

Supplemental Table S1. Excluded articles

Authors	Reason for exclusion
Bell & Epker 1976	No periodontal outcomes were reported
Glassman et al. 1984	No periodontal outcomes were reported
Kraut 1984	No periodontal outcomes were reported
Bays & Greco 1992	Unclear periodontal outcomes
Handelman 1997	Same patient sample from Handelman 1994
Berger et al. 1998	No periodontal outcomes were reported
Matteini & Mommaerts 2001	No periodontal outcomes were reported
Pinto et al. 2001	No periodontal outcomes were reported
Bierenbroodspot et al. 2002	Retrospective case series with <10 patients
Neyt et al. 2002	No periodontal outcomes were reported
Garib et al. 2006	Prospective case series with <10 patients
Harzer et al. 2006	No periodontal outcomes were reported
Hansen et al. 2007	No periodontal outcomes were reported
Aziz et al. 2008	No periodontal outcomes were reported
Chamberland & Proffit 2008	No periodontal outcomes were reported
De Freitas et al. 2008	No periodontal outcomes were reported
Fernandez-Sanroman et al. 2009	Unclear periodontal outcomes
Koudstaal et al. 2009	No periodontal outcomes were reported
Landes et al. 2009b	Same patient sample from Landes et al. 2009a
Laudemann et al. 2009	Same patient sample from Landes et al. 2009a
Angeletti et al. 2010	No periodontal outcomes were evaluated
El-Sayed & Khalil 2010	No periodontal outcomes were evaluated
Laudemann et al. 2010	Same patient sample from Landes et al. 2009a
Laudemann et al. 2011	Same patient sample from Landes et al. 2009a
Martorelli et al. 2011	No periodontal outcomes were evaluated
Seeberger et al. 2011	Unclear periodontal outcomes
Nada et al. 2012	No periodontal outcomes were evaluated
Zambon et al. 2012	No periodontal outcomes were evaluated
Sygouros et al. 2014b	Same patient sample from Sygouros et al. 2014a
Dergin et al. 2015	No periodontal outcomes were evaluated
Jensen et al. 2015	Unclear periodontal outcomes
Salguiero et al. 2015	No periodontal outcomes were evaluated
Verquin et al. 2016	Unclear periodontal outcomes
Jensen & Rodrigo-Domingo 2017	No periodontal outcomes were evaluated
Pereira et al. 2018	No periodontal outcomes were evaluated
Fonseca et al. 2019	No periodontal outcomes were evaluated
Andreischev et al. 2020	No periodontal outcomes were evaluated

Li et al. 2020	No periodontal outcomes were evaluated
Drobyshev et al. 2021	Unclear periodontal outcomes
Gul et al. 2021	No periodontal outcomes were evaluated
Kernitsky et al. 2021	Retrospective case series with <10 patients
Landes et al. 2021	Same patient sample from Landes et al. 2009a
Pereira et al. 2021	Unclear periodontal outcomes
Noverraz et al. 2021	Unclear periodontal outcomes
Turker et al. 2022	No periodontal outcomes were evaluated

Supplemental Table S2. Quality assessment of non-randomized studies based on the Newcastle-Ottawa Scale (NOS)

Cohort studies	Selection				Comparability		Outcomes		Total stars
	Representativeness of the exposed cohort	Selection of the non-exposed cohorts	Ascertainment of exposure	Demonstration that outcome of interest was not present at the start of the study	Comparability of cohort on the bases of the design or analysis	Ascertainment of outcome	Follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts	
Greenbaum & Zachrisson 1982	*	*	*	/	**	*	*	*	8
Handelman 1996	*	*	*	*	*	*	*	*	8
Northway & Meade Jr. 1997	*	*	*	*	*	*	*	*	8
Carmen et al. 2000	/	*	*	*	*	/	*	*	6
Handelman et al. 2000	*	*	*	*	**	*	*	/	8
Ramieri et al. 2005	*	/	*	*	*	*	*	/	6
Rungcharassaeng et al. 2007	*	/	*	*	*	*	*	*	7
Landes et al. 2009	*	/	*	*	*	*	*	*	7
Gauthier et al. 2011	*	/	*	*	/	/	*	*	5
Verlinden et al. 2011	*	/	*	/	/	*	*	*	5
Williams et al. 2012	*	/	*	/	/	*	*	*	5
Kilic et al 2013	*	/	*	*	/	*	*	*	6
Sygouros et al. 2014	*	/	*	*	/	*	*	*	6
Lin et al. 2015	/	/	*	*	*	*	*	*	6
Siqueira et al. 2015	*	/	*	*	*	*	*	*	7
Kim et al. 2017	*	/	*	*	*	*	*	*	7
Sendyk et al. 2018	*	/	*	*	*	*	*	/	6
Moon et al. 2020	*	/	*	*	/	*	*	*	6
Li and Guilleminault 2022	/	/	*	/	/	*	*	*	4
Martin 2023	*	/	*	*	/	*	*	/	5

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability. /: Study did not meet criteria, *: Study met criteria.

Supplemental Table S3. Bias risk assessment for RCTs using Cochrane Risk of Bias Tool for Randomized Controlled Trials

Author	Randomization process	Deviation from intended intervention	Missing outcome data	Measurement of the data	Selection of the reported result	Risk
Kayalar et al. 2016	Low	Low	Low	Low	Low	Low