

## Methods

A prospective case series study was performed at the Departments of Dermatology of the Freie Universität Berlin (1996-2005) and the Dessau Medical Center (2005–2014). All patients (or their parents/guardians) provided written consent for the inclusion of their anonymized data in research. Please note that in 1996 no ethics committee approval was required for patients treated with an approved regimen on a regular basis.

All patients were diagnosed, treated, and followed up by the same dermatologist (C.C.Z.). Patients received concomitantly per os isotretinoin 0.5 mg/kg body weight (0.25-0-0.25 mg/kg body weight) and prednisolone 30 mg/day (10-10-10 mg). The prednisolone treatment was scheduled for 1 month. Follow-up visits were planned at months 1, 2, and 3, every 3 months until the disappearance of the acne lesions, and for at least 6 months after the resolution of the lesions. At the 1-month visit, the clinical response was defined as marked (<50% of the skin lesions and resolution of all systemic signs) or a persistent disease (>50% of the skin lesions or <50% of the skin lesions and persistence of any systemic signs) in comparison with the initial clinical picture. At marked response prednisolone was tapered after 2 weeks and subsequently discontinued. In cases of persistent disease with acne skin lesions only the isotretinoin dose was increased 0.1 mg/kg body weight/day, and with necrotic skin lesions or systemic signs the prednisolone treatment was continued for another month. In cases of worsening the current prednisolone dose was doubled. The patients were photographed at month 1, month 3, and subsequently every 3 months.