



Moueden Mohamed Amine 1, Aberkane Meriem², Koriche Ilyes, Boughrara Wefa 2, Moghtit Fatima 2, Boubekeur Amina 2, Ouhba Imene 2, Mazari Mohamed 2, Benlaldj Driss 1, Seghier Fatima 1.

1 CHU Oran 2 EHU Oran

INTRODUCTION

The P53 tumor suppressor gene is the most studied gene by oncology researchers. Alteration of the P53 gene is the most common genetic alteration in human cancers (more than 50%). Several works found that the Pro72Pro genotype was a risk factor in the development of pathological mutations in P53 and deletions 17p. This polymorphism shows great variability with ethnicity. In view of all these data, we found it very useful to study of P53 abnormalities in our patients with CLL by research this polymorphism.

MATERIELS AND METHODS

For the analysis of the Arg72Pro polymorphism in 39 patients with CLL, the RFLP technique and NGS sequencing were used. Our study consists in comparing the presence of the ARG72PRO polymorphism and the clinical and biological epidemiological data as well as the relation between this polymorphism and the pathological mutation of the P53 gene.

The data were analyzed with IBM SPSS statistics 21 software. A threshold of 0.05% is considered significant for all statistical tests performed. The estimation of the survival function was realized by the Kaplan-Meier method.

RESULTS

Table 01: Comparison between Arg72Pro polymorphism and qualitative data.

Paramètres	le sexe	l'indice de performance	la classification de Binet	la classification de Rai	TDL	CD38
Test statistique	Test exact de Fisher	Test exact de Fisher	Test exact de Fisher	Test exact de Fisher	Test exact de Fisher	Test exact de Fisher
Valeur du test statistique	0.42	10.35	1.17	2.92	0.78	3.15
p	NS	NS	NS	NS	NS	NS

Table 02 : Comparison between Arg72Pro polymorphism and quantitative data.

Paramètres	Le taux des plaquettes	Le taux des globules blancs	Le taux des lymphocytes	Le taux de LDH	L'âge	Le taux d'hémoglobine
Test statistique	Test de Kruskal-Wallis	Test de Kruskal-Wallis	Test de Kruskal-Wallis	Test de Kruskal-Wallis	Test de L'Anova F	Test De L'Anova F
Valeur du test statistique	0.42	10.35	1.17	2.92	0.78	3.15
p	NS	NS	NS	NS	NS	NS

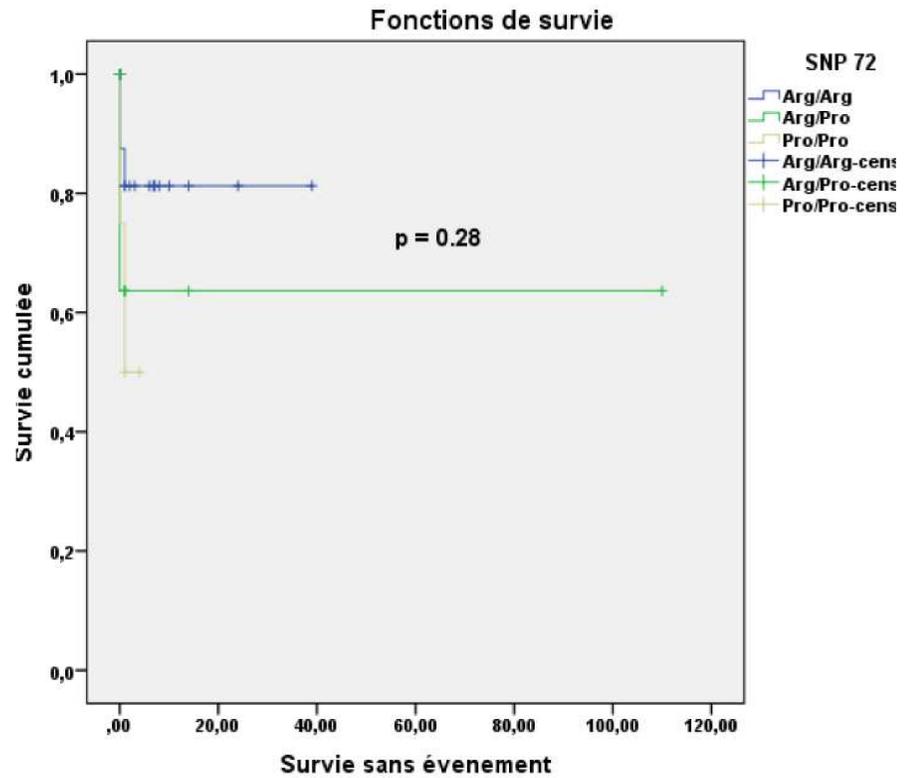


Figure 01 : Comparison of event-free survival curves according to the Arg72Pro polymorphism.

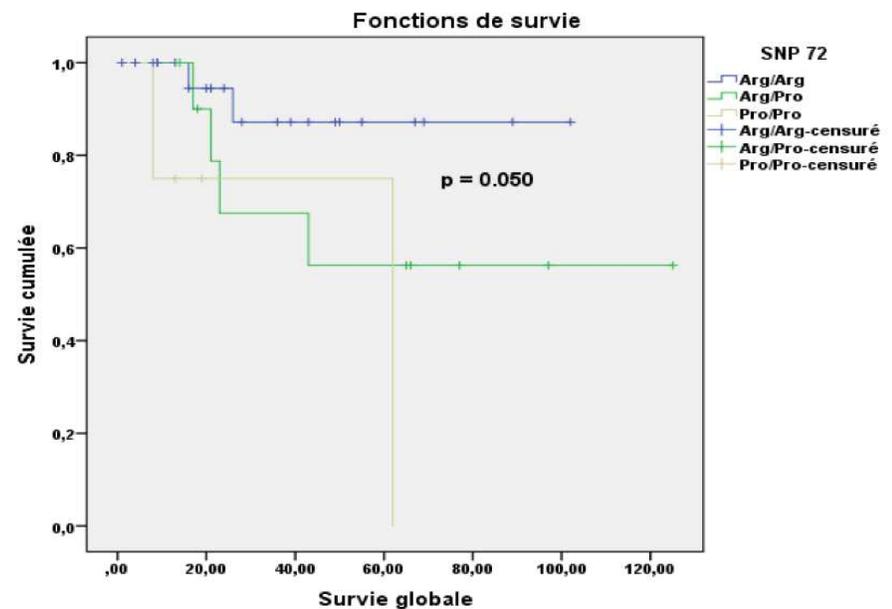


Figure 02 : Comparison of global survival curves according to the Arg72Pro polymorphism.

CONCLUSION

In our study, we found a significant statistical relationship between the presence of the Arg72Pro polymorphism and the P53 mutation ($p = 0.013$); 02 patients out of 04 patients with the Pro / Pro genotype (50%) also had a P53 mutation; On the other hand, our study did not find a significant statistical relationship between the Arg72Pro polymorphism and all of the epidemiological data (age, sex), clinical data (performance index, presence of lymphadenopathy, classification of Binet, Rai classification) and biological data (Hemoglobin level, platelet count, white blood cell count, lymphocyte count, TDL, LDH, CD38) $p > 0.05$. In our work, the progression-free survival did not show a significant difference between the 03 genotypes G / G, G / C and C / C $p = 0.28$; on the other hand, overall survival differs between there 03 genotypes but statistically at the limit of the significance threshold $p = 0.05$.

TDL: lymphocyte doubling time ,

P :degree of significance

NS : not significant