

# Goat milk based infant formula improves gastro-intestinal discomfort in infants in a randomized controlled pilot study

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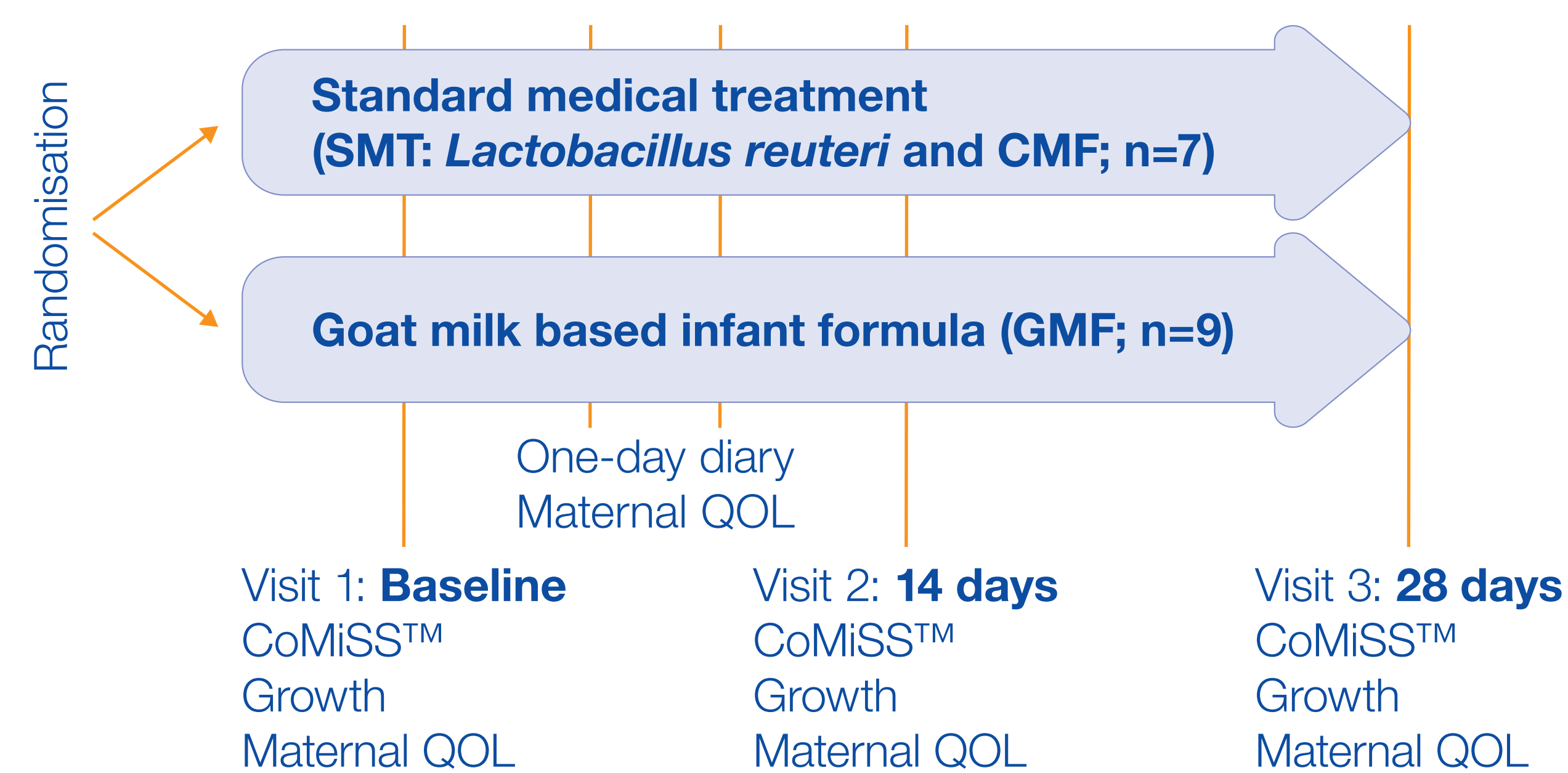
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Case studies in infants with gastro-intestinal (GI) complaints report improvements in stool characteristics, crying time and overall GI comfort within 3 weeks of consuming goat milk based infant formula (GMF) (1-2). Further well-designed research is needed to confirm these findings.

## Objective

To demonstrate that the decrease in infants' discomfort after being fed with GMF for 2 weeks was equivalent to, or better than, Spanish standard medical treatment (SMT) consisting of *Lactobacillus reuteri* and cow's milk infant formula of parent's choice (CMF).

## Study design

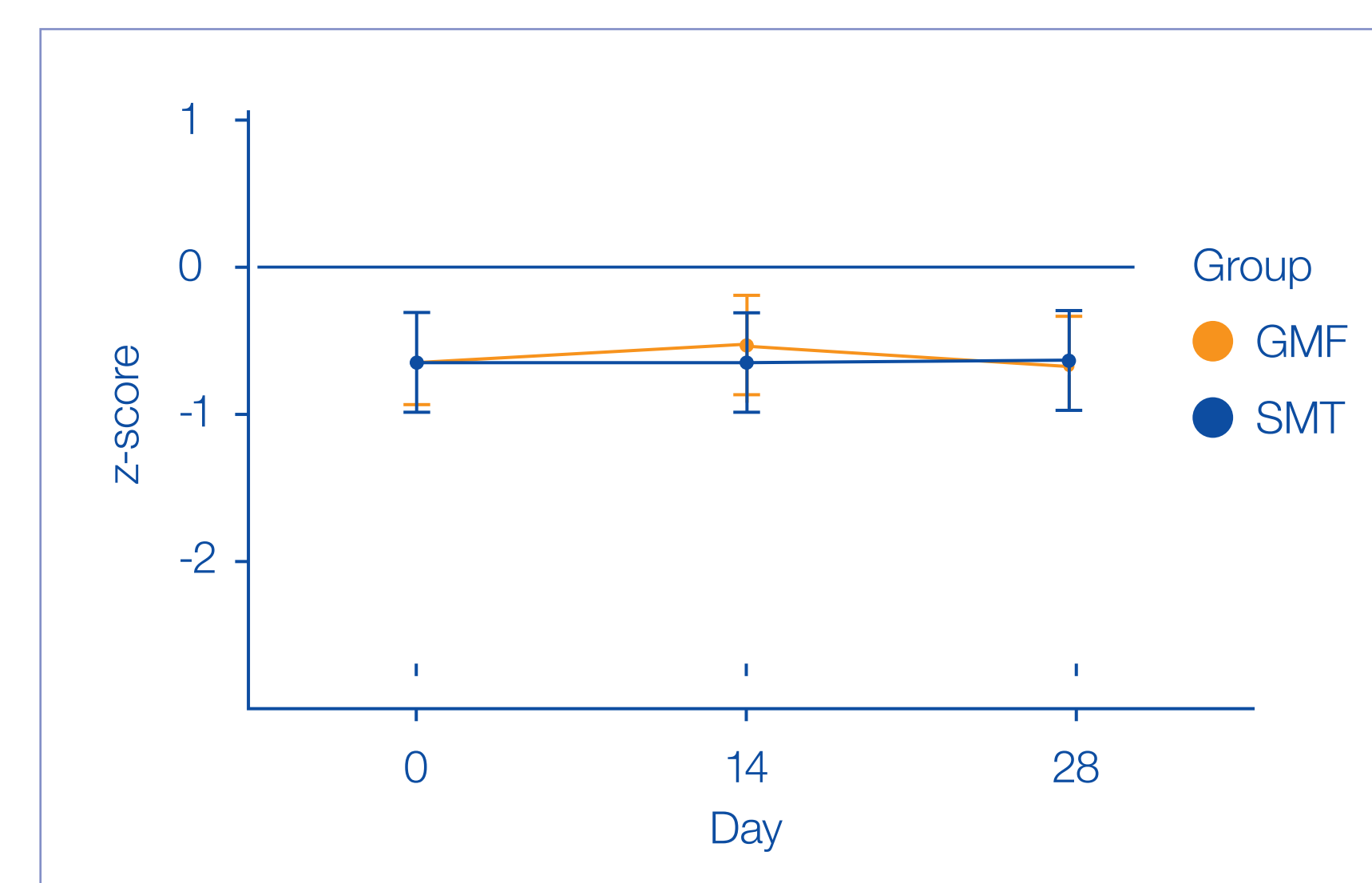


## Methods

GI discomfort was assessed using the CoMiSS™ (3), a scoring tool ranging from 0 (absent) - 33 (severe discomfort) that sums the severity of crying, stool consistency, regurgitation, skin and respiratory symptoms. Infants aged 1-3 months with a CoMiSS™ of 6-12 at baseline were included. For maternal quality of life (QOL), the WHOQOL-BREF (4) questionnaire was used. Linear mixed models were used to analyse changes between the two treatment groups, with baseline age as a covariate.

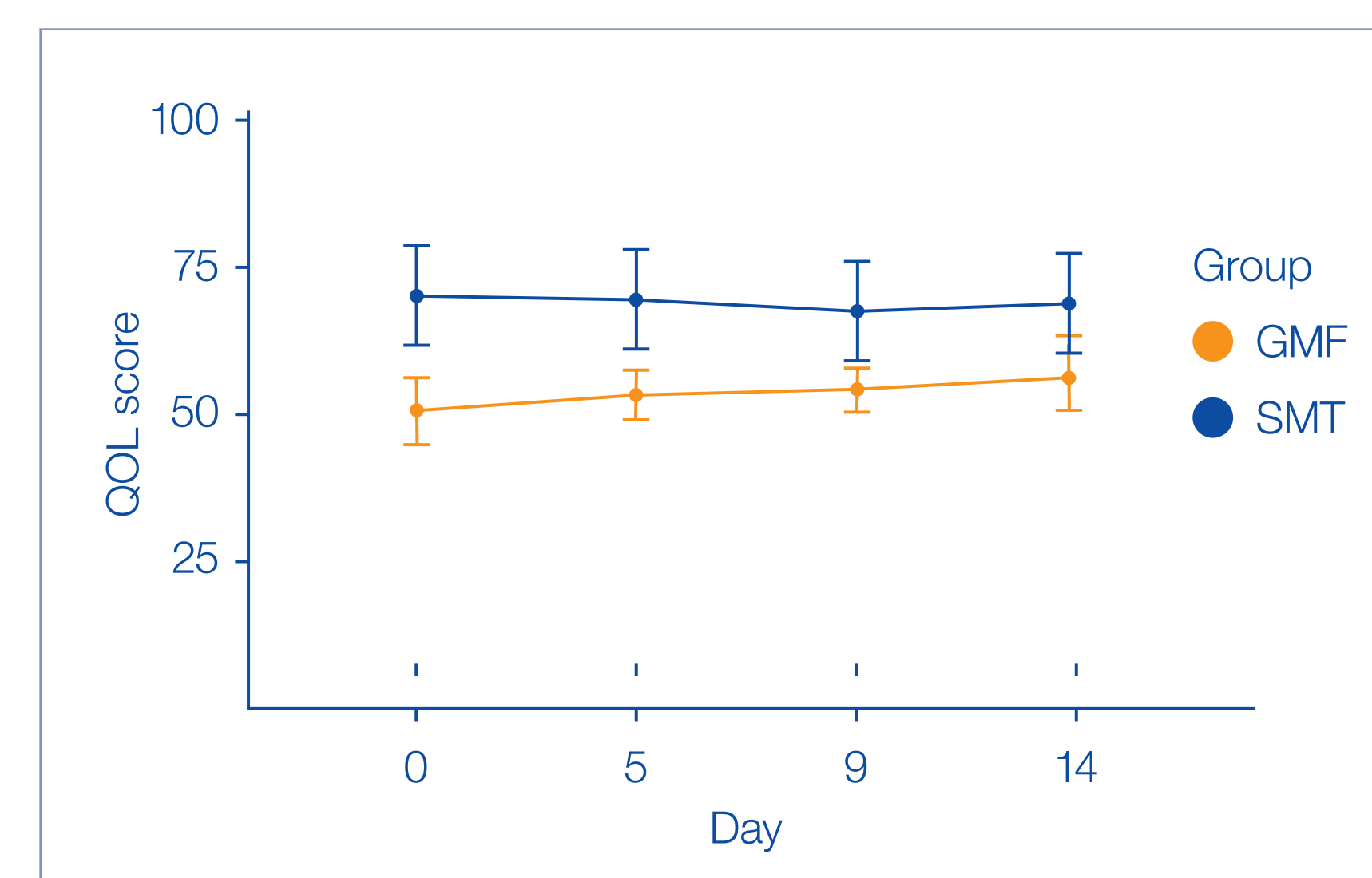
## Results

### Weight-for-age



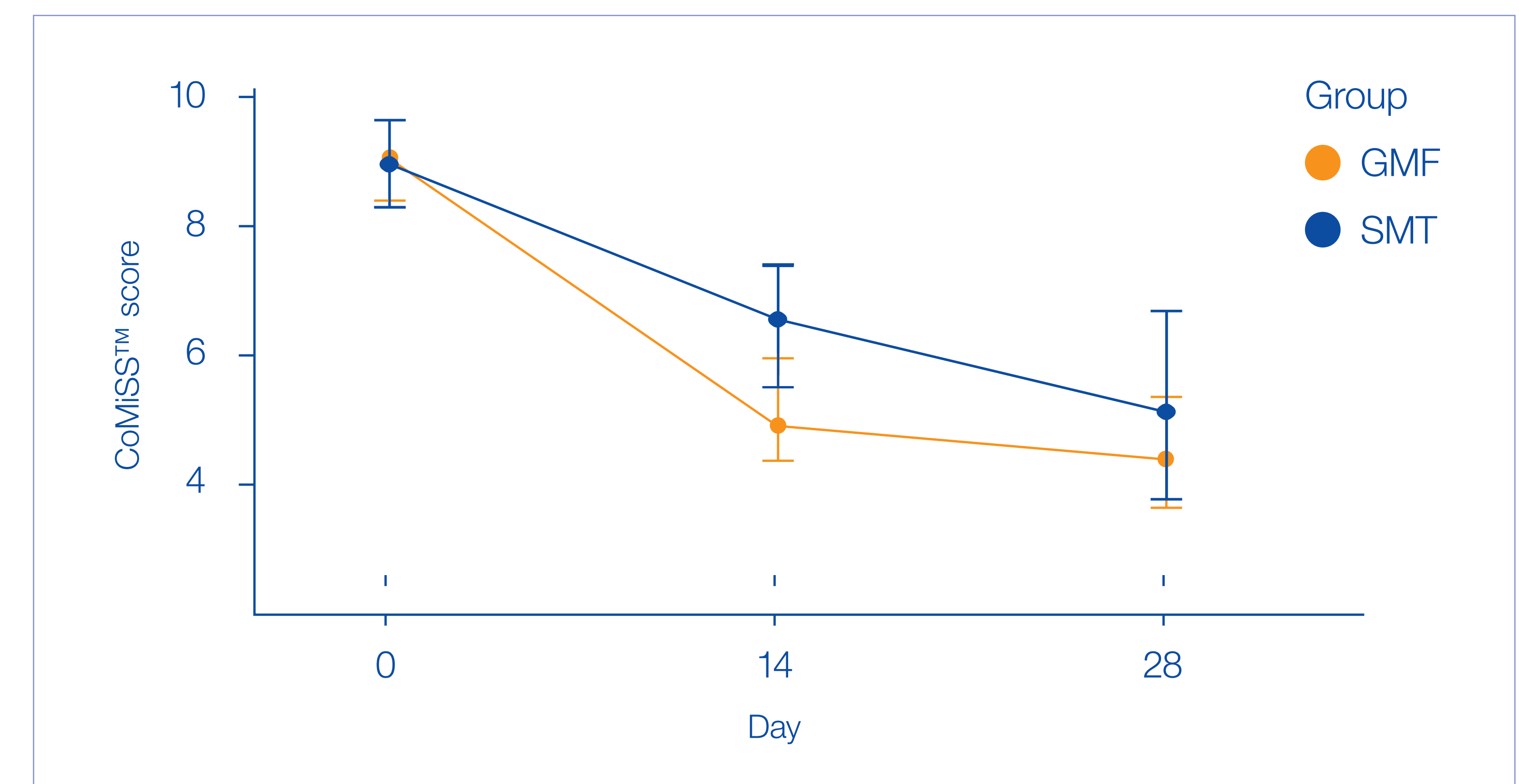
Growth was comparable in both groups throughout the intervention. All infants showed adequate growth.

### Quality of life mother



The maternal QOL significantly improved in the GMF group after 14 days compared to baseline (P = 0.04). Overall maternal QOL in the GMF group were comparable to those in the SMT group.

### Total CoMiSS™



After two weeks of intervention, total CoMiSS™ significantly decreased for both groups (P < 0.01), of which the subcomponents crying and stools contributed most.

The improvement in GI discomfort was faster for the GMF group, but not statistically significant different from the SMT group.

## Conclusion

GMF improved GI discomfort insignificantly faster in infants with mild complaints within two week intervention as compared to SMT (i.e. consisting of *Lactobacillus reuteri* and CMF of parent's choice).

Maternal QOL improved in the GMF group after two weeks. These results confirm that GMF is equivalent to SMT in improving GI discomfort. As this is a pilot study, a well-powered study is warranted.



Want to know more?