New Patent Application – Using TK1 for Respiratory Infection Detection and Classification

AroCell AB announced today that an international (PCT) application has been filed at the Swedish Patent Office (PRV) regarding the use of Thymidine kinase 1 (TK1) in predicting the presence of and diagnosing Mycoplasma pneumonia, and in the classification of respiratory infections.

The medically most important mycoplasma infection is a lower tract respiratory infection caused by *Mycoplasma pneumoniae*, which is an atypical bacterial pneumonia, referred to as *Mycoplasma* pneumonia. It is estimated that in the United States about two million cases occur each year and *M. pneumoniae* infections accounts for 1-10 out of every 50 cases of community-acquired pneumonia. It is therefore generally considered as a major health problem worldwide.

The patent application is based on a study indicating that respiratory infections caused by *Mycoplasma pneumoniae*, in particular *Mycoplasma* pneumonia, lead to significantly increased levels of thymidine kinase 1 (TK1) protein, in particular serum TK1 (STK1) protein, in human patients. Such an increase in STK1 protein levels is, however, not seen in healthy humans or in patients suffering from respiratory infections caused by other pathogens, e.g., viral pneumonia.

"This patent application opens up a new area for using TK1 besides oncology. We have been evaluating the use of TK1 connected to infectious diseases for some time and have now enough data to protect our findings which can generate new possibilities for AroCell and health care providers by facilitating detection and classification of mycoplasma" says Michael Brobjer, CEO AroCell.

Contacts

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About Thymidine Kinase 1

Thymidine Kinase 1 (TK1) is a key enzyme in DNA precursor synthesis. It is upregulated during the late G1 phase and early S phase of the cell cycle and its presence in cells is an indicator of active cell proliferation. Increased levels of TK1 in the blood can indicate active cell proliferation as a consequence of abnormal cell turnover and cell disruption triggered by for example therapeutic agents.

About TK 210 ELISA

AroCell TK 210 ELISA is a quantitative immunoassay kit for the determination of Thymidine Kinase 1 (TK1) in human blood. The ELISA format is simple and robust, requires no special instrumentation to perform and can easily be incorporated into standard laboratory processes. By utilizing monoclonal antibodies specific for the TK1 epitope TK 210, AroCell TK 210 ELISA brings improved sensitivity and specificity to the assay of this key biomarker. AroCell TK 210 ELISA provides new opportunities for studying cellular proliferation, disruption, and monitoring of therapy response and relapse in subjects with haematological and solid tumours.

About AroCell

AroCell AB (publ) is a Swedish company that develops standardized modern blood tests to support the prognosis and follow up of cancer patients. AroCell's new technology is based on patented methods to measure Thymidine Kinase 1 (TK1) protein concentrations in a blood sample. The TK 210 ELISA test provides valuable information mainly about the condition of cancer patients. This may help clinicians to optimize treatment strategies and estimate the risk of recurrence of tumor disease during the monitoring of the disease. AroCell (AROC) is listed at Nasdaq First North Growth Market with Redeye AB as Certified Adviser: Certifiedadviser@redeye.se, +46 (0)8 121 576 90. For more information; www.arocell.com

This information is information that AroCell is obliged to make public pursuant to the EU Market Abuse Regulation. The information was submitted for publication, through the agency of the contact persons set out above, at 2020-05-05 09:00 CEST.

Attachments

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