The results of this study established for the first time the role of human immune system in pseudomyxoma peritoneum (PMP). We demonstrated that patients able to prompt a high immune response against their PMP tumor had longer survival. We demonstrated that immunotherapy, aiming to optimize the immune response, is an efficient treatment modality of PMP in animal model. Results of this study were presented in multiple national conferences and published in high index journals. The important findings of this study prepared us to start a clinical trial for applying immunotherapy for humans with PMP.