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## PYRIDAZINO[2,3-A]PYRROLO[2,1-C]QUINOXALINIUM SALTS FOR THE TREATMENT OF LEISHMANIA INFECTIONS AND DISEASES THAT INVOLVE THE PROTEIN TYROSINE PHOSPHATASE 1B

**Patent**  
ES2537221

### Code

BIO\_UAH\_10

### Application areas

- Biological Sciences, Health and Pharma



### Type of Collaboration

- Technical cooperation
- Commercial agreement with technical assistance
- License agreement

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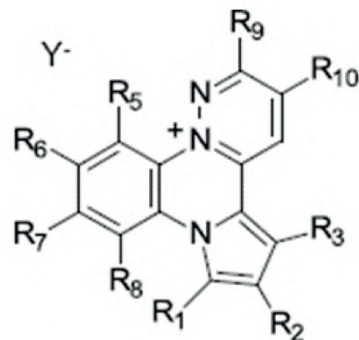
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Estructura de nuevos compuesto de Fórmula I

### ABSTRACT

The invention relates to the preparation of new compounds of Formula I as well as to the uses of these compounds to inhibit the growth and infection of the Leishmania parasite, which is an important new tool from the medical and veterinary point of views.

The invention also relates to the use of these compounds to inhibit PTP1B (protein belonging to the family of protein tyrosine phosphatases, PTPs).

The composition comprises at least one of the compounds of the invention together with a pharmaceutically acceptable carrier. The use of this composition for the treatment of infectious diseases is as a therapeutically effective amount. It can be prepared as a solid or aqueous suspension, in an acceptable pharmaceutically solvent and may be administered by a suitable administration route. The compounds of the invention are prepared from pirroloquinoxalines.

It can be used for the treatment of insulin resistance, glucose intolerance, obesity, diabetes mellitus, hypertension and ischemic diseases. Moreover, these compounds can be used in the treatment of cancer, osteoporosis, neurodegenerative and infectious diseases, and diseases involved with inflammation and the immune system.

The present invention also concerns the use of these compounds for the treatment of renal failure, myocardial infarction, ischemia, multiple sclerosis, neurodegenerative diseases or infectious diseases such as leishmaniasis.

### ADVANTAGES AND INNOVATIONS

- High specificity for the Leishmania parasite.
- Possible new therapy for diabetes and obesity.
- As leishmanicidal, these compounds are highly selective. They can be used with other pharmaceuticals or additional active principles to provide a combination therapy.