COMPOUNDS FOR THE TREATMENT OF DISEASES CAUSED BY HELICOBACTER

The present invention describes new compounds and the use as antibiotics in the treatment of infectious diseases caused by Helicobacter pylori (Hp).

Description

Helicobacter pylori (Hp) is a Gram-negative bacterium that establishes life-long infections in humans by colonizing their gastric mucosa, usually during childhood. Hp infection is the most common bacterial infection all over the world with a prevalence that varies from 10 to 94 % in different countries. In most cases, Hp infection is asymptomatic, but it can progressively damage the gastric mucosa by inducing chronic gastritis and then diseases from peptic ulcer to gastric mucosa associated lymphoid tissue (MALT) lymphoma and gastric adenocarcinoma. Hp is the main cause of gastric cancer all over the world. Eradication of Hp infection is the gold standard in peptic ulcer disease treatment and might prevent gastric cancer, the third most common cause of cancer death.

The present invention discloses new compounds for their use in the treatment of infectious diseases, and more specifically, diseases caused by Helicobacter pylori. It has been demonstrated that the compounds of the invention completely inhibit Hp bacteria

Innovative aspects

The present invention represents an improvement over the prior art, since it relates to new benzo[c][1,2,5]oxadiazole derivatives showing better bactericidal properties and a significantly lower toxicity than the known ones.

These novel derivatives are new antibiotics which will take the microorganism time to generate resistance.

Also, these compounds are selective against Hp minimizing the impact on the microbiome of the treated patient.





Helicobacter Pylori in the stomach 3d Illustration Photo by tussiksmail.gmail.com

IPR status

Spanish patent application (2019) with possibilities for international application (PCT)

Available for

Further research or development

Exclusive/non-exclusive licence agreement

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