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Factors affecting adherence with treatment advice in a clinical trial of patients with severe asthma

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Belonging to a minority ethnic group, multiple prior medication changes, being treated at a specific clinical centre, introduction of systemic corticosteroids and increased asthma symptoms were associated with resistance to asthma treatment modification <https://bit.ly/3gYb66S>

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Abstract

Background Understanding why patients with severe asthma do not follow healthcare provider (HCP) advice to adjust treatment is critical to achieving personalised disease management.

Methods We reviewed patient choice to follow HCP advice to adjust asthma treatment in a UK-based randomised, controlled, single-blind (study participant), multicentre, parallel group 48-week clinical study comparing biomarker-directed treatment adjustment with standard care in severe asthma.

Results Of 1572 treatment advisories (291 participants), instructions were followed in 1377 cases (87.6%). Patients were more likely to follow advice to remain on treatment (96.7%) than to either reduce (70.3%) or increase (67.1%) their treatment, with 64% of patients following all treatment advice. Multivariate analysis associated belonging to an ethnic minority group (OR 3.10, 95% CI 1.68–5.73) and prior study medication changes (two or more changes: OR 2.77, 95% CI 1.51–5.10) with failure to follow treatment advice. In contrast, emergency room attendance in the prior year (OR 0.54, 95% CI 0.32–0.92) was associated with following treatment advice. The largest effect was seen with transition onto or off oral corticosteroids (OR 29.28, 95% CI 16.07–53.36) when compared with those requested to maintain treatment. Centre was also an important determinant regarding the likelihood of patients to follow treatment advice.

Conclusions Belonging to an ethnic minority group and multiple prior treatment adjustments were associated with not following HCP treatment advice. Patients also responded differently to HCP advice

across UK specialist centres. These findings have implications for the generalisability of models of care in severe asthma and require further focused studies.