

Description of the Cariogenic and Periodontopathogenic Microbiome in Patients with and Without Oral Squamous Cell Carcinoma Using Next-Generation Sequencing



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Appendix 1. Cariogenic species.

Bacteria genus	Bacteria specie	Bacteria specie found in OSCC study	References
<i>Abiotrophia</i>	<i>Abiotrophia defectiva</i>	-	-
<i>Actinobaculum</i>	<i>Actinobaculum</i> sp	-	-
<i>Actinomyces</i>	<i>Actinomyces gerencseriae</i>	-	-
	<i>Actinomyces graevenitzi</i>	-	-
	<i>Actinomyces massiliensis</i>	-	-
	<i>Actinomyces naeslundii</i>	-	-
	<i>Actinomyces odontolyticus</i>	-	-
	<i>Actinomyces oral taxon 180</i>	-	-
	<i>Actinomyces oris</i>	-	-
<i>Alloprevotella</i>	<i>Alloprevotella</i> sp. oral taxon 308	-	-
	<i>Alloprevotella</i> sp. oral taxon 473	-	-
<i>Atopobium</i>	<i>Atopobium parvulum</i>	<i>Atopobium parvulum</i>	-
<i>Bergeyella</i>	<i>Bergeyella</i> sp. oral taxon 322	-	-
	<i>Bergeyella</i> sp. oral taxon 931	-	-
<i>Campylobacter</i>	<i>Campylobacter concisus</i>	-	-
	<i>Campylobacter gracilis</i>	-	-
	<i>Campylobacter rectus</i>	-	Hurley <i>et al.</i> , 2019 (saliva) [1]
	<i>Campylobacter showae</i>	-	Richards <i>et al.</i> , 2017 (plaque) [2]

contd....

Bacteria genus	Bacteria specie	Bacteria specie found in OSCC study	References
Capnocytophaga	<i>Capnocytophaga gingivalis</i>	-	Jiang et al., 2016 (saliva) [3]
	<i>Capnocytophaga granulosa</i>	-	Angello et al., 2017 (plaque) [4]
	<i>Capnocytophaga leadbetteri</i>	-	Peterson et al., 2013 (plaque) [5]
	<i>Capnocytophaga ochracea</i>	-	Lif Holgerson et al., 2015 (plaque) [6]
	<i>Capnocytophaga sputigena</i>	-	Dashper et al., 2019 (saliva) [7]
<i>Cardiobacterium</i>	<i>Cardiobacterium hominis</i>	-	-
<i>Catonella</i>	<i>Catonella morbi</i>	-	-
<i>Clostridiales</i>	<i>Clostridiales sp</i>	-	-
<i>Corynebacterium</i>	<i>Corynebacterium durum</i>	-	-
	<i>Corynebacterium matruchotii</i>	-	-
<i>Fusobacterium</i>	<i>Fusobacterium canifelinum</i>	-	-
	<i>Fusobacterium nucleatum</i>	-	-
	<i>Fusobacterium periodonticum</i>	-	-
<i>Gemella</i>	<i>Gemella haemolysans</i>	-	-
	<i>Gemella morbillorum</i>	-	-
	<i>Gemella sanguinis</i>	-	-
<i>Granulicatella</i>	<i>Granulicatella adiacens</i>	-	-
	<i>Granulicatella elegans</i>	-	-
<i>Haemophilus</i>	<i>Haemophilus haemolyticus</i>	-	-
	<i>Haemophilus parainfluenzae</i>	-	-
<i>Kingella</i>	<i>Kingella denitrificans</i>	-	-
	<i>Kingella oralis</i>	-	-
<i>Lachnoanaerobaculum</i>	<i>Lachnoanaerobaculum umeaense</i>	-	-
<i>Lactobacillus</i>	<i>Lactobacillus salivarius</i>	<i>Lactobacillus salivarius</i>	-
	<i>Lactobacillus gasseri</i>	<i>Lactobacillus gasseri</i>	-
	<i>Lactobacillus helveticus</i>	<i>Lactobacillus helveticus</i>	-
	<i>Lactobacillus reuteri</i>	<i>Lactobacillus reuteri</i>	-
<i>Lautropia</i>	<i>Lautropia mirabilis</i>	-	-
<i>Leptotrichia</i>	<i>Leptotrichia buccalis</i>	<i>Leptotrichia buccalis</i>	-
	<i>Leptotrichia hongkongensis</i>	-	-
	<i>Leptotrichia shahii</i>	-	-
	<i>Leptotrichia sp 212</i>	-	-
	<i>Leptotrichia sp 392</i>	-	-
	<i>Leptotrichia sp 417</i>	-	-
	<i>Leptotrichia sp 498</i>	-	-
	<i>Leptotrichia sp. oral clone FP036</i>	-	-
	<i>Leptotrichia sp. oral taxon 215</i>	-	-
	<i>Leptotrichia sp. oral taxon 221</i>	-	-
	<i>Leptotrichia sp. oral taxon 417</i>	-	-
<i>Neisseria</i>	<i>Leptotrichia wadei</i>	-	-
	<i>Neisseria bacilliformis</i>	-	-
	<i>Neisseria elongata</i>	-	-
	<i>Neisseria flavescens</i>	-	-
	<i>Neisseria mucosa</i>	-	-
	<i>Neisseria pharyngis</i>	-	-
<i>Oribacterium</i>	<i>Neisseria subflava</i>	-	-
	<i>Oribacterium sinus</i>	-	-
<i>Parascardovia</i>	<i>Parascardovia denticolens</i>	-	-
<i>Parvimonas</i>	<i>Parvimonas micra</i>	-	-
<i>Porphyromonas</i>	<i>Porphyromonas catoniae</i>	-	-
	<i>Porphyromonas pasteri</i>	-	-
	<i>Porphyromonas sp 279</i>	-	-
	<i>Porphyromonas sp. oral taxon 930</i>	-	-

contd....

Bacteria genus	Bacteria specie	Bacteria specie found in OSCC study	References
Prevotella	<i>Prevotella denticola</i>	-	-
	<i>Prevotella histicola</i>	-	-
	<i>Prevotella melaninogenica</i>	-	-
	<i>Prevotella nanceiensis</i>	-	-
	<i>Prevotella oris</i>	-	-
	<i>Prevotella salivae</i>	-	-
Propionibacterium	<i>Propionibacterium</i> sp. oral taxon 194	-	-
Rothia	<i>Rothia aerea</i>	-	-
	<i>Rothia dentocariosa</i>	<i>Rothia dentocariosa</i>	-
	<i>Rothia mucilaginoso</i>	<i>Rothia mucilaginoso</i>	-
Scardovia	<i>Scardovia wiggsiae</i>	-	-
Selenomonas	<i>Selenomonas dianaE</i>	-	-
	<i>Selenomonas infelix</i>	-	-
	<i>Selenomonas noxia</i>	-	-
	<i>Selenomonas</i> sp. oral taxon 478	-	-
	<i>Selenomonas sputigena</i>	<i>Selenomonas sputigena</i>	-
Staphylococcus	<i>Staphylococcus caprae</i>	-	-
Streptococcus	<i>Streptococcus anginosus</i>	<i>Streptococcus anginosus</i>	-
	<i>Streptococcus constellatus</i>	<i>Streptococcus constellatus</i>	-
	<i>Streptococcus cristatus</i>	<i>Streptococcus cristatus</i>	-
	<i>Streptococcus gordonii</i>	<i>Streptococcus gordonii</i>	-
	<i>Streptococcus infantarius</i>	<i>Streptococcus infantarius</i>	-
	<i>Streptococcus intermedius</i>	<i>Streptococcus intermedius</i>	-
	<i>Streptococcus macedonicus</i>	<i>Streptococcus macedonicus</i>	-
	<i>Streptococcus lutetiensis</i>	<i>Streptococcus lutetiensis</i>	-
	<i>Streptococcus mitis</i>	<i>Streptococcus mitis</i>	-
	<i>Streptococcus mutans</i>	<i>Streptococcus mutans</i>	-
	<i>Streptococcus oralis</i>	<i>Streptococcus oralis</i>	-
	<i>Streptococcus parasanguinis</i>	<i>Streptococcus parasanguinis</i>	-
	<i>Streptococcus parauberis</i>	<i>Streptococcus parauberis</i>	-
	<i>Streptococcus pasteurianus</i>	<i>Streptococcus pasteurianus</i>	-
	<i>Streptococcus salivarius</i>	<i>Streptococcus salivarius</i>	-
	<i>Streptococcus sanguinis</i>	<i>Streptococcus sanguinis</i>	-
	<i>Streptococcus sobrinus</i>	-	-
Tanerella	<i>Tanerella forsythia</i>	-	-
	<i>Tanerella</i> sp. oral taxon 286	-	-
Veillonella	<i>Veillonella criceti</i>	-	-
	<i>Veillonella dispar</i>	-	-
	<i>Veillonella parvula</i>	<i>Veillonella parvula</i>	-
	<i>Veillonella</i> sp. oral taxon 780	-	-

Appendix 2. Periodontopathogenic species.

Bacteria genus	Bacteria specie	Bacteria species foun in OSCC study	References
<i>Abiotrophia</i>	<i>Abiotrophia defectiva</i>	-	-
<i>Actinobacillus</i>	<i>Actinobacillus actinomycetemcomitans</i>	-	-
Actinomyces	<i>Actinomyces cardiffensis</i>	-	-
	<i>Actinomyces naeslundii</i>	-	-
	<i>Actinomyces odontolyticus</i>	-	-
	<i>Actinomyces odontolyticus</i>	-	-
	<i>Actinomyces oris</i>	-	-
	<i>Actinomyces</i> sp taxón oral 171	-	-
	<i>Actinomyces</i> sp taxón oral 175	-	-
	<i>Actinomyces</i> sp taxón oral 178	-	-
	<i>Actinomyces</i> sp taxón oral 448	-	-
	<i>Actinomyces</i> sp taxón oral 849	-	Hagenfeld <i>et al.</i> , 2023 (placa sub) [8]
	<i>Actinomyces viscosus</i>	-	Johnston <i>et al.</i> , 2022 (placa sub) [9]

contd....

Bacteria genus	Bacteria specie	Bacteria species foun in OSCC study	References
Aggregatibacter	<i>Aggregatibacter actinomycetemcomitans</i>	<i>Aggregatibacter actinomycetemcomitans</i>	Hagenfeld <i>et al.</i> , 2018 (placa sub) [10]
	<i>Aggregatibacter aphrophilus</i>	<i>Aggregatibacter aphrophilus</i>	Ma <i>et al.</i> , 2021 (saliva) [11]
	<i>Aggregatibacter segnis</i>	-	Kumar <i>et al.</i> , 2020 (lpaca sub) [12]
<i>Alloprevotella</i>	<i>Alloprevotella tannerae</i>	-	-
<i>Anaeroglobus</i>	<i>Anaeroglobus geminatus</i>	-	-
<i>Atopobium</i>	<i>Atopobium minor</i>	-	-
<i>Bacterium</i>	<i>Bacterium sinergistetes</i>	-	-
<i>Bacteroides</i>	<i>Bacteroides forsythus</i>	-	-
<i>Bacteroidetes</i>	<i>Bacteroidetes</i> taxón oral 274	-	-
<i>Campylobacter</i>	<i>Campylobacter concisus</i>	<i>Campylobacter concisus</i>	-
	<i>Campylobacter gracilis</i>	-	-
	<i>Campylobacter rectus</i>	-	-
	<i>Campylobacter showae</i>	-	-
<i>Capnocytophaga</i>	<i>Capnocytophaga canimorsus</i>	<i>Capnocytophaga canimorsus</i>	-
	<i>Capnocytophaga gingivalis</i>	-	-
	<i>Capnocytophaga ochracea</i>	<i>Capnocytophaga ochracea</i>	-
	<i>Capnocytophaga</i> sp taxón oral 329	-	-
	<i>Capnocytophaga</i> sp taxón oral 335	-	-
	<i>Capnocytophaga</i> sp taxón oral 412	-	-
	<i>Capnocytophaga sputigena</i>	-	-
<i>Cardiobacterium</i>	<i>Cardiobacterium valvarum</i>	-	-
<i>Catonella</i>	<i>Catonella morbi</i>	-	-
<i>Choloflexus</i> sp	<i>Choloflexus</i> sp	-	-
<i>Corynebacterium</i>	<i>Corynebacterium matruchotii</i>	-	-
<i>Cyanothece</i> sp	<i>Cyanothece</i> sp	-	-
<i>Desulfobulbus</i> sp	<i>Desulfobulbus</i>	-	-
<i>Dialister</i>	<i>Dialister invisus</i>	-	-
<i>Eikenella</i>	<i>Eikenella corrodens</i>	-	-
<i>Enterobacter</i>	<i>Enterobacter asburiae</i>	<i>Enterobacter asburiae</i>	-
<i>Eubacterium</i>	<i>Eubacterium brachy</i>	-	-
	<i>Eubacterium nodatum</i>	-	-
	<i>Eubacterium saphenum</i>	-	-
<i>Filifactor</i>	<i>Filifactor alocis</i>	<i>Filifactor alocis</i>	-
<i>Fretibacterium</i> sp	<i>Fretibacterium fastidiosum</i>	-	-
<i>Fusobacterium</i>	<i>Fusobacterium nucleatum</i>	<i>Fusobacterium nucleatum</i>	-
	<i>Fusobacterium periodonticum</i>	-	-
<i>Gardnerella</i>	<i>Gardnerella vaginalis</i>	<i>Gardnerella vaginalis</i>	-
<i>Granulicatella</i>	<i>Granulicatella adiacens</i>	-	-
<i>Haemophilus</i>	<i>Haemophilus parainfluenzae</i>	<i>Haemophilus parainfluenzae</i>	-
<i>Hafnia</i>	<i>Hafnia alvei</i>	-	-
<i>Johnsonella</i>	<i>Johnsonella</i>	-	-
<i>Kingella</i>	<i>Kingella desnitrificante</i>	-	-
<i>Klebsiella</i>	<i>Klebsiella pneumoniae</i>	<i>Klebsiella pneumoniae</i>	-
<i>Lachnospiraceae</i>	<i>Lachnospiraceae</i> taxón oral 107	-	-
<i>Lactobacillus</i>	<i>Lactobacillus gasseri</i>	-	-
	<i>Lactobacillus oris</i>	-	-
<i>Lentimicrobium</i> sp	<i>Lentimicrobium</i> sp	-	-
<i>Leptotrichia</i>	<i>Leptotrichia buccalis</i>	-	-
	<i>Leptotrichia goodfellowii</i>	-	-
	<i>Leptotrichia hofstadi</i>	-	-
<i>Leptotrichiaceae</i>	<i>Leptotrichiaceae</i>	-	-
<i>Mitsuokella</i> sp	<i>Mitsuokella</i> sp	-	-
<i>Mogibacteriaceae</i>	<i>Mogibacteriaceae</i>	-	-
<i>Mycoplasma</i>	<i>Mycoplasma</i>	-	-

contd....

Bacteria genus	Bacteria specie	Bacteria species foun in OSCC study	References
Neisseria	<i>Neisseria elongata</i>	-	-
	<i>Neisseria flava</i>	-	-
	<i>Neisseria flavescens</i>	-	-
	<i>Neisseria mucosa</i>	-	-
	<i>Neisseria sp taxón oral 014</i>	-	-
	<i>Neisseria subflava</i>	-	-
<i>Olsenella</i>	<i>Olsenella uli</i>	-	-
<i>Onibacterium</i>	<i>Onibacterium sp taxón oral 078</i>	-	-
<i>Parvimón</i>	<i>Parvimón midral</i>	-	-
<i>Parvimonas</i>	<i>Parvimonas micra</i>	-	-
<i>Peptostreptococcus</i>	<i>Peptostreptococcus anaerobius</i>	-	-
	<i>Peptostreptococcus stomatis</i>	-	-
	<i>Peptostreptococcus micros</i>	-	-
<i>Phocaeicola</i>	<i>Phocaeicola</i>	-	-
<i>Porphyromonas</i>	<i>Porphyromonas endodontalis</i>	-	-
	<i>Porphyromonas gingivalis</i>	<i>Porphyromonas gingivalis</i>	-
	<i>Porphyromonas sp taxón oral 279</i>	-	-
<i>Prevotella denticola</i>	<i>Prevotella denticola</i>	<i>Prevotella denticola</i>	-
	<i>Prevotella intermedia</i>	<i>Prevotella intermedia</i>	-
	<i>Prevotella melaninogenica</i>	<i>Prevotella melaninogenica</i>	-
	<i>Prevotella nigrescens</i>	-	-
	<i>Prevotella oris</i>	-	-
	<i>Prevotella sp taxón oral 306</i>	-	-
	<i>Prevotella sp taxón oral 317</i>	-	-
	<i>Prevotella tannerae</i>	-	-
-	<i>Prevotella veroralis</i>	-	-
	<i>Propionibacterium</i>	-	-
<i>Providencia</i>	<i>Providencia stuartii</i>	<i>Providencia stuartii</i>	-
<i>Pseudomonas</i>	<i>Pseudomonas aeruginosa</i>	<i>Pseudomonas aeruginosa</i>	-
<i>Pseudoramibacter</i>	<i>Pseudoramibacter alactolyticus</i>	-	-
<i>Rothia</i>	<i>Rothia aeria</i>	-	-
	<i>Rothia dentocariosa</i>	-	-
	<i>Rothia mucilaginosa</i>	-	-
<i>Saccharibacteria</i>	<i>Saccharibacteria</i>	-	-
<i>Selenomonas</i>	<i>Selenomonas noxia</i>	-	-
	<i>Selenomonas sputigena</i>	-	-
<i>Serratia</i>	<i>Serratia marcescens</i>	<i>Serratia marcescens</i>	-
<i>Spirochaetes</i>	<i>Spirochaetes</i>	-	-
<i>Staphylococcus</i>	<i>Staphylococcus capitis</i>	-	-
<i>Streptococcus</i>	<i>Streptococcus anginosus</i>	-	-
	<i>Streptococcus australis</i>	-	-
	<i>Streptococcus constellatus</i>	-	-
	<i>Streptococcus cristatus</i>	-	-
	<i>Streptococcus gordonii</i>	-	-
	<i>Streptococcus infantis</i>	-	-
	<i>Streptococcus intermedius</i>	-	-
	<i>Streptococcus intermedius constellatus</i>	-	-
	<i>Streptococcus mitis</i>	-	-
	<i>Streptococcus mutans</i>	-	-
	<i>Streptococcus oralis</i>	-	-
	<i>Streptococcus parasanguinis</i>	-	-
	<i>Streptococcus salivarius</i>	-	-
	<i>Streptococcus sanguinis</i>	-	-
	<i>Streptococcus sp taxón oral 056</i>	-	-
	<i>Streptococcus sp taxón oral 071</i>	-	-
<i>Synergistetes</i>	<i>Synergistetes bacteria</i>	-	-

contd....

Bacteria genus	Bacteria specie	Bacteria species foun in OSCC study	References
SR1	SR1	-	-
Tannerella	Tannerella forsythia	Tannerella forsythia	-
Tissierellaceae	Tissierellaceae	-	-
TM7	TM7-G5	-	-
	TM7 GP-083	-	-
	TM7[G-1] sp 346	-	-
	TM7[G-1] sp 347	-	-
	TM7[G-1] sp 348	-	-
	TM7[G-1] sp. Oral taxon 352	-	-
Treponema	Treponema denticola	Treponema denticola	-
	Treponema maltophilum	-	-
	Treponema parvum	-	-
	Treponema pectinovorum	-	-
	Treponema socranskii	-	-
	Treponema vincentii	-	-
Veillonella	Veillonella parvula	-	-
	Veillonella ceeae	-	-

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