



Preliminary findings from tick biomarker research in Australia

About DSCATT

Debilitating Symptom Complexes Attributed to Ticks (DSCATT) affects a group of Australian patients suffering from the symptoms of a debilitating illness, which many associate with a tick bite.

Researchers from Australia's national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) have completed a study to identify possible biomarkers for DSCATT, to help us get a better understanding of DSCATT detection and prognosis.

Biomarker study

Preliminary findings of our biomarker study represent the first characterisation of host responses to tick bites in the context of DSCATT. It is particularly looking at host-encoded microRNAs (miRNAs) as disease biomarkers.

The study found that blood samples from patients reporting symptoms consistent with DSCATT contain microRNA biomarkers that could help categorise DSCATT cases and forecast disease onset following tick-bite. These biomarkers require further investigation to determine their potential as clinical tools for DSCATT detection and management.

This CSIRO project is part of efforts towards targeted research for DSCATT to develop a positive and consistent approach to detection, treatment and ongoing management. CSIRO researchers will expand upon these results to understand the significance of these findings.

When finalised, CSIRO will make the data and results available through open-access peer-reviewed publications and a summary will be provided on our website.