Terleukin (IL)-1 drugs were the most frequently used, with the highest efficacy rate in 90% of patients fulfilling the EPCC required maintenance therapy and anti-inflammatory treatment in TRAPS. Patients with VOUS/not classified variants (38 patients, 17%) or pathogenic/classifications (40 patients, 18%) displayed a milder disease than the patients fulfilling the EPCC with VOUS/not classified variants not fulfilling the EPCC.

Methods: Prospective cohort study included 2 groups of sJIA patients: in stable remission (Remission group, n=53) receiving CAN (n=10) or TOC (n=43) treatment, and in acute stage of disease (Acute group, n=25) which started to received CAN (n=7) or TOC (n=18) either before vaccination (Acute Treated Before subgroup, n=17) or after vaccination (Acute Treated After subgroup, n=8). The need for continuous use of immunosuppressive drugs leads to increased risk of developing infectious diseases in children with juvenile idiopathic arthritis with systemic manifestation (sJIA). Questions about choosing the optimal vaccination time and the effect of different classes of therapy on vaccination effectiveness are still open.

Results: To study clinical and laboratory effectiveness of PCV13-vaccination in children with sJIA on tocilizumab (TOC) and canakinumab (CAN) treatment depending on disease activity stage.

Conclusion: Anti-IL-1 drugs are the best maintenance treatment in TRAPS with potential to reverse the most serious disease complications of AA amyloidosis and infertility. The diagnosis of TRAPS should be considered very carefully in patients carrying VOUS/not classified variants not fulfilling the EPCC.


Conclusion: Vaccination with the 13-valent PCV has demonstrated high clinical efficiency and safety in children with sJIA both in the acute stage of the disease and during remission. Vaccination of patients in acute stage of sJIA before treatment has advantages over vaccination during remission or after prolonged immunosuppressive therapy in terms of achieving an adequate vaccine response.