



**ORTHODONTICS :  
ARTIFICIAL INTELLIGENCE & ROBOTICS**

---

|                                                                                                                                                                                                                                                                                                                                                                        |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <a href="#">Effectiveness of automated segmentation of maxillofacial structures in cone-beam computed tomography images using artificial intelligence: A systematic review</a>                                                                                                                                                                                         | Int Orthodont 2025; 24 : 101081                                       |
| <a href="#">Accuracy of artificial intelligence in orthodontic extraction treatment planning: a systematic review and meta analysis</a>                                                                                                                                                                                                                                | BMC Oral Health 2025; 25(1): 1576                                     |
| <a href="#">Unveiling the role of artificial intelligence applied to clear aligner therapy: A scoping review</a>                                                                                                                                                                                                                                                       | J Dent 2025; 154: 105564                                              |
| <a href="#">Artificial intelligence in orthodontics: concerns, conjectures, and ethical dilemmas</a>                                                                                                                                                                                                                                                                   | Int Dent J 2025; 75(1): 20-22                                         |
| <a href="#">Designing an artificial intelligence system for dental occlusion classification using intraoral photographs: A comparative analysis between artificial intelligence-based and clinical diagnoses</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]             | Am J Orthod Dentofac Orthoped 2024; 166(2): 125-137                   |
| <a href="#">Automatic cephalometric landmark identification with artificial intelligence: An umbrella review of systematic reviews</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                                                                       | J Dentistry 2024; 146: 105056                                         |
| <a href="#">Examination of the reliability and readability of Chatbot Generative Pretrained Transformer's (ChatGPT) responses to questions about orthodontics and the evolution of these responses in an updated version</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one] | Am J Orthod Dentofac Orthoped 2024; 165 (5): 546-55                   |
| <a href="#">Clinical evaluation of Artificial Intelligence Driven Remote Monitoring technology for assessment of patient oral hygiene during orthodontic treatment</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                                       | Am J Orthod Dentofac Orthoped 2024; 165 (5): 586-92                   |
| Artificial intelligence for treatment planning and soft tissue outcome prediction of orthognathic treatment: A systematic review [can be accessed on DOSS free by logging in <a href="#">on this page</a> ]                                                                                                                                                            | J Orthodont 2024; 51 (2): 107-19                                      |
| <a href="#">Artificial intelligence in orthodontics: critical review</a>                                                                                                                                                                                                                                                                                               | J Dent Res 2024; online April 29<br>doi.org/10.1177/00220345241235606 |
| Cephalometric analysis performance discrepancy between orthodontists and an artificial intelligence model using lateral cephalometric radiographs [can be accessed on DOSS free by logging in <a href="#">on this page</a> ]                                                                                                                                           | J Esthet Restor Dent 2024; 36(4): 555-565                             |
| An artificial neural network approach for rational decision-making in borderline orthodontic cases: A preliminary analytical observational in silico study [can be accessed on DOSS free by logging in <a href="#">on this page</a> ]                                                                                                                                  | J Orthod 2023; 50(4): 439-448                                         |
| <a href="#">Blockchain technology and federated machine learning for collaborative initiatives in orthodontics and craniofacial health</a>                                                                                                                                                                                                                             | Orthod Craniofac Res 2023; 26(Suppl.1): 118-123                       |



## ORTHODONTICS : ARTIFICIAL INTELLIGENCE & ROBOTICS

---

[Connecting the dots towards precision orthodontics](#)

Orthod Craniofac Res 2023;  
26(Suppl.1): 8-19

[Novel machine learning algorithms for prediction of treatment decisions in adult patients with Class III malocclusion](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

J Oral Maxillofac Surg 2023; 81(11):  
1391-1402

[Artificial intelligence applications in orthodontics](#)

J Calif Dent Assoc 2023; 51(1):  
2195585

[Artificial intelligence in orthognathic surgery – a narrative review of surgical digital tools and 3d orthognathic surgical planning](#)

J Calif Dent Assoc 2023; 51(1):  
2202444

[What is the current state of artificial intelligence applications in dentistry and orthodontics?](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

J Stomatol Oral Maxillofac Surg 2023;  
124(5): 101524

[In-vivo evaluation of Artificial Intelligence Driven Remote Monitoring technology for tracking tooth movement and reconstruction of 3-dimensional digital models during orthodontic treatment](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

Am J Orthod Dentofac Orthop 2023;  
164(5): 690-699

[The knowledge, experience, and attitude on artificial intelligence-assisted cephalometric analysis: Survey of orthodontists and orthodontic students](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

Am J Orthod Dentofac Orthoped  
2023; 164 (4): e97-e105

[Assessment of artificial intelligence–based remote monitoring of clear aligner therapy: A prospective study](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

Am J Orthod Dentofac Orthop 2023;  
164 (2): 194-200

[Is automatic cephalometric software using artificial intelligence better than orthodontist experts in landmark identification?](#)

BMC Oral Health 2023; 23: Art 467

[AI driven orthodontic devices: Independent tooth movers \(ITM\)](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

Seminars Orthod 2023; 29 (1): 85-89

[Virtual-First: A virtual workflow for new patient consultation, engagement and education in orthodontics](#) [free to members on Science Direct. If you do not have a login email [library@bda.org](mailto:library@bda.org) to request one]

Seminars Orthod 2023; 29 (1): 109-  
115

[Evaluating the accuracy of automated orthodontic digital setup models](#)

Seminars Orthod 2023; 29 (1): 60-67

Artificial intelligence system for automated landmark localization and analysis of cephalometry (request using <https://www.smartsurvey.co.uk/s/PJHMY/>)

Dentomaxillofacial Radiol 2023; 52  
(1): 20220081

[The validation of orthodontic artificial intelligence systems that perform orthodontic diagnoses and treatment planning](#)

Eur J Orthodont 2022; 44 (4): 436-44



## ORTHODONTICS : ARTIFICIAL INTELLIGENCE & ROBOTICS

---

|                                                                                                                                                                                                                                                                                      |                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <a href="#">Machine learning in orthodontics: Automated facial analysis of vertical dimension for increased precision and efficiency</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]   | Am J Orthod Dentofac Orthop 2022; 161(3): 445-450    |
| <a href="#">Estimating the size of unerupted teeth: Moyers vs deep learning</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                                            | Am J Orthod Dentofac Orthop 2022; 161(3): 451-456    |
| <a href="#">A machine learning approach to determine the prognosis of patients with class III malocclusion</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                             | Am J Orthod Dentofac Orthop 2022; 161(1): e1-e11     |
| <a href="#">Evaluation of fully automated cephalometric measurements obtained from web-based artificial intelligence driven platform</a>                                                                                                                                             | BMC Oral Health 2022; 22: Art 132                    |
| <a href="#">Cephalometric analysis in orthodontics using artificial intelligence – a comprehensive review</a>                                                                                                                                                                        | BioMed Res Int 2022: 1880113                         |
| <a href="#">Automatic localization of cephalometric landmarks based on convolutional neural network</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                    | Am J Orthod Dentofac Orthop 2022; 161(3): e250-e259  |
| <a href="#">Machine learning and orthodontics, current trends and the future opportunities: A scoping review</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                           | Am J Orthod Dentofac Orthop 2021; 160(2): 170-192.e4 |
| <a href="#">Machine learning in orthodontics: Challenges and perspectives</a>                                                                                                                                                                                                        | Adv Clin Exp Med 2021; 30(10): 1065-1074             |
| Multiclass CBCT image segmentation for orthodontics with deep learning [can be accessed on DOSS free by logging in <a href="#">on this page</a> ]                                                                                                                                    | J Dent Res 2021; 100(9): 943-949                     |
| <a href="#">Robotic applications in orthodontics: Changing the face of contemporary clinical care</a>                                                                                                                                                                                | BioMed Res Int 2021: 9954615                         |
| <a href="#">Artificial intelligence in orthodontics: Where are we now? A scoping review</a>                                                                                                                                                                                          | Orthod Craniofac Res 2021; 24(S2): 6-15              |
| <a href="#">The validity of an artificial intelligence application for assessment of orthodontic treatment need from clinical images</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]   | Seminars Orthod 2021; 27(2): 164-171                 |
| <a href="#">An artificial intelligence based referral application to optimize orthodontic referrals in a public oral healthcare system</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one] | Seminars Orthod 2021; 27(2): 157-163                 |
| <a href="#">Artificial Intelligence Driven Remote Monitoring of orthodontic patients: Clinical applicability and rationale</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]             | Seminars Orthod 2021; 27(2): 138-156                 |



## ORTHODONTICS : ARTIFICIAL INTELLIGENCE & ROBOTICS

---

|                                                                                                                                                                                                                                                                                                     |                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <a href="#">Possibilities of artificial intelligence use in orthodontic diagnosis and treatment planning: Image recognition and three-dimensional VTO</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one] | Seminars Orthod 2021; 27(2): 121-129               |
| <a href="#">Artificial Intelligence for radiographic image analysis</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                                                                   | Seminars Orthod 2021; 27(2): 109-120               |
| <a href="#">Applications of artificial intelligence and machine learning in orthodontics: a scoping review</a>                                                                                                                                                                                      | Prog Orthod 2021; (22): 18                         |
| <a href="#">Deep learning and computer vision: Two promising pillars, powering the future in orthodontics</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                             | Seminars Orthod 2021; 27(2): 62-68                 |
| The diagnostic advantage of a CBCT-derived segmented STL rendition of the teeth and jaws using an AI algorithm (request using <a href="https://www.smartsurvey.co.uk/s/PJHMY/">https://www.smartsurvey.co.uk/s/PJHMY/</a> )                                                                         | J Clin Orthod 2021; 55(6): 361-369                 |
| <a href="#">Artificial Intelligence (AI) driven orthodontic care: A quest toward utopia?</a> [free to members on Science Direct. If you do not have a login email <a href="mailto:library@bda.org">library@bda.org</a> to request one]                                                              | Seminars Orthod 2021; 27(2): 57-61                 |
| <a href="#">Evaluation of automated cephalometric analysis based on the latest deep learning method</a>                                                                                                                                                                                             | Angle Orthod 2021; 91(3): 329-335                  |
| <a href="#">A knowledge-based algorithm for automatic monitoring of orthodontic treatment: The Dental Monitoring System. Two cases</a>                                                                                                                                                              | Sensors (Basel) 2021; 21(5): 1856                  |
| <a href="#">A deep learning-based approach for the detection of early signs of gingivitis in orthodontic patients using faster region-based convolutional neural networks</a>                                                                                                                       | Int J Environ Res Public Health 2020; 17(22): 8447 |
| <a href="#">Machine learning in orthodontics: Introducing a 3D auto-segmentation and auto-landmark finder of CBCT images to assess maxillary constriction in unilateral impacted canine patients</a>                                                                                                | Angle Orthod 2020; 90(1): 77-84                    |