

Patient story: Jack

Jack was an all-action kid. Bubbly and energetic, he was always doing something and willing to try anything; he would never sit still.

When Jack turned nine, he lost his energy and began to get absent and dazed. An MRI showed a large brain tumour, classified as a low-grade glioma. After a successful operation, Jack was given a positive prognosis and returned to school within three months.

Just over a year later, Jack woke up with a terrible headache and started vomiting. The tumour was back. This time it had a devastating effect on his young body. This bright, energetic young boy was bedbound, going blind and in constant pain. The tumour was aggressive, inoperable and would not respond to any conventional treatment. His parents were forced to face the reality that they may lose their precious boy.

Jack was enrolled on the Zero Childhood Cancer Program (ZERO), where his tumour was analysed to determine its specific genetic make-up. A genetic mutation called BRAF V600E was identified as driving the cancer's growth, and there was a drug that would target it. Jack quickly improved and is now back at school – as active as ever.

ZERO is underpinned by the ability to interpret vast quantities of data. Luminesce Alliance's computational biology platform will mean that more precisely targeted treatments can help children like Jack.



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