



Assay to Determine Risk of Fungal Infection

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WARF: P140236US02

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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a method to monitor a patient's immune status against dangerous fungi.

OVERVIEW

Fungal infections such as aspergillosis and Valley Fever can be life threatening, particularly in immune-compromised patients. These patients are vulnerable to fungal strains that flourish in hospitals and cost many thousands of dollars to treat.

Currently there is no vaccine against fungi despite the escalating risk of infection and death. However, there is hope. UW-Madison researchers have developed a potential vaccine that could prevent infection by many strains of pathogenic fungi (see WARF reference number [P130116US02](#)). The new vaccine contains calnexin – a protein found in fungi and other eukaryotes – and could help a patient's immune system recognize and combat infection.

Building on their work, the researchers are now developing a way to determine the immune response of patients who may have a fungal infection. The ability to check immunity has important applications in human and veterinary medicine.

THE INVENTION

More specifically, the researchers have developed a detection agent made up of calnexin peptides that recognize the telltale signs of infection. The peptides are able to track how a patient's helper T cells respond to infection and/or vaccination.

THE WARF ADVANTAGE

Since its founding in 1925 as the patenting and licensing organization for the University of Wisconsin-Madison, WARF has been working with business and industry to transform university research into products that benefit society. WARF intellectual property managers and licensing staff members are leaders in the field of university-based technology transfer. They are familiar with the intricacies of patenting, have worked with researchers in relevant disciplines, understand industries and markets, and have negotiated innovative licensing strategies to meet the individual needs of business clients.



APPLICATIONS

- Kits for monitoring fungal infections
- Assessing the efficacy of a calnexin-based vaccine
- Prescreening tissue donors
- Veterinary medicine

KEY BENEFITS

- A valuable new immunological tool

STAGE OF DEVELOPMENT

Promising animal studies are being conducted against a variety of fungal strains including *Blastomyces dermatitidis*, *Histoplasma capsulatum*, *Aspergillus fumigatus*, *Fonsecaea pedrosoi* and *Geomyces destructans* (i.e., “white nose fungus” decimating bat populations in North America).

ADDITIONAL INFORMATION

Related Technologies

[For more information on the researchers' pan-fungal vaccine, see WARF reference number P130116US02.](#)

Tech Fields

Diagnostic Assays - Immune status

CONTACT INFORMATION

For current licensing status, please contact Mark Staudt at mstaudt@warf.org or 608-960-9845.

