

EVOLUTION OF GINA GUIDELINES. PRACTICAL ASPECTS OF ASTHMA MANAGEMENT THROUGH THE PRISM OF CLINICAL TRIALS

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Abstract

Through the 28 years lifetime of GINA (Global Initiative for Asthma) recommendations, there's been a shift in the paradigm of asthma management. GINA is a Global Strategy of treatment and prophylaxis of asthma, established by National Heart, Lung and Blood Institute in collaboration with National Institute of Health and World Health Organization in 1993. First published in 1995 GINA report has become a widespread consensus, which made a basis for clinical recommendations on asthma worldwide. One can define three major periods in evolution of GINA.

The first period covered 1994–2004 years since GINA originated and first edition published until experts have recognized the advantage of inhaled route of asthma drugs administration. It was proved that in many patients the main goal was establishing asthma control, while combination of inhaled corticosteroid with long-acting beta agonist (ICS/LABA) was a preferred option in moderate persistent asthma. In this period it was recommended to choose an approach to management of asthma, based on scientific evidence, rather than expert's opinion.

In this regard, a second period (2005–2014 years) should be considered outstanding, due to the change in perception of major goals of asthma management, considering exclusively data from numerous studies. Such concepts as patient-medical personnel partnership, patient's education, guided self-control and goals of treatment have been introduced. GINA recommends to use asthma control as a major approach to treatment instead of severity of disease. Personalized treatment should be aimed on exacerbation risk reduction. Steps 3-5 of treatment algorithm were modified to include ICS-formoterol for maintenance therapy and relief of symptoms (MART-therapy).

Third period of GINA started after SYGMA 1 and 2 studies results became available. It was demonstrated that on-demand symptom-relief use of anti-inflammatory therapy with ICS/formoterol combination was highly effective in mild asthma patients. Use of this combination as rescue medication decreased the risk of exacerbation in comparison with short-acting beta agonist (SABA) and may be used in any variant of asthma. Since GINA 2019 edition SABA became not the only one available option even for the mildest forms of asthma. Eventually, in 2021 the culmination of GINA evolution occurred: major algorithm of asthma management has been divided in two tracks: preferred (Track 1) therapy with ICS/formoterol and alternative (track 2) therapy with SABA as rescue medication.

The authors of this article review in details the periods of GINA evolution, resulted in dividing asthma management into two tracks, which provide personalized treatment strategy considering all patient's needs and characteristics such as fast relief of symptoms, decreased risk of exacerbation and establishing asthma control.

Key words: asthma, GINA, evolution of treatment approaches.