

Supplemental Materials:

Using the Viasure kit, we performed sensitivity analysis on all biopsy samples collected for the parent study, including those with history of *H. pylori*. Our method relied on identification of *H. pylori*-positive samples and their subsequent amplification of the 23S ribosomal gene. Our goal was to confirm our clarithromycin-positive samples were also positive using this kit. This kit was able to identify 100% of our clarithromycin-positive samples with A2142G and A2143G mutations. Also, the kit was able to identify 100% of clarithromycin-positive samples with A2142G/A2143G with another mutation, T2182C. When the mutation T2182C was analyzed by itself it was not recognized by the kit (Supplementary Table S1). Supplementary Figure S1 shows a run where there is amplification for the FAM dye corresponding to reaction for clarithromycin resistant. The kit eliminated any potential false positive when the same sample was amplified by the HEX dye indicating this sample is not clarithromycin resistance and behaves like the wildtype strain.

**Supplementary Table S1.** Testing of clarithromycin-resistant *H. pylori* using the commercial kit from Viasure that measures resistance to clarithromycin by targeting two known mutations, A2142G and A2143G.

		Viasure Real Time PCR Kit	
Mutations	N	Positive	Negative
T2182C	28	0	100%
A2142G	5	100%	0%
A2143G	4	100%	0%
A2142G+T2182C	1	100%	0%
A2143G+T2182C	4	100%	0%
10 Hp (+) samples	10	100% (6/10)	(4/10)
		(Confirmed by sequencing)	
Hp (-)	40	0%	100%

**Supplementary Figure S1.** Sample run for clarithromycin positive *H. pylori* detected in the FAM channel. Arrow pointing to a suspicious sample. Also, the wild type phenotype was detected in the HEX channel which confirmed lack of clarithromycin resistance in this sample. The clarithromycin-resistant *H. pylori* commercial kit from Viasure measures resistance to clarithromycin by targeting two known mutations.



