***Reply to* "Testing for hereditary spherocytosis: a French experience". Haematologica. 2012;97(12):e48-9.**

The data presented by Mayeur-Rousse *et al.*[1] in this issue of the journal are very interesting. We stratified the hereditary spherocytosis (HS) patients of our series[2] in the 4 categories adopted by the authors finding a perfect correspondence of the results among classes in which a 15-21% and an over 21% decrease in fluorescence was observed; even at a cut-off value of 15%, the test sensitivity is the same (84% *vs*. 85%), albeit slight differences are observed within the two classes of below 11% and 11-15% (Table 1). Interestingly, the ROC curve analysis performed by Mayeur-Rousse *et al.* to discriminate HS from healthy controls shows an optimal cut off at 10% decrease in fluorescence, in line with that observed in our series (11%), whereas the comparison of HS with other hemolytic diseases indicated an optimal cut off at 14%. This latter finding raises the important point of differential diagnosis of HS with other rare hemolytic anemias. Applying a cut-off value of 14% to our 84 non-HS hemolytic patients, we were able to discriminate all the hereditary elliptocytosis (HE) from HS but only 4 of 14 congenital dyserythropoietic anemia type II (CDAII) patients, similarly to that found by Mayeur-Rousse *et al.* However, at this cut off, test sensitivity towards HS decreased from 93% to 84% mainly due to loss of patients with mild/compensated anemia and few spherocytes on peripheral blood smear.[3]

These data further confirm the usefulness of eosin-5-maleimade (EMA) binding as the first screening test for HS, provided that red cell morphology and family history are also taken into account. However, due to the overlap of the ROC curve in HS and hemolytic non-HS patients, we agree that subjects with EMA-binding values between 11-14% deserve further investigation.

Paola Bianchi, Elisa Fermo, and Alberto Zanella

U.O. Ematologia e Centro Trapianti di Midollo, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico Milan, Italy

Correspondence: Paola Bianchi, U.O. Ematologia e Centro Trapianti di Midollo, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Via Francesco Sforza 35, 20122 Milan, Italy.

E-mail: paola.bianchi@policlinico.mi.it

Key words: hereditary spherocytosis, eosin-5-maleimade binding test, fluorescence.

Citation: Bianchi P, Fermo E, and Zanella A. Reply to "Testing for hereditary spherocytosis: a French experience". Haematologica. 2012;97(12):e48-9. Haematologica 2012;97(12):e52. doi:10.3324/haematol.2012.075168

The information provided by the authors about contributions from persons listed as authors and in acknowledgments is available with the full text of this paper at www.haematologica.org.

Financial and other disclosures provided by the authors using the ICMJE (www.icmje.org) Uniform Format for Disclosure of Competing Interests are also available at www.haematologica.org.

References

1. Mayeur-Rousse C, Gentil M, Botton J, Thibaut MF, Guitton C, Picard V. Testing for hereditary spherocytosis: a French experience. Haematologica. 2012;97(12):e48-9.
2. Bianchi P, Fermo E, Vercellati C, Marcello AP, Porretti L, Cortelezzi A, et al. Diagnostic power of laboratory tests for hereditary spherocytosis: a comparison study in 150 patients grouped according to molecular and clinical characteristics. Haematologica. 2012;97(4):516-23.
3. Bianchi P, Fermo E, and Zanella A. Reply to "Flow cytometry test for hereditary spherocytosis". Haematologica. 2012;97(12):e47. Haematologica. 2012;97(12):e50-1.

Table 1. Results of the EMA binding test (at different cut-off categories) in 150 HS patients, 84 non-HS hemolytic anemias and 575 healthy controls (A) compared with the results reported by Mayeur-Rousse (B).

% decrease in fluorescence	HS		CDAII		HE/HPP		SAO		Xerocytosis		Others		Controls	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
<11	10 (7%)	9 (11%)	1	1	8	0	0	0	3	16	57	74	566 (98%)	133 (99%)
11-15	14 (9%)	3 (4%)	3	1	2	4	0	0	0	0	0	3	9	1
16-21	19 (13%)	11 (13%)	4	4	0	3	0	0	0	0	0	1	0	0
>21	107 (71%)	52 (72%)	6	1	0	1 (HPP)	0	4	0	0	0	0	0	0
Total	150	82	14	7	10	8	0	4	3	16	57	78	575	134