

DAFTAR PUSTAKA

- Alassiri, S., Parnanen, P., Rathnayake, N., Johannsen, G., Heikkinen, A. M., Lazzara, R., dan Sorsa, T. (2018). The ability of quantitative, specific, and sensitive point-of-care/chair-side oral fluid immunotests for aMMP-8 to detect periodontal and peri-implant diseases. *Disease markers*, 2018(1)
- Al-Majid, A., Alassiri, S., Rathnayake, N., Tervahartiala, T., Gieselmann, D. R., dan Sorsa, T. (2018). Matrix metalloproteinase-8 as an inflammatory and prevention biomarker in periodontal and peri-implant diseases. *International journal of dentistry*, 2018.
- Anderson, J. C., Calderwood, A. H., Christensen, B. C., Robinson, C. M., Amos, C. I., & Butterly, L. (2018). Smoking and other risk factors in individuals with synchronous conventional high-risk adenomas and clinically significant serrated polyps. *Official journal of the American College of Gastroenterology| ACG*, 113(12), 1828–1835.
- Aro, K., Wei, F., Wong, D. T., & Tu, M. (2017). Saliva liquid biopsy for point-of-care applications. *Frontiers in public health*, 5, 232286.
- Bhai, P., Kulshrestha, S., Puri, R. D., Bijarnia Mahay, S., Saxena, R., & Verma, I. C. (2020). Spectrum of mutations in genes associated with familial colorectal cancer syndrome (MLH1, MSH2, PMS2, MSH6, and APC): A not so common hereditary cancer syndrome in Indian population. *Indian Journal of Gastroenterology*, 39, 599–607.
- Bockelman, C., Beilmann-Lehtonen, I., Kaprio, T., Koskensalo, S., Tervahartiala, T., Mustonen, H., Stenman, U., Sorsa, T., dan Haglund, C. (2018). Serum MMP-8 and TIMP-1 predict prognosis in colorectal cancer. *BMc cancer*, 18, 1-10.
- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., dan Jemal, A. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: a cancer journal for clinicians*, 68(6): 394-424.

- Bui, F. Q., Almeida-da-Silva, C. L. C., Huynh, B., Trinh, A., Liu, J., Woodward, J., Asadi, H., dan Ojcius, D. M. (2019). Association between periodontal pathogens and systemic disease. *Biomedical journal*, 42(1): 27-35.
- Carr, P. R., Weigl, K., Jansen, L., Walter, V., Erben, V., Chang-Claude, J., Brenner, H., & Hoffmeister, M. (2018). Healthy lifestyle factors associated with lower risk of colorectal cancer irrespective of genetic risk. *Gastroenterology*, 155(6), 1805–1815.
- Dekker, E., Tanis, P. J., Vleugels, J. L., Kasi, P. M., dan Wallace, M., (2019). Colorectal Cancer. *Pure-amc. Lancet*, 394: 1467-1480.
- Deng, K., Pelekos, G., Jin, L., dan Tonetti, M. S. (2021). Diagnostic accuracy of a point-of-care aMMP-8 test in the discrimination of periodontal health and disease. *Journal of Clinical Periodontology*, 48(8), 1051-1065.
- Elkhaira, R., Kasuma, N., dan Putra, A. E., (2020). Jumlah Koloni Bakteri Asam Laktat pada Rongga Mulut yang Sehat. *Jurnal Kesehatan Andalas*, 8(4): 157-161.
- Gupta, S., Mohindra, R., Singla, M., Khera, S., Kumar, A., Rathnayake, N., ... & Bhalla, A. (2022). Validation of a noninvasive aMMP-8 point-of-care diagnostic methodology in COVID-19 patients with periodontal disease. *Clinical and Experimental Dental Research*, 8(4), 988-1001.
- Heikkinen, A.M., Nwhator, S., Rathnayake, N., Vatanen, P., Sorsa, T. and Mäntylä, P., 2016. Pilot study on the genetic background of an active matrix metalloproteinase-8 test in Finnish adolescents. *Journal of Periodontology*, 87(1), 36-42.
- Hajishengallis, G. (2015). Periodontitis: from microbial immune subversion to systemic inflammation. *Nature reviews immunology*, 15(1), 30-44.
- Hernández, M., Baeza, M., Räisänen, I. T., Contreras, J., Tervahartiala, T., Chaparro, A., Sorsa, T., & Hernández-Ríos, P. (2021). Active MMP-8 quantitative test as an adjunctive tool for early diagnosis of periodontitis. *Diagnostics*, 11(8), 1503.

- Herrero, E., Boon, N., Bernaerts, K., Slomka, V., Verspecht, T., Quirynen, M., & Teughels, W. (2018). Clinical concentrations of peroxidases cause dysbiosis in in vitro oral biofilms. *Journal of Periodontal Research*, 53(3), 457–466.
- Himbert, C., Warby, C. A., Gigic, B., Ose, J., Lin, T., Viskochil, R., Peoples, A. R., Ashworth, A., Schrotz-King, P., & Scaife, C. L. (2022). Associations of Individual and Combined Physical Activity and Body Mass Index Groups with Proinflammatory Biomarkers among Colorectal Cancer Patients. *Cancer Epidemiology, Biomarkers & Prevention*, 31(12), 2148–2156.
- Huang, T.-H., Mokgautsi, N., Huang, Y.-J., Wu, A. T., & Huang, H.-S. (2021). Comprehensive omics analysis of a novel small-molecule inhibitor of chemoresistant oncogenic signatures in colorectal cancer cell with antitumor effects. *Cells*, 10(8), 1970.
- Hulley, S.B., Cummings, S.R., Browner, W.S., Grady, D. & Newman, T.B., (2013). *Designing clinical research: an epidemiologic approach*. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins.
- Jang, D., Choe, S., Park, J. W., Jeong, S., & Shin, A. (2020). Smoking status before and after colorectal cancer diagnosis and mortality in Korean men: A population-based cohort study. *Cancer medicine*, 9(24), 9641–9648.
- Jakubowska, K., Koda, M., Grudzińska, M., Kańczuga-Koda, L., & Famulski, W. (2020). Monocyte-to-lymphocyte ratio as a prognostic factor in peripheral whole blood samples of colorectal cancer patients. *World journal of gastroenterology*, 26(31), 4639.
- Juurikka, K., S. Butler, G., Salo, T., Nyberg, P., & Åström, P. (2019). The role of MMP8 in cancer: A systematic review. *International journal of molecular sciences*, 20(18), 4506.
- Kallio, E., Puolakkainen, T., Tervahartiala, T., Snäll, J., Marttila, E., Sorsa, T., & Uttamo, J. (2024). Applicability of an active matrix metalloproteinase-8 point-of-care test in an oral and maxillofacial surgery clinic: a pilot study. *Odontology*, 112(1), 250-255.

- Kemenkes RI. (2018) *Laporan Nasional Kesehatan Dasar (Riskesdas) Indonesia tahun 2018*, Riset Kesehatan Dasar 2018. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan. pp 94.
- Khor, B., Snow, M., Herrman, E., Ray, N., Mansukhani, K., Patel, K. A., Al-Naief, N. S., Maier, T., dan Machida, C. A., (2021). Interconnections between the oral and gut microbiomes: reversal of microbial dysbiosis and the balance between systemic health and disease. *Microorganisms*, 9(3), 496: 1-21.
- Khosama, Y. (2015). Faktor risiko kanker kolorektal. *Cermin Dunia Kedokteran*, 42(11), 399378.
- Kuipers, E. J., William, M., & David, L. (2016). Cancer colorectal. *Journal Medical HHS Public Access*, 10(65), 1–49.
- Luchian, I., Goriuc, A., Sandu, D., & Covasa, M. (2022). The role of matrix metalloproteinases (MMP-8, MMP-9, MMP-13) in periodontal and peri-implant pathological processes. *International Journal of Molecular Sciences*, 23(3), 1806.
- Michaud, D. S., Fu, Z., Shi, J., dan Chung, M. (2017). Periodontal disease, tooth loss, and cancer risk. *Epidemiologic reviews*, 39(1), 49-58.
- Mohammed, H. A., Abdulkareem, A. A., Zardawi, F. M., & Gul, S. S. (2022). Determination of the accuracy of salivary biomarkers for periodontal diagnosis. *Diagnostics*, 12(10), 2485.
- Najafi, M., Farhood, B., & Mortezaee, K. (2019). Extracellular matrix (ECM) stiffness and degradation as cancer drivers. *Journal of cellular biochemistry*, 120(3), 2782–2790.
- Nasution, N., & Sari, R. S. (2020). Pengelompokan Diagnosis Dan Prosedur Berdasarkan Icd X Dan Icd IX Di Rsi Siti Rahmah Padang. *Jurnal Manajemen Informasi Kesehatan Indonesia*, 8(1), 53–53.
- Nwizu, N., Wactawski-Wende, J. and Genco, R. J. (2020) 'Periodontal disease and cancer: Epidemiologic studies and possible mechanisms', *Periodontology* 2000, 83(1), 213-233.
- Noack, B., Kipping, T., Tervahartiala, T., Sorsa, T., Hoffmann, T., dan Lorenz, K. (2017). Association between serum and oral matrix metalloproteinase-8

- levels and periodontal health status. *Journal of periodontal research*, 52(5), 824-831.
- Peltonen, R., Hagström, J., Tervahartiala, T., Sorsa, T., Haglund, C., & Isoniemi, H. (2021). High expression of MMP-9 in primary tumors and high preoperative MPO in serum predict improved prognosis in colorectal cancer with operable liver metastases. *Oncology*, 99(3), 144–160.
- Pratama, K. P., & Adrianto, A. A. (2019). Faktor-faktor yang mempengaruhi kejadian kanker kolorektal stadium III Di RSUP Dr Kariadi Semarang. *Jurnal Kedokteran Diponegoro (Diponegoro Medical Journal)*, 8(2), 768–784.
- Pujiastuti, P. (2015) 'Obesitas dan penyakit periodontal', *STOMATOGNATIC-Jurnal Kedokteran Gigi*, 9(2), pp. 82-85.
- Ramenzoni, L. L., Hofer, D., Solderer, A., Wiedemeier, D., Attin, T., & Schmidlin, P. R. (2021). Origin of MMP-8 and Lactoferrin levels from gingival crevicular fluid, salivary glands and whole saliva. *BMC Oral Health*, 21, 1–12.
- Ren, H. G., Luu, H. N., Cai, H., Xiang, Y. B., Steinwandel, M., Gao, Y. T., Hargreaves, M., Zheng, M., Blot, J. W., Long, J. R., dan Shu, X. O. (2016). Oral health and risk of colorectal cancer: results from three cohort studies and a meta-analysis. *Annals of Oncology*, 27(7), 1329-1336.
- Rizkiyah, M., Oktiani, B. W., dan Wardani, I. K., (2021). Prevalensi Dan Analisis Faktor Risiko Kejadian Gingivitis Dan Periodontitis Pada Pasien Diabetes Melitus (Literature Review). *Dentin*, 5(1): 32-36.
- Raisanen, I. T., Aji, N. R. A. S., Sakellari, D., Grigoriadis, A., Rantala, I., Pätälä, T., Heikkilä, P., Gupta, S., dan Sorsa, T. (2023). Active Matrix Metalloproteinase-8 (aMMP-8) Versus Total MMP-8 in Periodontal and Peri-Implant Disease Point-of-Care Diagnostics. *Biomedicines*, 11(11):1-10.
- Rossi, G. R., Trindade, E. S., & Souza-Fonseca-Guimaraes, F. (2020). Tumor microenvironment-associated extracellular matrix components regulate NK cell function. *Frontiers in Immunology*, 11, 511170.

- Rossi, M., Jahanzaib Anwar, M., Usman, A., Keshavarzian, A., & Bishehsari, F. (2018). Colorectal cancer and alcohol consumption—Populations to molecules. *Cancers*, 10(2), 38.
- Siddhartha, R., & Garg, M. (2021). Molecular and clinical insights of matrix metalloproteinases into cancer spread and potential therapeutic interventions. *Toxicology and Applied Pharmacology*, 426, 115593. <https://doi.org/10.1016/j.taap.2021.115593>
- Sindhu, S., & Jagannathan, N. (2014). Saliva: A cutting edge in diagnostic procedures. *Journal of Oral Diseases*, 2014(1), 168584.
- Sirnio, P., Tuomisto, A., Tervahartiala, T., Sorsa, T., Klintrup, K., Karhu, T., Herzig, K., Makela, J., Kartunen, T., Salo, T.m Makinen, M., dan Vayrynen, J. P. (2018). High-serum MMP-8 levels are associated with decreased survival and systemic inflammation in colorectal cancer. *British journal of cancer*, 119(2), 213-219.
- Smith, T., Muller, D. C., Moons, K. G., Cross, A. J., Johansson, M., Ferrari, P., Fagherazzi, G., Peeters, P. H., Severi, G., & Hüsing, A. (2019). Comparison of prognostic models to predict the occurrence of colorectal cancer in asymptomatic individuals: A systematic literature review and external validation in the EPIC and UK Biobank prospective cohort studies. *Gut*, 68(4), 672–683.
- Sorsa, T., Gieselmann, D., Arweiler, N. B., & Hernández, M. (2017). A quantitative point-of-care test for periodontal and dental peri-implant diseases. *Nature Reviews Disease Primers*, 3(1), 1–1.
- Sorsa, T., Heikkinen, A. M., Leppilahti, J., Tervahartiala, T., Nwhator, S., Rathnayake, N., Mäntylä, P., Gieselmann, D.-R., & Netuschil, L. (2018). Active matrix metalloproteinase-8: Contributor to periodontitis and a missing link between genetics, dentistry, and medicine. *Pathogenesis of Periodontal Diseases: Biological Concepts for Clinicians*, 51–57.
- Sorsa, T., Alassiri, S., Grigoriadis, A., Raisanen, I. T., Parnanen, P., Nwhator, S. O., Gieselmann, D. R., dan Sakellari, D. (2020). Active MMP-8 (aMMP-8)

as a grading and staging biomarker in the periodontitis classification. *Diagnostics*, 10(2), 61: 1-10

Sorsa, T., Hernández, M., Leppilähti, J., Munjal, S., Netuschil, L., Mäntylä, P. and Bostanci, N., 2020. Detection of gingival crevicular fluid MMP-8 levels with different laboratory and chair-side methods. *Oral Diseases*, 26(6), 1447-1453.

Sorsa, T., Nwhator, S. O., Sakellari, D., Grigoriadis, A., Umezudike, K. A., Brandt, E., Keskin, M., Tervahartiala, T., Pärnänen, P., Gupta, S., Mohindra, Bostanci, N., Nurcan Buduneli, N., dan Räisänen, I. T. (2022). aMMP-8 oral fluid PoC test in relation to oral and systemic diseases. *Frontiers in oral health*, 3, 897115.

Stuelten, C. H., Parent, C. A., & Montell, D. J. (2018). Cell motility in cancer invasion and metastasis: Insights from simple model organisms. *Nature Reviews Cancer*, 18(5), 296–312.

Sun, H., He, Z., & Zhao, D. (2020). Dietary Patterns and Colorectal Cancer Risk. *Current Developments in Nutrition*, 4, nzaa044_053.

Wen, B. W., Tsai, C. S., Lin, C. L., Chang, Y. J., Lee, C. F., Hsu, C. H., dan Kao, C. H. (2014), Cancer risk among gingivitis and periodontitis patients: a nationwide cohort study. *QJM: An International Journal of Medicine*, 107(4), 283-290.

Yao, Q. W., Zhou, D. S., Peng, H. J., Ji, P., dan Liu, D. S. (2014), Association of periodontal disease with oral cancer: a meta-analysis. *Tumor Biology*, 35, 7073-7077.

Zalewska, E. A., Ławicka, R., Grygorczuk, P., Nowosielska, M., Kicman, A., dan Ławicki, S. (2024). Importance of Metalloproteinase 8 (MMP-8) in the Diagnosis of Periodontitis. *International Journal of Molecular Sciences*, 25(5), 2721.

Zhang, F., Liu, E., Radaic, A., Yu, X., Yang, S., Yu, C., Xiao, S., & Ye, C. (2021). Diagnostic potential and future directions of matrix metalloproteinases as biomarkers in gingival crevicular fluid of oral and systemic diseases. *International Journal of Biological Macromolecules*, 188, 180–196.

Zhang, Y., Kang, N., Xue, F., Qiao, J., Duan, J., Chen, F., & Cai, Y. (2021).
Evaluation of salivary biomarkers for the diagnosis of periodontitis. *BMC
Oral Health*, 21(1), 266.