Supplemental Table. Oligonucleotides used in this study for creation of miRNA and luciferase reporter plasmids, mutagenesis and qPCR analyses.

Plasmid or Application	Oligonucleotide	Sequence $(5' \rightarrow 3')$
Plasmid		
pS-miR-27b	Forward	CGGGATCCCGGATTTATGCCCAGCGATGACCTCTCTAACAA
	Reverse	CCCAAGCTTGGGTTAACTGTCCCCATCTCACCTTCTCTCA
pS-mmu-miR-298	Forward	CGGGATCCCGATTTCCAGGCCTTTGGCAGAGGAGGGCTGTT
*	Reverse	CCCAAGCTTGGGATTGCCACTCCTAAGCTGAGAGAAGG
pS-miR-122a	Forward	CGCGGATCCCAGCGTTTGGAACCACTGAGGAGTC
•	Reverse	CCCAAGCTTACACACAATGGAGAACTCTAGCACA
pGL3-CYP3A4-3'UTR (0-1130 bp)	Forward	AGCTCTAGAGCATTTTCCTAAGGACTTCTGCTTTGCTC
luciferase reporter	Reverse	ATAGGCCGGCCAAGTGTTCATTGCATCGAGACAGTTGG
psiCHECKII-VDR-3'UTR (-59-	Forward	CCGCTCGAGCGGAGTGCAGCATGAAGCTAACGCCCCTTGT
1360 bp) luciferase reporter	Reverse	TTGCGGCCGCAAAAGCCTCTGTGATCCACCTCGAAGAACG
psiCHECKII-VDR-3'UTR (1255-	Forward	CCGCTCGAGCGGGAAGCGTCTGTCCGTTTACTCCAAGGTG
2263 bp) luciferase reporter	Reverse	TTGCGGCCGCAACGGAGTTTCGCTCTTGTTGTCCAGGTT
qPCR		
CYP3A4 CDS	Forward	GCCTGGTGCTCCTCTATCTA (exon 1)
	Reverse	GGCTGTTGACCATCATAAAAG (exon 4)
CYP3A4 miR-298/27b-MRE	Forward	GCTTCATCCAATGGACTGCATAAATAAC
3'UTR	Reverse	TCTTTCTAAACAATGGGCAAAGTCACAG
VDR CDS	Forward	GACATCGGCATGATGAAGGA
	Reverse	CTAGGGTCACAGAAGGGTCATC
CYP3A4 miR-298-MRE 3'UTR	Forward	CAGCCACCTGCTCTATGC
	Reverse	CCACTTGGGTTTCTTTGTC
CYP3A4 miR-27b-MRE 3'UTR	Forward	AAACATCTGAAAGCCACG
	Reverse	TCTCCCACTGAAGAGCAA
GAPDH	Forward	ATCACCATCTTCCAGGAGCGA
	Reverse	GCTTCACCACCTTCTTGATGT
Mutagenesis		
CYP3A4 3'UTR miR-27b-MRE		
Mutant 1	Forward	AGGTGAAAGTTAATCCTCGGTCACTT TGCCCATTG

	Reverse	CAATGGGCAAAGTGACCGAGGATTAACTTTCACCT
Mutant 2	Forward	AGGTGAAAGTTAATCCTCGGTGACTTTGCCCATTG
	Reverse	CAATGGGCAAAGTCACCGAGGATTAACTTTCACCT
CYP3A4 3'UTR miR-298-MRE		
Mutant 1	Forward	GGAGGTAGATTTGGCTGGTCTCCTTCTCACGGG
	Reverse	CCCGTGAGAAGGAGACCAGCCAAATCTACCTCC
Mutant 2	Forward	GGAGGTAGATTTGGCTGGTCTGCTTCTCACGGG
	Reverse	CCCGTGAGAAGCAGACCAGCCAAATCTACCTCC
Stem-loop RT qPCR		
miRNA RT	Universal reverse	TGTCAGGCAACCGTATTCACCGTGAGTGG(T) ₁₈
qPCR of mmu-miR-298	Forward	GGCAGAGGAGGGCTGTTCTTCCC
	(specific)	
qPCR of miR-27b	Forward	TTCACAGTGGCTAAGTTCTGC
	(specific)	
Universal specific REV	Reverse primer	TGTCAGGCAACCGTATTCACC
U6 RNA	Forward	CTCGCTTCGGCAGCACA
	Reverse	AACGCTTCACGAATTTGCGT

Supplemental Figure 1. Lin-41 luciferase reporter activity was reduced about 50% in HEK293 cells co-transfected with pS-Let-7a plasmid, as compared to cells co-transfected with pS-Neg plasmid. Values represent mean \pm SD of triplicate transfections.



Supplemental Figure 2. Semi-quantitation of CYP3A4 protein in PANC1 and LS-180 cells based on densitometric analyses of immunoblot bands. GAPDH was used as a loading control. Values in individual groups represent mean of randomly-selected two samples from triplicate transfections.





Supplemental Figure 3. Semi-quantitation of VDR protein based on densitometric analyses of immunoblot bands. GAPDH was used as a loading control. Values in individual groups represent mean of randomly-selected two samples from triplicate transfections.



vehicle

miR-298

VD3