

10/2019

★ Diffuse large B-cell lymphoma (Kleinstern, 2019)

Geffen Kleinstern, et al.
Human Molecular Genetics

Blood Cancer

STUDY SUMMARY

Identification of 2 novel genetic variants associated with an increased risk of developing diffuse large B-cell lymphoma.

STUDY DESCRIPTION

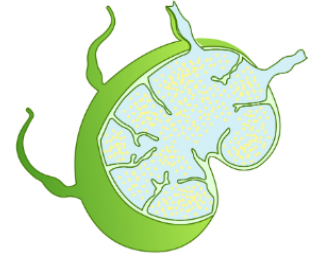
B-cells are a type of white blood cell that plays an important role in our immune system by producing antibodies that help detect and destroy germs. However, abnormal B-cell growth has the potential to form diffuse large B-cell lymphoma (DLBCL), an aggressive form of cancer. A family history of lymphoma has previously been associated with an increased risk of developing the disease. This study examined over 17,000 individuals of European ancestry to further characterize genetic factors associated with an increased risk of developing the disease. It identified novel 2 variants associated with a risk of developing DLBCL, both of which are located in the proximity of genes that play a role in the immune system.

DID YOU KNOW?



DLBCL is exceptionally sensitive to chemotherapy, which is generally used as a first line of treatment. Other treatment avenues include radiation therapy, stem cell transplants, and immunotherapy.

YOUR DETAILED RESULTS

The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to DLBCL. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to DLBCL. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to DLBCL. However, please note that genetic predispositions do not account for important non-genetic factors like lifestyle. Furthermore, the genetics of most traits has not been fully understood yet and many associations between traits and genetic variants remain unknown. For additional explanations, click on the column titles in the table below and visit our [Nebula Library tutorial](#).



A lymph node containing lymphocytes

VARIANT [Ⓞ]	YOUR GENOTYPE [Ⓞ]	EFFECT SIZE [Ⓞ]	VARIANT FREQUENCY [Ⓞ]	SIGNIFICANCE [Ⓞ]
rs9831894_C 	A / A	-0.19 (-)	40%	3.62×10^{-13}
rs6773363_C 	T / C	0.18 (↑)	45%	2.31×10^{-12}