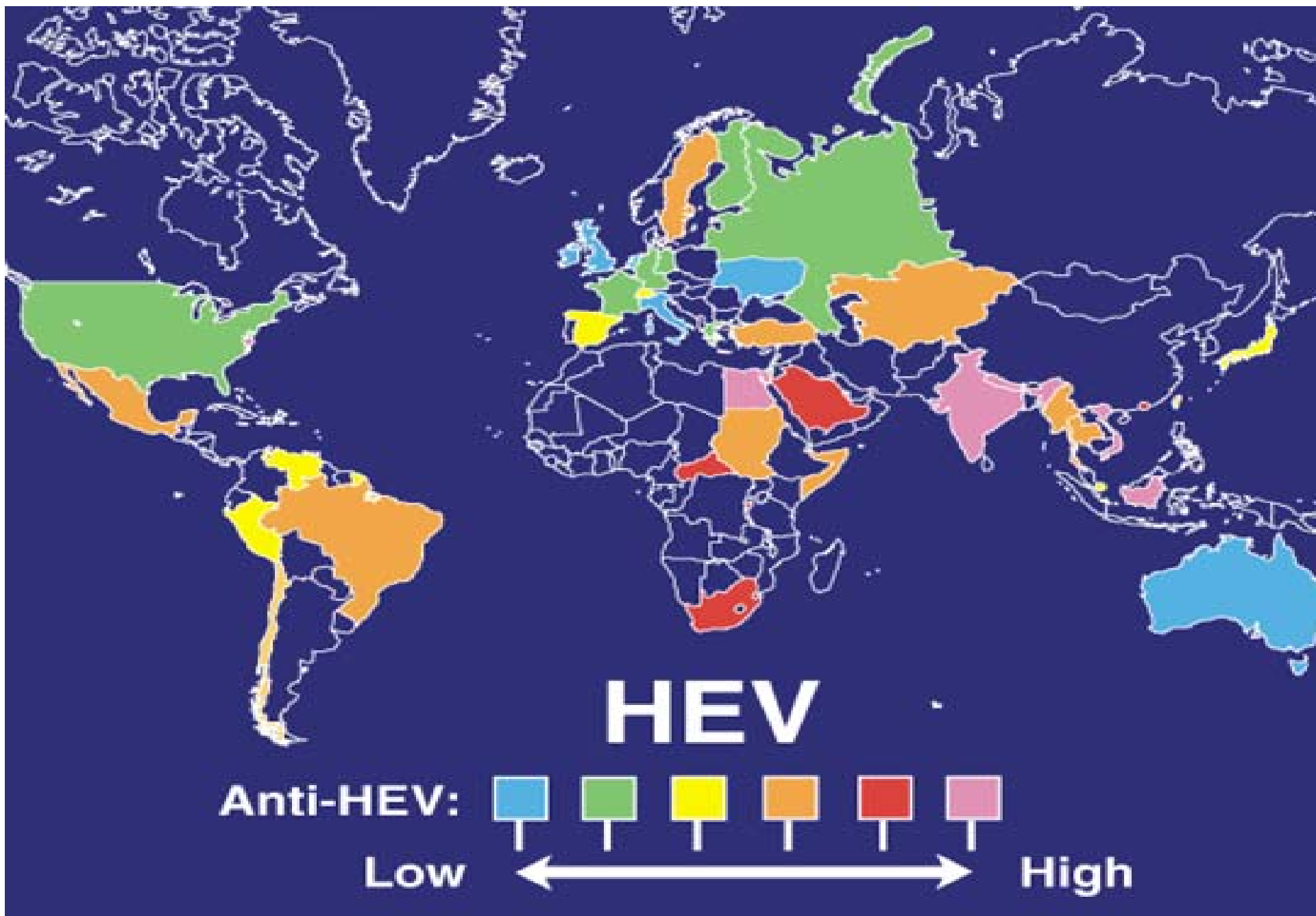


The Epidemiological situation of Hepatitis E

in Portugal



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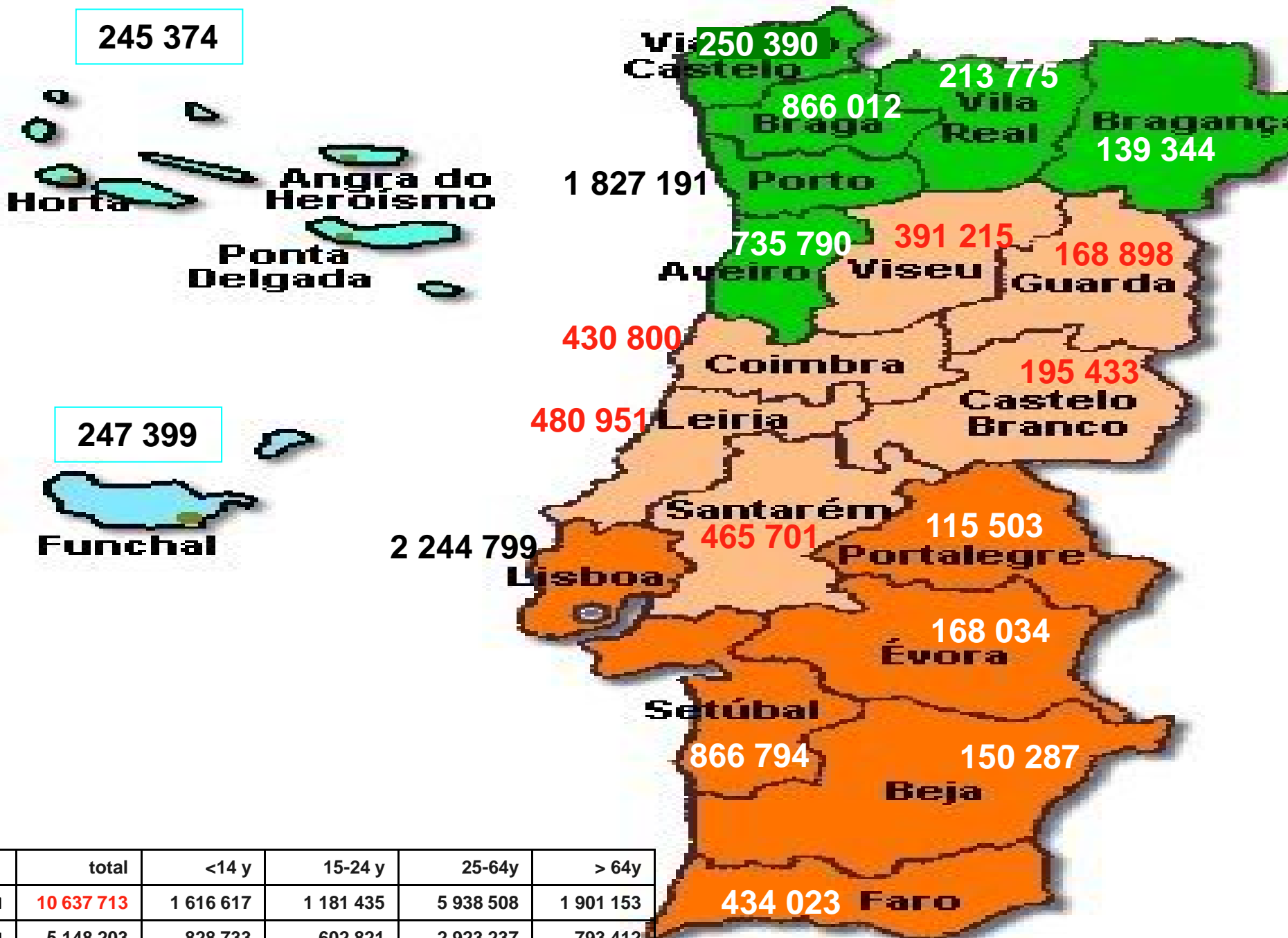


Autochthonous Hepatitis E

Country	Prevalence	Sample Size	Reference article
Spain	7,3%	1280 donors	Buti et al 2006
France	10,6% 97%	431 acute hepatitis 62 HEV 5 years	Mansuy et al 2004 2009
Italy	3,3%	651 with acute Hepatitis	Romanò et al. 2010
Germany	68%	66 HEV infection	Wichmann et al. 2008
Netherlands	2,7%	694 acute hepatitis	Borgen et al 2008
Sweden	9,3%	108	Olsen et al 2006
UK	3,3% 3,6%	838 acute hepatitis 478	Dalton et al 2008 Ijaz et al 2005
Denmark	20,6%	461	Christensen et al 2008

The epidemiological situation of Hepatitis E in Portugal





	total	<14 y	15-24 y	25-64y	> 64y
HM	10 637 713	1 616 617	1 181 435	5 938 508	1 901 153
H	5 148 203	828 733	602 821	2 923 237	793 412
M	5 489 510	787 884	578 614	3 015 271	1 107 741

The epidemiological situation of Hepatitis E in Portugal

Area	Prevalence	Sample Size	Reference
Lisbon	29%	360	Marinho R et al. 1994
North	2,5%	1430 HD	Queirós L et al. 1997
Porto	4% 6,8%	50 HD 103 CLD	Macedo G et al. 1998
North	2.1%	681 HD	Lecour H et al 1999
Lisbon	3,3% 3,5%	152 LD 85 HBD	Folgado Alberto et al. 2007
Lisbon	3,2 %	95 GE	Folgado Alberto et al. 2011

The epidemiological situation of Hepatitis E in Portugal

Lisbon, 1994

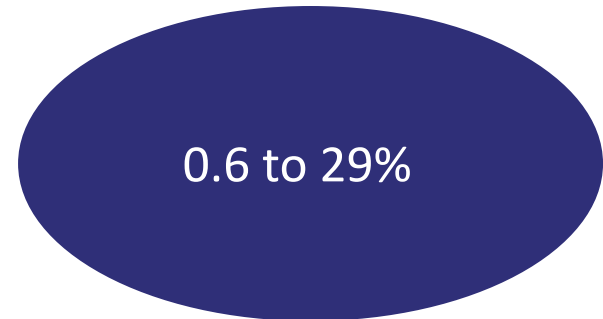
- 50 Medical students – 4% (2)
- 138 Health workers – 19.5% (19)
- 72 HCV patients – 48% (35)
- 13 Pediatric patients – 0% (0)
- 39 Drug users- 87% (34)

- 17 Timor inhabitants – 53% (9)
- 31 Cape Vert inhabitants – 16% (5)

360 patients – 104 (29%) but ...

Enzymatic immunoassay

Positive if > 10 % of the cut-off value



The epidemiological situation of Hepatitis E in Portugal

North of Portugal, 1997

- 1473 Volunteer healthy donors
- North of Portugal
 - Braga, Bragança, Porto, Viana do Castelo and Vila Real
- Mean age – 37.19 y
- 5% had traveled to endemic areas
- 0,5% had had blood transfusion
- 6.4% were AgHbs+
- 0% HVC+
- Enzymatic immunoassay
- Positive results were confirmed by western Blot



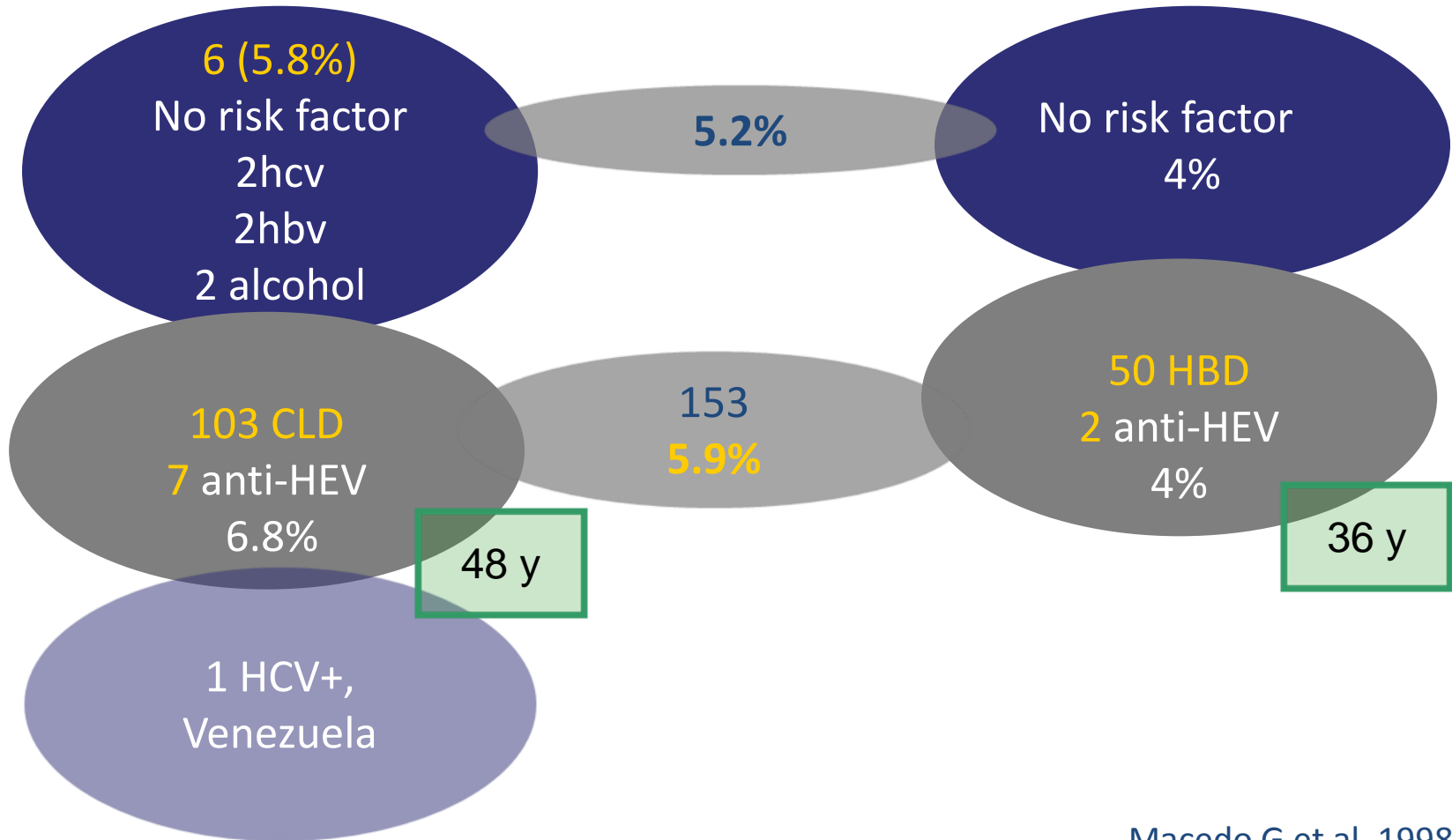
The epidemiological situation of Hepatitis E in Portugal

North of Portugal, 1997

- HEV prevalence (IgG) – **2.5% (64)**
- No statistically significant association has been found between HEV prevalence and:
 - age
 - gender
 - area of residence
 - presence of AgHbs+

The epidemiological situation of Hepatitis E in Portugal

Porto, 1998



Macedo G et al. 1998


Enzymatic immunoassay
Positive results were retested for regular cut-off values

The epidemiological situation of Hepatitis E in Portugal

North of Portugal, 1999

- 681 Volunteer healthy donors
- North of Portugal
 - Braga, Bragança, Porto, Viana do Castelo and Vila Real
- Mean age – 20,3
- 0 had traveled to endemic areas
- ? had had blood transfusion
- ? HCV or HBV

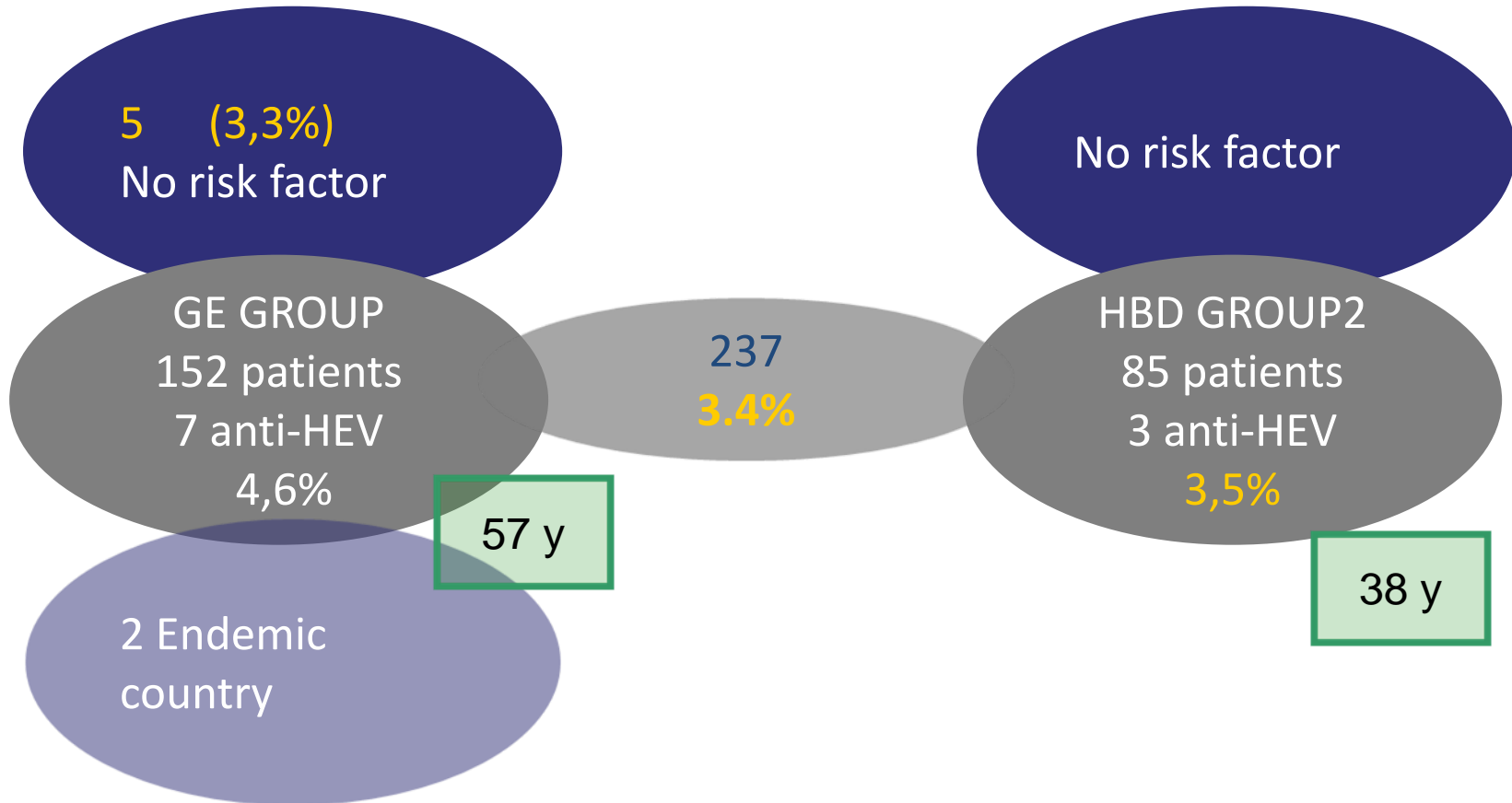
- Enzimatic imunoessay , Abbott
- Positive if twice the cutoff value



No risk factor
14/ 2.1%

The epidemiological situation of Hepatitis E in Portugal

Lisbon, 2007

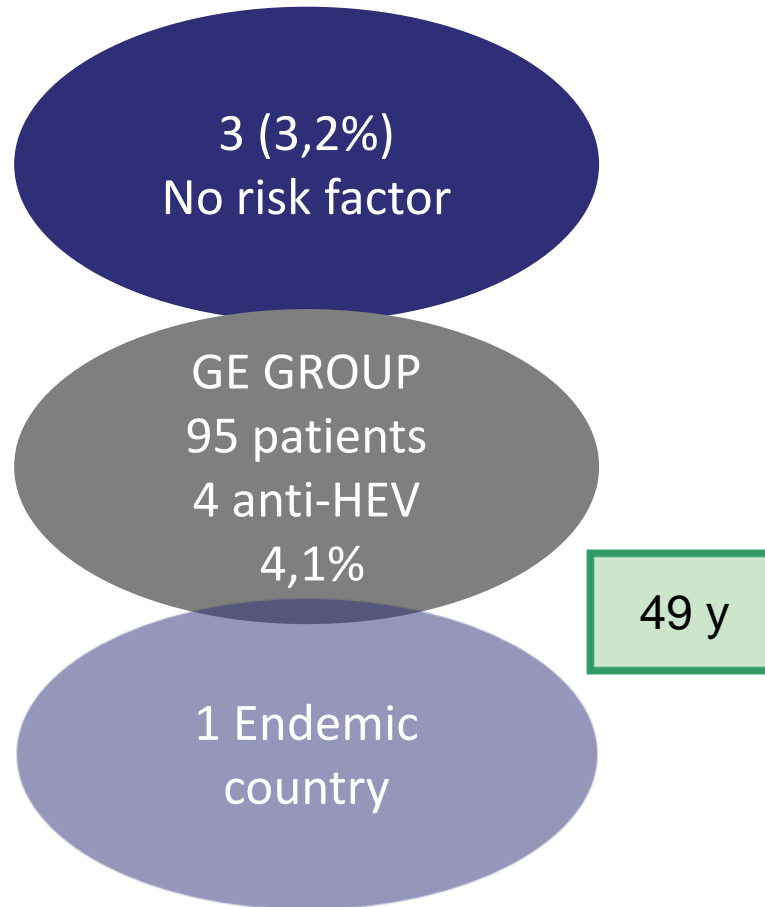


Folgado Alberto et al.

Enzymatic immunoassay
Positive results were retested for regular cut-off values > 1.1

The epidemiological situation of Hepatitis E in Portugal

Lisbon, 2010



Enzymatic immunoassay
Positive results were retested for regular cut-off values > 1.1

Folgado Alberto et al.

Diagnosis of HEV at discharge

	HEV	With coma
1995	2	
1996	1	1
1998	-	1
1999	2	
2000	1	
2002	4	
2003	10	
2004	1	
2006	1	
2008	1	
	23	2

25 acute HEV+
Unknown risk factors
2 coma

44 y

The epidemiological situation of Hepatitis E in Portugal

Acute HEV cases

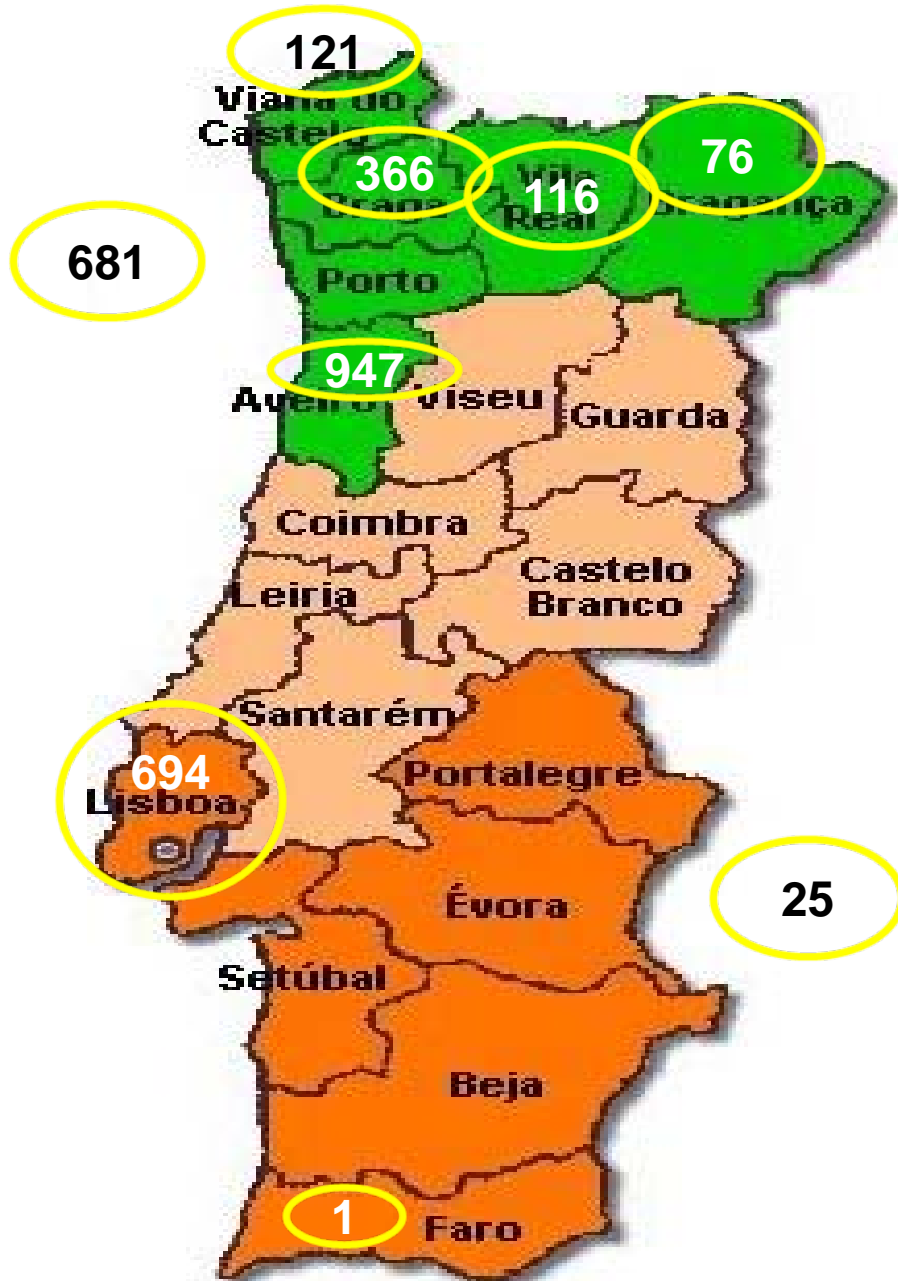
Area	Hospital	Description
Lisbon	IPO	Man, 50y, HBV+, Paris,
Lisbon	H. Santa Maria	Man, 20y, Spain
Algarve	H. Barlavento	Woman, 27y, HIV+, no trips

The epidemiological situation of Hepatitis E in Portugal

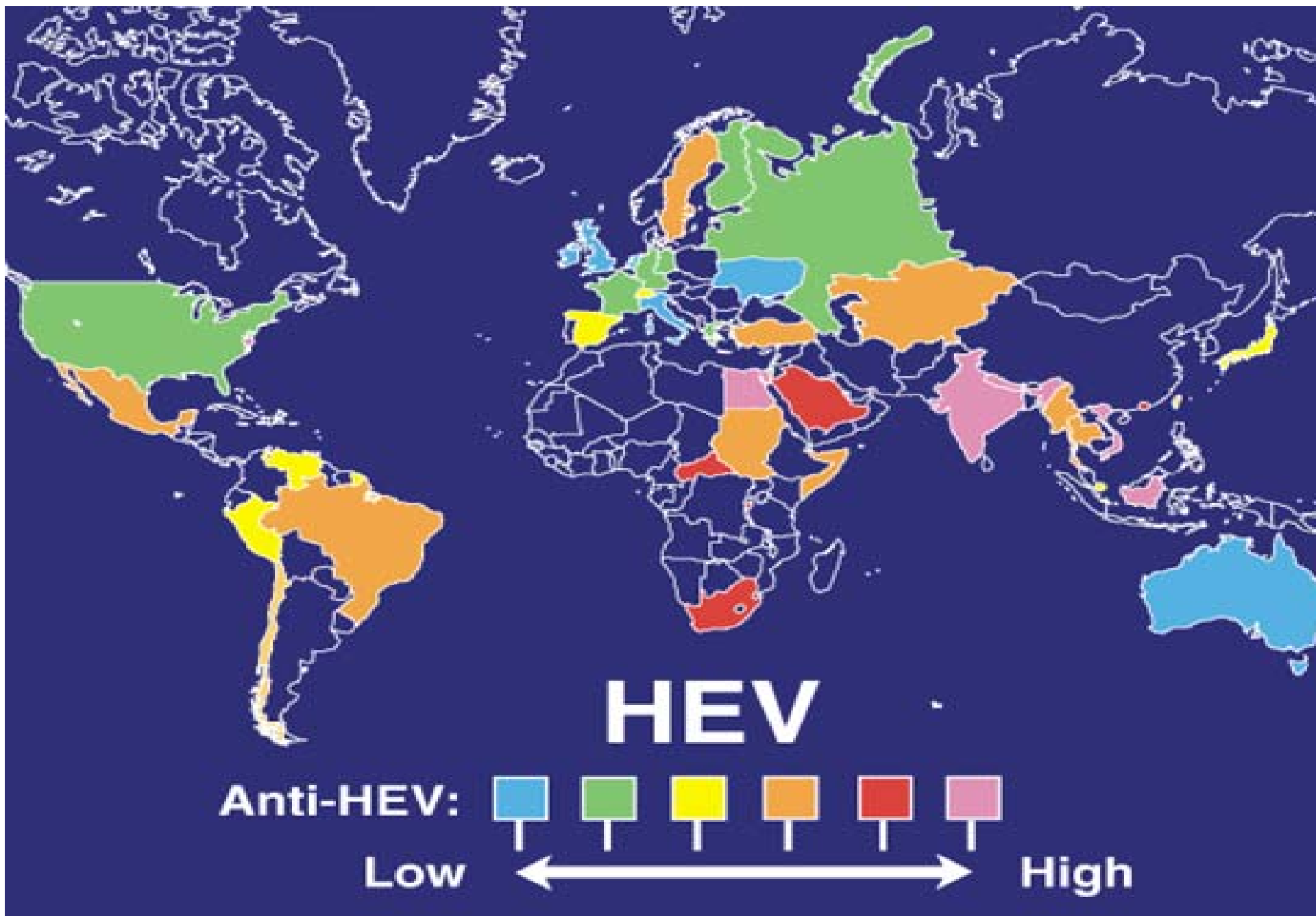


- We don't test for HEV
- Difficult access to serological test
- It's not declared

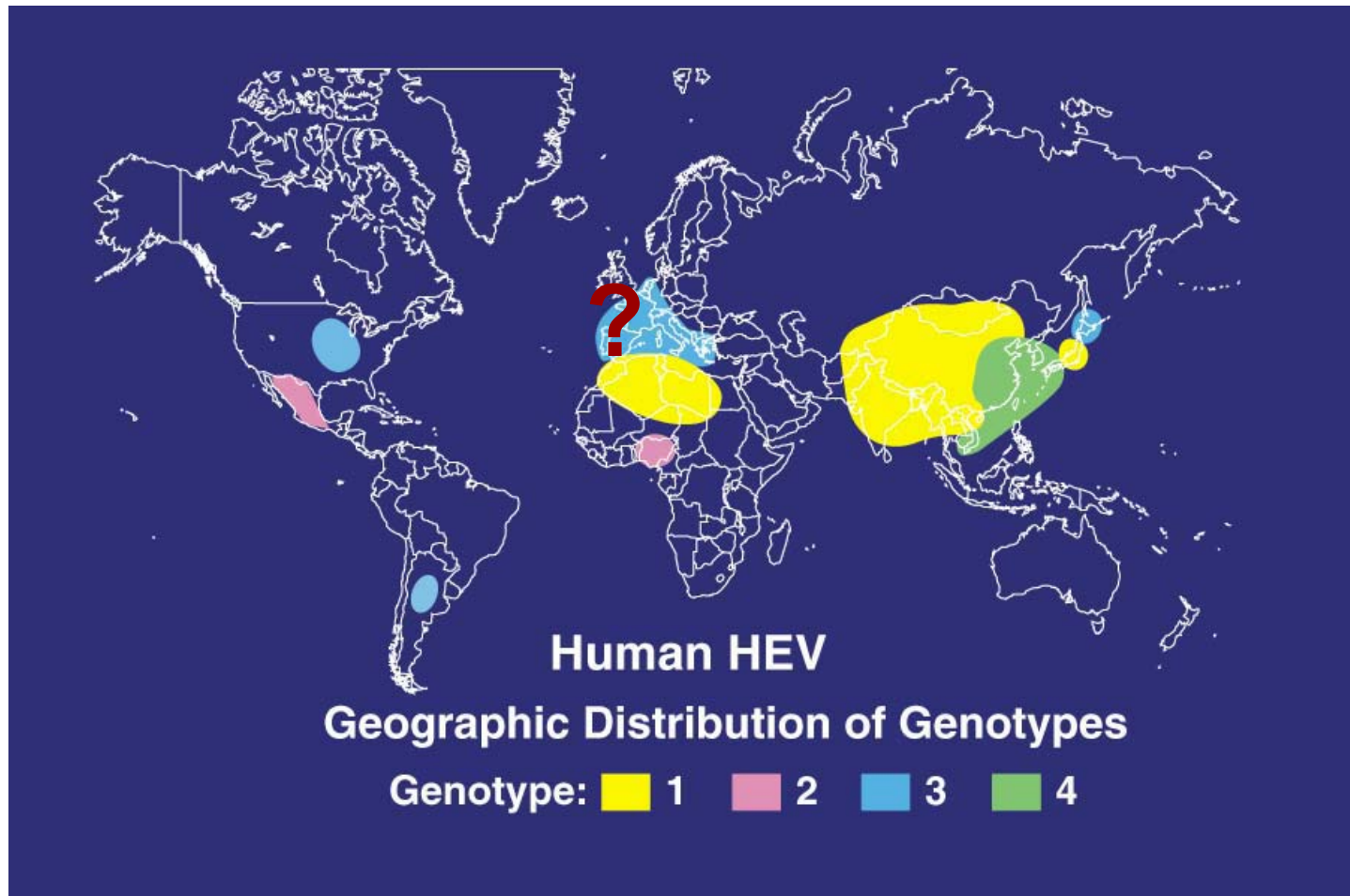
The epidemiological situation of Hepatitis E in Portugal



- 1994-2010
- Including HCV, HBV
- Total sample 3027
- No travels 2691
- Total HEV+ 233 (**7.7%**)
- 101 HEV (**3,8%**)



Genotypes



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There is evidence of Hepatitis E in Portugal

HEV might be underdiagnosed because of lack of serological testing



Thank you !



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