

# The Journal of Arthroplasty

---

The *Journal of Arthroplasty* (ISSN: 0883-5403) is published monthly by Elsevier, 360 Park Avenue South, New York, NY 10010-1710. Periodicals postage paid at New York, NY, and additional mailing offices.

POSTMASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051.

**Editorial Office Correspondence:** Correspondence for the U.S. Editorial office for the *Journal of Arthroplasty*, Dr. William J. Hozack, MD, should be directed to: Taylor Bowen, Managing Editor, email: journalofarthroplasty@gmail.com.

**Annual subscription rates:** United States and possessions: individual, \$656; student and resident, \$269. All other countries: individual, \$829; student and resident, \$334. To receive student/resident rate, orders must be accompanied by name of affiliated institution, date of term, and the *signature* of program/residency coordinator on institution letterhead. Orders will be billed at individual rate until proof of status is received.

**Orders, claims, and journal inquiries:** Please contact the Elsevier Customer Service Department nearest you:

**St. Louis:** Elsevier Customer Service Department, 3251 Riverport Lane, Maryland Heights, MO 63043, USA; phone: (800) 654-2452 [toll free within the USA]; (+1) (314) 447-8871 [outside the USA]; fax: (+1) (314) 447-8029; e-mail: JournalCustomerService-usa@elsevier.com.

**Oxford:** Elsevier Customer Service Department, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) (1865) 843434; fax: (+44) (1865) 843970; e-mail: JournalsCustomerServiceEMEA@elsevier.com.

**Tokyo:** Elsevier Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg, 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: JournalsCustomerServiceJapan@elsevier.com.

**Singapore:** Elsevier Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 63490222; fax: (+65) 67331510; e-mail: JournalsCustomerServiceAPAC@elsevier.com.

**Advertising information:** Advertising orders and enquiries can be sent to: USA, Canada and South America: Tino DeCarlo, Advertising Sales Department, Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710, USA; phone: (+1) (212) 633-3815; fax: (+1) (212) 633-3820; e-mail: t.decarlo@elsevier.com.

**Reprints:** To order 100 or more reprints for educational, commercial, or promotional use, contact the Commercial Reprints Department, Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710; E-mail: reprints@elsevier.com.

**Author information:** For full and complete Author Information, please go to: <http://www.arthroplastyjournal.org/authorinfo>.

**Author inquiries:** For inquiries relating to the submission of articles (including electronic submission) please visit this journal's homepage at <http://www.elsevier.com/locate/arthroplastyjournal>. For detailed instructions on the preparation of electronic artwork, please visit <http://www.elsevier.com/artworkinstructions>. Contact details for questions arising after acceptance of an article, especially those relating to proofs, will be provided by the publisher. You can track accepted articles at <http://www.elsevier.com/trackarticle>. You can also check our Author FAQs at <http://www.elsevier.com/authorFAQ> and/or contact Customer Support via <http://support.elsevier.com>.

**Funding body agreements and policies:** Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit <http://www.elsevier.com/fundingbodies>.

©2020 Elsevier Inc. All rights reserved. This journal and the individual contributions contained in it are protected under copyright by Elsevier Inc., and the following terms and conditions apply to their use:

**Photocopying:** Single photocopies of single articles may be made for personal use as allowed by national copyright laws. Permission of the Publisher and payment of a fee is required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for non-profit educational classroom use. For information on how to seek permission visit [www.elsevier.com/permissions](http://www.elsevier.com/permissions) or call: (+44) 1865 843830 (UK) / (+1) 215 239 3804 (USA).

**Derivative Works:** Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution. Permission of the Publisher is required for all other derivative works, including compilations and translations (please consult [www.elsevier.com/permissions](http://www.elsevier.com/permissions)).

**Electronic Storage or Usage:** Permission of the Publisher is required to store or use electronically any material contained in this journal, including any article or part of an article (please consult [www.elsevier.com/permissions](http://www.elsevier.com/permissions)). Except as outlined above, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the Publisher.

**Notice:** No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made. Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

The ideas and opinions expressed in *The Journal of Arthroplasty* do not necessarily reflect those of the Editor or the Publisher. The articles and substantive materials contained in *The Journal of Arthroplasty* are for educational purposes only. The authors of the articles and substantive materials contained herein are solely responsible for their accuracy. Accordingly, the Journal's publisher and editors disclaim all responsibility for the accuracy or completeness of any such articles and substantive materials. The publication of advertisements in the Journal does not constitute an endorsement or guarantee by the Journal's publisher or editors of the quality or value of the advertised services or products or of the claims made for such services or products. Readers are encouraged to contact the manufacturer with any questions about the features or limitations of the products mentioned. The Publisher does not assume any responsibility for any injury and/or damage to persons or property arising out of or related to any use of the material contained in this periodical. The reader is advised to check the appropriate medical literature and the product information currently provided by the manufacturer of each drug to be administered to verify the dosage, the method and duration of administration, or contraindications. It is the responsibility of the treating physician or other health care professionals, relying on independent experience and knowledge of the patient, to determine drug dosages and the best treatment for the patient.

© The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper)

---

Elsevier  
New York, NY