Standardization, 
Documentation and Normal 
Values in Haematology

2nd Transactions of the Standardizing Committee of the 
European Society of Haematology and 

Proceedings of a Symposium held at the Xth Congress of the 
International Society of Haematology 

Stockholm, 30th August and 1st September, 1964 

Edited by Ch. G. de Boroviczény 

Medical University Clinic, Freiburg i. Br. (Germany) 

With 56 figures and 49 tables 

BASEL (Switzerland) S. KARGER NEW YORK 

Erscheint gleichzeitig als 

Bibliotheca Haematologica 

Additamentum ad 

Acta Haematologica 

International Journal of Haematology - Journal International d'Hématologie 
Internationale Zeitschrift für Hämatologie 

Contributing Editors : 
L. Heilmeyer, Freiburg i. Br. - E. Meulengracht, København - S. Moeschlin, Solothurn - J. Waldenström, Lund 


et 

Additamentum ad 

Vox Sanguinis
Preface

The universal and lively interest displayed by more than 200 participants from 34 countries throughout the world with regard to our meetings shows how topical are the themes cited in the title of the symposium (and this report) and which have until now been so sadly neglected.

Among the questions of standardization, the first main theme of our symposium, that of haemometry, still occupied the focal point of most papers. In addition, however, the problems of standardizing numerous other haematological methods were mentioned, thus outlining the path to be taken by the relevant research during the next few years. With regard to haemometry, it was of great importance that the majority of the world leaders in this field were present for this question; and that at last the discussion revealed the possibility of worldwide agreement. Other papers were devoted to the important theme of documentation of haematological findings, diseases, methods and the literature, and showed what immense opportunities for technical progress are offered in this field. The third section of the papers was concerned with the question “What is normal?” and contributed a large number of haematological normal values from widely varying countries and continents.
At the meeting of the European Standardizing Committee the delegates from a dozen European countries reported on, inter alia, the problems of organisation, as well as on their experiences up to the present of the work of haematological standardization in their own countries. They exchanged experiences, and brought a significant stimulus to the work still to be accomplished. Here, too, the question of haemometry was in the forefront (one delegate even communicated a norm draft worked out to the last detail) but other methods were also discussed.

The present volume contains all papers and discussions together with extensive bibliographies, and forms the companion to the Fasc. 18 of the Bibliotheca Haematologica “Erythrocytometric Methods and their Standardization”, which in the few months since it appeared has already met with an enthusiastic reception.

It is my pleasant duty to thank Prof. Waldenström, the President, and Prof. Böttiger, the General Secretary of the Congress, and Prof. Thorell, who have rendered possible the realisation of these meetings. I have also to thank Prof. Heilmeyer for presiding at our conferences; the authors for their brilliant scientific work; and all participants, whose vigorous co-operation has helped to make both of these meetings an outstanding success. My thanks are due to Prof. Astaldi, Dr. Coster, Dr. Lewis and Dr. Spaander, who so kindly undertook the editorship of large sections of the second part. My thanks are also due to the publishers, S. Karger, for the rapid publication of this work and for its moderate price, which was also rendered possible by the generous support of the Ministry of Public Health of Germany and of the firms mentioned overleaf. Finally, I have to thank Mrs. Gózon and Mr. Preston for their skilful assistance in interpreting and correcting this volume.

Freiburg im Breisgau, November 1964

Ch. G. de Boroviczény

Acknowledgement

The organization of the symposium and the publication of this issue was supported by:
Preface ........................................... III

Part I
Proceedings of the Symposium “Standardization, Documentation and Normal Values in Haematology” of the Xth Congress of the International Society of Haematology

1. Standardization
a) General Aspects

Heilmeyer, L. (Freiburg i. Br.): The Standardization of Haematological Methods .................. 2
Stengle, J. M.; Strumia, M. M.; Liddy, Th. J. and Brecher, G. (Bethesda, Md. and Bryn Mawr, Pa.) : Mean Corpuscular Haemoglobin Concentration (MCHC) and Mean Corpuscular Volume (MCV) as
b) Haemoglobinometry and Molecular Weight of Haemoglobin

Adair, G. S. (Cambridge): Estimations of the Molecular Weight of Haemoglobin by Measurements of Osmotic Pressures .......... 43
Lehmann, H. (Cambridge): The Influence of Abnormal Haemoglobins to the Average Molecular Weight of Haemoglobin .......... 48
Braunitzer, G. (Munich) : The Molecular Weight of Human Haemoglobin .......... 49
Schroeder, W. A. (Pasadena, Calif.): Factors in the Difference Between the Calculated and Determined Molecular Weight of Human Haemoglobin .......... 50
Discussion .......... 54
References .......... 56

Index VII

c) Haemoglobincyanide Standard Solutions

Eilers, R. J. (Kansas City): Experience with the Cyanmethaemoglobin Standard for Haemoglobinometry in the United States .......... 66
Holtz, A. H. (Utrecht): Some Experience with a Cyanhaemoglobin Solution .......... 75
Klein-Wisenberg, A. von and Clotten, R. (Freiburg i. Br.): Examination of Commercial Haemoglobincyanide Standard Solutions by Spectrophotometry, Electrophoresis, and Chromatography .......... 79
2. Documentation

Fritze, E. (Bochum): Propositions on Documentation of Haematological Data and Haematological Literature .................................. 103
Stobbe, H. (Berlin): Clear Recording of Blood-Cell and Haemoglobin Values ...................................................... 111
Reissner, I. (Freiburg i. Br.) : Documentation of Haematological Findings as a Prerequisite for Standardizing Diagnostic Terminology and Examination Methods .......................... 114
Discussion ................................................... 116
References ..................................................... 118

3. Normal Values

Koller, S. (Mainz) : Problems in Defining Normal Values ......................................................... 125
Reimann, F. (Istanbul): Normal Haematological Values in the Turkish Population .................................................. 132
Hoshino, T. (Hiroshima): Haematological Values in Hiroshima and Nagasaki .................................................. 135
Kawakita, Y. (Kumamoto): Normal Values for Blood Picture and Bone Marrow Findings in Japanese Individuals ........................................... 151
Discussion ..................................................... 163
References ..................................................... 167

VIII Index

Appendix

Proposal for the Foundation of an International Standardizing Committee
of Haematology .......................... 169
Boroviczény, Ch. G. de (Freiburg i. Br.); Führ, J. (Hamburg); Gaster, F. (Berlin); Kleine, N. and Klein-Wisenberg, A. von (Freiburg i. Br.): Text of the German Norm Draft DIN 58931 ......................... 171

Part II

Transactions of the Standardizing Committee of the European Society of Haematology

Report of the 2nd Session of the Board ......................... 188
Report of the 3rd Session of the Board ......................... 190
Minutes of the Extraordinary General Assembly ................. 192
Reports: Derviz, G. V. and Alexeieff, G. (Moscow) ............ 194
Gabl, F. (Innsbruck) ........................................ 195
Jørgensen, K. (Copenhagen) ................................. 196
Kampen, E. J. van (Groningen) .............................. 197
Kelemen, E. (Budapest) ...................................... 198
Kleine, N. (Freiburg i. Br.) .................................. 199
Libánsky, J. (Prague) ......................................... 199
Nevanlina, H. R. and Furuhjelm, U. (Helsinki) .................. 201
Pawelski, S. (Warsaw) ........................................ 202
Rein, H. (Berlin) ............................................... 203
Schrumpf, A. (Porsgrunn) .................................... 203
Stewart, J. W. (London) ....................................... 204
Tentori, L. (Roma) ............................................. 205
Trincão, C. (Lisboa) .......................................... 206
Discussion .................................................. 206
Report of the 4th Session of the Board ......................... 209

Appendix

Constitution of the International Committee for Standardization in Haematology of the European Society of Haematology ....................... 211
Recommendations and Requirements for Haemoglobinometry in Human Blood ..................... 213

List of Participants ........................................ 217
Author’s Index ............................................ 224
Subject Index ............................................. 225