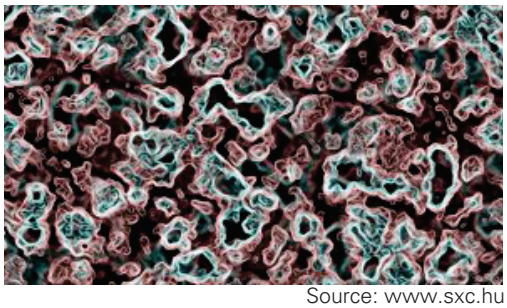
PHOSPHINIC COMPLEXES WITH ANTIMYCOBACTERIAL ACTIVITY

"Effective antimycobacterial activity, low toxic effects, with a potential for the treatment of tuberculosis resistant to current drugs."



Source: www.sxc.hu

Idea | **Laboratory** | Prototype | Scale-up | Market

► Product

Description

The technology consists of a new class of active compounds against the tuberculosis bacillus and the process to obtain them. The new compounds present a possible therapeutic potential against strains that are resistant to current drugs. The compounds can be used for the preparation of antiseptic and disinfectant medications against tuberculosis.

Benefits

The new compounds present high inhibitory activity against M. tuberculosis, as effective or more effective than the best drugs currently used for TB treatment (rifampicin, isoniazid, ethambutol and pyrazinamide), with minimal cytotoxic effects in in vitro trials in macrophage cell cultures.
The main differential is the possibility of acting upon bacteria that are resistant to the current drugs.
The use of the compounds would bring numerous benefits, such as:
- Effective treatment against tuberculosis and possible treatment against drug-resistant tuberculosis;

Problem

The increasing growth of bacteria resistant to drugs used in the conventional treatment of tuberculosis makes it imperative to improve the activity of existing drugs or to develop new active drugs.

Market potential

According to the World Health Organization (WHO), 1.8 people die each year from tuberculosis (TB). Worldwide, 8.7 million new cases of the disease were registered in the same year, 4.9% corresponding to drug-resistant strains. The amount spent on the treatment and control of TB in the countries with high incidence of the disease should reach US$ 2.6 billion in 2010, with Russia and South Africa accounting for 68% of this amount. Brazil expects to spend US$ 99 million on TB treatments in 2010, more than 90% of which paid for by the government
(Global Tuberculosis Control, World Health Organization, 2010).

Proposed solution

The newly developed compounds have proven to be effective, in vitro, against the principal agent of Tuberculosis, *Mycobacterium tuberculosis*, which are sensitive to the current therapeutic scheme, as well as to mono- and multidrug-resistant clinical isolates.

Contact

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