Regulatory polymorphisms in *CYP2C19* affecting hepatic expression

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Supplemental Table 1: Primer Sequences and PCR conditions for PCR amplifications for sequencing, quantitation, genotyping and SNAPSHoT.
Primers are presented with the use, name and sequence.
Run conditions are presented in order of
(Annealing temp)PCR(HS = Hotstart)(# of Cycles if >30)
Extension times are 1 minute unless otherwise specfied.

CYP2C19 Master Primer List
1. CYP2C19 Promoter and Exonic regions for Ion Torrent Sequencing
Promoter ~-4KB to -2KB
63.5PCRHS, 2 min 30 sec extension
2C192kbTL1F1, GACCGGAGCTGTTCGTATTTGGC
2C19P2kbTL1R1, TTGACTAGATTGGGGGTCAGAAGAGTTTG
Promoter -2KB to start of Exon 1
63.5PCRHS, 2 min 30 sec extension
2C19P2kbTL2F2, CATTGTGATACTTTGTCTCACTGAGTCA
2C19P2kbTL2R2, CTTACATTGGTTAAGGATTTGCTGACA
****Promoter -3KB to Exon 1*
63.5PCRHS_35
2C19_3kbP_to_Ex1_F, TTATTTGTTGCTAGGGCTCGTG
2C19_3kbP_to_Ex1_R, CTTACTGTTTACCCTCAGCC
****Exon 2 to Exon 3*
60PCRHS
2C19_Ex2_to_Ex3_F, AGGTAGACACAAGAGTGCTGA
2C19_Ex2_to_Ex3_R, TTCTCTGGTGACATGTTCTGGA
****Exon 4 to Exon 5*
60PCRHS_35
2C19_Ex4_to_Ex5_F, CCATTATTTAACCAGCTAGGC
2C19_Ex4_to_Ex5_R, TCCTATCCTGACATCCTTATTG
Exon 6
60PCRHS
2C19 I5F1, GACAAACCCACAGCCAATATCATACT
2C19 I6R1, GGGACAGATTACAGCTGCGG

Exon 7
60PCRHS
2C19_Ex7_F, AATGCTGAAGTGGGTTGTTG
2C19_Ex7_R, ACCCTGACAGAAATTCTAGCCC
Exon 8
64.1PCRHS, requires gel purification of ~951 bp band
CYP2C19I7F1, GTGCTGCACCCATTAACTCATC
CYP2C19I8R1, TTTCCAAACACAGAAGTGAGCCTC
Exon 9
59.3PCRHS
CYP2C19I8F1, CCATCCATTCATCCATTAATCCT
CYP2C193UPR1, CATTATGTGGCACTCAATGTAACTATTAT
**** From Blaisdell J, et al.(39)*
2. Quantitation Primers
GATA4QF, AGCCTGGCCTGTCATCTCACTA
GATA4QR, GACATCGCACTGACTGAGAACGT
CARquan-F, CACATGGGCACCATGTTTGA
CARquan-R, AAGGGCTGGTGATGGATGAA
RXRA-F, GAGCGGCAGCGTGGCAAGG
RXRA-R, GGCAAATGTTGGTGACAGGG
PXRquan-F, CAAGCGGAAGAAAAGTGAACG
PXRquan-R,CACAGATCTTTCCGGACCTG
HNF4A1A-F, ACATGGACATGGCCGACTAC
HNF4A1A-R, CTCGAGGCACCGTAGTGTTT
GAPDHquan-F1, ACTCCTCCACCTTTGACGCT
GAPDHquan-R1, GGTCCACCACCCTGTTGC
CYP2C19_E8F2, GTCACTTTCTGGATGAAGGTGTA
CYP2C19_E9_R, AGGTCCTTTGGGTCAATCAGAG
3.SNaPshot/Genotype primers
*rs12248560(CYP2C19*17)*

60PCRHS
2C19 Promoter F1, GCCCTTAGCACCAAATTCTCTG
2C19 Promoter R1, AACACCTTTACCATTTAACCCC
CYP2C19_rs560_PEF, CAAATTTGTGTCTTCTGTTCTCAAAG
*rs4244285 (CYP2C19*2)*
60PCR
CYP2C19Int4F, ATCTTATATTTCAAGATTGTAGAGAAGAATTGTTG
CYP2C19int5R, CATCCGTAGTAAACACAAAACTAGTCAATG
2C19rs285PEFT10, T(10)CCCACTATCATTGATTATTTCCC
rs17885098 (marker SNP)
60PCRHS
2C19 E1DNA-R1, CTTACATTGGTTAAGGATTTGCTGACA
2C19 E1RNA-R1, AGAGATTGGTTAAGGATTTGCTGACA
2C10 rs098PER2, ATTTCCAATCACTGGGAGAGGAGT
rs4986894(-98T>C)
60PCRHS
F Primer, [6FAM]TGCATTGGAACCACTTGGGTTA
R Primer, CCTACATTGGTTAAGGATTTGCTGACA
Cut with BtsCI at 50C in Buffer 4 (New England Biosciences, Ipswich MA)
*rs4986893(2C19*3)*
60PCRHS
F Primer, GAATGAAAACATCAGGATTGTAAGCAC
R Primer, GGATTTCCCAGAAAAAAAGACTGT
Primer Extension R, CAAAAAACTTGGCCTTACCTGGAT
4. Sanger sequencing primers for promoter region
2C19P7F1, CGGAGCTGTTCGTATTTGGC
2C19P7F2, AATAAGATGACAAGACACAGACTGGGA
2C19P7F3, AGAAATGAACTATCAAGCCATGAAAAGA
2C19P7F4, CATTGTGATACTTTGTCTCACTGAGTCA
2C19P7F5, CCTCATTCCTGAGATGGGTCAAT
2C19P7F6, GTGGTTCTATTTAATGTGAAGCCTGTT
2C19P7F7, TTAGCTATTTCATGTTTAGGCTGCTGTAT