

# Research suggests anti-cancer drugs can help treat infectious diseases

Drugs increasingly used to treat cancer could have a major impact on a wide range of infectious diseases, according to new research.

Anti-angiogenic drugs are used to try to prevent cancers from stimulating the growth of the blood vessels they need to survive and grow.

New research by the Centre for Immunology and Infection suggests the same drugs may help in the treatment of other diseases including visceral leishmaniasis which kills 70 000 people worldwide every year.

The findings, published online today by *The Journal of Clinical Investigation*, show that anti-angiogenic drugs can improve the structure of tissues where immune responses are generated and which are often destroyed by chronic infection or inflammation.

## Lower doses possible

The resulting improvement in the immune response can increase the effectiveness of conventional treatments for leishmaniasis, allowing doctors to use lower doses of existing drugs that otherwise have harmful side effects.

Professor Paul Kaye, Director of the Centre for Immunology and Infection, said: "While our research has focused on leishmaniasis the findings could have implications for a range of globally important diseases.

"It is particularly exciting that this potential has been discovered in a class of drugs that are already well-established in clinical practice.

"Our research also identifies ways that anti-angiogenic drugs might be used more effectively in the treatment of cancers."

The research was funded by the Medical Research Council and the Wellcome Trust.

These findings have led to further research, supported by Yorkshire Cancer Research, into the potential use of anti-angiogenic drugs as a "preconditioning agent" in the treatment of melanoma.

Source: Centre for Immunology and Infection