

Fact Sheet Rosacea - Microes Staphefekt SA.100 (Gladskin)

Rosacea is a common inflammatory skin disorder. Symptoms vary broadly, including combinations of vascular and inflammatory symptoms: flushing, erythema, telangiectasias, edema, papules, pustules, itch, burning feeling, dry skin, ocular lesions (blepharitis) and rhinophyma. Rosacea primarily affects the face, negatively influencing the quality of life.^{1,2}

The exact cause of rosacea is not fully understood, and it is suggested that symptoms are caused by an inappropriate immune response against environmental triggers such as UV light and bacteria, together with dysfunction of the blood vessels.³ The bacterium *Staphylococcus aureus* may trigger (secondary) infection of the skin lesions, leading to inflammatory symptoms like redness, itch, pain and swelling.

Current treatments act directly on the blood vessels, inhibit inflammation, or kill bacteria (antibiotics). Most topical therapies are well tolerated, although side effects can be a concern when acting on the vascular or immune system. With antibiotics, prolonged use leads to antimicrobial resistance, limiting their use.¹

Staphefekt SA.100 is an endolysin, a targeted antibacterial enzyme. Contrary to antibiotics, it kills only *S. aureus*, leaving the beneficial bacteria intact. And by targeting essential parts of the bacterial cell wall of *S. aureus*, resistance is neither observed nor expected.^{4,5,6} As an active ingredient in emollients, Staphefekt is therefore suitable for long-term daily use as suppression therapy of *S. aureus* on the skin.⁷

In a questionnaire-based study by prof. Pasmans, pediatric dermatologist at the Erasmus Medical Centre Rotterdam, Staphefekt in an emollient (Gladskin) was applied on the skin of 112 people suffering from rosacea. After one month of daily use, patients experienced significantly less severity of inflammatory symptoms, while vascular symptoms did not diminish (figure 1). The quality of life was enhanced, as measured by two validated scientific scores (Skindex-29 and RosaQoL). Symptoms did not diminish immediately, and in most patients a minimum of two weeks seemed required for Gladskin to have its effect. Since Staphefekt targets only *Staphylococcus aureus*, the positive effect of Gladskin suggests a role for this microorganism in the inflammatory symptoms of rosacea.^{7,8}

People will always be challenged with *S. aureus*, as it is often present on our body and in our environment. In some of us, colonization with this bacterium eventually leads to inflammation or infection, as is often the case in rosacea patients. With Staphefekt, the first *targeted* antibacterial compound is available for daily use as maintenance therapy, to intervene before colonization can progress and lead to infection and flares of inflammation.

Decreased rosacea severity after Gladskin

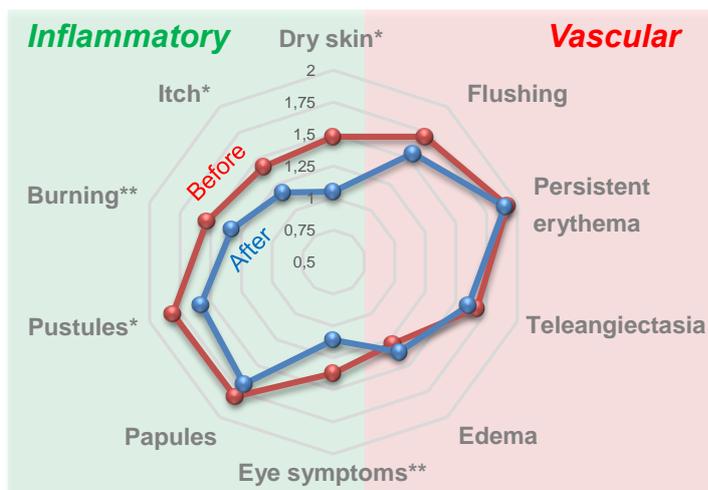


Figure 1. Rosacea symptom severity was measured before and after Gladskin use in 112 patients (average use 39 days) based on the grading system proposed by the National Rosacea Society Expert Committee. Inflammatory symptoms decreased significantly, while vascular symptoms did not change (* $p < 0.0125$ and ** $p < 0.05$). This suggests a role for *S. aureus* in the inflammatory symptoms of rosacea.

References

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