評価対象論文リスト（要因：歯周病、アウトカム：糖尿病）

評価判定日：2025/4/25

①既存の系統的レビュー・メタ解析・統合解析

1	Wu C zhou, Yuan Y hang, Liu H hang, et al. Epidemiologic relationship between periodontitis and type 2 diabetes mellitus. BMC Oral Health. 2020;20(1):204.
2	Nascimento GG, Leite FRM, Vestergaard P, Scheutz F, López R. Does diabetes increase the risk of periodontitis? A systematic review and meta-regression analysis of longitudinal prospective studies. Acta Diabetol. 2018;55(7):653-667. doi:10.1007/s00592-018-1120-4
3	Stöhr J, Barbaresko J, Neuenschwander M, Schlesinger S. Bidirectional association between periodontal disease and diabetes mellitus: a systematic review and meta-analysis of cohort studies. Sci Rep. 2021;11(1):13686. doi:10.1038/s41598-021-93062-6
4	Abariga SA, Whitcomb BW. Periodontitis and gestational diabetes mellitus: a systematic review and meta-analysis of observational studies. BMC Pregnancy Childbirth. 2016;16(1):344. doi:10.1186/s12884-016-1145-z
5	Esteves Lima RP, Cyrino RM, De Carvalho Dutra B, et al. Association between periodontitis and gestational diabetes mellitus: systematic review and meta‐analysis. Journal of Periodontology. 2016;87(1):48-57. doi:10.1902/jop.2015.150311
6	Zheng M, Wang C, Ali A, Shih YA, Xie Q, Guo C. Prevalence of periodontitis in people clinically diagnosed with diabetes mellitus: a meta-analysis of epidemiologic studies. Acta Diabetol. 2021;58(10):1307-1327. doi:10.1007/s00592-021-01738-2
7	Ziukaite L, Slot DE, Van Der Weijden FA. Prevalence of diabetes mellitus in people clinically diagnosed with periodontitis: A systematic review and meta‐analysis of epidemiologic studies. J Clinic Periodontology. 2018;45(6):650-662. doi:10.1111/jcpe.12839

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8	Miyawaki A, Toyokawa S, Inoue K, Miyoshi Y, Kobayashi Y. Self-reported periodontitis and incident type 2 diabetes among male workers from a 5-year follow-up to my health up study. Kokubo Y, ed. PLoS ONE. 2016;11(4):e0153464. doi:10.1371/journal.pone.0153464
9	Morita I, Inagaki K, Nakamura F, et al. Relationship between periodontal status and levels of glycated hemoglobin. J Dent Res. 2012;91(2):161-166.
10	Ide R, Hoshuyama T, Wilson D, Takahashi K, Higashi T. Periodontal disease and incident diabetes: a seven-year study. J Dent Res. 2011;90(1):41-46.

■系統的レビュー・メタ解析・統合解析

No	Author	Title	Year	Outcomes	Study location	Catgory	Relative risk (95%CI)	P for trend	Magnitude of association
1	Wu, CZ., et al	Epidemiologic relationship between periodontitis and type 2 diabetes mellitus.	2020	T2DM	China, Norway, Netherlands	Periodontitis	OR=4.04 (2.48–6.59)	<0.001	↑↑↑
					Germany, Japan, Finland, UK	Moderate periodontitis	RR=1.28 (1.07–1.54)	0.007	↑
						Severe periodontitis	RR=1.53 (1.27–1.83)	<0.001	↑↑
				Periodontitis	USA, India, Taiwan, Hong Kong	T2DM	OR=1.58 (1.38–1.81)	<0.001	↑↑
					Taiwan, US, Japan		RR=1.34 (1.11–1.61)	0.002	↑
2	Nascimento, GG., et al	Does diabetes increase the risk of periodontitis? A systematic review and meta-regression analysis of longitudinal prospective studies.	2018	Pperiodontitis	Taiwan, Japan, US, South Kores	T2DM	RR=1.86 (1.25–2.77)	NA	↑↑
3	Stöhr, J., et al	Bidirectional association between periodontal disease and diabetes mellitus: a systematic review and meta-analysis of cohort studies.	2021	DM	USA, Taiwan, Japan, Germany, Finland, Northern Ireland	Periodontitis	RR=1.26 (1.12–1.41)	NA	↑
4	Abariga, SA., et al	Periodontitis and gestational diabetes mellitus: a systematic review and meta-analysis of observational studies.	2016	Gestational DM	US, Saudi Arabia, Brazil, Turkey, Thailand, Spain, India	Periodontitis	OR=1.66 (1.17–2.36)	0.005	↑↑
5	Esteves Lima, RP., et al	Association Between Periodontitis and Gestational Diabetes Mellitus: Systematic Review and Meta-Analysis.	2016	Gestational DM	US, Saudi Arabia, Spain	Periodontitis	OR=1.67 (1.20–2.32)	<0.001	↑↑
6	Zheng, M., et al	Prevalence of periodontitis in people clinically diagnosed with diabetes mellitus: a meta-analysis of epidemiologic studies.	2021	Periodontitis	Hungary、Colombia, Spain, Italy, Chile, Thailand, Finland, USA, UK, Saudi Arabia, Japan	DM	OR=1.85 (1.61–2.11)	NA	↑↑
7	Ziukaite, L., et al	Prevalence of diabetes mellitus in people clinically diagnosed with periodontitis: A systematic review and meta- analysis of epidemiologic studies	2018	DM	China, Jordan, South Korea, Thailand, Taiwan, Malaysia, Australia, Netherlands, Switzerland, USA, Mexico, Brazil	Periodontitis	OR=2.27 (1.90–2.72)	NA	↑↑↑

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No	Author	Title	Year	Study period	Number of subjects for analysis	Source of subjects	Event followed	Definitions	Number of incident cases	Participant 's race	Category	Number among cases	Relative risk (95%CI)	P for trend	Magnitude of association	Confounding variable considered
8	Miyawaki A. et al	Self-Reported Periodontitis and Incident Type 2 Diabetes among Male Workers from a 5-Year Follow-Up to MY Health Up Study.	2016	2004-2009	2469 (only male) Women was excluded because most were part-time with a high turnover rate, making a 5-year follow-up assessment challenging.	A large Japanese insurance company participated in the MY Health Up Study	Incident T2DM	Self-reported and/or FPG ≥ 126mg/dL (2005-2009) HbA1c ≥ 6.5% (2008-2009)	133	Japanese	Self-reported tooth loosing	29	1.73 (1.18–2.53)	<0.01	↑	Age, current smoking habits, BMI, family history of diabetes, hypertension, alcohol heavy consumption (>=40 g/day), exercise habits (> 30 minutes, >= 2 days/week), and prediabetes
											Self-reported gingival hemorrhage	53	1.23 (0.90–1.70)	NS	–	
9	Morita et al.	Relationship between Periodontal Status and Levels of Glycated Hemoglobin	2012	1997-2006	6,215 (male 4511; female1345)	Employee worked in and around Nagoya City	Incident T2DM	HbA1c ≥ 6.5%	168	Japanese	CPI score 3 (Moderate periodontitis)	102	2.47 (0.78–7.79)	0.122	↑↑	BMI, alcohol consumption, smoking status, sex, and age
											CPI score 4 (Severe periodontitis)	63	3.45 (1.08–11.02)	0.037	↑↑↑	
							Incident Periodontitis	CPI score 3 or 4	2068		HbA1c ≥6.5%	77	1.17 (1.01–1.36)	0.038	↑	
10	Ide et al.	Periodontal Disease and Incident Diabetes: a Seven-year Study	2011	2000-2007	5,848 (male 3,883; female 1,965)	Civil service officers	Incident T2DM	FPG ≥ 126mg/dL	287	Japanese	CPI score 3 (Moderate periodontitis)	82	1.04 (0.80–1.35)	NA	–	age, sex, smoking, high BMI
											CPI score 4 (Severe periodontitis)	32	1.43 (0.99–2.07)	0.056	–	