

**Supplementary table 4 : Gastric cancer (GC) -enriched and -depleted OTUs compared to superficial gastritis**

OTU code	Status	OTU Taxonomy_greengenes database	OTU representative sequence	Species level identification	p value	q value
Otu000005	GC-enriched	k__Bacteria;p__Firmicutes;c__Bacilli;o__Lactobacillales;f__Streptococaceae;g__Streptococcus;s__infantis;	TACGTAGGTCCCAGCGTTGTCGGATTATTGGGCGTAAAGCGAGCGCAGGCCGTTAGATAAGTCTGAAGTTAAAGGCTGTGGCTTAACCATAGTACGCTTTGAAACTGTTAACTTGAGTGAAGAGGGAGAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATATGGAGGAACACCGGTGGCGAAAGCCGCTCTGGCTTGAAGTACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGG	<i>Streptococcus infantis</i>	0.005545567	0.03283371
Otu000012	GC-enriched	k__Bacteria;p__Firmicutes;c__Bacilli;o__Lactobacillales;f__Lactobacillaceae;g__Lactobacillus	TACGTAGGTGGCAAGCGTTGTCGGATTATTGGGCGTAAAGGGAAACAGCAGGCCGTTTAAAGTCTGATGTGAAAGCCTTCGGCTTAACCGGAGTAGCATTGGAAACTGGAAGACTTGAGTGCAGAAAGGAGAGTGGAACTCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCACTGGCGAAAGCGGCTCTGGTCTGAACTGACGCTGAGGTTCCGAAAGCGTGGGTAGCAAACAGG	<i>Lactobacillus salivarius</i>	0.016546424	0.03990608
Otu000016	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Peptostreptococaceae;g__Peptostreptococcus	TACGTAGGGGGTAGCGTTATCCGGATTACTGGGCGTAAAGGGTGCCTAGGTTGCTTCAAGTCGGTGTAAAGGCTACGGCTCAACCTAGTAAAGCCGCGAAACTGGAGACTTGAGTGCAGGAGAGGAAAGTGGAAATCCAGTGTAGCGGTGAAATGCGTAGATATGGGAGGAACACCACTAGCGAAGCCGCTTCTGGACTGCAACTGACACTGAGGCGCAAAAGCGTGGGTAGCAAACAGG	<i>Peptostreptococcus stomatis</i>	0.013130375	0.02999834
Otu000017	GC-enriched	k__Bacteria;p__Firmicutes;c__Bacilli;o__Gemellales;f__Gemellaceae;g__Gemella;	TACGTAGGTGGCAAGCGTTGTCGGATTATTGGGCGTAAAGCGCGCGCAGGTTGTTAAAGTCTGATGTGAAAGCCACGGCTCAACCTGGAGGTGATTGGAACTGTTAACTTGAGTGCAGGAGAGAAAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATAGGAGGAACACCACTGGCGAAGCCGCTTTTTGGCCTGTAAGTACACTGAGGCGCGAAAGCGTGGGAGCAAACAGG	ND	0.020916148	0.03364659
Otu000033	GC-enriched	k__Bacteria;p__Fusobacteria;c__Fusobacteriia;o__Fusobacteriales;f__Fusobacteriaceae;g__Fusobacterium;	TACGTATGTCACGAGCGTTATCCGGATTATTGGGCGTAAAGCGCGTCTAGGTTGTTAAAGTCTGATGTGAAAGCCTTCGGCTTAACCGGAGTAGCATTGGAACTGTTAACTTGAGTGCAGGAGAGAAAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATGGGAGGAACACCACTGGCGAAGCCGCTTACTGGACAGACTGACGCTGAAGCGGAAAGCGTGGGTAGCAAACAGG	<i>Fusobacterium nucleatum</i>	0.020117415	0.04083629
Otu000035	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__[Tissierellaceae];g__Parvimonas	TACGTATGGGGCGAGCGTTGTCGGATTATTGGGCGTAAAGGGTACGTAGGCCGTTTTAAAGTCAAGTGTGAAAGCGTGAGGCTTAACCTCATTAAAGCACTTGAAGTGGAAAGACTTGAGTGAAGGAGAGGAAAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATAGGAGGAATACCGGTGGCGAAGCCGACTTCTGGACTTTACTGACGCTCAGTACGAAAGCGTGGGAGCAAACAGG	<i>Parvimonas micra</i>	0.001936456	0.04083629
Otu000045	GC-enriched	k__Bacteria;p__Firmicutes;c__Bacilli;o__Lactobacillales;f__Lactobacillaceae;g__Lactobacillus;s__fermentum	TACGTAGGTGGCAAGCGTTATCCGGATTATTGGGCGTAAAGAGAGTGCAGGCCGTTTCTAAGTCTGATGTGAAAGCCTTCGGCTTAACCGGAGTAGCATTGGAAACTGGATAACTTGAGTGCAGAAAGGGTGTGAACTCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCACTGGCGAAAGCGGCTACCTGGTCTGAACTGACGCTGAGACTCGAAAGCATGGGTAGCGAACAGG	<i>Lactobacillus fermentum</i>	0.007509976	0.03283371
Otu000068	GC-enriched	k__Bacteria;p__Firmicutes;c__Bacilli;o__Lactobacillales;f__Streptococaceae;g__Streptococcus;s__anginosus;	TACGTAGGTCCCAGCGTTGTCGGATTATTGGGCGTAAAGCGAGCGCAGGCCGTTAGAAAAGTCTGAAGTGAAGGCAAGTGGCTCAACCATGTAGGCTTTGAAACTGTTAACTTGAGTGCAGAAAGGGAGAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATATGGAGGAACACCGGTGGCGAAGCCGCTCTGGTCTGAACTGACGCTGAGGCTCGAAAGCGTGGGAGCGAACAGG	<i>Streptococcus anginosus</i>	0.010105818	0.02999834
Otu000085	GC-depleted	k__Bacteria;p__Proteobacteria;c__Betaproteobacteria;o__Burkholderiales;f__Comamonadaceae;	TACGTAGGTGCGAGCGTTATCCGGATTACTGGGCGTAAAGCGTGCGCAGGCCGTTGATGAAGACAGATGTGAAATCCCGCGCTCAACCTGGAACTGCAATTGTGACTGCATCGTGGAGTGGCGCAGAGGGGATGGAAATCCGCGTGTAGCAGTGAATGCGTAGATATGGGAGGAACACCGATGGCGAAGGCAATCCCTGGCCTGCACTGACGCTATGCACGAAAGCGTGGGAGCAAACAGG	ND	0.008031708	0.03283371
Otu000090	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Lachnospiraceae;g__Eubacterium;	TACGTAGGGGGCAAGCGTTATCCGGATTACTGGGTGTAAGGGAGCGCAGACCGCTTGCAAGTCTGAAGTGAAGCCCGGGCTTAACCCGGGACTGCTTTGAAACTGTGAAGTGTAGTGTGCGGAGAGGTAAGTGGAAATCCAGTGTAGCGGTGAAATGCGTAGATATGGGAGGAACACCGTGGCGAAGCCGCTTACTGGACGATAACTGACGTTGAGGCTCGAAGCGTGGGAGCAAACAGG	ND	0.00593905	0.03283371
Otu000115	GC-enriched	k__Bacteria;p__Bacteroidetes;c__Bacteroidia;o__Bacteroidales;f__[Paraprevotellaceae];g__Alloprevotella;	TACGGAAAGGTCAGCGCTTATCCGGATTATTGGGTTTAAAGGGAGCGTAGGCCGATTATTAAGTCAAGTGTGAAAGCGTGGCTCAACCATCGTTAGCCATTGAAACTGGTAGTCTTGAGTGCAGACAGGGATGCTGGAAGTCTGGTGTAGCGGTGAAATGCTTAGATATACGATGAACCTCGATCGCAAGGCAGGTGCCGGCTGCAACTGACGCTGAGGCTCGAAAGTGTGGGTATCAAACAGG	ND	0.004671605	0.03283371
Otu000148	GC-enriched	k__Bacteria;p__Bacteroidetes;c__Bacteroidia;o__Bacteroidales;f__Prevotellaceae;g__Prevotella;	TACGGAAAGGTCAGCGCTTATCCGGATTATTGGGTTTAAAGGGAGCGTAGGCCGTTAAGCGTGTGTGAAATGCAAGTGCACAGCTCTGCATGACGCGCAACTGGTCACTTGAGTGTGCGCAACGAGCGGAAATCCGTCGTGTAGCGGTGAAATGCTTAGATATGACGAAGAAGTCCGATTGGCGAAGCAGCTTGGGGAGCAACTGACGCTGAAAGTTCGAAAGTGGGGTATCGAACAGG	<i>Prevotella oris</i>	0.007551867	0.03283371
Otu000151	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Veillonellaceae;g__Dialister;	TACGTAGGTGGCAAGCGTTGTCGGATTATTGGGCGTAAAGCGCGCGCAGGCCGTTTCTAAGTCCATCTTAAAGCGTGGGCTCAACCCATGAGGGGATGGAAACTGGGAAGTGGAGTATCGGAGAGGAAAGTGGAAATCCATGTGTAGCGGTGAAATGCGTAGATATGGAAGAACACCGGTGGCGAAGCCGACTTCTAGACGAAAAGTACGCTGAGGCGGAAAGCGTGGGAGCAAACAGG	<i>Dialister pneumosintes</i>	0.003492768	0.03283371
Otu000174	GC-enriched	k__Bacteria;p__Actinobacteria;c__Coriobacteriia;o__Coriobacteriales;f__Coriobacteriaceae;g__Slackia;	TACGTAGGGGGCAGCGTTATCCGGATTACTGGGCGTAAAGCGCGCGCAGGCCGCGCCCAAGCGGCTCGTGAAGCCGGGGCTCAACCCCGGAAAGCGAACCTGGCGGCTCGAGTGGGCGAGGGAGGATGGAAATCCCGGTGTAGCGGTGAAATGCGTAGATATCGGAGGAACACCGACGGCGAAGGCAGCCCTTGGGCTTCACTGACGCTGAGGCGGAAAGTGGGAGCGAACAGG	<i>Slackia exigua</i>	0.01832997	0.03283371
Otu000211	GC-enriched	k__Bacteria;p__Bacteroidetes;c__Bacteroidia;o__Bacteroidales;f__Prevotellaceae;g__Prevotella;s__intermedia;	TACGGAAAGGTCAGCGCTTATCCGGATTATTGGGTTTAAAGGGAGTGTAGGCCGTTAAGCGTGTGTGAAATTAAGTGTCTCAACATCTACCTTGCAGCGCAACTGGCGGACTTGAGTGCACGCAACGTATGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGACGAACTCCGATTGCGAAGGCACGCTACGGGAGTGTACTGACGCTTAAAGTTCGAAAGTGGGGTATCGAACAGG	<i>Prevotella intermedia</i>	0.01121151	0.04073555
Otu000231	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Eubacteriaceae;g__Eubacteriaceae_unclassified;	TACGTAGGGGGCAAGCGTTATCCGGATTACTGGGCGTAAAGGGTGCCTAGGCCGTTGTTAAGTCAAGTGAAGGCAAGTCAACTACTGTTCGGCTTGAAGTATCAAGCTTGAGTATAGGAGAGGAAAGTGGAAATCCAGTGTAGCGGTGAAATGCGTAGATATGGGAGGAATACCGGTGGCGAAGCCGACTTCTGGACTAAAAGTACGCTGAGGCGCAAAAGTGTGGGTAGCAAACAGG	ND	0.036518589	0.03283371

Otu000246	GC-depleted	k__Bacteria;p__Proteobacteria;c__Betaproteobacteria;o__Burkholderiales;f__Comamonadaceae;g__Hydrogenophaga;	TACGTAGGGTGAAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGCGGTTTTGTAAAGACAGGCGTGAAATCCCGGGCTCAACCTGGGAATGGCGTTGTGACTGCAAGAGTGGAGTGGCGGAGGGGGATGGAATTCGGCGTGTAGCAGTGAATGCGTAGATATGCGGAGGAACACCGATGGCGAAGGCAATCCCTGGGCTGCACTGACGCTCATGCACGAAAGCGTGGGGAGCAACACAGG	ND	0.029271642	0.04990874
Otu000256	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Peptococcaceae;g__Peptococcus;	AAACATAGGGGGCAAGCGTTTGTCCGGAATCACTGGGCGTAAAGGGCGCGCAGGCGGTAATAAGTCAGGTGTGAAAGTTCGGGGCTCAACCCCGTGAATTGACCTGATACTGATAAACTAGAGTGTGGAGAGGTAAGTGGAAATTCCTAGTGTAGCGGTGGAATGCGTAGATATTAGGAGAACACCAAGTGGCGAAGGCGACTTACTGGCCAATAACTGACGCTGAGGCGCGAAAGCGTGGGGAGCAACACAGG	<i>Peptococcus oraltaxon167</i>	0.008539407	0.04615913
Otu000267	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Lachnospiraceae;g__Catonella;	TACGTAGGGGGCAAGCGTTAATCGGAATTACTGGGCGTAAAGGGAGCGCAGGCGGTTTTGCAAGTTGAGAGTGGAAAGCAGGGGGCTCAACCCCTGACTGCTCCAAAACGTAAAACCTGAGTATGGGAGAGGCGAGGCGGAATTCCTAGTGTAGCGGTGAAATGCTTAGATATTAGGAAGAACACCGGTGGCGAAGGCGGCTGCTGGACAAAACCTGACGCTGAGGCTCGAAAGCGTGGGTACCAACACAGG	<i>Catonella morbi</i>	0.012542471	0.03283371
Otu000294	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Lachnospiraceae;g__Moryella;	TACGTAGGGGGCAAGCGTTAATCGGAATTACTGGGCGTAAAGGGAGCGCAGGCGGCTTGCAAGTGGAGTGAAGCCCGGCTTAAACCGGGAATGCTTTGGAAACTGCAAGGCTTGGAGTATCGGAGGGGCGAGGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACACCGGTGGCGAAGGCGGCTGCTGGACAAAACCTGACGCTGAGGCTCGAAAGCGTGGGGAGCAACACAGG	ND	0.025278541	0.03364659
Otu000369	GC-depleted	k__Bacteria;p__Proteobacteria;c__Gammaproteobacteria;o__Pseudomonadales;f__Moraxellaceae;g__Acinetobacter;	TACAGAGGGTGGCAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGTAGGCGGCTTCTGAAGTTGGATGTGAAATCCCGGAGCTTAACTGGGAATGCAATCAAAACTGCGAGGCTAGAGTATGGGAGAGGATGGTAGAATTCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGATGGCGAAGGCACCATCTGGCCTAATACTGACGCTGAGGTACGAAAGCATGGGGAGCAACACAGG	<i>Acinetobacter baumannii</i>	0.030644586	0.04506175
Otu000561	GC-depleted	k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;o__Actinomycetales_unclassified;o__Actinomycetales_unclassified;	TACGTAGGGGGCGAGCGTTTGTCCGGAATTATGGGCGTAAAGGGCTCGTAGGCGGCTTGTGCGCTGTGTAAGTGGCGGGCTTAACTCCGTACGTGAGTGGGTACGGCGAGCTAGAGTGGGTGAGGCGTACTGGAATTCCTGTTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGATGGCGAAGGCGGCTCACTGGGCTGTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCAACACAGG	ND	0.005725176	0.04653437
Otu000586	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__Veillonellaceae;g__Veillonella;	TACGTAGTGGGCAAGCGTTTGTCCGGAATTATGGGCGTAAAGCGCGCGCAGGCGGCTATCCAGCTGTCTTAAAAGTTCGGGGCTCAACCCCGTGGATGGATGGAAACTAGTAGGCTAGAGTATCGGAGAGGAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACACAGTGGCGAAGGCGGCTTCTGGACGAAAACCTGACGCTGAGGCGCGAAAGCCAGGGGAGCGAACCGG	<i>Veillonella oraltaxon780</i>	0.027343392	0.04615913
Otu000610	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__[Mogibacteriaceae];g__Eubacterium;	TACGTAGGGGGCGAGCGTTAATCGGAATTACTGGGCGTAAAGAGTATGTAGGTGGTTAAGTAAAGCTAGGGTTTAAAGCGCAGACCCCAACTGCTGATGCCCGCGAAGCTTTAACTTGTAGTACAGGAGGGGAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAAGTGGCGAAGGCGGCTTCTGGACTGTAAGTACACTGAGATACGAAAGCGTGGGTAGCAACACAGG	ND	0.036255658	0.04990874
Otu000661	GC-depleted	k__Bacteria;p__Proteobacteria;c__Betaproteobacteria;o__Neisseriales;f__Neisseriaceae;g__Vogesella;	TACGTAGGGTGGCAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGCGGTTTGATAAGCAGATGTGAAATCCCGGAGCTCAACTTGGGAACGCGTTTGGAACTGTGACTAGAGTGGCTGAGAGGGGGGTGGAATTCCTGCGTGTAGCAGTGAATGCGTAGAGATGGGAGGAACACCGATGGCGAAGGCAGCCCTGGGATGACACTGACGCTCATGCACGAAAGCGTGGGGAGCAACACAGG	<i>Vogesella perlucida</i>	0.006619554	0.03283371
Otu000714	GC-depleted	k__Bacteria;p__Proteobacteria;c__Betaproteobacteria;o__SC-I-84;o__SC-I-84_unclassified;o__SC-I-84_unclassified;	TACGTAGGGTGGCAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGCGGTTTCCGTGTGTCGATGTGAAAGCCCGGGCTTAACTGGGAATGGCATTGGAAACTGGCGGGCTTGGAGTGGCAGAGGGGGTGGAAATTCCTGCGTGTAGCAGTGAATGCGTAGATATTAGGAGGAACACCGATGGCGAAGGCAGCCCTGGGCTAACACTGACGCTCAGGCACGAAAGCGTGGGGAGCAACACAGG	ND	0.025108163	0.04506175
Otu000752	GC-depleted	k__Bacteria;p__Acidobacteria;c__[Chloracidobacteria];o__RB41;f__Ellin6075;f__Ellin6075_unclassified;	TACGTAGGGCAAGCGTTTGTCCGGAATTACTGGGCGTAAAGGGCGCGTAGGCGGCGCGTAAAGTCACTTGTGAAATCTCTGAGCTTAACTCAGAAGCCAAAGTACTGAGTGTGAAAGGGGCAATCGGAATTCCTGTTGTAGCGGTGAAATGCGTAGATATCAAGAGGAACACCTGAGGTGAGAGCGGTTGCTGGCCAAACACTGACGCTGAGGCGGAAAGCCAGGGGAGCAACACAGG	ND	0.028967925	0.04615913
Otu000977	GC-depleted	k__Bacteria;p__Proteobacteria;c__Betaproteobacteria;o__Rhodocyclales;f__Rhodocyclaceae;g__Methyloversatilis;	TACGTAGGGTGGCAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGCGGTTGTGTAAGACAGGTGTGAAATCCCGGGCTTAACTGGGAACGCGCTTGTGACTGACGCGTAGAGTATGGCAGAGGGGGGTGGAATTCCTGCGTGTAGCAGTGAATGCGTAGAGATGGGAGGAACACCGATGGCGAAGGCAGCCCTGGGCAATACTGACGCTCATGCACGAAAGCGTGGGGAGCAACACAGG	<i>Methyloversatilis discipulorum</i>	0.010743935	0.03283371
Otu001266	GC-depleted	k__Bacteria;p__Proteobacteria;c__Deltaproteobacteria;o__Syntrophobacterales;f__Syntrophobacteraceae;f__Syntrophobacteraceae_unclassified;	TACGGAGGGTGTAGCGTTTGTCCGGAATCACTGGGCGTAAAGGGCGTGTAGGCGGTCGCTAAGTCTGATGTGAAATCCCTTCCGTCAACGAGGGAACTGCGTGGGACTGGGAGACTGAGTACCGGAGAGGAAGTGGAAATTCCTGCGTGTAGCGGTGAAATGCGTAGATATCGGGAGGAACATCGGTGGCGAAGGCGGCTTCTGGACGGTACTGACGCTGAGACGCGAAAGCGTGGGGAGCAACACAGG	ND	0.033637103	0.04925433
Otu001596	GC-depleted	k__Bacteria;p__Proteobacteria;c__Gammaproteobacteria;o__Oceanospirillales;f__Halomonadaceae;g__Candidatus_Portiera;	TACGGAAAGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCGCGTAGGTTGGTTTGAAGTTGGATGTGAAAGCCCTGGGCTCAACCTAGGAATGCAATCCAAAACACTACTAGAGTACGATAGAGGGAGGTAGAAATTCCTAGTGTAGCGGTGGAATGCGTAGATATTAGGAAGAATACCAAGTGGCGAAGGCGGCTTCTGGACTGTACTGACACTGAGGTGCGAAAGCGTGGGTAGCGAACAGG	ND	0.01887745	0.04073555
Otu002428	GC-enriched	k__Bacteria;p__Firmicutes;c__Clostridia;o__Clostridiales;f__[Mogibacteriaceae];f__[Mogibacteriaceae]_unclassified;	TACGTAGGGGGCGAGCGTTAATCGGAATTATGGGCGTAAAGAGTGTGCGTAGGTTGCTTAAAGCGAGGTTTAAAGCAATGGCCCAACCTATGCTGCCCTCGAAGTGGGAGGCTGAGTGCAGGAGAGGAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAAGTGGCGAAGGCGGCTTCTGGACTGTAACTGACACTGAGGCGGAAAGTGGGGGAGCAACACAGG	ND	0.008829099	0.03283371

OTU: Operational taxonomic unit