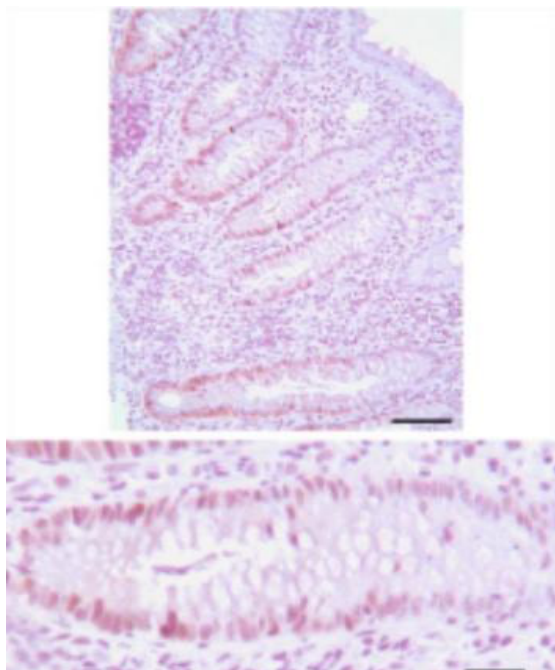




**UNIVERSITÀ  
DEGLI STUDI  
DI TRIESTE**

## **METHOD AND APPARATUS FOR THE ANALYSIS OF A SAMPLE OF SPUTUM**

Use of low-field nuclear magnetic resonance (LF-NMR) on patients with pulmonary pathologies.



Category:

**Biotechnology - Engineering**

Patent Ownership:

**UNIVERSITÀ DI TRIESTE**

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**Available**

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### **Brief description**

The invention concerns the use of low-field nuclear magnetic resonance (LF-NMR) to monitor patients with pulmonary pathologies on a microbial basis using sputum.

### **Innovative aspects and applications**

Currently, sputum is analysed to assess whether pharmacological therapy is needed and what its possible effects could be in patients with pulmonary pathologies on a microbial basis. This procedure is expensive (it requires well-equipped laboratories and highly specialised staff) and the results are not immediately available (average waiting time = 3 days).

### **Main advantages**

This invention's advantages are numerous: it is simple (it is sufficient to insert a sample of saliva

in the NMR machine), inexpensive (it does not require labs nor highly specialised staff) and, therefore, it allows frequent monitoring of the patients.

### **Potential market**

The global market of medical diagnostics hospital labs, as well as the low-field NMR equipment manufacturers.

### **Development status**

Available for the market.

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