PEER-REVIEW REPORT

Title: Artificial intelligence in dentistry: Harnessing big data to predict oral cancer survival

Scientific quality	[Y] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [Y] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The authors deal with the survival in oral cancer. Oral cancer is the sixth most prevalent cancer worldwide. Hung et al. propose several machine learning algorithms to predict the length of survival for individuals diagnosed with oral cancer, and to explore the most important factors that are responsible for shortening or lengthening oral cancer survival. It has been essential to make use of a large and reliable database. They used the Surveillance, Epidemiology, and End Results database of the National Cancer Institute from the years 1975 to 2016. The motivation and justification of the work are appropriate. The introduction and discussion presented is especially interesting. This study is important and appropriate for the prediction of oral cancer survival can assist dentists, patients and caregivers in disease management and treatment plan development. I suggest that the authors include this recent reference: Ogden, G. R. (2020). Factors Affecting Survival for Oral Cancer. In Textbook of Oral Cancer (pp. 327-342). Springer, Cham. In the Introduction, I miss the reference to the works of JCR Alcantud about medical decision making with incomplete and inaccurate data with fuzzy techniques. Some of his papers are applied to glaucoma and lung cancer survival. Now I include some typographical errors and recommendations: In Methods, https://seer.cancer.gov/r This website does not work. It is better to include the SEER website (https://seer.cancer.gov/) or https://seer.cancer.gov/data/access.html For: (n = 72179) males read: (n = 72,179) males In References, Ref. 1 (to unify the bibliographic style): For: Epidemiological Trends of Head and Neck Cancer in the United States: A SEER Population Study read: Epidemiological trends of head and neck cancer in the United States: A SEER population study Ref. 2: This website could be included: https://seer.cancer.gov/registries/ Ref. 7: For: ea. Cancer read: et al. Cancer For: sources,methods read: sources, methods Ref. 8: For: Kittipong Dhanuthai

SR, Watcharaporn Thosaporn 2, Sompid Kintarak 3, Ajiravudh, Subarnbhesaj 4 MD, Eugene Kryshtalskyj 6, Chun-Pin Chiang 7, Hong-In Shin 8, So-Young Choi 9,, Sang-shin Lee 10 P-AS. Oral cancer: A multicenter study. Journal section: Oral Medicine and Pathology. 2018(Jan 1;23 (1):e23-9.). read: Dhanuthai K, Rojanawatsirivej S, Thosaporn W, Kintarak S, Subarnbhesaj A, Darling M, Kryshtalskyj E, Chiang CP, Shin HI, Choi SY, Lee SS, Shakib PA. Oral cancer: A multicenter study. Med Oral Patol Oral Cir Bucal. 2018 Jan 1;23 (1):e23-9. Ref. 14: Complete with this website? https://seer.cancer.gov/survivaltime/ Ref. 17: Gonzalez-Moles S. . Importance Gonzalez-Moles S. Importance Regarding the Tables, Table 3 could be complemented with some boxplot diagrams of the most important variables. Boxplots provide a visual and direct representation of the distribution of the variables.