

Repurposing the anthelmintic drug niclosamide to combat

Helicobacter pylori

Nagendran Tharmalingam¹, Jenna Port¹, Dawilmer Castillo¹, Eleftherios Mylonakis^{1, *}

¹Infectious Diseases Division, Warren Alpert Medical School of Brown University, Rhode Island Hospital, Providence, RI, 02903, USA.

***Corresponding author:** Eleftherios Mylonakis, M.D., Ph.D., FIDSA,

Rhode Island Hospital

593 Eddy Street, POB, 3rd Floor, Suite 328/330

Providence, RI, 02903

Tel: 401-444-7856

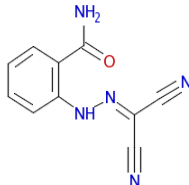
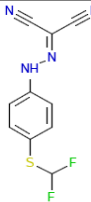
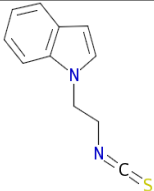
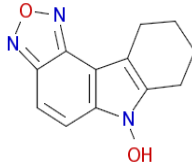
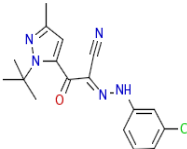
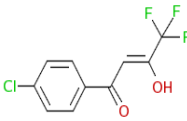
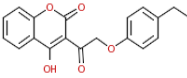
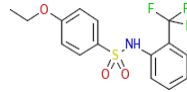
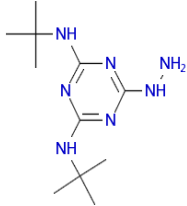
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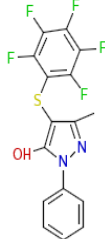
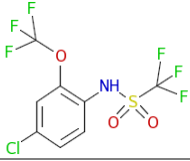
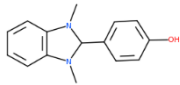
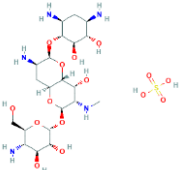

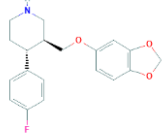
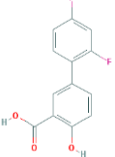
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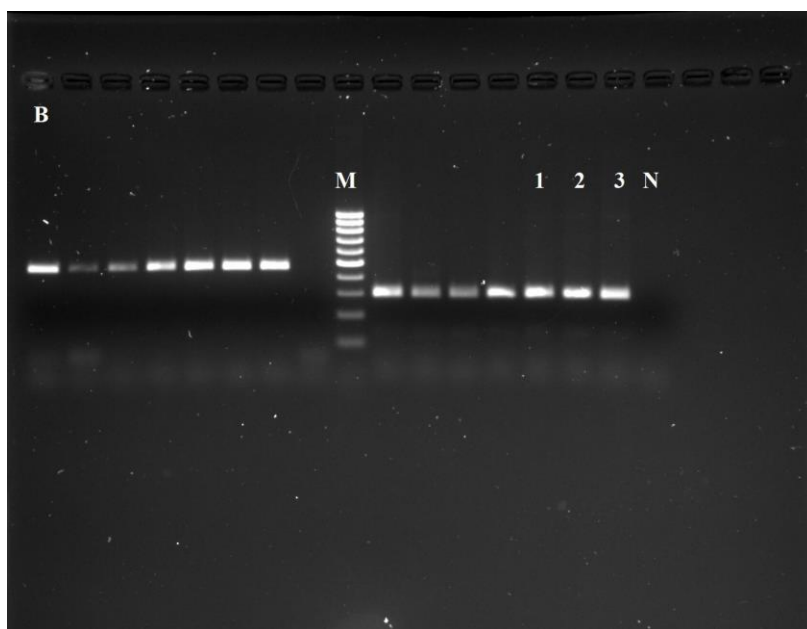
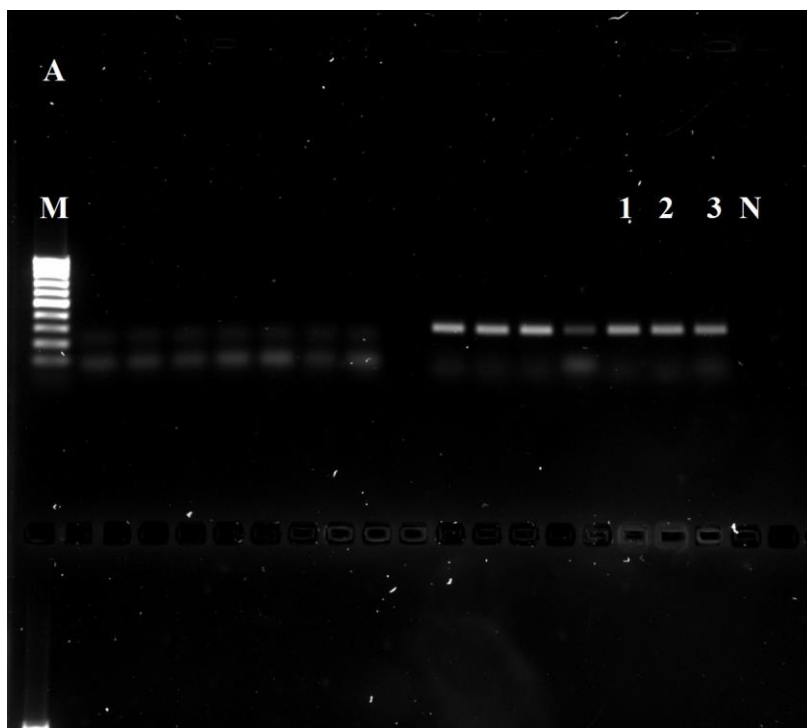
Supplementary Table S1. List of Primers

Primer	Relevant sequence	Size	Amplification cycles	Annealing temperature	References
<i>vacA-F</i>	5' AAACGACAAGAAGAGATCAGT 3'	291	20	58	51,63
<i>vacA-R</i>	3' CCAGCAAAAGGCCCATCAA 5'				
<i>galE-F</i>	5' ATGGCATTATTATTCACAGG 3'	461	20	58	51
<i>galE-R</i>	3' GCTCCATAAGGATTAATGGG 5'				
<i>Real-Time PCR Primers</i>					
IL 8- F	5'-ACT GAG AGT GAT TGA GAG TGG AC-3'		40		64
IL 8-R	5'-AAC CCT CTG CAC CCA GTT TTC-3'				
18 rRNA-F	5'-CGG CGA CGA CCC ATT CGA AC-3'		40		64
18s rRNA-R	5'-GAA TCG AAC CCT GAT TCC CCG TC-3'				

Supplementary Table S2. Pilot screening of hit compounds from MRSA and *F. tularensis* LVS screen for the anti-*H. pylori* activity.

Antibacterials (Hit molecules from MRSA and <i>F. tularensis</i> LVS screen)	MIC	Structure
1	1	
2	1	
3	1	
4	2	
5	4	
6	4	
7	8	
8	16	
9	16	

10	32	
11	32	
12	64	
Apramycin	2	
Mefloquine	8	
Paroxetine	16	
Diflunisal	32	



Supplementary Figure S3. Uncropped full-length gel picture. S3 A. Niclosamide down-regulated *vacA* gene (291 bp) expression at sub-MIC (0.2 µg/mL). M – Marker, 1. DMSO; 2. Niclosamide- 150 µg/mL; 3. Niclosamide- 200 µg/mL; N. Negative control. **S3 B.** Normalization of house-keeping gene *rpoB* (301 bp) in niclosamide treatment. M – Marker, 1. DMSO; 2. Niclosamide- 150 µg/mL; 3. Niclosamide- 200 µg/mL; N. Negative control.

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- 63 Boonjakuakul, J. K., Canfield, D. R. & Solnick, J. V. Comparison of Helicobacter pylori virulence gene expression in vitro and in the Rhesus macaque. *Infection and immunity* **73**, 4895-4904 (2005).
- 64 Tsai, K.-W. *et al.* Difference in the regulation of IL-8 expression induced by uropathogenic E. coli between two kinds of urinary tract epithelial cells. *Journal of biomedical science* **16**, 91 (2009).