

# Improved Treatment Adherence in Asthma Patients with Beclometasone/Formoterol/Glycopyrronium: 12-Month Results of TriMaximize Study

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TRIMAXIMIZE

## BACKGROUND:

- Randomized clinical trials have shown clinical efficacy of extrafine formulation single-inhaler triple therapy consisting of beclometasone dipropionate/formoterol fumarate/glycopyrronium (BDP/FF/G)<sup>1</sup>.
- TriMaximize study observes patients who have transitioned to BDP/FF/G in a real-world setting over a period of one to three years.

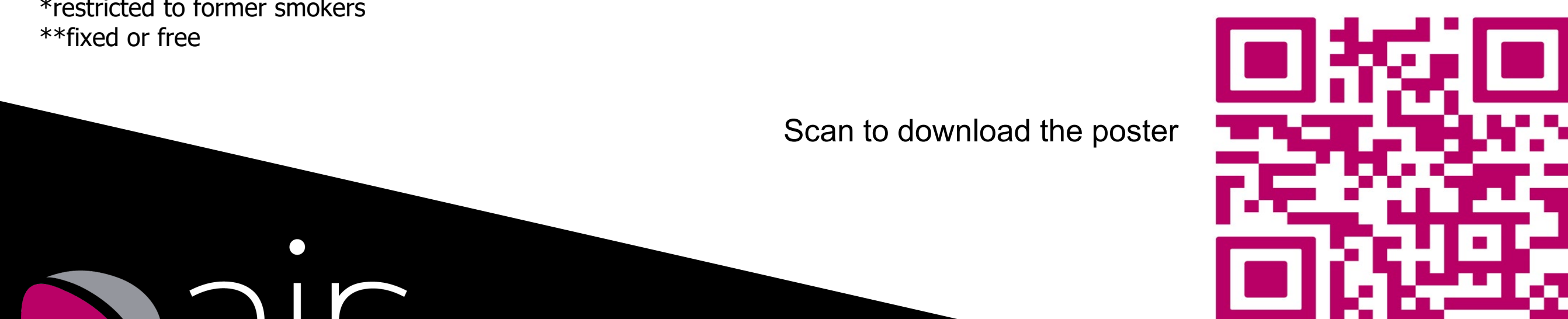
## METHODS:

- TriMaximize is a multinational, observational study that follows patients with moderate to severe asthma who have been prescribed BDP/FF/G in medium (MS, 87/5/9 µg) or high strength (HS, 172/5/9 µg). Patients were recruited at 162 sites across eight countries (Germany, United Kingdom, Austria, Denmark, France, Spain, Poland and Italy).
- Treatment adherence was evaluated using the Test of Adherence to Inhalers (TAI)<sup>2</sup>. The TAI-12 questionnaire comprises ten items answered by the patient (TAI-10) with a range from 10 to 50 (score: ≤45 poor; 46-49 moderate and 50 good adherence) and two items answered by the physician about the regimen and patient's inhalation technique (range from 2 to 4).

Table 1. Baseline characteristics of the patients.

Parameters	Overall population n=1,445	Medium strength (87/5/9 µg) n=1,084	High strength (172/5/9 µg) n=361
Age (years), mean (±SD)	57.9 (15.0)	57.9 (14.8)	56.4 (15.4)
Sex, n (%)			
Female	907 (62.8)	685 (63.2)	222 (61.5)
Male	538 (37.2)	399 (36.8)	139 (38.5)
BMI (kg/m <sup>2</sup> ), mean (±SD)	28.9 (6.4)	28.8 (6.4)	29.2 (6.5)
Smoking status, n (%)			
Never smoker	755 (52.2)	561 (51.8)	194 (53.7)
Current smoker	259 (17.9)	203 (18.7)	56 (15.5)
Former smoker	431 (29.8)	320 (29.5)	111 (30.7)
Time since stopped smoking (years)* (±SD)	14.7 (12.4)	14.1 (12.2)	16.5 (13.1)
Time since diagnosis at baseline visit, years (±SD)	15.1 (14.7)	13.6 (13.6)	19.7 (16.8)
Concomitant diseases, n (%)			
Arterial hypertension	507 (37.8)	392 (39.2)	115 (33.7)
COPD	298 (22.4)	255 (25.7)	43 (12.8)
Rate of moderate or severe asthma exacerbations in previous year, mean (±SD)	1.8 (1.6)	1.8 (1.5)	2.0 (1.9)
Classification according to GINA criteria, n (%)			
GINA Step 4	1079 (76.3)	913 (85.3)	166 (48.3)
GINA Step 5	335 (23.7)	157 (14.7)	178 (51.7)
Previous treatment			
ICS/LABA**	1050 (72.7)	854 (78.8)	196 (54.3)
ICA/LABA/LAMA**	395 (27.3)	230 (21.2)	165 (45.7)

\*restricted to former smokers  
\*\*fixed or free



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## RESULTS:

Figure 1. TAI-10 (patient domain) score at baseline and after 6- and 12-months treatment with BDP/FF/G, stratified by medium and high strength of BDP/FF/G.

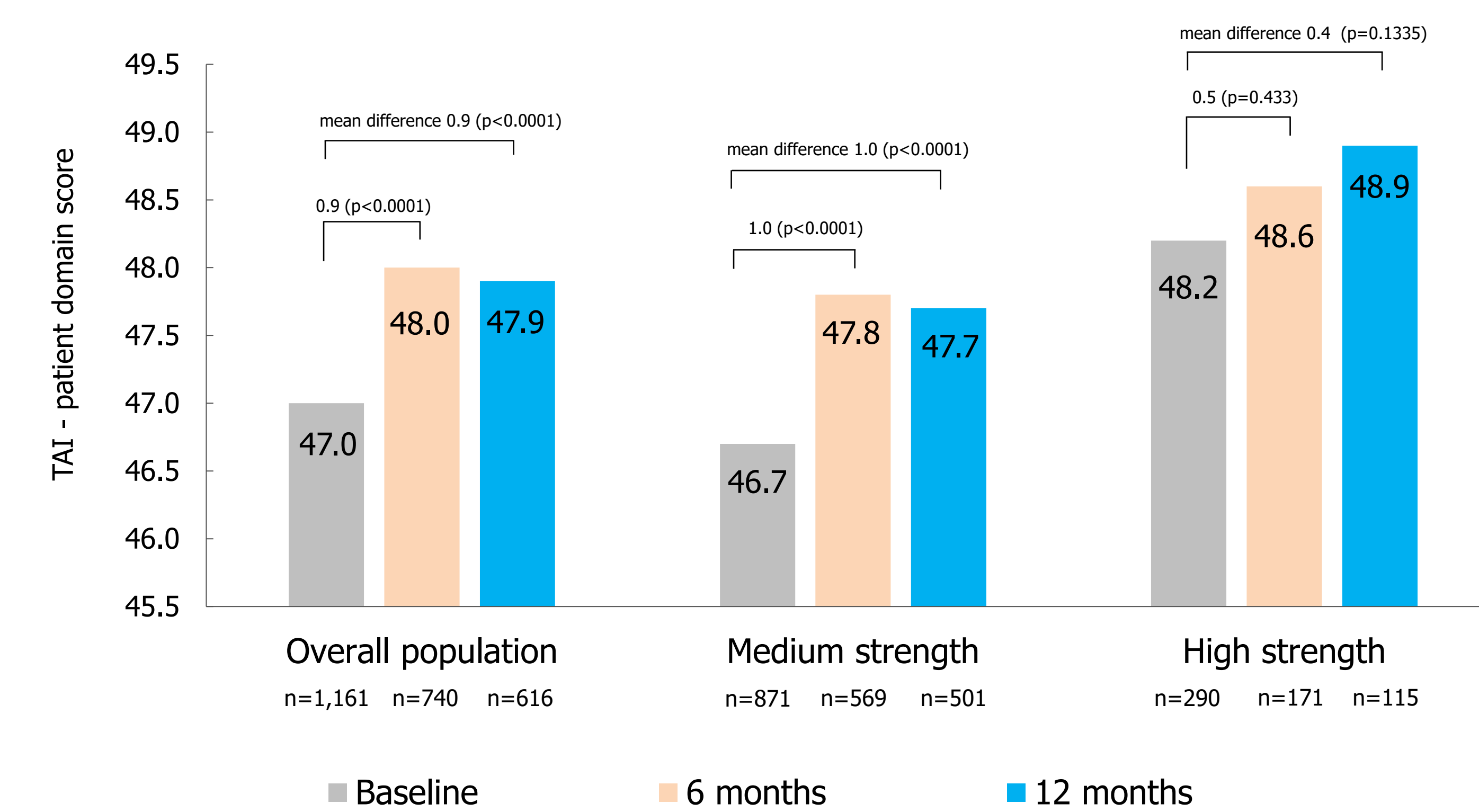
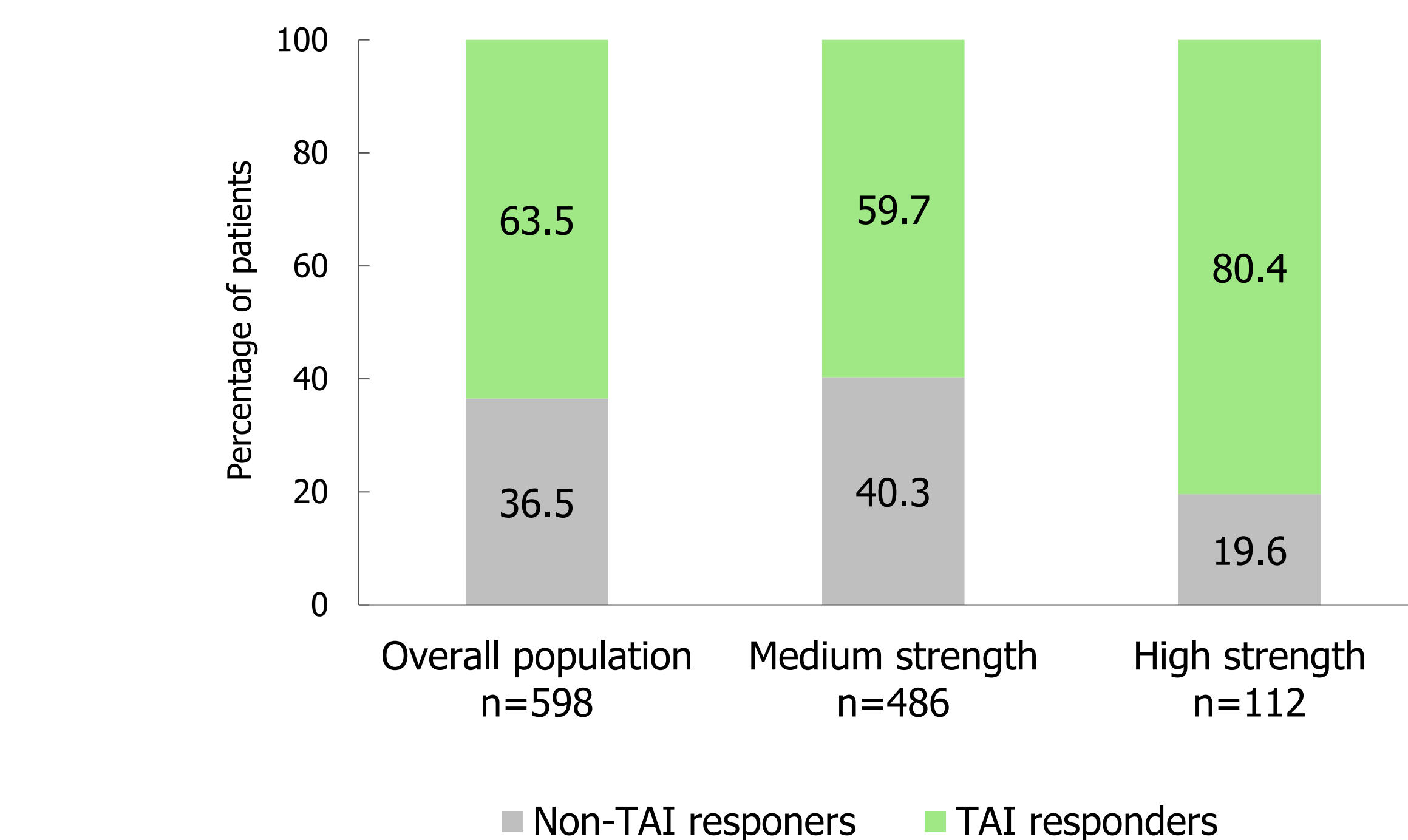
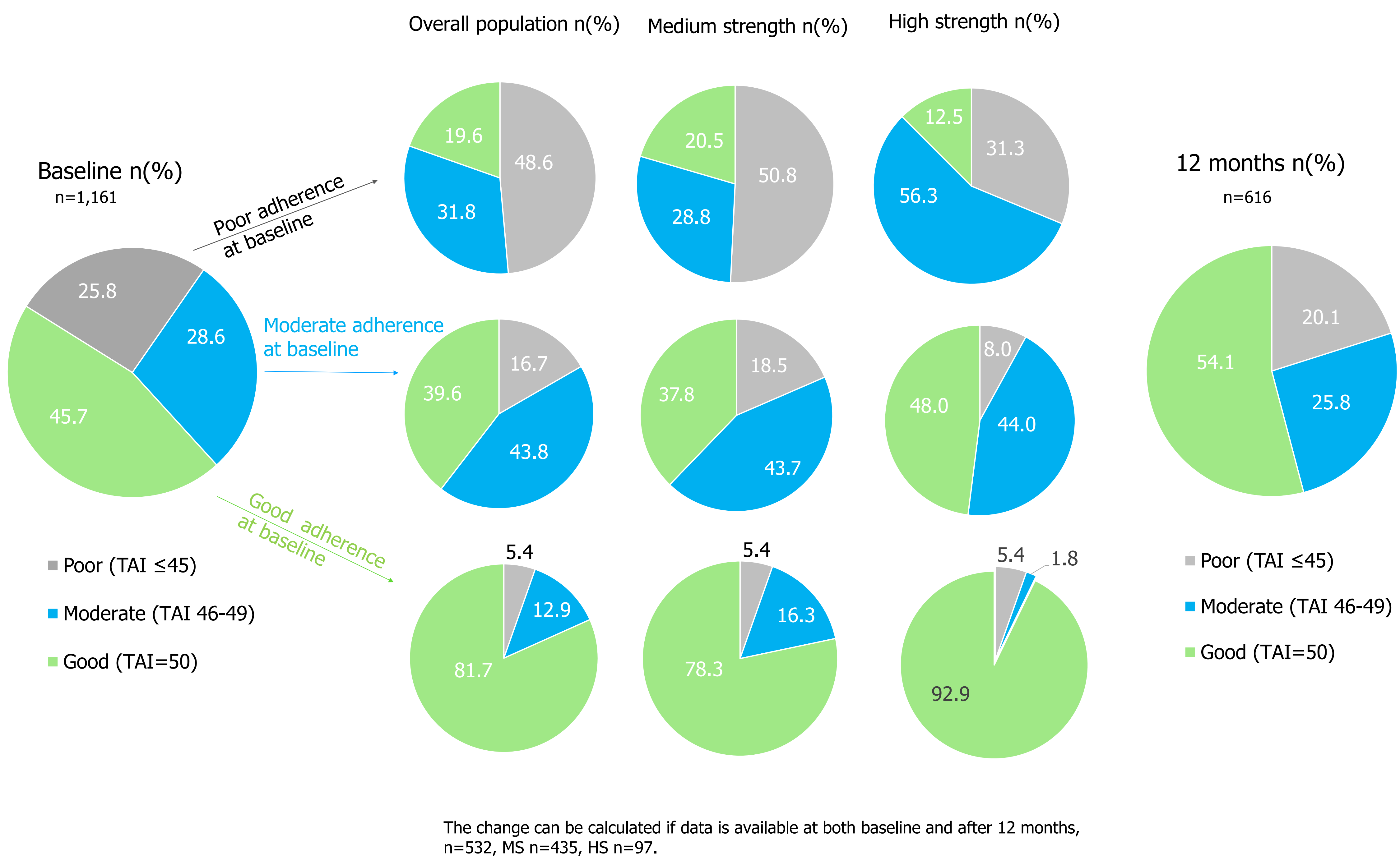


Figure 2. TAI-10 responders according to change to a higher adherence category at month 12, stratified by medium and high strength of BDP/FF/G.



Overall, 63.5% patients achieved the higher adherence category or maintained the good adherence and were classified as responders.

Figure 3. Change of adherence according to TAI-10 (patient domain) score from baseline to 12 months, stratified by medium and high strength of BDP/FF/G.



The proportion of patients with poor and good adherence increased after 12 months of treatment compared to baseline.

## CONCLUSIONS:

- Significant improvement in treatment adherence was observed in patients with moderate to severe asthma over a 12-month period of fixed triple BDP/FF/G therapy.
- The high dose strength of BDP/FF/G formulation was associated with a higher proportion of patients reaching the higher adherence category compared to the medium strength.

### References:

- Virchow J.C. et al., Single inhaler extrafine triple therapy in uncontrolled asthma (TRIMARAN and TRIGGER): two double-blind, parallel-group, randomised, controlled phase 3 trials. The Lancet, 2019. 394(10210): p. 1737-1749.
- Plaza V, Fernández-Rodríguez C, Melero C, et al. Validation of the 'Test of the Adherence to Inhalers' (TAI) for Asthma and COPD Patients. J Aerosol Med Pulm Drug Deliv. 2016;29(2):142-152. doi: 10.1089/jamp.2015.1212

The TriMaximize study was funded by Chiesi. TG, REKR, CSU, WP, VP, AB, MK, FB and CG have received fees for conducting the study. VB, AH, CF and VC are employees of Chiesi GmbH during the planning, implementation or evaluation of the study.