Discussion results: The main research in the field aimed at depleting GSH by a specific inhibition of GCL, a key enzyme of GSH biosynthesis. But GSH depletion appears to be therapeutically effective when very low levels (<10% of their control values) can be achieved within the cancer cells. Thus, achievement of selective tumor GSH depletion under in vivo circumstances is a pharmacological challenge. Also, GSH synthesis and GSH synthesis-linked genes are up-regulated during oxidative stress and inflammation. Furthermore, Nrf-2 deficient cells were more susceptible to doxorubicin and BSO treatment-induced cell death than wild cells. Moreover, propyl gallate activated caspases 3, 8, and 9, and induced an increase in p53, Bax, Fas, and Fas Ligand; whereas MAPKs inhibited nuclear translocation of Nrf-2 and induced intracellular GSH depletion in human leukemia. This indicates that Nrf-2 is one of the first factors that induce cell survival under GSH depletion, which points out to this transcription factor as an attractive target in leukemia but also in other cancers sharing similar molecular mechanisms. The increase in GSH is a major contributing factor to drug resistance by binding to or reacting with, drugs, interacting with ROS, preventing damage to proteins or DNA, or by participating in DNA repair processes.

Conclusion: The modulation of cellular GSH is a double-edged sword. On one hand, enhancing the capacity of GSH and its Associated enzymes represents an aim in the search for cytoprotective strategies against cancer. On the other hand, the strategy of depleting GSH and GSH-related detoxification pathways is aimed at sensitizing cancer cells to chemotherapy. **Keywords:** Glutathione, cancer development, chemoresistance.

265. TUFTSIN-BIOLOGICAL ROLE AND PHARMACEUTICAL VALUE

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Introduction: Despite the high level the human civilization achieved, we still constantly face dangers as viral infections, bacteria, traumas, chronic disease, cancer etc. Thanks to the development of medicine and pharmaceutics, antibiotics, anti-inflammatory and immunomodulatory drugs as well as cytostatic and cancer killing drugs were developed. Still, many of them have many adverse reactions, or are expensive, or both. That is why the discovery of Tuftsin in 1970 is considered one of a high value for the modern medicine, by offering new ways of treatment of the diseases, which endanger health and life.

Objectives and Purposes of this work was to identify the immunomodulatory, anti-inflammatory, antibacterial and cancer killing properties of Tuftsin.

Materials and Methods: A bibliographic review of the scientific articles published over the studies of Tuftsin and its properties, during 1980-2012, was performed.

Results: In 1970s, Victor A. Najjar and Kenji Nishioka found a new natural tetrapeptide (Thr-Lys-Pro-Arg) derived from the proteolytic degradation of the 289–292 amino acid residues of the IgG heavy chain Fc domain that was named tuftsin. Tuftsin is produced by the action of two proteolytic enzymes – splenic tuftsin edocarboxypeptidase and leukokininase.

Further studies found out that Tuftsin and/or Tuftsin-like peptides increase immunologic effects like phagocyte respiratory burst, migration and chemotaxis ability, antigen presentation, etc. of cells of monocytic origin (macrophages, neutrophils, microglia and Kupffer cells). The peptide can be recognized by macrophages and microglia cells due to the expression of Tuftsin receptors. The receptors for Tuftsin react specifically to the Pro-Arg part of the peptide and the interaction of them raises the GMPc level in the target cell. In addition, the peptide is capable of targeting proteins to these cells. According to some studies, Tuftsin conjugates could increase production of antibodies and strengthen the humoral immune response to the antigen to which it was linked.

Still, in many animal disease models, such as sepsis (Wardowska et al., 2009), encephalomyelitis and multiple sclerosis (Bhasin M., et al., 2007), arthritis (Bashi T., et al., 2016), lupus nephritis (Bashi T., et al., 2015) Tuftsin treatment has been Associated with anti-inflammatory effects. This proves the paradox effects of Tuftsin and its original immunomodulatory properties.

Tuftsin clinical developments was hampered because it is extremely susceptible to proteolytic degradation in vivo. To overcome this pitfall several derivatives have been synthesized. Their studies found out that these compounds exhibit similar activity as Tuftsin or even better properties. For example, it was described the ability of Tuftsin fragment 1-3 to inhibit macrophage and microglia and to decrease oxygen radicals production by activated microglia, thus reducing brain edema and tissue damage in animal models of brain ischemia. T peptide (TP), obtained by linking four tuftsin peptides, despite its limited effect in intact tumors, strongly inhibited postsurgical relapsed growth of residual tumors in mice.

Conclusions: According to the presented data, Tuftsin presents different and useful properties that can be used in treating different severe diseases by rising the immune activity, as well as inflammatory processes by lowering it. It's value as a medicine rises, by the fact that Tuftsin it is an endogenous substance proper to the patient's body, thus being better accepted and having far more less adverse reactions than the rest of drugs, which is of a great importance.

Key words: Tuftsin, immunomodulation, antibacterial, anticancer.

266. IMPLEMENTATION OF PID-5 QUESTIONNAIRES, IN DIAGNOSIS OF PERSONALITY DISORDERS

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Introduction. Personality disorder is the inability to develop a sense of identity and the self-commitment in the context of interpersonal functioning inability norms and cultural expectations of the subject that persists for several years and are not the result of other disorders.

The purpose of paper. The study aims to put in circulation in Republic of Moldova a tool for analyzing personality disorders.