



Triple therapy in uncontrolled asthma: a network meta-analysis of phase III studies

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Triple combination therapy by adding either a LAMA to ICS/LABA FDC or escalating ICS on a background of ICS/LABA/LAMA FDC may reduce severe exacerbations and improve lung function; adding a LAMA along with escalating ICS provides incremental effects <https://bit.ly/39NuNkb>

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Abstract

Conflicting evidence is currently available concerning the impact on asthma exacerbation of triple inhaled corticosteroid (ICS)/long-acting β_2 -adrenoceptor agonist (LABA)/long-acting muscarinic receptor antagonist (LAMA) fixed-dose combination (FDC).

Since meta-analyses allow settling controversies of apparently inconsistent results, we performed a network meta-analysis of phase III randomised controlled trials including 9535 patients to assess the effect of ICS/LABA/LAMA combinations in uncontrolled asthma.

Triple combination therapies with an ICS administered at high dose (HD) were more effective ($p < 0.05$) than medium-dose (MD) ICS/LABA/LAMA FDC and both MD and HD ICS/LABA FDCs against moderate to severe exacerbation (relative risk 0.61–0.80) and increasing trough forced expiratory volume in 1 s (from +33 to +114 mL). Triple combination therapies including HD ICS were superior ($p < 0.05$) to MD ICS/LABA/LAMA FDC in preventing severe exacerbation (relative risk 0.46–0.65), but not with respect to moderate exacerbation ($p > 0.05$). Triple combination therapies were equally effective on asthma control, with no safety concerns.

This quantitative synthesis suggests that ICS/LABA/LAMA FDCs are effective and safe in uncontrolled asthma, and that the dose of ICS in the combination represents the discriminating factor to treat patients with a history of moderate or severe exacerbation.

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