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|  | **Disease** | **Up-regulated** | **Down-regulated** | **References** |
| Neurodegenerative Diseases | Parkinson disease | *Bifidobacterium* | *Brautella* | Hill-Burns et al., (2017); Hopfner et al., (2017); Peng et al., (2018); Scheperjans et al., (2015); Bedarf et al., (2017); Heintz-Buschart et al., (2018) |
| *Pasteurella* | *Prevotella* |
| *Enterococcus* | *Faecococcus* |
| Alzheimer disease | *Escherichia* | *anti-inflammatory bacteria* | Minter et al., (2017) |
| *Shigella* |  |
| Cardiovascular Diseases | Hypertension | *Prevotella* |  | Yan et al.,(2017); Li B. et al.,(2017); Yang et al.,(2015) |
| *Klebsiella* |  |
| *Streptococcus* |  |
| *Firmicutes/ Bacteroidetes* |  |
| Atherosclerosis | *Enterobacteriaceae* |  | Jie et al., (2017); Li et al.,(2016) |
| *Enterobacter aerogenes* |  |
| *Collinsella* |  |
| *Anaeroglobus* |  |
| Metabolic Diseases | Obesity | *Mollicutes* | *Akkermansia* | Turnbaugh et al., (2009); Liu et al., (2017); Vallianou et al., (2019) |
| *Phylum Firmicutes* | *Faecalibacterium* |
|  | *Oscillibacter* |
|  | *Alistipes* |
|  | *Bacteroides thetaiotaomicron* |
| T1DM |  | *Clostridium* | Zhou et al., (2020b) |
|  | *Prevotella* |
| T2DM | *Dallella* | *Bifidobacteria* | Li et al., (2020) |
|  | *Akkermansia* |
| GDM | *Rumenococcus* | *Bifidobacterium* | Crusell et al., (2018) |
| *Desulfovibrio* | *Fischeri* |
| *Enterobacter* |  |
| *Bacteroides* |  |
| *Prevotella* |  |
| NAFLD | *Bacteroidetes* | *Firmicutes* | Da Silva et al., (2018); Raman et al., (2013); Jiang et al., (2015) |
| *Lactobacillus* | *Rumenococcus* |
| *Dorea* | *Prevotella* |
| *Streptococcus* | *Flavobacterium* |
| Gastrointestinal Diseases | IBD | *Enterobacter* | *Firmicutes* | Caruso et al., (2020); Li et al., (2014) |
| *Candida albicans* | *Bifidobacterium* |
| *Aspergillus albicans* | *Roseburia* |
| *Cryptococcus neoformans* | *Faecalibacterium prausnitzii* |
| *Proteobacteria* | *Saccharomyces cerevisiae* |
| CRC | *Escherichia coli* | *Bifidobacteria* | Si et al., (2020); Tsoi et al., (2017) |
| *Bacteroides fragilis* | *Lactobacillus* |
| *Fusobacterium nucleatum* | *Bacteroidetes* |
| *Peptostreptococcus anaerobius* |  |