

Use Of Novel Retrovirus Associated With Myelodysplastic Syndromes (MDS)

The technology relates to the identification and use of novel retrovirus and its reverse transcriptase activity associated with the existence of Myelodysplastic syndromes (MDS).

AREAS OF APPLICATION

This technology can be useful in targeting the novel retrovirus and associated reverse transcriptase activity, alone the:

- Treatment of MDS patients by or in combination with other therapeutics;
- Detection of MDS in tissue samples using test protocols and kits;
- Diagnostic evaluation, genetic testing and prognosis of MDS associated retroviral infection not limited to MDS and acute leukemias using serum and antibodies to MDS associated retrovirus and the nucleotide sequences; and
- Characterization of the complete genome of MDS associated retrovirus, including the identification and characterization of novel retroviruses, and prognostic and diagnostic evaluation of an infection by MDS associated retrovirus.

ADVANTAGES

- Serum from patients infected with the MDS associated retrovirus and polyclonal and monoclonal antibodies may be used as diagnostic tools for the detection of MDS and related disorders.
- Isolated nucleotides of MDS retroviral sequences can be utilized as probes or primers in identifying and diagnosing individual at risk for MDS, or exhibiting MDS and acute leukemias.
- MDS associated retrovirus can be easily detected by immunological essays, such as immunofluorescence, immunoenzymatic or radioimmunoprecipitation.
- Levels of MDS associated retroviral nucleotide sequences can be measured, or other cellular or extracellular gene products involved in regulation and disorders of MDS leukemias can be identified.
- Vaccine formulations can be developed based on isolated MDS associated virus particles or MDS associated retroviral gene products.

THE TECHNOLOGY

The technology relates to the identification and use of novel retrovirus and its reverse transcriptase activity associated with the existence of Myelodysplastic syndromes (MDS). Specifically novel nucleotide sequences encoding a retroviral polymerase gene associated with MDS and acute leukemia are used to target the novel retrovirus and its reverse transcriptase activity, alone or in combination with other therapeutics. This technology includes diagnostic protocols and kits that detect MDS in tissue samples and measure the amount and activity of MDS associated retrovirus.

The use of novel retrovirus associated with myelodysplastic syndromes is patent pending.

CONTACT

Matthew J. Raymond, PhD, MBA
Director, Intellectual Property Office
Rush University Medical Center
1700 W. Van Buren, Suite 470
Chicago, IL 60612
Phone: 312-563-2732
Fax: 312-942-7224