has been also used for the $^{32}$P branch of our protocol. Why does Prof Pearson not criticize these data?

On the contrary, I agree with Prof Pearson’s other criticism. If, in fact, some patients with a particular risk are precociously excluded from a therapy protocol, the calculation of this risk for the whole population will be wrong. That was the case in the phlebotomy branch of the P.V.S.G. protocol, where the oldest and those with vascular risk factors or thrombocytosis have been excluded and treated otherwise. So, the true risk of leukemia could be under-estimated. But this is not a criticism of the method of calculation; this is a criticism of the design, or of the fulfilment, of the protocol.

Yves Najean
Hôpital Saint-Louis
Paris, France

---

**Fifty Years of Studies of the Biology and Therapy of Childhood Leukemia**

To the Editor:

The December 1, 1997 issue of *Blood* included my commentary on 50 years of studies of biology and therapy of childhood leukemia. In my acknowledgments, I tried to anticipate the fact that I would be responsible for errors of omission, commission, and also would be unable to properly credit many individuals in the field.

However, there is one glaring omission that I believe requires additional comment. This is the important cloning of the TEL-AML1 fusion gene in two separate laboratories in 1995. This fusion gene has been particularly important because of its lack of detection by standard cytogenetic methods and because of its independent prognostic significance as reported by several groups as discussed in the Commentary. I believe that this inclusion helps to clear up one major omission.

John H. Kersey
University of Minnesota Cancer Center
Minneapolis, MN

---

**Factor V Leiden Mutation and Budd-Chiari Syndrome**

To the Editor:

Budd-Chiari syndrome is characterized by the hepatic venous outflow obstruction. A multifactorial interaction between the genetic and circumstantial risk factors may be responsible for this kind of disorder. Among these, myeloproliferative syndromes are reported to be the commonest cause of Budd-Chiari syndrome. Other causes include thrombophilia states, oral contraceptives, and cancer.

Until recently, the major known genetic defects detected for repeated venous thrombosis were deficiencies of protein C, protein S, and antithrombin III, which together accounted for 5% to 10% of these type of cases. The defect in the anticoagulation response to activated protein C has been detected as a new mechanism for thrombophilia, which was subsequently linked to a single point mutation on the factor V gene, resulting in Arg$^{506}$-Gln substitution in the activated protein C cleavage site. Since then, various thrombotic events like deep vein thrombosis, pulmonary embolism, preeclampsia, and pulmonary infarction have been studied for factor V Leiden mutations and reported. However, there is not much information on the frequency of these mutations in Budd-Chiari syndrome except for a few isolated case reports. This prompted us to report the present findings.

---

**REFERENCES**

Fifty Years of Studies of the Biology and Therapy of Childhood Leukemia

John H. Kersey