REVIEWS

Zl. Kolarov. BIOLOGIC AGENTS FOR INFLUENCE ON TNF-α IN RHEUMATOID ARTHRITIS
Summary. Described and compared are the structure, mechanism of action, main pharmacologic properties, indications and the most frequent adverse effects of the anti-TNF preparations introduced into clinical practice: etanercept (Enbrel), infliximab (Remicade), adalimumab (Humira) and the preparation – a new anti-TNF generation still in a process of study – certolizumab pegol (CDP870). There are analysed the possibilities to combine these anti-TNF preparations with the classic disease-modifying agents leflunomide, azathioprine, methotrexate, and the clinical efficacy of the combined and monotherapy in rheumatology practice.
Key words: biologic agents, TNF-α, rheumatoid arthritis

D. Dimov. NEW KNOWLEDGE CONCERNING HYPERURICEMIA AND GOUT
Summary. The survey presents new knowledge concerning hyperuricemia and gout. The recent discovery of the specific transport protein URAT1 clears up the mechanism of uric acid reabsorption in the primary urine, explains the action of uricosurics/uricoeliminators as URAT1 inhibitors and creates a precondition for producing new more effective and safer drugs for treatment of hyperuricemia. The survey deals with the contemporary concept for the biologic role of the uric acid end of the purine metabolism, arising in the evolutionary past as a mutation useful for the human species under conditions of low-salt diet. In the modern epoch under a diet with high content of sal, purines, fructose and alcohol consumption, the uricemia often reaches levels in which the beneficial uric acid effects are surpassed by the exaggerated risks for gout, urolithiasis, cardiovascular and renal damage. The actual epidemiologic data showing the increasing gout prevalence on all continents, including its appearence among races and ethnic groups in whom until recently it has not existed at a11, are communicated.
Key words: gout, uric acid, URAT1, hyperuricemia, epidemiology

S. Monov and D. Monova. SYSTEMIC LUPUS ERYTHEMATOSUS – NEW SPECIFIC THERAPEUTIC AGENTS
Summary. Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with multi-organ involvement. The complex pathogenesis and variable severity among patients mandate the search for new cellular and molecular targets that might improve effectiveness in patients with refractory to convetional therapy disease.Understanding the pathogenesis of SLE is a prerequisite to finding molecular targets for therapy. It is well known that abnormalities in the regulatory T cell compartment in SLE have an important role in the pathogenesis of the disease. It has been suggested that an enhancement of regulatory T cell activity in SLE could have beneficial effects on this autoimmune condition. In this review, we summarize the results from the literature identifying new cellular and molecular targets that might improve effectiveness in patients with refractory disease.
Key words: immunotherapy, systemic lupus erythematosus, target-specific drugs

S. Monov and D. Monova. SPECIFIC B CELL TARGETED THERAPEUTIC AGENTS FOR SYSTEMIC LUPUS ERYTHEMATOSUS
Summary. The therapy of systemic lupus erythematosus has improved thanks to a better understanding of the immunopathogenesis of the disease and important advances in drug development. In contrast to the worrying paucity of new therapies for SLE at the end of the last century, several agents have emerged as useful treatments for this condition in the last decade. In this article, we summarise the mechanism of action and the results obtained with a variety of drugs that have recently been utilized in the treatment of patients with SLE.
Key words: immunotherapy, systemic lupus erythematosus

Zl. Kolarov and R. Rashkov. DISEASE-MODIFYING AGENTS IN OSTEOARTHRITIS
Summary. Viewed are the main peculiarities, requirements, goals and means of osteoarthritis treatment, the favorable effects and disadvantages of the conventional actual therapy and the necessity of structure modifying agents to be applied on joint cartilage. There are pointed out the basic agents in this connection: glucosamine hydrochloride, chondroitin sulfate, unsaponifiable mixture of avocado/soybean, hyaluronic acid products, diacerein and its active metabolite rhein. Stressed is the difference between the symptom

modifying agents which influence the disease symptoms but not the joint structure changes, and the structure modifying preparations which affect the joint structure changes. The latter are classified in two subgroups – structure modifying preparations which influence the disease symptoms and structure modifying preparations which do not influence them. Discussed are the opinions of leading research teams concerning advantages and disadvantages of the disease-modifying agents in osteoarthritis. The particular preparations are not discussed as they are subject of another review article.
Key words: disease-modifying agents, symptom modifying agents, structure modifying agents, osteoarthritis

R. Rashkov and Zl. Kolarov. NEW THERAPEUTIC METHODS AND AGENTS IN OSTEOARTHRITIS
Summary. Discussed are the main pathogenetic effects of interleukin-1 in articular cartilage breakdown, synovial membrane inflammation, chondrocyte apoptosis induction, subhondral remodeling impairment, stimulation of its own synthesis and prolongation of the pathogenetic effect on target matrix and cellular elements of the connective tissue. Viewed are also the mechanism of counteraction and the pharmacological properties of the drug diacerein.
Key words: interleukin-1, diacerein, osteoarthritis

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