

**Supplement 3: Bacterial taxa statistically enriched (P-value <0.05) when compared between colorectal cancer and controls.**

Author	Pop.	N	Sampling	Detection Method	Taxa Enriched in CRC	Taxa Enriched in Control
Liu et al. <sup>12</sup> 2020	China	147	Faecal	Illumina	<b>Proteobacteria, Spirochaetes, Synergistetes</b>	<b>Firmicutes</b>
Zhang et al. <sup>13</sup> 2019	China	23	Biopsy	Illumina	Devosia	Blautia producta, Eubacterium, Klebsiella, Leptotrichia, Phascolarctobacterium, Prevotella copri & stercora
Yachida et al. <sup>14</sup> 2019	Japan	616	Faecal	WGSS	Bilophila wadsworthia, Collinsella aerofaciens, Desulfovibrio longreachensis* & vietnamensis, Dorea longicatena, Fusobacterium nucleatum, Gemella morbillorum, Lactobacillus sanfranciscensis, Parvimonas micra, Peptostreptococcus anaerobius & stomatis, Phascolarctobacterium succinatutens*, Porphyromonas ueonis, Selenomas sputigena, Solobacterium moorei, Streptococcus angionus	Eubacterium eligens, Lachnospira multipara
Tunnsjø et al. <sup>15</sup> 2019	Norway	77	Faecal & Biopsy	qPCR	Fusobacterium nucleatum	
Saito et al. <sup>16</sup> 2019	Japan	81	Colonoscopy Aspirate	Illumina	Actinobacillus, Actinomyces, Fusobacterium (varium), Parvimonas, Peptostreptococcus	Fusobacterium peridonticum, Megamonas, Sphingobium
Geravand et al. <sup>17</sup> 2019	Iran	77	Faecal	qPCR	Enterococcus faecalis	
Zhang et al. <sup>18</sup> 2018	China	348	Faecal	Illumina	Campylobacter rectus, Clostridium lactatifermentans, Clostridium scindens, Clostridium symbiosum, Dialister pneumosintes, Eggerthella lenta, Eisenbergiella tayi, Fusobacterium nucleatum, Gemella morbillorum, Parvimonas micra, Peptostreptococcus stomatis, Porphyromonas asaccharolytica, Ruminococcus torques, Solobacterium moorei	Blautia faecis, Coprococcus comes, Eubacterium desmolans, Eubacterium eligens, Eubacterium hadrum, Eubacterium hallii, Fusicatenibacter saccharivorans, Roseburia faecis, Ruminococcus lactaris, Streptococcus salivarius

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Rezasoltani et al. <sup>19</sup> 2018	Iran	93	Faecal	qPCR	Enterococcus faecalis, Bacteroides fragilis, Enterotoxigenic Bacteroides fragilis, Fusobacterium nucleatum, Porphyromonas (gingivalis), Streptococcus bovis	
Mori et al. <sup>20</sup> 2018	Italy	65+	Faecal	Illumina	Escherichia, Shigella, Sutterella	Anaerostipes
Allali et al. <sup>21</sup> 2018	Morocco	23	Faecal	Illumina	Akkermansia (municiphilia), Bacteroides fragilis, Bilophila, Butyricimonas, Christensenella, Clostridium, Collinsella aerofaciens, Dehalobacterium, Eubacterium (biforme), Fusobacterium, Oscillospira, Oxalobacter (formigenes), Parabacteroides, Peptostreptococcus, Porphyromonas, Ruminococcus, Selenomas	Faecalibacterium prausnitzii, Megamonas, Prevotella copri, Prevotella stercorea
Yu et al. <sup>22</sup> 2017	Hong Kong & Denmark	324	Faecal	Illumina	<i>Bacteroides fragilis</i> , <i>Fusobacterium (nucleatum)</i> , <i>Gemella (morbillorum)</i> , <i>Parvimonas (micra)</i> , <i>Peptostreptococcus (stomatis)</i> , <i>Solobacterium (moorei)</i>	Eubacterium (ventriosum)
Xu and Jiang <sup>23</sup> 2017	China	160	Previous Data		Campylobacter, Dialister, Fusobacterium, Lactobacillus, Leptotrichia, Mogibacterium, Parvimonas, Peptostreptococcus	Acidomonas, Blautia, Escherichia, Faecalibacterium, Pseudomonas, Sphingomonas
Suehiro et al. <sup>24</sup> 2017	Japan	109	Faecal	Droplet PCR	Fusobacterium nucleatum	
Liang et al. <sup>25</sup> 2017	China & Hong Kong	536	Faecal	qPCR	Fusobacterium nucleatum, Clostridium hathewayi	Bacteroides clarus, Roseburia intestinalis
Flemer et al. <sup>26</sup> 2017	Ireland	147	Biopsy	Illumina	Bacteroides, Fusobacterium, Oscillibacter, Roseburia, Ruminococcus.	Coprococcus, Lachnospiraceae
Zhou et al. <sup>27</sup> 2016	China	145	Biopsy	qPCR	Enterococcus (faecalis), Fusobacterium	

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Vogtmann et al. <sup>28</sup> 2016	USA	104	Lyophilised Faeces	WGSS	Fusobacterium, Porphyromonas	
Thomas et al. <sup>29</sup> 2016	Brazil	36	Biopsy	QIIME	Bacteroides (fragilis, uniformis), Bilophila, Desulfovibrio, Fusobacterium, Odoribacter, Parabacteroides, Phascolarctobacterium	Acinetobacter, Alcaligenes faecalis, Bacillus (cereus), Escherichia, Lactobacillus (delbruecki), Prevotella melaninogenica, Pseudomonas
Sinha et al. <sup>30</sup> 2016	USA	150	Lyophilised faeces	QIIME	Fusobacterium, Porphyromonas	
Keenan et al. <sup>31</sup> 2016	New Zealand	142	Faecal	qPCR	Enterotoxigenic Bacteroides fragilis	
Paritsky et al. <sup>32</sup> 2015	Israel	203	Colonoscopy Aspirate	Culturing	Streptococcus bovis	
Mira-Pascual et al. <sup>33</sup> 2015	Spain	28	Faecal & Biopsy	Pyro	<b>Enterobacteriaceae</b> , Blautia coccoides	
Magdy et al. <sup>34</sup> 2015	Egypt	461	Biopsy	Antiserum	Enteropathogenic Escherichia coli	
Feng et al. <sup>35</sup> 2015	Austria	138	Faeces	Illumina	Acidaminococcus (intestini), Alistipes (finegoldii, putredinis), Bacteroides (caccae, dorei, eggerthii, massiliensis, ovatus, vulgatus, xylanisolvans), Bilophila (wadsworthia), Burkholderia, Clostridium (symbiosum), Escherichia (coli), Lachnospiraceae, Odoribacter (splanchius), Parabacteroides (distasonis, merdae), Paraprevotella (clara), Sutterella (wadsworthensis), Veilonella (atypica)	Actinomyces (viscosus), Bifidobacterium (animalis), Clostridium, Streptococcus (mutans, thermophilus)
Boltin et al. <sup>11</sup> 2015	Israel	118	Colonoscopy Aspirate & Biopsy	Culturing	No significance found	No significance found
Kohoutova et al. <sup>36</sup> 2014	Czech Republic	80	Biopsy	Culturing & Primers	Escherichia coli	

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Weir et al. <sup>37</sup> 2013	USA	21	Faecal	Pyro	Acidaminobacter (unspecified), Akkermansia (muciniphilia), Citrobacter (farmeri), Phascolarctobacterium (unspecified)	Bacteroides (capillosus, finegoldii, intestinalis), Dialister (invisus, pneumosintes), Dorea (formicigenerans), Lachnobacterium (bovis), Lachnospira (pectinoschiza), Megamonas (hypermegale), Prevotella (copri, oris), Pseudobutyrovibrio (ruminis), Ruminococcus (albus, obeum)
Ahn et al. <sup>38</sup> 2013	USA	141	Lyophilised Faeces	QIIME	Anaerovorax, Atopobium, Fusobacterium, Megasphaera, Peptostreptococcus, Porphyromonas, Selenomas	Coprococcus, Ruminococcus
Chen et al. <sup>39</sup> 2012	China	102	Swab, Faecal & Biopsy	Pyro	Anaerococcus <sup>!</sup> , Anaerotruncus <sup>!</sup> , Catonella <sup>\$</sup> , Collinsella <sup>!</sup> , Desulfovibrio <sup>!</sup> , Eubacterium <sup>!</sup> , Filifactor <sup>\$</sup> , Fusobacterium <sup>\$</sup> , Gemella <sup>\$</sup> , Klebsiella <sup>\$</sup> , Mogibacterium <sup>\$!</sup> , Paraprevotella <sup>!</sup> , Peptostreptococcus <sup>\$!</sup> , Slackia <sup>!</sup> , Porphyromonas <sup>\$</sup> , Selenomas <sup>\$</sup>	Anaerostipes, Bifidobacterium, Blautia, Catenibacterium, Faecalibacterium, Gardnerella, Lachnospira
Sobhani et al. <sup>40</sup> 2011	France	179	Faecal	Pyro	Bacteroides/Prevotella group	
Potter et al. <sup>41</sup> 1998	UK	42	Faecal & Biopsy	Culturing	No significance found	No significance found

Where a species is in brackets next to its corresponding genus, denotes that both genus and species are statistically significant. If species not in brackets, only the species is significant. Where genus level is not available or scarce, family taxonomic level and above was included and listed in bold.

\*article contains more patients that had undergone chemotherapy, these are excluded from numbers and results.

<sup>\$</sup>faecal sample.

<sup>!</sup>swab sample.

CRC: colorectal cancer; WGSS: whole genome shotgun sequencing; Pyro: pyrosequencing.