WE ARE GRATEFUL TO REVIEWERS AND THE EDITOR FOR THEIR CONSTRUCTIVE COMMENTS. PLEASE SEE THE BOLD WRITTEN AND ADDED SECTIONS.

Discussion. This editorial article contains several pieces of information about the usefulness of applying AI technologies in dentomaxillofacial Radiology and was written in a descriptive manner. Also, the authors demonstrated their own point of view regarding the huge value of AI-based on scientific arguments, however, during the reading of this manuscript, it is a bit difficult to catch the main idea of the manuscript due to the absence of structural division of the manuscript text. I think it will be more appropriate to understand the main idea if authors divide the text of the manuscript into several sections with subheadings depending on the sphere of dentomaxillofacial radiology, where AI methods and technologies are used. In addition, due to the fact that authors indicated information regarding some drawbacks and limitations of AI technologies (for example, YOLO), which still require strict control and rechecking by physicians I suggest include additional information (examples from previous investigations) regarding some imperfections of AI technologies.

The text is divided into two main headings in order to ensure the integrity of the meaning.

1 Some of the current artificial intelligence studies using panoramic radiography device:

2 Some of the current artificial intelligence studies using CBCT device:

Additional information is provided on the disadvantages and limitations of artificial intelligence.

A 2011 study proposed an AI model to automatically localize a key landmark on CBCT images[26]. Cephalometric radiographs were gradually replaced by CBCT images to develop models for cephalometric analysis. The ability to make 3D measurements for cephalometric analysis on CBCT images is an important advantage, but the automatic localization performance in current models is not accurate enough to meet clinical requirements[26]. Therefore, existing models can be recommended for using preliminary localization of cephalometric landmarks, but manual correction is still necessary prior to further cephalometric analysis.

Limitations and Future Outlook

Future studies that address specific issues in more detail and critically assess their clinical potential are needed. Despite the promising performance results of current AI models, it is still necessary to confirm the reliability of these models by using adequate external data obtained from new patients or collected from other dental institutions[26]. In the future, it can be expected not only to improve the
performance of AI models on par with experts, but also to detect early lesions that are invisible to the human eye.

Before final acceptance, the author(s) must add a table/figure (medical imaging) to the manuscript. There are no restrictions on the figures (color, B/W).

Tables and figures have been added to the article.

Current artificial intelligence studies in the field of Dentomaxillofacial Radiology

Studies using radiological diagnostic tools

Studies using panoramic radiography device

Studies using CBCT device
Main study topics in Dentomaxillofacial Radiology related to artificial intelligence

— Localization/measurement of cephalometric landmarks
— Diagnosis of osteoporosis
— Classification of the maxillofacial cysts and/or tumors
— Identification of alveolar bone resorption
— Classification of periapical lesions
— Diagnosis of multiple dental diseases
— Classification of tooth types
— Detection of dental caries
— Classification of the stage of the lower third molar