand requires: 1) Trachoma fight in endemic zones, 2) Iatrogenic edema prevention. Increasing supply requires: 1) Corneal donation politic dynamism, 2) Local eye banking implantation in each country, 3) Optimizing storage technique for better efficiency (retrieved/delivered graft ratio), 4) Bioengineering of endothelial graft.

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DATI NAZIONALI RACCOLTI ED ELABORATI DA SIBO

Tessuto Oculare

A. Bari
B. Genova
C. Mestre
D. Monza
E. Napoli
F. Palermo
G. Pavia
H. Torino

Tessuto Oculare e Membrana Amniotica

I. Bologna
J. Cosenza
K. Fabriano
L. L'Aquila
M. Lucca
N. Roma
O. Imola

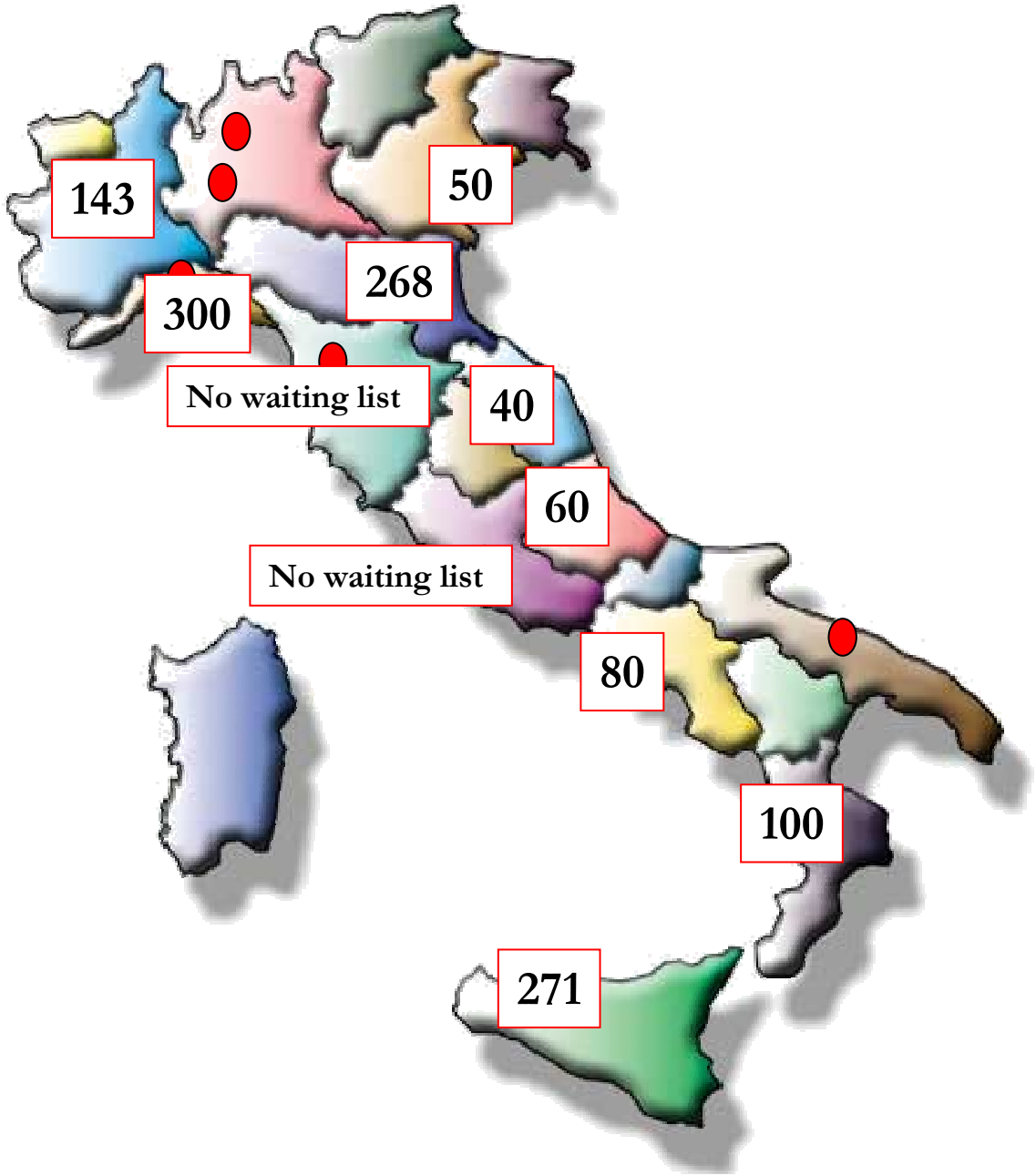
Membrana Amniotica

P. Cuneo
Q. Treviso

Part I : Corneal transplantation for Italy

1) Number of keratoplasty performed each year (data from 2011)	**4720**
2) The Top 5 indications, from the most common to the least one (among : Keratoconus =1 , Bullous Keratopathy = 2, Failed Previous Graft = 3 , Cornea Guttata = 4, Other Corneal Dystrophy = 5 , Post Infectious = 6, Post Traumatic= 7, other causes= 8)	**8,1,2,4,3**
3) Percentage or number of failed previous graft on total Keratoplasty each year	**---**
4) Number of patients on the waiting list	**145**

Number of patients on the waiting list



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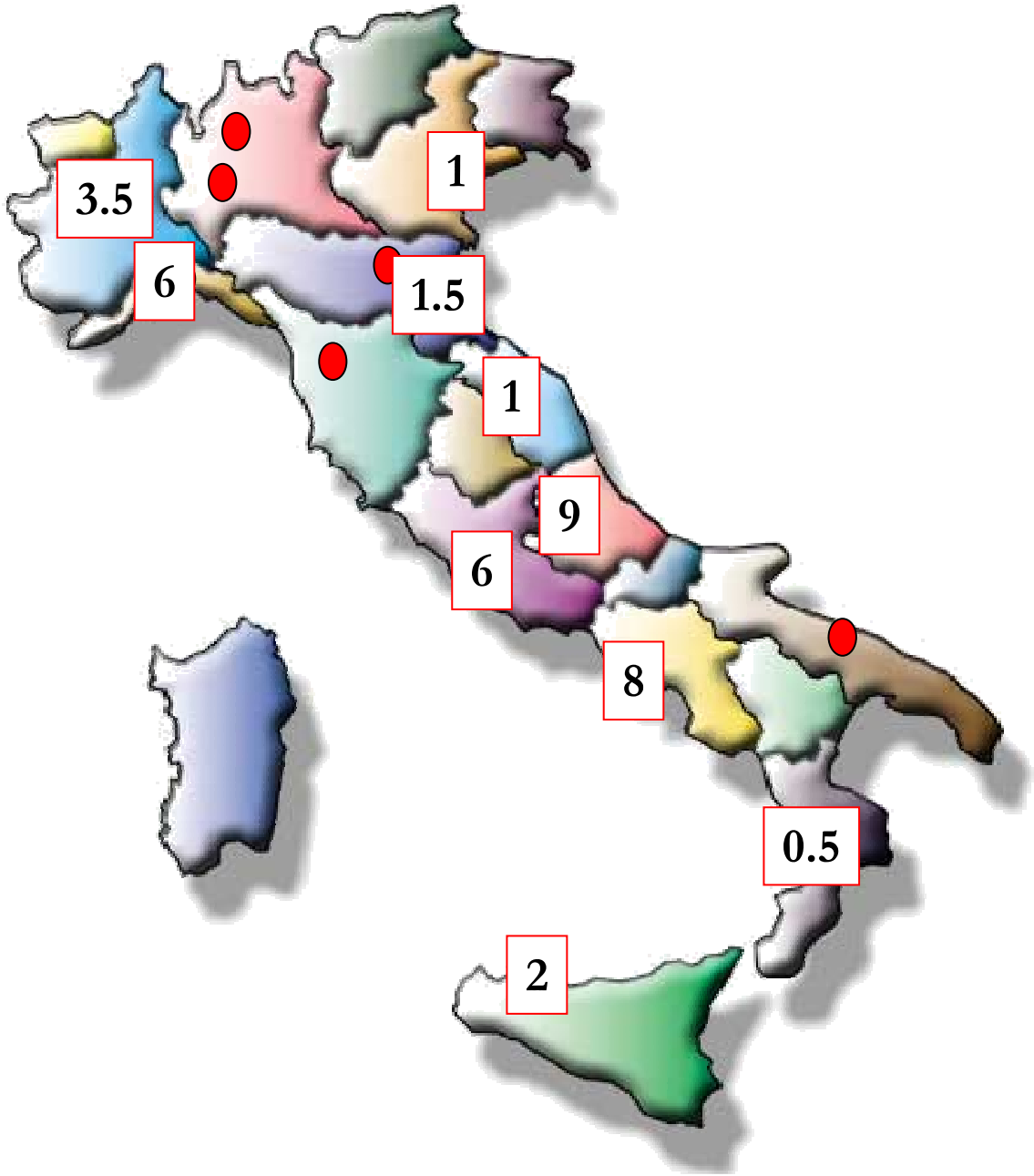

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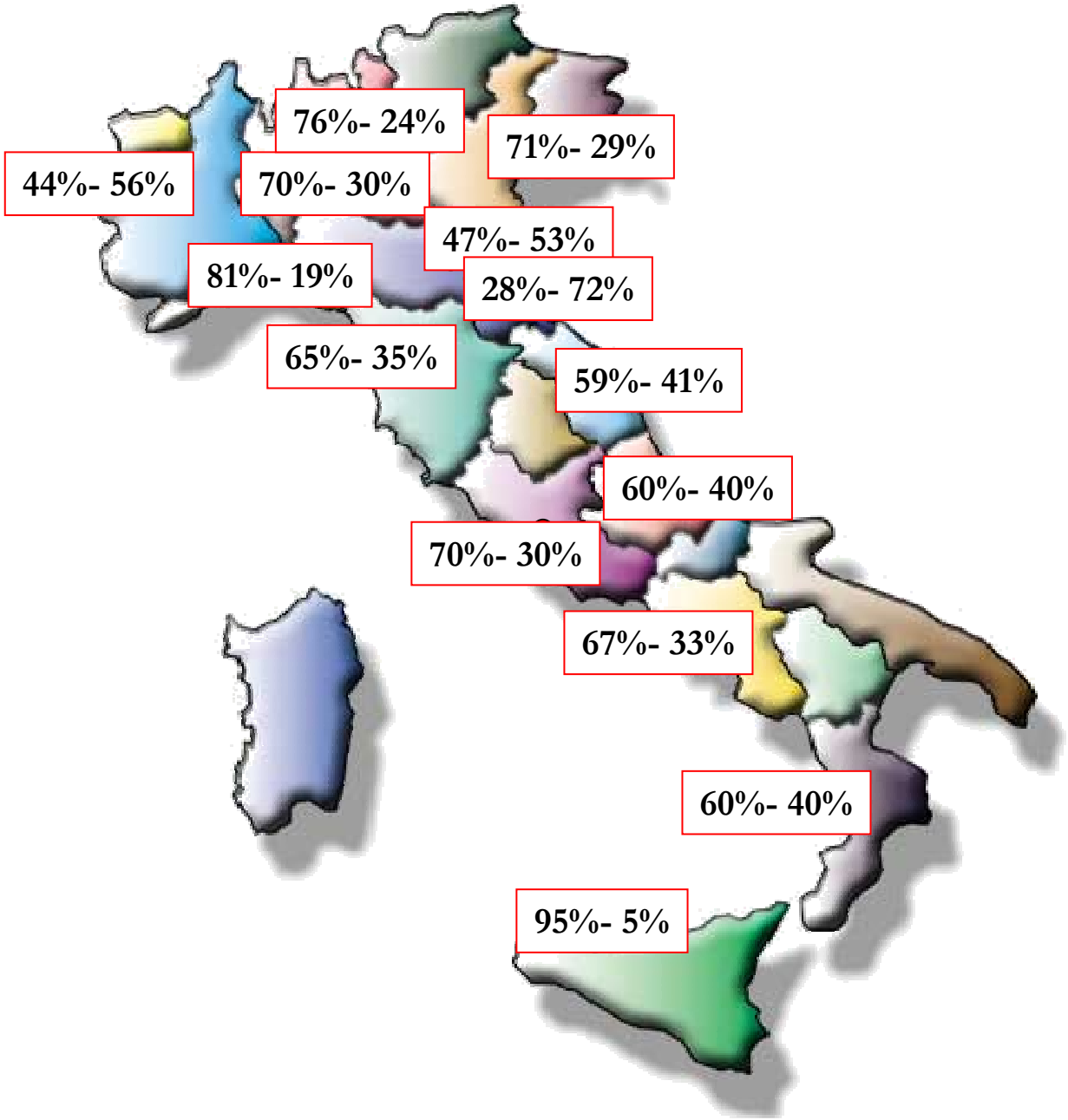
6) In terms of number of keratoplasty, %performed in public care v/s %private care	
public	**91%**
private	**9%**
7a) The average cost of a keratoplasty	**min 1250** **max 2850**
7b) The amount / percentage paid by the patient in public care	**0**
8) Surgical techniques : %Penetrating Keratoplasty v/s % Lamellar Keratoplasty v/s % Limbic stem cells	
pk	**67%**
lk	**33%**

Surgical techniques :
%Penetrating Keratoplasty v/s % Lamellar Keratoplasty: 67% vs 33%



Part II : Corneal collect and storage in Your Country + Eye Banking

1) Number of corneas collected locally/year (2011)	14917
2) Corneal collection : (enucleation, corneoscleral button, both)	both
3) %Multi-organ donor v/s %cadaveric donor	9,8%/90,2%

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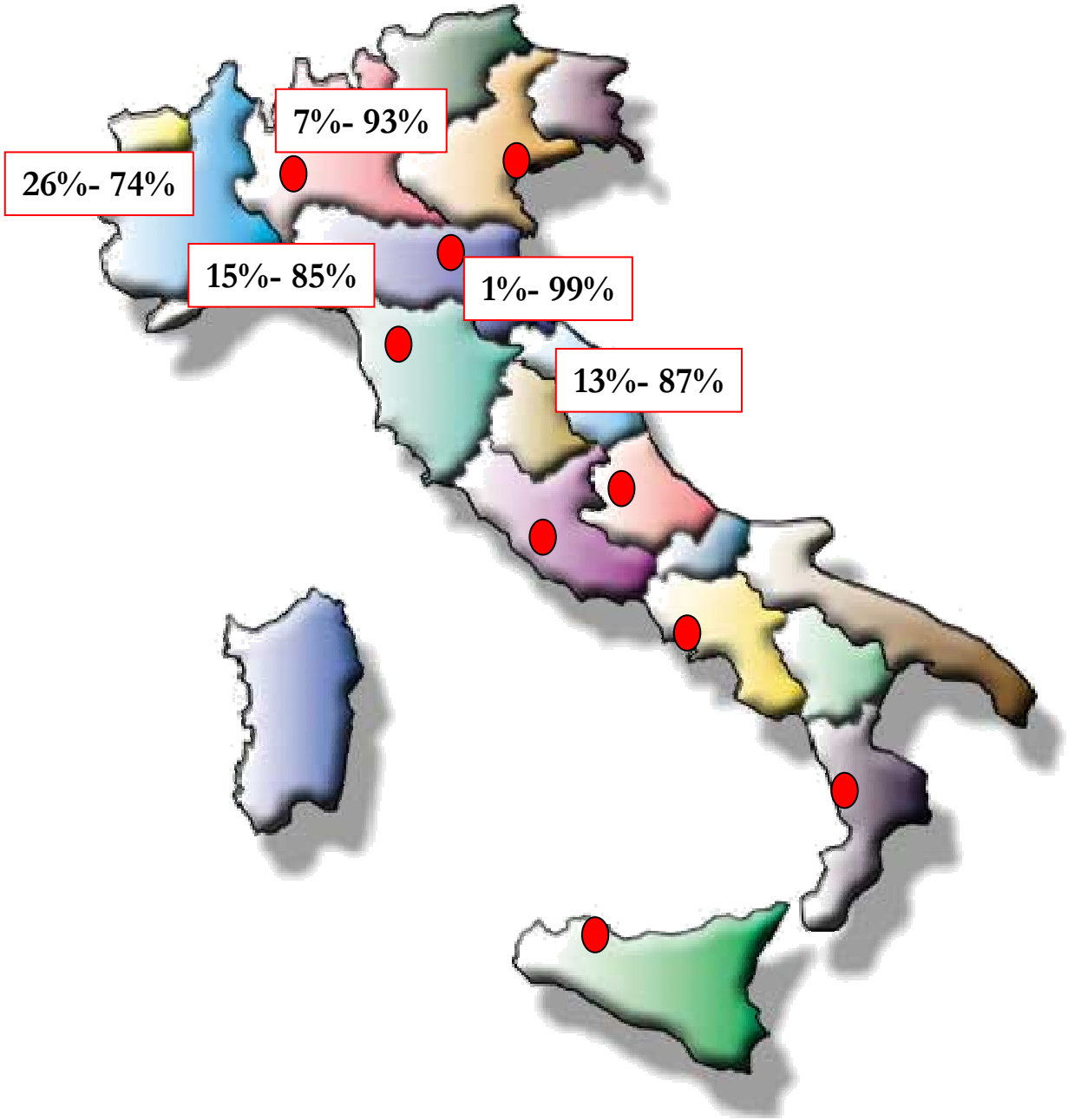

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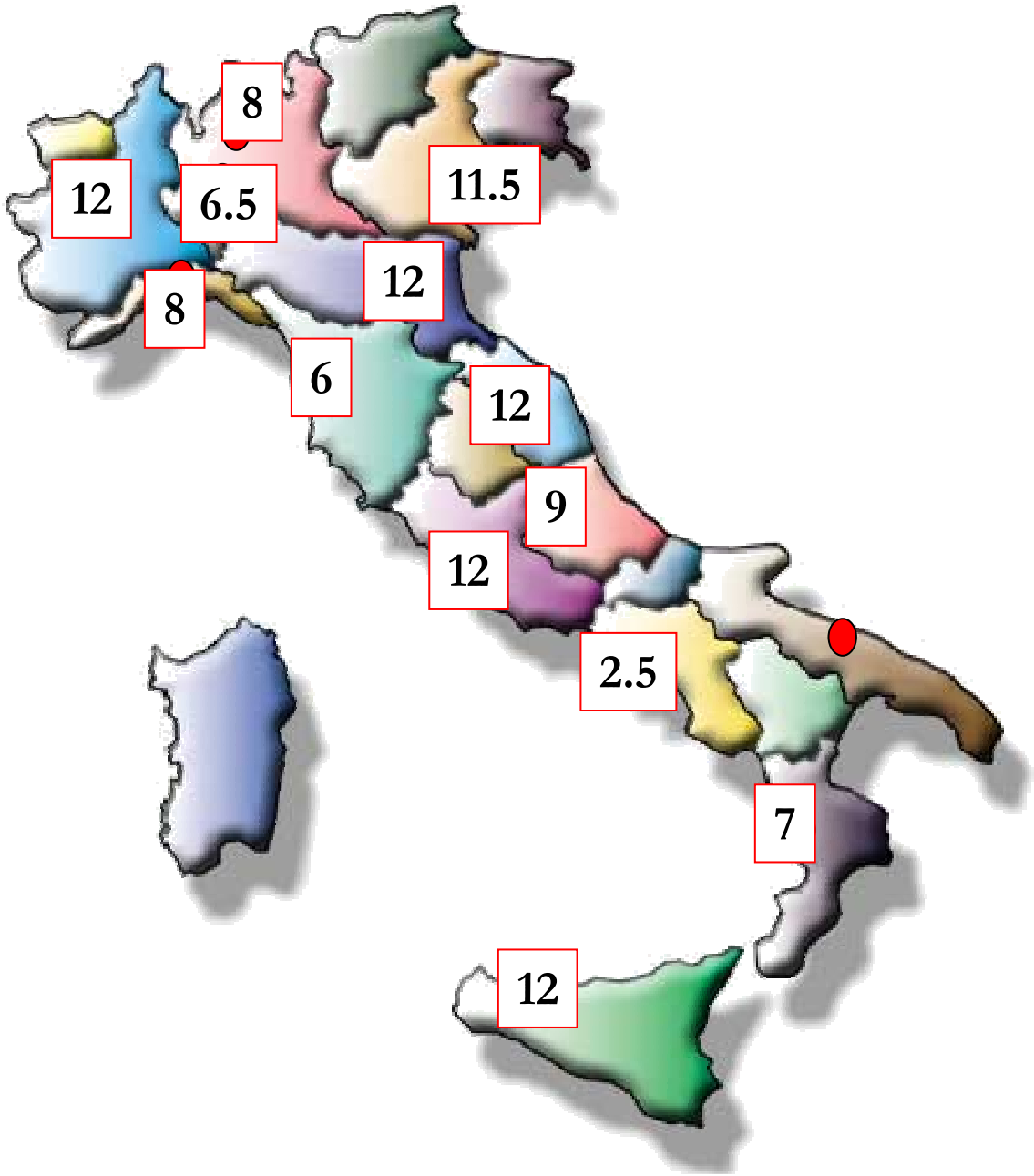

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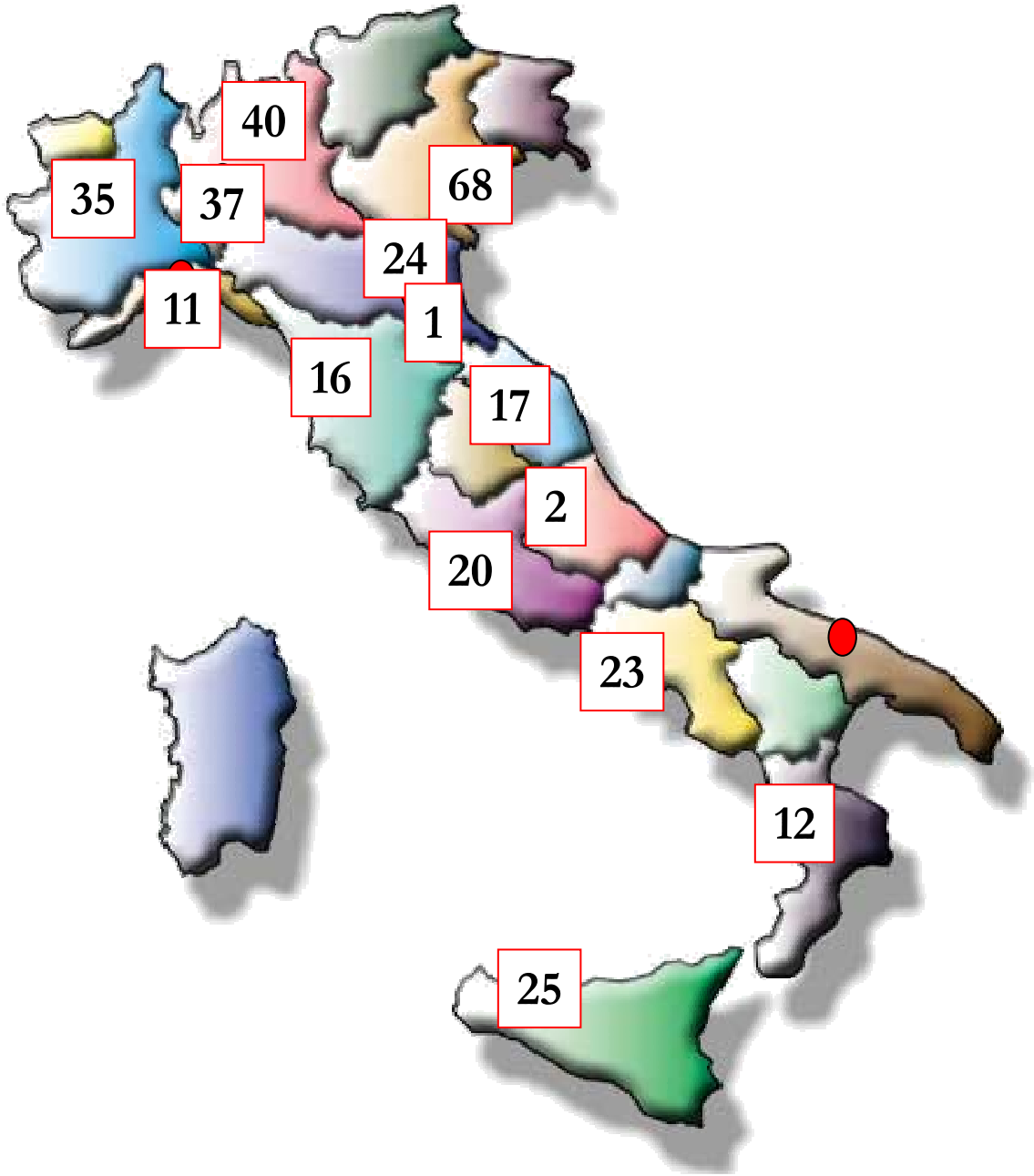
5) Types of storage (Short term in 4°C = 1, Organ culture 31°C - 37°C = 2, Refrigeration 24h =3)	1, 2
5*) If Organ culture is used, (homemade =1 or commercial medium =2 or both =3)	2 (93%), 1 (7%)
6) The corneal collector (Medical/Paramedical/Non Medical)	Medical
7) Concerning Endothelial lamellar keratoplasty, is lab-precut lamellar graft available (Y/N)	Y
8) Total number of collecting centers	315

Total number of collecting centers



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7) Concerning Endothelial lamellar keratoplasty, is lab-precut lamellar graft available (Y/N)	Y
8) Total number of collecting centers	315
9) Total number of Eye banks	14
10) Concerning legal consents or tissue donation laws, donation is possible	2 and 3

Only when expressed positively before death = 1
Each time unless expressed negatively before death on a refusal registry = 2
Each time unless refused by the family after death = 3

Grazie per l'attenzione!