**Abstract** 

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**Title of diploma thesis:** Advances in the treatment of rheumatoid arthritis

Rheumatoid arthritis is a serious systemic inflammatory autoimmune disease whose origin isn't precisely known. In the last decade there has been significant progress in the treatment of rheumatoid arthritis, which is the main topic of this dissertation. Major treatment advances have been based around the introduction of new drugs, including synthetic disease modifiying drugs, but primarily biological drugs (inhibitor). Diagnostic techniques for rheumatoid arthritis have also improved significantly, becoming more accurate, especially in the early stages, enabling earlier treatment and better outcomes. In particular a detailed description of the negative prognostic indicators for the destructive development of rheumatoid arthritis, together with improved evaluation of rheumatoid arthritis activity, have been the basis for the development of a new algorithm for the treatment of rheumatoid arthritis. The complex therapy of rheumatoid arthritis is increasingly sophisticated, incorporating both pharmacological and non-pharmacological treatment methods (physical and surgical procedures). Additional promising treatment techniques are in clinical testing