

RESSALVA

Atendendo solicitação do(a)
autor(a), o texto completo desta
dissertação será disponibilizado
somente a partir de 6/07/2028

Adrielli Cristina Moreno Barreto

**Clinical Outcomes and Prognostic Factors in Lip
Squamous Cell Carcinoma: An Updated
Retrospective Cohort Study**

**Araçatuba – SP
2026**

Adrielli Cristina Moreno Barreto

**Clinical Outcomes and Prognostic Factors in Lip
Squamous Cell Carcinoma: An Updated
Retrospective Cohort Study**

Dissertação apresentada à Universidade
Estadual Paulista (UNESP), Faculdade de
Odontologia de Araçatuba, para obtenção
do título de Mestre em Odontologia.
Área de Concentração: Implantodontia

Orientador: Prof. Idelmo Rangel Garcia
Júnior

Coorientador: Prof. Daniel Galera Bernabé

**Araçatuba – SP
2026**

Catálogo na Publicação (CIP)

Diretoria Técnica de Biblioteca e Documentação – FOA / UNESP

B273f Barreto, Adrielli Cristina Moreno.
Factors associated with clinical outcomes and treatment in
lip squamous cell carcinoma: a retrospective cohort study /
Adrielli Cristina Moreno Barreto Pereira. – Araçatuba, 2026
35 f. ; tab.

Dissertação (Mestrado) – Universidade Estadual Paulista
(UNESP), Faculdade de Odontologia, Araçatuba
Orientador: Prof. Idelmo Rangel Garcia Júnior
Coorientador: Prof. Daniel Galera Bernabé

1. Carcinoma de células escamosas 2. Comorbidade 3.
Prognóstico I. T.

Black D7
CDD 617.64

Ana Claudia M. Grieger Manzatti CRB-8/6315

AGRADECIMENTOS

Agradeço, primeiramente, ao **Prof. Dr. Idelmo Rangel Garcia Júnior**, pela oportunidade, confiança, orientação e contribuição fundamental para o desenvolvimento deste trabalho. Sua experiência, disponibilidade e dedicação foram essenciais para a construção desta pesquisa e para o meu crescimento acadêmico e profissional.

Ao meu coorientador, **Prof. Dr. Daniel Galera Bernabé**, expresso minha sincera gratidão pelo apoio, pela condução científica, pelas valiosas contribuições e pelo incentivo constante ao longo de toda a elaboração deste estudo. Sua orientação foi indispensável para o amadurecimento das ideias, análise dos resultados e desenvolvimento deste trabalho.

Agradeço à **Carol Marchioli**, pelo apoio, paciência, disponibilidade e incentivo durante esta trajetória. Sua ajuda e compreensão foram muito importantes ao longo deste processo.

À **Diovana de Melo Cardoso**, agradeço pela colaboração, dedicação e auxílio na elaboração e aprimoramento do manuscrito, contribuindo de forma significativa para o desenvolvimento deste trabalho.

Agradeço também aos meus pais, pelo amor, apoio incondicional, incentivo e por sempre acreditarem nos meus sonhos. À minha irmã, pelo carinho, companheirismo e presença constante em minha trajetória.

Ao meu marido, agradeço profundamente pelo suporte, paciência, compreensão e encorajamento nos momentos de dedicação intensa a este trabalho. Sua presença foi essencial para que esta etapa fosse vivida com mais força, equilíbrio e confiança.

Por fim, agradeço à Faculdade de Odontologia de Araçatuba da Universidade Estadual Paulista “Júlio de Mesquita Filho” — FOA/UNESP, e ao Programa de Pós-Graduação, pela estrutura, acolhimento e contribuição para minha formação acadêmica e científica.

Agradeço também ao Centro de Oncologia Bucal — COB, espaço essencial de aprendizado, pesquisa e crescimento profissional, que contribuiu de forma significativa para o desenvolvimento deste trabalho.

“A vida como meio de conhecimento — com este princípio no coração, pode-se não apenas viver valentemente, mas até viver e rir alegremente.”

— Friedrich Nietzsche, *A Gaia Ciência*, §324.

RESUMO

Barreto ACM. Fatores associados aos desfechos clínicos e ao tratamento do carcinoma de células escamosas de lábio: estudo retrospectivo de coorte [dissertação]. Araçatuba: Universidade Estadual Paulista (UNESP), Faculdade de Odontologia; 2026.

Este estudo de coorte retrospectivo avaliou os desfechos clínicos e os fatores associados ao prognóstico de 198 pacientes com carcinoma espinocelular de lábio tratados em um centro de referência em oncologia bucal entre janeiro de 1991 e dezembro de 2024. Foram coletados dados demográficos, comportamentais, clinicopatológicos, terapêuticos e relacionados às comorbidades a partir dos prontuários, e os desfechos analisados incluíram recidiva, segundo tumor primário, sobrevida global e sobrevida específica da doença. As análises de sobrevida em 2 e 5 anos foram realizadas pelo método de Kaplan–Meier e por modelos de regressão de Cox, enquanto as associações com recidiva e segundo tumor primário foram avaliadas por análises univariadas. Recidiva e segundo tumor primário foram eventos pouco frequentes nesta coorte. A recidiva não apresentou associação significativa com nenhuma das variáveis analisadas, enquanto o segundo tumor primário foi identificado em pequeno número de pacientes e apresentou associações univariadas exploratórias com faixa etária, tabagismo, intensidade do tabagismo, hipertensão arterial e classificação T. Na análise de sobrevida em 2 anos, idade superior a 65 anos e ex-tabagismo foram associados à pior sobrevida global. Na análise de 5 anos, o estágio clínico avançado permaneceu independentemente associado à pior sobrevida global e à pior sobrevida específica da doença. A carga de comorbidades, avaliada pelo Índice de Comorbidade de Charlson, e as comorbidades analisadas individualmente não demonstraram influência independente consistente sobre recidiva ou sobrevida. Esses achados indicam que o prognóstico de pacientes com carcinoma espinocelular de lábio é influenciado por fatores relacionados ao paciente e ao tumor, com padrões distintos conforme o período de seguimento e o desfecho analisado. Idade avançada e ex-tabagismo foram associados à pior sobrevida global em curto prazo, enquanto o estágio clínico avançado foi o principal determinante de pior sobrevida global e específica da doença em longo prazo. Recidiva e segundo tumor primário foram incomuns, e as comorbidades não influenciaram independentemente o prognóstico. De modo geral, os resultados reforçam a

importância do diagnóstico precoce, do estadiamento adequado, do tratamento oportuno e do acompanhamento em longo prazo em pacientes com carcinoma espinocelular de lábio.

Palavras-chave: Carcinoma de Células Escamosas; Neoplasias Labiais; Prognóstico; Análise de Sobrevida; Estudos de Coortes.

ABSTRACT

Barreto ACM. Factors associated with clinical outcomes and treatment in lip squamous cell carcinoma: a retrospective cohort study [dissertação]. Araçatuba: Universidade Estadual Paulista (UNESP), Faculdade de Odontologia; 2026.

This retrospective cohort study evaluated clinical outcomes and factors associated with prognosis in 198 patients with lip squamous cell carcinoma (LSCC) treated at a reference oral oncology center between January 1991 and December 2024. Demographic, behavioral, clinicopathological, treatment-related, and comorbidity data were collected from medical records, and the outcomes analyzed included recurrence, second primary tumor, overall survival, and disease-specific survival. Survival analyses were performed at 2 and 5 years using Kaplan–Meier curves and Cox proportional hazards regression models, while associations with recurrence and second primary tumor were assessed using univariate analyses. Recurrence and second primary tumor were infrequent events in this cohort. Recurrence was not significantly associated with any of the analyzed variables, whereas second primary tumor was identified in a small number of patients and showed exploratory univariate associations with age range, smoking status, tobacco intensity, hypertension, and T classification. In the 2-year survival analysis, age older than 65 years and former smoking were associated with worse overall survival. In the 5-year analysis, advanced clinical stage was independently associated with poorer overall survival and disease-specific survival. Comorbidity burden, assessed using the Charlson Comorbidity Index, and individual comorbid conditions did not show a consistent independent influence on recurrence or survival outcomes. These findings indicate that prognosis in LSCC is influenced by both patient-related and tumor-related factors, with different patterns according to the follow-up period and outcome analyzed. Older age and former smoking were associated with poorer short-term overall survival, whereas advanced clinical stage was the main determinant of worse long-term overall and disease-specific survival. Recurrence and second primary tumor were uncommon, and comorbidities did not independently influence prognosis. Overall, these results reinforce the importance of early diagnosis, adequate staging, timely treatment, and long-term follow-up in patients with LSCC.

Keywords: Carcinoma, Squamous Cell; Lip Neoplasms; Prognosis; Survival Analysis; Cohort Studies

LISTA DE TABELAS

Table 1. Demographic, risk factors and clinicopathological characteristics of Lower lip CEC	14
Table 2. Baseline comorbidities of patients with lower lip squamous cell carcinoma	16
Table 3. Univariate analysis of recurrence and second primary tumors in patients treated for lower lip squamous cell carcinoma	17
Table 4. Multivariate Cox regression analysis of overall survival in patients with lower lip squamous cell carcinoma	21
Table 5. Multivariate Cox regression analysis disease-specific survival in patients with lower lip squamous cell carcinoma	21

LISTA DE ABREVIATURAS E SIGLAS

AJCC	American Joint Committee on Cancer
BMI	Body Mass Index
CAAE	Certificado de Apresentação de Apreciação Ética
CCI	Charlson Comorbidity Index
CEC	Carcinoma de Células Escamosas
CEP	Comitê de Ética em Pesquisa
CI	Confidence Interval
DSS	Disease-Specific Survival
FOA	Faculdade de Odontologia de Araçatuba
HR	Hazard Ratio
IBM	International Business Machines Corporation
JOMS	Journal of Oral and Maxillofacial Surgery
LSCC	Lip Squamous Cell Carcinoma
N	Regional Lymph Node Classification
N+	Presence of Regional Lymph Node Metastasis
N0	Absence of Regional Lymph Node Metastasis
OS	Overall Survival
SPSS	Statistical Package for the Social Sciences
SPT	Second Primary Tumor
T	Tumor Classification
TNM	Tumor, Node and Metastasis Classification System

SUMÁRIO

1 INTRODUCTION	9
2 PATIENTS AND METHODS	11
2.1 Study Design and Sample	11
2.2 Study Variables	11
2.3 Prognostic Outcomes	12
2.4 Statistical Analysis	13
3 RESULTS	14
3.1 Demographic, Clinicopathological and Behavioral Characteristics	14
3.2 Occurrence of Comorbidities in Patients with Squamous Cell Carcinoma of the Lip	17
3.3 Univariate Analysis of Recurrence and Second Primary Tumor	18
3.4 Overall and Disease-Specific Survival	20
4 DISCUSSION	23
5 CONCLUSION	30
ANEXOS	37

1 INTRODUCTION

Oral cancer remains a major global health problem, ranking among the most common malignancies worldwide and being responsible for substantial morbidity and mortality. Approximately 400,000 new cases are diagnosed annually, and nearly 200,000 patients die from the disease each year.¹⁻³ Among oral malignancies, lip cancer represents a frequent clinicopathological subtype, and squamous cell carcinoma is its most common histopathological presentation, comprising more than 90% of diagnosed cases.¹⁻⁴ In Brazil, lip squamous cell carcinoma (LSCC) represents a substantial proportion of oral cancer cases, with malignant lip lesions comprising approximately 25% of all malignant neoplasms affecting the oral cavity.^{5,6} This malignancy occurs predominantly in men and shows a well-established predilection for the lower lip, especially the vermilion border.^{5,7}

Chronic ultraviolet exposure is considered the main risk factor for LSCC, particularly among individuals with outdoor occupations.^{5,8} Nevertheless, other modifiable risk factors, such as tobacco and alcohol use, may also contribute to disease development.^{5,7,9} Compared with intraoral squamous cell carcinomas, lip tumors are generally considered less aggressive and are often diagnosed at earlier clinical stages, resulting in a more favorable prognosis.¹⁰⁻¹³ The survival rate can reach 94% when the disease is diagnosed at an early stage.^{11,12} In these cases, surgery is often performed alone, without the need for adjuvant therapy.^{11,12} However, the presence of lymph node metastasis markedly worsens prognosis and may reduce survival by up to 50%.^{9,12}

Despite its generally favorable prognosis, LSCC outcomes may vary according to clinical and pathological characteristics, including tumor extension, clinical stage, lymph node involvement, treatment modality, surgical margins, recurrence, and the

development of second primary tumors. Patient-related factors may also contribute to clinical outcomes. In this context, comorbidities represent concomitant diseases or conditions that coexist with the primary disease and may influence treatment planning, tolerance to therapy, and prognosis.¹⁴⁻¹⁶ In oral cancer, comorbidities have been associated with advanced disease, second primary tumors, and worse survival outcomes.^{2,17-20} However, evidence specifically addressing their role in LSCC remains limited, since most studies have focused predominantly on tumor-related prognostic factors.²¹⁻²³

A previous study from our institution by Biasoli et al. analyzed a 25-year experience with LSCC and described the clinicopathological profile, treatment outcomes, recurrence, and survival of patients treated at a reference oral oncology center. Although that study provided relevant information on the clinical behavior of LSCC, the institutional casuistic has since been expanded, allowing these findings to be updated in a larger and more recent cohort. Therefore, the present study was designed to complement and extend that previous report by reassessing patients with LSCC treated at the same center, with emphasis on clinical outcomes, survival patterns, and clinical and pathological factors, while also describing the occurrence of comorbidities in this population.

5 CONCLUSION

In conclusion, prognosis in patients with LSCC varied according to the follow-up period and outcome analyzed. Older age and former smoking were associated with worse short-term overall survival, whereas advanced clinical stage was the main independent determinant of poorer 5-year overall and disease-specific survival. Recurrence and second primary tumor were infrequent, and comorbidity burden did not show a consistent independent prognostic influence in this cohort. These findings reinforce the importance of early diagnosis, adequate staging, timely treatment, and long-term follow-up, with prognostic assessment centered mainly on disease extent while also considering relevant patient-related factors

REFERENCES

1. Zhou Z, Tang Q, Chen X, Yu T, Huang W, Liang F. The association between the socioeconomic status and systemic comorbidities in patients with oral cancers: a retrospective study in Guangxi Province. *Clin Oral Investig*. 2021;25(3):1085-97. doi: 10.1007/s00784-020-03405-2.
2. Hung LC, Kung PT, Lung CH, Tsai MH, Liu SA, Chiu LT, Huang KH, Tsai WC. Assessment of the risk of oral cancer incidence in a high-risk population and establishment of a predictive model for oral cancer incidence using a population-based cohort in Taiwan. *Int J Environ Res Public Health*. 2020;17(2):665. doi: 10.3390/ijerph17020665.
3. Zanoni DK, Montero PH, Migliacci JC, Shah JP, Wong RJ, Ganly I, Patel SG. Survival outcomes after treatment of cancer of the oral cavity (1985-2015). *Oral Oncol*. 2019;90:115-21. doi: 10.1016/j.oraloncology.2019.02.001.
4. Han AY, Kuan EC, Mallen-St Clair J, Alonso JE, Arshi A, St John MA. Epidemiology of squamous cell carcinoma of the lip in the united states: a population-based cohort analysis. *JAMA Otolaryngol Head Neck Surg*. 2016;142(12):1216-23. doi: 10.1001/jamaoto.2016.3455.
5. Géraud C, Koenen W, Neumayr L, Doobe G, Schmieder A, Weiss C, Goerdts S, Faulhaber J. Lip cancer: retrospective analysis of 181 cases. *J Dtsch Dermatol Ges*. 2012;10(2):121-7. doi: 10.1111/j.1610-0387.2011.07853.x.
6. Irani S. Pre-cancerous lesions in the oral and maxillofacial region: a literature review with special focus on etiopathogenesis. *Iran J Pathol*. 2016;11(4):303-22.
7. Biasoli ÉR, Valente VB, Mantovan B, Collado FU, Neto SC, Sundfeld ML, Miyahara GI, Bernabé DG. Lip cancer: a clinicopathological study and treatment outcomes in a

- 25-year experience. *J Oral Maxillofac Surg.* 2016;74(7):1360-7. doi: 10.1016/j.joms.2016.01.041.
8. Borges JF, Lanaro ND, Bernardo VG, Albano RM, Dias F, de Faria PA, Pinto LF, Lourenço SQ. Lower lip squamous cell carcinoma in patients with photosensitive disorders: Analysis of cases treated at the Brazilian National Cancer Institute (INCA) from 1999 to 2012. *Med Oral Patol Oral Cir Bucal.* 2018;23(1):e7-12. doi: 10.4317/medoral.21960.
9. Ant A, Kilic C, Baltu Y, Duran AB, Tunccan T, Ozlugedik S, Bozdogan N. Lip cancer: Reconsidering the at-risk patients with pathological assessment. *Oral Dis.* 2019;25(3):742-9. doi: 10.1111/odi.13017.
10. Hwang JR, Khachemoune A. Lower lip basal cell and squamous cell carcinomas: a reappraisal of the similarities and differences in clinical presentation and management. *Arch Dermatol Res.* 2023;315(2):117-25. doi: 10.1007/s00403-022-02345-z.
11. Bogusiak K, Kozakiewicz M, Puch A, Mostowski R, Paneth P, Kobos J. Oral cavity cancer tissues differ in isotopic composition depending on location and staging. *Cancers.* 2023;15(18):4610. doi: 10.3390/cancers15184610.
12. Lang K, Akbaba S, Held T, El Shafie R, Farnia B, Bougatf N, Bernhardt D, Freudlsperger C, Plinkert PK, Rieken S, Debus J, Adeberg S. Retrospective analysis of outcome and toxicity after postoperative radiotherapy in patients with squamous cell carcinoma of the lip. *Tumori.* 2022;108(2):125-33. doi: 10.1177/0300891621996805.
13. Copelli C, Manfuso A, Cassano L, Pederneschi N, Tewfik K, Pansini A, Cocchi R. Recurrent squamous cell carcinoma of the lower lip: salvage surgery outcome. *Br J Oral Maxillofac Surg.* 2021;59(8):921-7. doi: 10.1016/j.bjoms.2020.10.019.

14. Sorrow ML, Maris MB, Storb R, Baron F, Sandmaier BM, Maloney DG, Storer B. Hematopoietic cell transplantation (HCT)-specific comorbidity index: a new tool for risk assessment before allogeneic HCT. *Blood*. 2005;106(8):2912-9. doi: 10.1182/blood-2005-05-2004.
15. Fowler H, Belot A, Ellis L, Maringe C, Luque-Fernandez MA, Njagi EN, Navani N, Sarfati D, Rachet B. Comorbidity prevalence among cancer patients: a population-based cohort study of four cancers. *BMC Cancer*. 2020;20(1):2. doi: 10.1186/s12885-019-6472-9.
16. Feinstein AR. The pre-therapeutic classification of co-morbidity in chronic disease. *J Chronic Dis*. 1970;23(7):455-68. doi: 10.1016/0021-9681(70)90054-8.
17. Vrinzen CEJ, Delfgou L, Stadhouders N, Hermens RPMG, Merks MAW, Bloemendal HJ, Jeurissen PPT. A systematic review and multilevel regression analysis reveals the comorbidity prevalence in cancer. *Cancer Res*. 2023;83(7):1147-57. doi: 10.1158/0008-5472.CAN-22-1336.
18. Jéhannin-Ligier K, Dejardin O, Lapôtre-Ledoux B, Bara S, Coureau G, Grosclaude P, Marrer E, Molinié F, Trétarre B, Velten M, Woronoff AS, Colonna M, Guizard AV. Oral cancer characteristics in France: descriptive epidemiology for early detection. *J Stomatol Oral Maxillofac Surg*. 2017;118(2):84-89. doi: 10.1016/j.jormas.2017.02.003.
19. Guller M, Cooper DJ, Alkhatib H, Suru A, Blancaflor A, Maroun CA, Tham T, Allen H, Mazzara E, Thomas J, Amin N, Wu E, Eisele DW, Fakhry C, Pardoll D, Seiwert TY, Zhu G, Mandal R. Impact of comorbidities on outcomes in patients with advanced head and neck cancer undergoing immunotherapy. *Head Neck*. 2023;45(11):2789-97. doi: 10.1002/hed.27502.
20. Paleri V, Wight RG, Silver CE, Haigentz M Jr, Takes RP, Bradley PJ, Rinaldo A, Sanabria A, Bień S, Ferlito A. Comorbidity in head and neck cancer: a critical appraisal

and recommendations for practice. *Oral Oncol.* 2010;46(10):712-9. doi: 10.1016/j.oraloncology.2010.07.008.

21. Choi SY, Cheong HK, Lee MK, Kang JW, Lee YC, Oh IH, Eun YG. Metabolic diseases and risk of head and neck cancer: a cohort study analyzing nationwide population-based data. *Cancers.* 2022;14(13):3277. doi: 10.3390/cancers14133277.

22. Cheng H, Xu JH, He JQ, Yang XY, Shen XN, Xu XL. Multivariate analysis of prognostic factors in patients with lip squamous cell carcinoma after surgery. *World J Surg Oncol.* 2024;22(1):35. doi: 10.1186/s12957-024-03313-9.

23. Ozturk K, Gode S, Erdogan U, Akyildiz S, Apaydin F. Squamous cell carcinoma of the lip: survival analysis with long-term follow-up. *Eur Arch Otorhinolaryngol.* 2015;272(11):3545-50. doi: 10.1007/s00405-014-3415-6.

24. Louredo BV, Vargas PA, Pérez-de-Oliveira ME, Lopes MA, Kowalski LP, Curado MP. Epidemiology and survival outcomes of lip, oral cavity, and oropharyngeal squamous cell carcinoma in a southeast Brazilian population. *Med Oral Patol Oral Cir Bucal.* 2022;27(3):e274-84. doi: 10.4317/medoral.25147.

25. Babu G, Ravikumar R, Rafi M, Nair LM, Nazeer F, Thomas S, George PS, Kainickal CT. Treatment outcomes of squamous cell carcinoma of the lip: a retrospective study. *Oncol Lett.* 2022;25(1):8. doi: 10.3892/ol.2022.13594.

26. Antoniades DZ, Styaniadis K, Papanayotou P, Trigonidis G. Squamous cell carcinoma of the lips in a northern Greek population. Evaluation of prognostic factors on 5-year survival rate--I. *Eur J Cancer B Oral Oncol.* 1995;31B(5):333-9. doi: 10.1016/0964-1955(95)00030-5.

27. Freire GCB, Juliasse LER, Queiroz SIML, Lins RDAU, Mourão CF, Gurgel BCV. Survival patterns and prognostic factors in lip cancer patients: a 15-year single-center experience from Northeastern Brazil. *Onco*. 2025;5(1):4. doi: 10.3390/onco5010004.
28. Han AY, Kuan EC, Mallen-St Clair J, Alonso JE, Arshi A, St John MA. Epidemiology of squamous cell carcinoma of the lip in the United States: a population-based cohort analysis. *JAMA Otolaryngol Head Neck Surg*. 2016;142(12):1216-23. doi: 10.1001/jamaoto.2016.3455.
29. Zanoni DK, Montero PH, Migliacci JC, Shah JP, Wong RJ, Ganly I, Patel SG. Survival outcomes after treatment of cancer of the oral cavity (1985-2015). *Oral Oncol*. 2019;90:115-21. doi: 10.1016/j.oraloncology.2019.02.001.
30. Du E, Mazul AL, Farquhar D, Brennan P, Anantharaman D, Abedi-Ardekani B, Weissler MC, Hayes DN, Olshan AF, Zevallos JP. Long-term survival in head and neck cancer: impact of site, stage, smoking, and human papillomavirus status. *Laryngoscope*. 2019;129(11):2506-13. doi: 10.1002/lary.27807.
31. MELO, Andreia Cristina de et al. Prognostic factors associated with overall survival in patients with oral cavity squamous cell carcinoma. *Med Oral Patol Oral Cir Bucal*., v. 25, n. 4, p. 523-531, jul. 2020.
32. Szturz P and Vermorken JB (2016) Treatment of Elderly Patients with Squamous Cell Carcinoma of the Head and Neck. *Front. Oncol*. 6:199. doi: 10.3389/fonc.2016.00199
33. Andersen AO, Jensen JS, Jakobsen KK, et al. The impact of tobacco smoking on survival of patients with oral squamous cell carcinoma: a population-based retrospectivestudy. *ActaOncol*.2022;61(4):449458.doi:10.1080/0284186X.2022.2033830.

34. Colares N, Souza Rodrigues DF, Freitas MO, Dantas TS, Cunha MDPSS, Sousa FB, Barros Silva PGD. *Smoking History Decreases Survival in Patients with Squamous Cell Carcinoma of the Mouth: A Retrospective Study with 15 Years of Follow-up*. Asian Pac J Cancer Prev. 2019;20(6):1781-1787. doi:10.31557/APJCP.2019.20.6.1781.
35. Hu CY, Pan ZY, Yang J, Chu XH, Zhang J, Tao XJ, Chen WM, Li YJ, Lyu J. .Nomograms for predicting long-term overall survival and cancer-specific survival in lip squamous cell carcinoma: a population-based study. Cancer Med. 2019;8(8):4032-42. doi: 10.1002/cam4.2260.
36. Do KA, Johnson MM, Lee JJ, Wu XF, Dong Q, Hong WK, Khuri FR, Fu KK, Spitz MR. Second primary tumors in patients with upper aerodigestive tract cancers: joint effects of smoking and alcohol. Cancer Causes & Control. 2003;14(2):131-138. doi:10.1023/A:1023060315781.
47. Mohan M, Jagannathan N. *Oral field cancerization: an update on current concepts*. Oncology Reviews. 2014;8(1):244. doi:10.4081/oncol.2014.244.