ABSTRACT
The study indicates that the genetic polymorphisms studied in childhood B-cell precursor ALL treated with BFM protocols do not have a significant impact on risk of relapse.

INTRODUCTION
Tumor necrosis factor and lymphotoxin-alpha (TNF-alpha) are two classes of immune cells that produce cytokines that are involved in the immune response to foreign invaders, such as viruses. In children, these cytokines are produced by B-cells and are known to play a role in the development of B-cell precursors of acute lymphoblastic leukemia (ALL).

The incidence of childhood ALL is increasing in the UK, and the number of children with the condition is on the rise, with an estimated 7% of children having the disease by the age of 20 in the UK, which is double the number of children with ALL in 1974 The secretion of TNF and lymphotoxin-, with pleiotropic biological activities, has been associated with the outcome of certain autoimmune and infectious diseases, as well as solid and hematologic malignancies. In this study, we genotyped a group of 64 patients with childhood acute lymphoblastic leukemia (ALL) in both matched case-control studies and identified genetic polymorphisms within TNF and LT- genes to determine their predictive power for ALL relapse.

CONCLUSION
Remarkable conclusions The TNF gene polymorphism at nucleotide position -308 and the LT- gene PolymorphISm (Pg) at Pg 252 were not significantly associated with ALL relapse in a matched case-control group of 64. childhood B-cell precursor ALL patients, all of which were either standard or intermediate risk; our study showed that these genetic poly(h)istromeromes had little to no effect on the risk of recidivism among those who were followed by BFM protocols.