CONTENTS

COMMENTS FROM THE EDITOR ................................................................................................................................. ix

REVIEW ARTICLE

Review: Factor VIII Gene and Hemophilia A................................................................. G.C. White, II, and C.B. Shoemaker 1

RAPID COMMUNICATIONS

Stimulation of Erythropoietin Gene Transcription During Hypoxia and Cobalt Exposure .............. S.J. Schuster,
E.V. Badiavas, P. Costa-Giomi, R. Weinmann, A.J. Erslev, and J. Caro 13

Hepatitis B Virus DNA in the Serum of Sardinian Blood Donors Negative for the Hepatitis B Surface Antigen
M.E. Lai, P. Farci, A. Figus, A. Balesstrieri, M. Arnone, and G.N. Vyas 17

CLINICAL INTERVENTION AND THERAPEUTIC TRIALS

Treatment of Aggressive Multiple Myeloma by High-Dose Chemotherapy and Total Body Irradiation Followed by
Blood Stem Cells Autologous Graft ......................... J.-P. Fermand, Y. Levy, J. Gerota, M. Benbunan, J.M. Cosset,
S. Castaigne, M. Seligmann, and J.-C. Brouet 20

In Vivo Cell Growth and Pharmacologic Determinants of Clinical Response in Acute Myelogenous Leukemia
J.E. Karp, R.C. Donehower, J.P. Enterline, G.B. Dole, M.G. Fox, and P.J. Burke 24

Recombinant Human Granulocyte-Macrophage Colony-Stimulating Factor in Patients With Myelodysplastic
Syndromes—A Phase I/II Trial ......................................................... A. Ganser, B. Völkers, J. Greher,
O.G. Ottmann, F. Walther, R. Becher, L. Bergmann, G. Schulz, and D. Hoelzer 31

Deoxycoformycin-Induced Immunosuppression in Patients With Hairy Cell Leukemia ..... W.J. Urba, M.W. Baseler,

Toward Comprehensive Management Tailored to Prognostic Factors of Patients With Clinical Stages I and II in
Hodgkin’s Disease. The EORTC Lymphoma Group Controlled Clinical Trials: 1964–1987 .......... M. Tubiana,
M. Henry-Amar, P. Carde, J.M.V. Burgers, M. Hayat, E. Van der Schueren, E.M. Noordijk, A. Tanguy,
J.H. Meerwaldt, J. Thomas, B. De Pauw, M. Monconduit, J.M. Cosset, and R. Somers 47

Treatment of Acute Lymphoblastic Leukemia in Adults With Intensive Induction, Consolidation, and Maintenance
Chemotherapy ............... K.K. Hussein, S. Dahlberg, D. Head, C.C. Waddell, L. Dabich, J.K. Weick, F. Morrison,
J.H. Saiki, E. Metz, S.E. Rivkin, M.B. Grever, D. Boldt, and the Southwest Oncology Group 57

HEMATOPOIESIS

Granulocyte-Macrophage Colony-Stimulating Factor (CSF) and Multilineage CSF Recruit Human Monocytes to
Express Granulocyte CSF ......................................................... W. Oster, A. Lindemann, R. Mertelsmann, and F. Herrmann 64

Demonstration of a Blood-Bone Marrow Barrier to Macrophage Colony-Stimulating Factor............. R.K. Shadduck,
A. Waheed, and E.J. Wing 68

Suppressive Effects In Vivo of Purified Recombinant Human H-Subunit (Acidic) Ferritin on Murine Myelopoiesis

Various Human Hematopoietic Growth Factors (Interleukin-3, GM-CSF, G-CSF) Stimulate Clonal Growth of
Nonhematopoietic Tumor Cells ......................... W.E. Berdel, S. Danhauser-Riedl, G. Steinhauser, and E.F. Winton 80

(Continued on following page)
Survival of Recombinant Erythropoietin in the Circulation: The Role of Carbohydrates
M.N. Fukuda, H. Sasaki, L. Lopez, and M. Fukuda
84

The In Vivo Metabolism of Recombinant Human Erythropoietin in the Rat
J.L. Spivak and B.B. Hogans
90

Proliferation and Maturation of Human Erythroid Progenitors in Liquid Culture
E. Fibach, D. Manor, A. Oppenheim, and E.A. Rachmilewitz
100

The Human Interleukin-1α Gene Is Located on the Long Arm of Chromosome 2 at Band q13
104

In Vivo Hematologic Effects of Recombinant Interleukin-6 on Hematopoiesis and Circulating Numbers of RBCs and WBCs
T.R. Ulich, J. del Castillo, and K. Guo
108

Dual Role of Fibronectin in Hematopoietic Differentiation
R. Weinstein, M.A. Riordan, K. Wenc, S. Kreczko, M. Zhou, and N. Dainiak
111

Serum Granulocyte Colony-Stimulating Factor Levels in Healthy Volunteers and Patients With Various Disorders as Estimated by Enzyme Immunoassay
K. Watari, S. Asano, N. Shirafuji, H. Kodo, K. Ozawa, F. Takaku, and S.-I. Kamachi
117

Putative Involvement of Protein Kinase C in Proliferation of Human Myeloid Progenitor Cells
N. Katayama, M. Nishikawa, N. Minami, and S. Shirakawa
123

Differential Expression of CD11b/CD18 (Mo1) and Myeloperoxidase Genes During Myeloid Differentiation
A.G. Rosmarin, S.C. Well, G.L. Rosner, J.D. Griffin, M.A. Arnaout, and D.G. Tenen
131

In Situ Hybridization Histochemistry Localization of Interleukin-3 mRNA in Mouse Brain
W.L. Farrar, M. Vinocour, and J.M. Hill
137

HEMOSTASIS AND THROMBOSIS

α-Tocopherol, an Effective Inhibitor of Platelet Adhesion
J. Jandak, M. Steiner, and P.D. Richardson
141

Epinephrine Induces Platelet Fibrinogen Receptor Expression, Fibrinogen Binding, and Aggregation in Whole Blood in the Absence of Other Excitatory Agonists
S.J. Shattil, A. Budzynski, and M.C. Scrutton
150

Tumor Necrosis Factor Leads to the Internalization and Degradation of Thrombomodulin From the Surface of Bovine Aortic Endothelial Cells in Culture
K.L. Moore, C.T. Esmon, and N.L. Esmon
159

Expression of a Fibrinogen Fusion Peptide in Escherichia coli: A Model Thrombin Substrate for Structure/Function Analysis
S.T. Lord and D.M. Fowlkes
166

Abnormalities of Cytoplasmic CA²⁺ in Platelets From Patients With Uremia
J.A. Ware, B.A. Clark, M. Smith, and E.W. Salzman
172

Heparin Binds to Human Monocytes and Modulates Their Procoagulant Activities and Secretory Phenotypes. Effect of Histidine-Rich Glycoprotein
L. Leung, K. Saigo, and D. Grant
177

Activation/Inactivation of Human Factor V by Plasmin
C.D. Lee and K.G. Mann
185

Histidine-Rich Glycoprotein Does not Interfere With Interactions Between Antithrombin III and Heparin-Like Compounds on Vascular Endothelial Cells
K. Shimada, A. Kawamoto, K. Matsubayashi, and T. Ozawa
191

IMMUNOBIOLOGY

Human T-Lymphotrophic Virus I-Infected T Cells Constitutively Express Lymphotoxin In Vitro
E. Tschachler, M. Robert-Guroff, R.C. Gallo, and M.S. Reitz, Jr
194

Studies of In Vitro Activated CD5+ B Cells
202

Increased Serum CD8 Antigen Level in Childhood Hodgkin's Disease Relates to Advanced Stage and Poor Treatment Outcome
209

(Continued on following page)
**CONTENTS**

(Contents continued)

Characterization of a Novel Form of Transferrin Receptor Preferentially Expressed on Normal Erythroid Progenitors and Precursors .............................................. T. Cotner, A. Das Gupta, Th. Papayannopoulou, and G. Stamatoyannopoulos 214

**NEOPLASIA**

Isolation of Reed-Sternberg Cells From Lymph Nodes of Hodgkin’s Disease Patients ........... G. Sitar, E. Brusamolino, C. Bernasconi, and E. Ascari 222

Chromosome 7 Long Arm Deletion in Myeloid Disorders: A Narrow Breakpoint Region in 7q22 Defined by Molecular Mapping ................................. J. Kere, T. Ruutu, K.A. Davies, I.B. Roninson, P.C. Watkins, R. Winqvist, and A. de la Chapelle 230


Phenotypic Heterogeneity of Spontaneous Lymphomas of CWD Mice ......................... C.Y. Thomas, V.K. Buxton, J.S. Roberts, B.J. Boykin, and D. Innes 240


Prognostic Impact of Cytogenetic Abnormalities in Patients With De Novo Acute Nonlymphocytic Leukemia ................................. C.A. Schiffer, E.J. Lee, T. Tomiyasu, P.H. Wiernik, and J.R. Testa 263

Immunophenotype-Karyotype Associations in Human Acute Lymphoblastic Leukemia .................. F.M. Uckun, K.J. Gajl-Peczalska, A.J. Provisor, and N.A. Heerema 271

Analysis of N-RAS Exon-1 Mutations in Myelodysplastic Syndromes by Polymerase Chain Reaction and Direct Sequencing ............................................. M. Bar-Eli, H. Ahuja, N. Gonzalez-Cadavid, A. Foti, and M.J. Cline 281

**PHAGOCYTES**

Monocyte Antigen CD14 Is a Phospholipid Anchored Membrane Protein ....................... D.L. Simmons, S. Tan, D.G. Tenen, A. Nicholson-Weller, and B. Seed 284

Aberrant Restriction Endonuclease Digests of DNA From Subjects With Hereditary Myeloperoxidase Deficiency ....................................................... W.M. Nauseef 290


Respiratory Burst in Adherent Human Neutrophils: Triggering by Colony-Stimulating Factors CSF-GM and CSF-G ........................................................................................................ C.F. Nathan 301

Synergistic Stimulation of Macrophage Proliferation by the Monokines Tumor Necrosis Factor-Alpha and Colony-Stimulating Factor 1 ........................................... D.R. Branch, A.R. Turner, and L.J. Guilbert 307

**RED CELLS**

Elevated Glutathione Accelerates Oxidative Damage to Erythrocytes Produced by Aromatic Disulfide ....... Y. Maede, M. Kuwabara, A. Sasaki, M. Inaba, and W. Hiraoka 312


(Continued on following page)

An αγ Type of Nondeletional Hereditary Persistence of Fetal Hemoglobin With a T → C Mutation at Position –175 to the Cap Site of the αγ Globin Gene ................. T.A. Stoming, G.S. Stoming, K.D. Lanclos, Y.J. Fei, C. Altay, F. Kutlar, and T.H.J. Huisman 329

Catalase and Glutathione Peroxidase Are Equally Active in Detoxification of Hydrogen Peroxide in Human Erythrocytes ......................... G.F. Gaetani, S. Galiano, L. Canepa, A.M. Ferraris, and H.N. Kirkman 334

TRANSPLANTATION


TRANSFUSION MEDICINE


CORRESPONDENCE

Jaw Involvement in Burkitt’s Lymphoma ................................................. 351
Age as a Prognostic Factor in Multiple Myeloma .................................................. 353
Polymorphism of Vitronectin ................................................................. 353
High-Dose Intravenous Methylprednisone for Immune Thrombocytopenic Purpura .............................................. 354
Bronchiolitis Obliterans After Bone Marrow Transplantation ........................................... 355
Anti-D Immunoglobulins for Treatment of HIV-Related Immune Thrombocytopenic Purpura ................ 357

SPECIAL DEPARTMENTS

Announcements .................................................................................................. 358
Information for Contributors ........................................................................ xxii

All manuscripts submitted to BLOOD and subsequently accepted for publication will be assessed a $50.00 charge per published page. This charge is necessary to offset the increasing costs of publication.

All manuscripts submitted for consideration for publication in BLOOD should be sent to: Arthur W. Nienhuis, M.D., Editor, BLOOD, The Journal of the American Society of Hematology, 9650 Rockville Pike, Bethesda, MD 20814. For other information, call (301) 571-1895.

The American Society of Hematology certifies that the continuing medical education offering provided by BLOOD, The Journal of The American Society of Hematology, meets the criteria for up to 22 hours of credit in Category 5(a) for the Physician’s Recognition Award of the American Medical Association.