

Immunohematology



Journal of Blood Group Serology and Molecular Genetics

VOLUME 40, NUMBER 3, 2024



**American
Red Cross**

Immunohematology

Journal of Blood Group Serology and Molecular Genetics

Volume 40, Number 3, 2024

CONTENTS

89

CASE REPORT

Mixed-field ABO front typing as an early sign of disease recurrence in ABO-matched stem cell transplantation

N. Yurtsever, E.S. Lee, L. Pinatti, B. Shah, C.A. Tormey, and A.J. Siddon

93

ORIGINAL REPORT

Red blood cell extended antigen typing in Omani patients with sickle cell disease to enhance daily transfusion practice

A.S. Al Breiki, S. Al Kindi, and L. Castilho

100

ORIGINAL REPORT

The American Rare Donor Program: 25 years supporting rare blood needs

M.A. Keller, S.T. Nance, J. Maurer, V. Kavitsky, and S.P. Babariya

122

CASE REPORT

A challenging case of hemolytic disease of the fetus and newborn (HDFN) due to anti-Ku in a K₀ (Kell_{null}) mother

S.A. Wan Mohd Hasni, N.H. Ahmad, M. Ganeshan, S.L. Yong, P.P. Tan, R. Abdul Wahab, R.H. Musa, G. Muniandi, A. Nakulan, and A. Hassan

128

ANNOUNCEMENTS

129

ADVERTISEMENTS

136

INSTRUCTIONS FOR AUTHORS

EDITOR-IN-CHIEF

Margaret A. Keller, PhD
Philadelphia, Pennsylvania

MANAGING EDITOR

Cynthia Flickinger, MLS(ASCP)SBB
Bethany Beach, Delaware

SENIOR EDITOR

David Moolten, MD
Philadelphia, Pennsylvania

ASSOCIATE EDITORS

Corinne L. Goldberg, MD
Durham, North Carolina

Janis R. Hamilton, MS, MLS(ASCP)SBB
Detroit, Michigan

Jennifer Jung, MLS(ASCP)
St. Louis, Missouri

TECHNICAL EDITORS

Hallie Lee-Stroka, MLS(ASCP)SBB
New York, New York

Christine Lomas-Francis, MSc
Highland, New York

Dawn M. Rumsey, ART(CSMLT)
Duluth, Georgia

Tiffany Walters, MLS(ASCP)SBB^{CM}
Charlotte, North Carolina

PRODUCTION ASSISTANT

Douglas Roberts

COPY EDITOR

Frederique Courard-Hauri

PROOFREADER

Wendy Martin-Shuma

ELECTRONIC PUBLISHER

Paul Duquette

EDITORIAL BOARD

Carine Prisco Arnoni
São Paulo, Brazil

P. Dayand Borge, Jr., MD, PhD
New York, New York

Barbara J. Bryant, MD
Bedford, Texas

Lilian M. Castilho, PhD
Campinas, Brazil

Meghan Delaney, DO, MPH
Washington, District of Columbia

Anne F. Eder, MD
Washington, District of Columbia

Melissa R. George, DO, FCAP, FASCP
Hershey, Pennsylvania

Shane Grimsley
Bristol, United Kingdom

Julie K. Karp, MD
Philadelphia, Pennsylvania

Jose Lima, MD
Birmingham, Alabama

Christine Lomas-Francis, MSc
Highland, New York

Geralyn M. Meny, MD, MS
Dallas, Texas

Sandra Nance, MS, MASCP,
MLS(ASCP)SBB
Lansdale, Pennsylvania

Paul M. Ness, MD
Baltimore, Maryland

Thierry Peyrard, PharmD, PhD
Paris, France

Kathleen E. Puca, MD, MLS(ASCP)SBB
Milwaukee, Wisconsin

Ira A. Shulman, MD
Los Angeles, California

Jill R. Storry, PhD
Lund, Sweden

Nicole Thornton, MS
Bristol, United Kingdom

PAST EDITORS-IN-CHIEF

Sandra Nance, MS, MASCP,
MLS(ASCP)SBB
Lansdale, Pennsylvania

Delores Mallory, MLS(ASCP)SBB
Supply, North Carolina

Marion E. Reid, PhD, FIBMS
Bristol, United Kingdom

Immunohematology is published quarterly (March, June, September, and December) by the American Red Cross, National Headquarters, Washington, DC 20006.

Immunohematology is electronically published quarterly (March, June, September, and December) by DeGruyter Poland, Warsaw, Poland, and is available from <https://www.sciendo.com/journal/IMMUNOHEMATOLOGY>.

eISSN 1930-3955

Immunohematology is indexed and included in *Index Medicus* and MEDLINE on the MEDLARS system. The contents are also cited in the EMBASE/Excerpta Medica and Elsevier Scopus and BIOBASE/Current Awareness in Biological Sciences (CABS) databases.

For subscription types, rates, and forms, visit the Web site at <https://www.sciendo.com/journal/IMMUNOHEMATOLOGY>

For change of mailing address, extra copies, or information, send an email to: immuno@redcross.org.

Copyright 2024 by The American National Red Cross
ISSN 0894-203X



ON OUR COVER

Monet, well known as a founder of Impressionism, painted “Fishing Boats at Sea” (1868) relatively early in his career, and the work shows evidence of a style still evolving. There is a straightforward realism in how he depicts the two vessels in the foreground which is uncharacteristic of what he would do later. On the other hand, there are areas of the sea and sky rendered much more softly, with tone and texture rather than detail, and a flattening of perspective, as well as striking contrasts of color and light, all incongruous with the norms of the time. Despite these groundbreaking features, or because of them, the painting was rejected by the Paris Salon the following year. In this issue of *Immunohematology*, Yurtsever et al. discuss the use of the FISH method to monitor chimerism in a sex-mismatched transplant.

DAVID MOOLTEN, MD