Genome sequencing promising for curing lupus, personalized medicine

Medical researchers have used DNA sequencing to identify a gene variant responsible for causing lupus in a young patient.

The development shows that for the first time, it is feasible for researchers to identify the individual causes of lupus in patients by using DNA sequencing, allowing doctors to target specific treatments to individual patients.

Lupus is a chronic autoimmune disease that affects one in 700 Australians, predominantly young and middle aged women.

Medical researchers at the Centre for Personalised Immunology, based at the John Curtin School of Medical Research (JCSMR), sequenced the genes of a young girl who suffered a stroke when she was four as a result of her lupus.

Professor Matthew Cook, co-director of the Centre for Personalised Immunology, said the results proved the potential benefits of personalised medicine, where doctors will be able to target treatments to individual patients.

“We are optimistic that this represents proof of principle for a new approach to diagnosis and treatment of a range of complex immunological disease,” Professor Cook said.

Read the full, original story: Genetic key to lupus shows potential of personalized medicine