

Table S1: Effect of smoking on osseointegration.

n/a = Not available; ISQ = Implant Stability Quotient; PT = Perio-test; Time= Observation period; Nr. of implants = Number of implants; S = smoker; non-S = non-smoker; Max = maxilla; Man = mandible.

1stAuthor, date	Group	Nr. Of Implants	Location	Obs. period	Bone density	Bone contact	Implant mobility	P value
Wychowanski, 2020	S	n/ a	Max	2 years	n/ a	n/a	n/ a	n/ a
			Anterior max	At time of insertion			ISQ 58.5±5.05	0.06
				Evaluation at 6 months			ISQ 65.52±5.05	
	Non-S	n/a	Anterior max	At time of insertion	n/a	n/a	ISQ 60.0±5.1	0.02
				Evaluation at 6 months			ISQ 67.61±5.11	
	S	n/a	Anterior max	At time of insertion	n/a	n/a	PT 2.52±0.11	0.1
				Evaluation at 6 months			PT 0.34±0.12	0.02
				Evaluation at 24 months			PT - 1.40±0.12	0.82
	Non-S	n/a	Anterior max	At time of insertion	n/a	n/a	PT 2.27±0.10	n/a
				Evaluation at 6 months			PT 0.0±0.09	n/a
				Evaluation at 24 months			PT - 1.44±0.09	0.0047
	S	n/a	Posterior max	At time of insertion	n/a	n/a	ISQ 60.4±0.4	n/a

1stAuthor, date	Group	Nr. Of Implants	Location	Obs. period	Bone density	Bone contact	Implant mobility	P value
				Evaluation at 6 months			ISQ 64.0±0.5	0.0179
			Posterior max	At time of insertion			PT 2.37±0.2	< 0.0001
				Evaluation at 6 months			PT 0.20±0.18	0.0179
				Evaluation at 24 months			PT - 1.08±0.18	0.0003
	Non-S	n/a	Posterior max	At time of insertion	n/a	n/a	ISQ 62.9±0.6	< 0.0001
				Evaluation at 6 months			ISQ 67.2±0.6	n/ a
			Posterior max	At time of insertion			PT 1.27±0.3	
				Evaluation at 6 months			PT - 0.91±0.2	
				Evaluation at 24 months			PT - 2.32±0.2	
Shibili, 2010	S	n/ a	Max	n/ a	14.01±5.70	19.02±4.38	n/ a	0.03
			Man		23.51±9.58	32.93±6.57		0.02
Non-S	Max		17.90±8.38		32.97±8.98	0.2		
	Man		41.85±16.9		56.40±8.38	0.14		
Ferreira, 2016	S	11	Max +	8 weeks	19.1±7.6	25.9±9.1	n/ a	0.04
	Non-S	11	Man		28.5±18.8	39.8±14.2		0.21

Table S4: Effect of number of cigarettes consumed on implant survival – failure rate.

n/a = Not available; Nr. of imp = Number of implants; Nr. of cig = amount of cigarette intake; Time = Observation period; S = smoker; non-S = non-smoker; Max = maxilla; Man = mandible.

1 st Author, date	Group	Nr. of imp	Time	Nr. of cig	Implant failure %	Implant success %	Implant survival %	Implant location	P value
Shevana , 2015	S	n/ a	n/ a	< 20 per year	38 (45.23)	388 (40.24)	n/ a	Max+ Man	0.062
	non-S			n/ a	84 (63.63)	n/ a			2248 (71.87)
Twito & Sade, 2014	S	n/a	n/ a	overall smokers	135 (5.6)	n/ a	2271 (94.4)	Max+ Man	< 0.001
				1 – 10 per day	32 (4.3)		720 (95.7)		
				11 – 20 per day	50 (5.3)		891 (94.7)		
				21 – 30 per day	34 (6.9)		462 (93.1)		
				31 – 40 per day	18 (9.2)		177 (90.8)		
	non-S			n/ a	185 (3.5)		5074 (96.5)		
Sanchez -Perez, 2007	S	90	5 years	> 20 per day	31	69	n/ a	Max+ Man	< 0.05
				< 20 per day	15.80	84.2			
	non-S	70		n/ a	1.40	98.60	n/a		
De Luca, 2006	Heavy smokers	104 (total) not specified for each group separately	20 years	> OR = 15 per day	5.56	82.70%	n/ a	n/ a	0.027
	Light smokers			< OR = 15 per day	3.51				
	Moderate smokers			6 – 14 per day	4.82				
	Non - smokers			285	n/ a				7%

1st Author, date	Group	Nr. of imp	Time	Nr. of cig	Implant failure %	Implant success %	Implant survival %	Implant location	P value
Ramano, 2013	Heavy smokers	66	5 – 9 years	20 per day	n/ a	92.42%	97	n/ a	0.001
	non-S	97		n/ a		98	99		0.001
Saleem, 2020	S	204 (total) Not specified for each group separately	7 years	< 20 per day	n/ a	86	n/ a	n/ a	0.001
				> 20 per day		n/ a			< 0.001
	non-S			n/ a		98.6			< 0.001
Levin, 2008	Heavy smokers	64 (total) not specified for each group separately	5 – 14 years	> 10 per day	n/ a	87	n/ a	Max+ Man	< 0.001
	Moderate smokers			< 10 per day		89			0.001
	non-S			n/ a		93			0.001

Table S7: Effect of duration of smoking on survival – failure rate. S = smoker; non-S = non-smoker; Max = maxilla; Man = mandible; n/a = not available; Time = observation period; Dur. Of smoking = Duration of smoking; Location = Implant location; Survival = Implant survival; Failure = Implant failure; Success = Implant success; cal = Calculated; Nr. Of imp = Number of Implants.

1 st Author, date	Group	Nr. of imp	Time	Dur. of Smoking	Failure	Success	Survival	Location	P value	
Arora, 2017	S	n/a n/a	n/a	< 10 years	6	94 cal	93.9	Max+ Man	Survival 0.21 / mobility 0.001	
				> 10years	7.5	92.5 cal	92.4			
	non-S			n/a	n/a	n/a	n/a			
Shevana, 2015	S	n/a	n/a		8 4 (63.63)	84 (36.37) cal	n/a	Max 2265 (69.48) / Man 995 (30.52)	n/a	
				< 10 years	2 6 (30.95)	350 (36.30)				0.036
				> 10 years	5 8 (69.05)	614 (63.70)				0.023
	non-S	n/a	n/a	4 8 (36.37)	48 (63.63) cal	n/a	n/a			
Sade, 2014	S	6731 total males / 949 total females	n/a		1 3 5 (5.6)	135 (94.4) cal	2 2 7 1 (94.4)	Max+ Man	0.001	
				Up to 10 years	1 4 (3.5)	14 (96.5) cal	384 (96.5)			
				More than 10 years	121 (6)	121 (94) cal	1887 (94)			
	non-S			n/a	1 8 5 (3.5)	185(96.5) cal	5 0 7 4 (96.5)			0.001
	ex- S			n/a	4 0 (2.8)	40 (97.2) cal	1 3 8 2 (96.5)			0.007

1 st Author, date	Group	Nr. of imp	Time	Dur. of Smoking	Failure	Success	Survival	Location	P value
	ex-S who quit 2-15 years before implantation			n/ a	3 1 (2.3)	1316 (2.3) cal	1 3 1 6 (97.7)		0.001
Lambert, 2000	S	959	8 years	n/ a	n/ a	n/ a	91.14	Max	n/ a
	non-S combined with patients who quit	1928					94.01		
Ramanos, 2013	Heavy smokers	66	5 – 9 years	> 10 years	7 . 5 8 cal	92.42	97	n/ a	n/ a
	non-S	97			2 cal	98			
Levin, 2008	Past smokers	6 4 (total) not specified for each group separately	5 – 1 4 years	Quit smoking 5 years before insertion	n/ a	n/ a	93.75	Max+ Man	0 . 0 3 1 current to former smokers
	Current-smokers			Smokers for over 8 years			87.1		0 . 0 1 6 current to non-S
	non-S			n/ a			93.8		n/ a