SUMMARY OF NEW CONCLUSION FROM THE THESIS

Name of thesis: ***Antiepileptic drugs-induced severe cutaneous adverse reactions and the predictive values of HLA-B*15:02, HLA-A*31:01, T cell receptor repertoires.***

Code: 9720106 Specialty: Pediatrics

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New conclusions of the thesis:

This is the first study in Vietnam conducted with a large sample size of 1,185 Children with epilepsy.

The results show that patients carrying the HLA-B*15:02 allele were associated to increase the risk of cutaneous adverse reactions with OR of 8,26 (95%CI: 3,41-20,19; p<0,001). Similarly, patients with the HLA-A*31:01 allele had an increased risk of adverse cutaneous drug with OR of 7,24 (95% CI: 1,77-27,84; p<0,001).

The data from screening 952 patients before they use Aromatic antiepileptic drugs illustrates that there had been 21.2% of patients carrying HLA-B*15:02 allele and 4.1% of patients carrying HLA-A*31 allele. The negative predictive value of HLA-B*15:02 and HLA-A*31:01 to predict cutaneous adverse reactions were higher than 98% (95%CI: 0,03-0,34; p<0,001).

HLA screening is meant to prevent severe cutaneous adverse reactions; no patients with severe cutaneous adverse reactions related to Aromatic antiepileptic drugs were recorded after screening.

Gene expression profiling study reveals differentially expressed genes (DEGs) that were enriched dominantly into immune signaling pathways, consisting of complement activation, interleukin, interferon and cytokine signaling pathways. These genes were also involved in T cell activation and differentiation, regulation and activation of CD8+ alpha and beta cells. Analyzing focus on gene coding for T cell receptor repertoires, the results show the level of expression was observed in genes encoding for the Joining region of the Alpha chain (TRAJ) and the Variable region of the Beta chain(TRBV).

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