

# TITLE: BATERIOPHAGES against *Pseudomonas* aeruginosa, Klebsiella pneumoniae, Mycobacterium abscessus

## **FIELD OF INTEREST**

Infectious diseases

## **CLINICAL NEED**

Currently, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* and *Mycobacterium abscessus* constitute some of the main opportunistic pathogens which can cause a wide variety of nosocomial, acute, or chronic infections (including pneumonia, septicemia, urinary tract and surgery site infections), especially in immunocompromised individuals.

Moreover, depending on the organism, they may contain a low permeable membrane, a capsule or multiple transport systems, providing an innate resistance to many antibiotics.

Owing to the absence of appropriate and effective treatments and the increase in antibiotic resistance, researchers are looking for new ways of inhibiting bacterial strains, being phage therapy one of the most promising methods. Bacteriophages are viruses infecting bacteria which can be used against chronic or complicated infections in patients. The present invention is thus focused on solving this problem and new strategy is herein provided.

# **DESCRIPTION OF THE INVENTION**

The present invention refers to a several bacteriophages deposited at the German Collection of Microorganisms and Cell Cultures GmbH (DSMZ). In a preferred embodiment, the bacteriophages are used for treating bacterial infections caused by *Pseudomonas aeruginosa, Keibsella pneumoniae and Mycobacterium abscessus*.

#### **ADVANTAGES**

New treatments for infectious diseases Personalized medicine

#### **TECHNOLOGY KEYWORDS**

Pulmonary infections, antibiotic resistance, bacteriophages, relapses, chronic infections.

## **IPR STATUS**

Patent application number: EP22382361.8, EP22382362.6, EP22382363.4 Applicants: UCM, FIIS-FJD.

## **Contact details:**

Innovation Unit e-mail: beatriz.palomo@quironsalud.es







# **TYPE AND ROLE OF PARTNER**

Looking for commercial partners interested in licensing.