Clinical Evaluation of Class II Restorations Made with Bulk-fill Restorative Materials
Merve GÜRSER, Bahar İNAN, Nevin ÇOBANOĞLU

Microhardness, Degree of Conversion, and Water Sorption/Solubility of Non-expired and Expired (Two and Three Years) Dental Composites
Kıvanç DÜLGER, Tuğba KOŞAR

The Role of Clinical and Inflammatory Parameters to Predict the Success of Medical Treatment in Patients with Tubo-ovarian Abscess
Fatih AKTOZ, Can TERCAN, Hanife ÜRÜN, Eren VURGUN

Cerebroplacental Ratio During the Third Trimester of Pregnancy: A Prospective Case-Control Study
Mehmet Mete KIRLANGIÇ, Meral ÇEVİK, Osman Sertaç SADE, Dilek ÜNER, Melkure ERASLAN ŞAHİN

Aromatherapy in Cancer Patients Receiving Palliative Care
Derya EGELİ, Murat KARTAL, Adem AKÇAKAYA
Ahmet BELCE  
Department of Biochemistry, Biruni University School of Medicine, İstanbul, Turkey

Amrita BANERJEE  
Department of Pharmaceutical Sciences, North Dakota State University School of Pharmacy, Fargo, ND, USA

Anne-Catherine ANDRES  
Department of Clinical Research, University of Bern School of Medicine, Switzerland

Artur BEKE  
Department of Obstetrics and Gynecology, Semmelweis University School of Medicine, Budapest, Hungary

Arzu TEZVERGİL MUTLUAY  
Department of Prosthetic, University of Turku School of Medicine, Turku, Finland

Atilla EROĞLU  
Department of Thoracic Surgery, Ataturk University School of Medicine, Erzurum, Turkey

Claudiu T. SUPURAN  
Department Neuropharma, University of Florence School of Medicine, Firenze, Italy

Gökçen BAŞARANOĞLU  
Department of Anesthesiology and Reanimation, Bezmialem Vakif University School of Medicine, Istanbul, Turkey

Gülaçtı TOPÇU  
Dean of the Faculty of Pharmacy, Bezmialem Vakif University, Istanbul, Turkey

Hayat ÖNYÜKSEL  
Department of Biopharmaceutical Sciences, UIC Faculty of Pharmacy, Illinois, USA

İsmail MERAL  
Department of Medical Physiology, Bezmialem Vakif University, Istanbul, Turkey

İsmet KIRPINAR  
Department of Psychiatry, Bezmialem Vakif University School of Medicine, Istanbul, Turkey

Jie ZHOU  
Department of Anesthesiology, Per operative and Pain Medicine, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, USA

Joachim FANDREY  
Department of Physiology, Duisburg University School of Medicine, Duisburg, Germany

Klaus W. GRAETZ  
Department of Cranio-Maxillo-Facial and Oral Surgery, University of Zurich School of Medicine, Zurich, Switzerland

Martina MUCKENTHALER  
Clinic of Pediatric Oncology, University Medical Center of Schleswig-Holstein, Heidelberg, Germany

Max GASSMAN  
Department of Veterinary Physiology, University of Zurich, Institute of Veterinary Physiology, Zurich, Switzerland

Mukkades EŞREFOĞLU  
Department of Histology and Embryology, Bezmialem Vakif University, Istanbul, Turkey

Oliver ULRICH  
Department of Anatomy, University of Zurich School of Medicine, Zurich, Switzerland

Orhan ÖZTURAN  
Department of Otolaryngology, Bezmialem Vakif University School of Medicine Hospital, Istanbul, Turkey

Özlem DURMAZ  
Department of Pediatric Gastroenterology, Hepatology and Nutrition, Istanbul University School of Medicine, Istanbul, Turkey

Renate GAY  
Department of Rheumatology, University of Zurich School of Medicine, Zurich, Switzerland

Steffen GAY  
Department of Rheumatology, University of Zurich School of Medicine, Zurich, Switzerland

Suhair SUNOQROT  
Department of Pharmacy, Al-Zaytoonah University of Jordan School of Pharmacy, Amman, Jordan

Şahabettin SELEK  
Department of Medical Biochemistry, Bezmialem Vakif University School of Medicine, Istanbul, Turkey

Thomas A. LUTZ  
Department of Veterinary Physiology, University of Zurich School of Medicine, Zurich, Switzerland

Tufan KUTLU  
Department of Pediatric Gastroenterology and Hepatology, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey

Üfuk ÇAKATAY  
Department of Biochemistry, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey

Ülkan KILIÇ  
Department of Medical Biology, University of Health Science School of Medicine, Istanbul, Turkey

Yener YÖRÜK  
Department of Thoracic Surgery, Trakya University School of Medicine, Edirne, Turkey
AIMS AND SCOPE

Bezmiâlem Science is an independent, unbiased, international online journal that publishes articles in all branches of medicine in accordance with the double-blind peer-review process. The print version of the journal is not available and it is only accessible at www.bezmialescience.org.

The manuscripts published on this web page can be read free of charge and files can be downloaded in PDF format. Four issues are released per year (January, April, July, October). The publication language of the journal is English.

The target population of this journal includes medical academicians, specialists, assistants, and medical students. The aim of the journal is to publish high-ranking original researches in basic and clinical sciences, reviews covering contemporary literature about medical education and practice, reports of rare cases, and manuscripts that would contribute to continuous medical education.

The editorial and publication process of Bezmiâlem Science are shaped in accordance with the guidelines of the International Committee of Medical Journal Editors (ICME), World Association of Medical Editors (WAME), Council of Science Editors (CSE), Committee on Publication Ethics (COPE), European Association of Science Editors (EASE), and National Information Standards Organization (NISO). The journal is in conformity with the Principles of Transparency and Best Practice in Scholarly Publishing.

Bezmiâlem Science indexed in Web of Science-Emerging Sources Citation Index, TURKUAT ULAKBIM, EBSCO, Index Copernicus, Gale, CABI, ProQuest, CINAHL, Türk Medline, Türk Atif Dizini, IdealOnline, J-Gate, DOAJ, Hinari, GOALI, ARDI, OARE, AGORA.

Title: Bezmiâlem Science
Official abbreviation: Bezmialem Science
E-ISSN: 2148-2373

Open Access Policy
This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge.

Author(s) and copyright owner(s) grant access to all users for the articles published in the Bezmiâlem Science as free of charge. Articles may be used provided that they are cited.

Open Access Policy is based on rules of Budapest Open Access Initiative (BOAI). By “open access” to [peer-reviewed research literature], we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

Bezmiâlem Science does not demand any subscription fee, publication fee or similar payment for access to electronic resources.

Creative Commons
A Creative Commons license is a public copyright license that provides free distribution of copyrighted works or studies. Authors use the CC license to transfer the right to use, share or modify their work to third parties. This journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC-ND 4.0) which permits third parties to share and adapt the content for non-commercial purposes by giving the appropriate credit to the original work.

Open access is an approach that supports interdisciplinary development and encourages collaboration between different disciplines. Therefore, Bezmiâlem Science contributes to the scientific publishing literature by providing more access to its articles and a more transparent review process.

Advertisement Policy
Potential advertisers should contact the Editorial Office. Advertisement images are published only upon the Editor-in-Chief’s approval.

Material Disclaimer
Statements or opinions stated in articles published in the journal do not reflect the views of the editors, editorial board and/or publisher; The editors, editorial board and publisher do not accept any responsibility or liability for such materials. All opinions published in the journal belong to the authors.

Editorial Office
Prof. Dr. Adem AKÇAKAYA
Address: Bezmiâlem Vakif University, Adnan Menderes Boulevard, Fatih, Istanbul/Turkey
Phone: +90 (212) 453 17 00/-2464
Fax: +90 (212) 533 68 55
E-mail: info@bezmialescience.org / bvugenelkoordinator@yahoo.com

Publisher Info
Galenos Publishing House
Address: Molla Gürani Mahallesi Kaçamak Sokak No: 21 34093 Fındıkzade - İstanbul/Turkey
Phone: +90 (212) 621 99 25
E-mail: info@galenos.com.tr
The journal Bezmialem Science is a periodical in electronic format in accordance with the principles of independent, unbiased, and double-blinded peer-review. Four issues are published per year, in January, April, July, and October.

The print version of the journal is not available, and it is only accessible at www.bezmialemscience.org. The manuscripts on this web page are accessible free of charge, and full-text PDF files can be downloaded.

Bezmialem Science does not charge any fee for article submission or processing.

Authors should submit manuscripts only to the web page at www.bezmialemscience.org. Manuscripts sent by other means will not be evaluated. The full text of the manuscripts should be in English. The title, abstract, and keywords in every manuscript should be written both in Turkish and English. However, manuscripts submitted by foreign authors outside of Turkey do not necessarily include Turkish title, abstract and keywords. Turkish articles are also accepted in the journal. Submitted Turkish articles will be translated into English after being included in the publication plan.

Preliminary conditions for the approval of the manuscripts include being original, having a high scientific value and having high citation potential.

Submitted manuscripts should not have been presented or published elsewhere in electronic or printed format. A statement should be included for the previous submission to and rejection by another journal. Relaying previous reviewer evaluation reports would accelerate the evaluation process. The name, date and place of the event must be specified if the study has been previously presented at a meeting.

The authors transfer all copyrights of the manuscript relevant to the national and international regulations to the journal as of the evaluation process. Copyright Transfer Form signed by all authors should be submitted to the journal while uploading the manuscript through the online submission system. All financial liability and legal responsibility associated with the copyright of the contained text, table, figure, picture, and all other sorts of content protected by national and international laws belong to the author.

Author Contribution Form should be completed by the corresponding author in order to protect authors’ rights and avoid ghost and honorary authorship issues.

All kinds of aids and support received from persons and institutions should be declared, and ICMJE Uniform Disclosure Form for potential conflicts of interest should be completed to clarify conflicts of interest issues.

The presentation of the article types must be designed in accordance with trial reporting guidelines:

- Human research: Helsinki Declaration as revised in 2013
- Systematic reviews and meta-analyses: PRISMA guidelines
- Case reports: the CARE case report guidelines
- Clinical trials: CONSORT
- Animal studies: ARRIVE and Guide for the Care and Use of Laboratory Animals

Ethics committee report prepared in accordance with “WMA Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Subjects” and “Guide for the Care and Use of Laboratory Animals” is required for experimental and clinical studies, drug investigations, and some case reports. The authors may be asked to submit an ethics committee report or a substitute official report if deemed necessary. In papers reporting the results of experimental studies, after explaining in detail all procedures that the volunteer subjects and patients underwent, a statement should be included in the text indicating that all subjects provided consent for the study. In animal studies, it should be clearly specified how the pain or discomfort has been relieved. Informed consent, name of the ethics committee, issue number and date of the approval document should be written in the Methods section of the main document.

All manuscripts are subject to preliminary evaluation by the Editors. The manuscripts are reviewed for possible plagiarism, replication and duplicated publication during this process. Our journal will impose sanctions in accordance with the guidelines of the Committee on Publication Ethics (COPE) in conditions where such non-ethical issues may arise. Subsequently, manuscripts are forwarded to at least 2 independent referees for double-blinded peer-review. The reviewers are selected among independent experts with international publications and citations on the subject of the manuscript. Research articles, systematic reviews and meta-analyses are also evaluated by a statistician. Authors are deemed to have accepted that required revisions are to be made by the Editors, provided that this will not make a comprehensive change in the original document.

Upon approval of the manuscript for publication, requests of addition to or removal from the author list or order change will not be accepted.

The manuscripts should be prepared with Microsoft Office Word and should comply with the following specifications.

**Title Page**

For each type of manuscript, the title page should be uploaded through the online submission system as a separate Microsoft Word document that includes the Turkish and English title of the manuscript, names of the authors and latest academic degrees, name of the department and institution, city, and country. If the study has been conducted in more than one centre, the affiliation of each author must be specified using symbols. Correspondence address should include the name of the corresponding author, postal address, e-mail address, phone and fax numbers. Name, date and place of the meeting must be specified if the study has been presented in a previous meeting. Disclosure of Conflict of Interest, Disclosure of Institutional and Financial Support, Author Contribution and Acknowledgments should be included on this page.

Original Research: Abstract should be written in Turkish and English, and be structured with Objective, Methods, Results and Conclusion sections. The abstract should not exceed 250 words. Keywords must conform
INSTRUCTIONS TO AUTHORS

to Medical Subject Headings (MeSH) terms prepared by the National Library of Medicine (NLM) and contain minimum 3 and maximum 6 items; keywords should be written in Turkish and English just below the abstract. The main text should contain Introduction, Methods, Results, Discussion, Limitations of the Study, Conclusion, References, Tables, Figures and Images, and should be limited to 5000 words excluding references. References not exceeding 50 would be acceptable.

Statistical analyses must be conducted in accordance with the international statistical reporting standards (Altman DG, Gore SM, Gardner MJ, Pocock SJ. Statistical guidelines for contributors to medical journals. Br Med J 1983; 7: 1489-93). Statistical analyses should be written as a subheading under the Methods section, and statistical software must certainly be specified. Data must be expressed as mean±standard deviation when parametric tests are used to compare continuous variables. Data must be expressed as median (minimum-maximum) and percentiles (25th and 75th percentiles) when non-parametric tests are used. In advanced and complicated statistical analyses, relative risk (RR), odds ratio (OR), and hazard ratio (HR) must be supported by confidence intervals (CI) and p values.

Editorial Comments: Editorial comments aim at providing brief critical commentary by the reviewers having expertise or with high reputation on the topic of the research article published in the journal. Authors are selected and invited by the journal. Abstract, Keywords, Tables, Figures, Images and other media are not included. The main text should not include subheadings and be limited to maximum 1500 words; references should be limited to 15.

Review: Reviews that are prepared by authors who have extensive knowledge on a particular field and whose scientific background has been translated into a high volume of publication and higher citation potential are taken under review. The authors may be invited by the journal. Reviews should be describing, discussing and evaluating the current level of knowledge or topic used in the clinical practice and should guide future studies. The manuscript contains an unstructured abstract not exceeding 250 words. The manuscript should include minimum 3 and maximum 6 keywords which conform to Medical Subject Headings (MeSH) terms prepared by National Library of Medicine (NLM). The text should include Introduction, Case Report, Discussion, References, Tables, Figures and Images sections, and should be limited to 700 words. References should be limited to 10.

Video Article

In addition to the pictures in Case Reports and Original Images, video/motion images and extra images / static images can be published on the web page of our journal if submitted with the following technical specifications.

1. Video articles should include a brief introduction on case, surgery technique or a content of the video material.
2. Presentations in image / static image format: JPG, GIF, TIFF, BMP
3. Presentations in video / motion picture format: MP4
4. The file size should be a maximum of 100 MB.
5. The file size should be no more than 10 minutes.
6. Main text should not exceed 500 words.
7. References are welcomed and should not be more than 5.
8. Video and images must be cited within main text.
9. There should be no identification of patient / physician / institution / city / country in pictures and especially video images.

The tables, figures and illustrations included in your article should be declared as original. When received from sources other than the original, the source must be cited, and hardcopy format or electronic versions of the source should be submitted to the Editor-in-Chief office with permission from the copyright holder (publisher, journal or author). The rules for references, figures and tables apply to all article types.

Letter to the Editor: Includes manuscripts discussing important parts, overlooked aspects or lacking parts of a previously published article. Articles on the subjects within the scope of the journal that might attract the readers’ attention, particularly educative cases, can also be submitted in the form of “Letter to the Editor”. Readers can also present their comments on the published manuscripts in the form of “Letter to the Editor”. Abstract, Keywords, Tables, Figures, Images and other media are not included. The text should be unstructured and should not exceed 500 words; references are limited to 5. Volume, year, issue, page numbers, and title of the manuscript being commented on, as well as the name of the authors, should be clearly specified, should be listed in the references and cited within the text.

Images in Clinical Practices: Our journal accepts original high quality images related to the cases which we have come across in clinical practices, that cites the importance or infrequency of the topic, makes the visual quality stand out and present important information that should be shared in academic platforms. Titles of the images should not exceed 10 words and should be provided both in English and Turkish. Images can be...
INSTRUCTIONS TO AUTHORS

signed by no more than 3 authors. Figure legends are limited to 200 words and the number of figures are limited to 3. Video submissions will not be considered.

Special Considerations

Names of the corresponding author and other authors, affiliations, and other information on the study centers should not be included in any part of the manuscript or images in order to allow double-blinded peer-review. Such information should be uploaded to the relevant section of the online submission system and separately added to the title page.

All tables, figures, graphs and other visual media must be numbered in order of citation within the text and must not disclose the names of the patients, doctors or institutions. Tables must be prepared in a Microsoft Office Word document using the “Insert Table” command and be placed at the end of the references section in the main document. Tables should not be submitted in JPEG, TIFF or other visual formats. In microscopic images, magnification and staining techniques must be specified in addition to figure captions. All images should be in high resolution with minimum 300 dpi. Lines in the graphs must be in adequate thickness. Therefore, loss of details would be minimal if a reduction is needed during press. The width must be 9 cm or 18 cm. It would be more appropriate if the drawings are prepared by professionals. Gray color should be avoided. Abbreviations must be explained in alphabetical order at the bottom. Roman numerals should be avoided while numbering the Tables and Figures, or while citing the tables in the text. Decimal points in the text, tables and figures should be separated by a comma in Turkish sections and by dots in English sections. Particularly, tables should be explanatory for the text and should not duplicate the data given in the text.

Pharmaceuticals should be specified with their generic names, and medical products and devices should be identified with brand name and company name, city and country.

References

References should be numbered in the order they are cited. Only published data or manuscripts accepted for publication and recent data should be included. Inaccessible data sources and those not indexed in any database should be omitted. Titles of journals should be abbreviated in accordance with Index Medicus-NLM Style (Patrias K. Citing medicine: the NLM style guide for authors, editors, and publishers [Internet]. 2nd ed. Wendling DL, technical editor. Bethesda (MO): National Library of Medicine (US); 2007 - [updated 2011 Sep 15; cited Year Month Day] (http://www.nlm.nih.gov/citingmedicine). All authors should be listed if an article has six or less authors; if an article has more than six authors, first six authors are listed and the rest is represented by “et al.” in Turkish articles and by “et al.” in English articles. Reference format and punctuation should be as in the following examples.


Editor(s) as author: Norman UJ, Redfern SJ, editors. Mental health care for elderly people. New York: Churchill Livingstone; 1996.


The latest status of the submitted manuscripts and other information about the journal can be accessed at www.bezmialemscience.org. Furthermore, contact details of the Editorial Office and Publisher are provided below for correspondence with the journal in every respect.

Editor: Adem AKÇAKAYA, MD, Prof.
Address: Bezmiâlem Vakif University, Adnan Menderes Boulevard, Fatih, Istanbul/Turkey
Phone: +90 (212) 453 17 00/-2464
Fax: +90 (212) 533 68 55
E-mail: info@bezmialemscience.org / bvugenelkoordinator@yahoo.com

Publisher Info
Galenos Publishing House
Address: Molla Gürani Mahallesi Kaçamak Sokak No: 21 34093 Fındıkzade - İstanbul/Turkey
Phone: +90 (212) 621 99 25
E-mail: info@galenos.com.tr
# CONTENTS

## Commentary

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>138</td>
<td>Does Vitamin D Prevent Cancer?</td>
<td>Adem AKÇAKAYA; İstanbul, Turkey</td>
</tr>
</tbody>
</table>

## Original Articles

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>Clinical Evaluation of Class II Restorations Made with Bulk-fill Restorative Materials</td>
<td>Merve GÜRSES, Bahar İNAN, Nevin ÇOBANOĞLU; Konya, Turkey</td>
</tr>
<tr>
<td>151</td>
<td>Microhardness, Degree of Conversion, and Water Sorption/Solubility of Non-expired and Expired (Two and Three Years) Dental Composites</td>
<td>Kıvanç DÜLGER, Tuğba KOŞAR; Trabzon, Turkey</td>
</tr>
<tr>
<td>158</td>
<td>The Role of Clinical and Inflammatory Parameters to Predict the Success of Medical Treatment in Patients with Tubo-ovarian Abscess</td>
<td>Fatih AKTOZ, Can TERCAN, Hanife ÜRÜN, Eren VURGUN; İstanbul, Turkey</td>
</tr>
<tr>
<td>163</td>
<td>Analgesic Efficacy of Ibuprofen in Dysmenorrhea</td>
<td>Safa DÖNMEZ, Alp ŞENER, Ahmet Burak ERDEM, Çağlar ÇETİN, Gülhan KURTOĞLU ÇELİK; Ankara, İstanbul, Turkey</td>
</tr>
<tr>
<td>170</td>
<td>Association of Maternal Iron Deficiency Anemia and Its Severity with the Cerebroplacental Ratio during the Third Trimester of Pregnancy</td>
<td>Mehmet Mete KIRLANGIÇ, Meral ÇEVİK, Osman Sertaç SADE, Dilek ÜNER, Mefkure ERASLAN ŞAHİN; İstanbul, Kayseri, Turkey</td>
</tr>
<tr>
<td>175</td>
<td>Could the Umbilical Cord Suggest the Method of Anesthesia?</td>
<td>Enes ÇELİK, Ömer TAMMO; Mardin, Turkey</td>
</tr>
<tr>
<td>182</td>
<td>Psychological Outcomes 1 Year After Restrictive Bariatric Surgery</td>
<td>Derya GEZER, Şeyma YURTSEVEN, Dudu ALPTEKİN, Sevilay ERDEN, Sevban ARSLAN; Mersin, Adana, Turkey</td>
</tr>
<tr>
<td>189</td>
<td>Can Sepsis-induced Coagulopathy Scores and Routine Blood Tests Indicate Prognosis in Patients with COVID-19?</td>
<td>Bahadır TAŞLIDERE, Ertan SÖNMEZ, Abuzer COŞKUN; İstanbul, Turkey</td>
</tr>
<tr>
<td>195</td>
<td>Development of a New HPLC Method for the Identification of Allicin and S-allyl Cysteine in Garlic (<em>Allium sativum</em> L.) Extracts</td>
<td>Burhan CEYLAN, Gizem TİRİL; Şanlıurfa, İstanbul, Turkey</td>
</tr>
<tr>
<td>200</td>
<td>Relationship Between Plasma Chemerin Levels and Supraventricular Tachycardia</td>
<td>Özden KUTLAY, Zafer YALIM; Afyonkarahisar, Turkey</td>
</tr>
</tbody>
</table>
CONTENTS

207 Hyperinflammatory Syndrome in Patients with COVID-19
Mehmet UZUNLU, Hatice Şeyma MARAŞLI, Erhan EKEN, Onur İNCEALTIN, Haluk VAHABOĞLU; İstanbul, Turkey

213 Effect of Translucency on Color Stability of Resin-based Composites
Nevin ÇOBANOĞLU, Fatma SAĞ GÜN GöR, Omar Faezabdulateef ABDULTEEF, Mehmet Semih VELİOĞLU, Elif Can ŞİMŞEK BALABAN; Konya, Turkey, Iraq

221 Short-term Effect of Elastic Taping on Balance And Postural Control in Patients with Early-Stage Parkinson's Disease -a Non-controlled, Quasi-experimental Study
Evrim GÖZ, Berril DÖNMEZ ÇOLAKOĞLU, Raif ÇAKMUR, Birgül BALCI; Mersin, İzmir, Turkey

Review

229 Aromatherapy in Cancer Patients Receiving Palliative Care
Derya EGELİ, Murat KARTAL, Adem AKÇAKAYA; İstanbul, Turkey