




Should There be a Washout Period When Switching to Another Biological in Asthma?

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Dear Editor,

Once the decision is made to switch from one biological agent to another, various difficulties arise regarding the timing and method of administration of the new biological agent. For example, there is no algorithm for the necessity and optimal duration of a washout period before the new biologic is administered, and what to do if worsening occurs during the transition. In addition, there is also no consensus on the management of drug interactions and possible adverse drug reactions if two different biologicals are given concurrently in the same patient.

The elimination half-life of the six biologics approved for the treatment of severe asthma ranges from 24 to 26 days for omalizumab, 25 to 30 days for reslizumab, 16 to 22 days for mepolizumab, approximately 15 days for benralizumab, approximately 26 days for dupilumab, and 19 to 25 days for tezepelumab (1, 2). It is generally estimated that the washout period of a drug is approximately 5-10 times the elimination half-life. This means that a biological agent with a longer half-life requires a longer washout time to be completely eliminated from the body (3).

However, faster initiation of the new biologic may be necessary for patients who are symptomatic and have frequent exacerbations. This may raise concerns about the safety of the biological agent. The OSMO study assessed if patients eligible for both biologics but not optimally controlled with omalizumab experience any improvement in asthma control when switched directly to mepolizumab

(4). As this study was designed to mimic daily clinical practice, it was conducted to switch from omalizumab to mepolizumab without a standard washout period. One of the key findings of this study is not only a significant improvement in asthma control, lung function, quality of life, and asthma exacerbations, but also that switching between these two biologics without a washout time did not result in any adverse events and/or tolerability issues (4, 5). Consistent with these studies, similar results were obtained in retrospective observational and prospective real-life studies in patients whose asthma was uncontrolled with omalizumab and were switched to mepolizumab uneventfully (6, 7). However, there is not enough data in the literature regarding the results of switching between other biologicals without a washout period.

In conclusion, there is a need for studies and algorithms on how long the washout period should be between biologics used in severe asthma or whether they could be switched without a washout period, and the management of this process.

Conflict of Interest

The authors declare that they have no conflicts of interest to this study.

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