## PROSPECTS OF OLOPATADINE-MOMETASONE FIXED-DOSE COMBINATION NASAL SPRAY IN SEASONAL ALLERGIC RHINITIS TREATMENT

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Introduction. Seasonal allergic rhinitis (SAR) is most commonly caused by pollen. Symptoms of AR are nasal symptoms (nasal congestion, rhinorrhea (watery nose), itching, and sneezing) and nonnasal symptoms (itching/burning, tearing/watering and redness of eyes; itching of ears/palate). The innovative approach of precision medicine allows for much more accurate diagnostic methods. Despite the availability of various pharmacological drugs for SAR treatment, adequate control of SAR symptoms is not always achieved in many patients. SAR symptoms may appear within minutes of allergen exposure. Therefore, medications that provide both immediate and sustained relief of SAR symptoms with minimal side effects are essential for effective disease management.

**Aim.** Analysis of the prospects for using a fixed combination of a fast-acting intranasal antihistamine (olopatadine hydrochloride) with a long-acting intranasal corticosteroid (mometasone furoate) for SAR effective control.

**Materials and methods.** The theoretical study was carried out in the framework of the qualification work «Clinical and pharmaceutical aspects of olopatadine rational use in allergic diseases treatment» in the form of a review analysis. For the search, we used the PubMed database. The criteria for the search were text availability – free full-text; article type – clinical trial, meta-analysis, randomized controlled, review, and systematic review. Keywords were seasonal allergic rhinitis, intranasal forms of antihistamines, intranasal glucocorticoids, and allergy symptoms control.

Research results. The fixed-dose combination of a fast-acting intranasal antihistamine (olopatadine hydrochloride) with a long-acting intranasal corticosteroid (mometasone furoate) may be more effective in controlling SAR symptoms, than monotherapy with a long-acting intranasal corticosteroid (mometasone furoate). An equally important aspect, using a single-device combination treatment instead of multiple monotherapy agents, which can also reduce treatment costs and improve patient compliance (treatment adherence). Olopatadine is a highly selective histamine H<sub>1</sub> receptor antagonist with anti-inflammatory properties, which, when used intranasally, reduces SAR symptoms such as itching, runny nose, and sneezing, and has a high safety profile. Intranasal corticosteroid mometasone effectively reduces symptoms of SAR such as itching, nasal congestion, sneezing, and rhinorrhea by inhibiting the release of inflammatory mediators. Mometasone has a well-documented safety profile with minimal systemic effects, as well as minimal bioavailability, which compares favorably with other intranasal corticosteroids. On the Ukrainian pharmaceutical market, this combination is registered under the trade name Realtris (olopatadine 600 mcg and mometasone furoate 25 mcg) which is manufactured by Glenmark Pharmaceuticals. This is a prescription drug. The recommended dose for adults and children over 12 years is 2 doses in each nostril, twice daily.

**Conclusions.** According to an analysis of PubMed data, twice daily olopatadine-mometasone fixed-dose combination nasal spray treatment is safe and well-tolerated with a rapid onset of action of 15 minutes in adult and adolescent patients 12 years and older. It has short-term benefits for seasonal and perennial allergic rhinitis, but may not improve patients' quality of life and rhinitis control in the long term.