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# **ASSOCIATIONS BETWEEN PATIENT CHARACTERISTICS AND OUTCOMES IN PSORIATIC DISEASE**

## **Evidence from Swedish real-world data**

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### **Akademisk avhandling**

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Associations between patient characteristics and outcomes in psoriatic disease: Evidence from Swedish real-world data

**Abstract**

**Background:** Psoriatic disease, encompassing skin psoriasis and psoriatic arthritis, is a common condition affecting 2-3% of the Western population associated with reduced quality of life and increased healthcare costs. To improve patients' lives and the stewardship of societal resources, a nuanced understanding of the associations between patient characteristics and health outcomes are needed for optimal clinical and societal decision making. **Methods:** Data from several Swedish registries were collected for those with psoriatic disease and non-psoriasis controls, including diagnoses, pharmacy dispensed medications, mortality, socioeconomic information, quality of life, and clinical severity. This thesis analysed four associations between patient characteristics and outcomes in real-world settings: 1) disease severity and quality of life, 2) skin psoriasis and somatic comorbidity with incident psychiatric illness, 3) age and incident biologic prescriptions, and 4) non-persistence with adalimumab, ustekinumab, and secukinumab. **Results:** The analysis found a statistically significant, negative association between disease severity and quality of life, which was non-linear. Skin psoriasis was found to be independently associated with the onset of psychiatric illness as was somatic comorbidity. However, the results were compatible with a lack of synergistic effect between skin psoriasis and somatic comorbidity on psychiatric illness. Older psoriasis patients appeared less likely to initiate biologic therapies than their younger counterparts after controlling for disease severity and comorbidity. Individuals with psoriatic arthritis treated with ustekinumab were found to have lower rates of non-persistence compared to adalimumab. **Conclusions:** Patient characteristics appear to play an important role in a variety of health outcomes in psoriatic disease, demonstrated across four real-world settings. The utilisation of data from routine clinical care enabled the investigation of research questions that are not suitable for clinical trial contexts and provides relevance for patients in regular clinical practice. Understanding the associations between patient characteristics and subsequent outcomes is an important element in the delivery of holistic, personalised healthcare.

**Keywords**

Psoriasis, psoriatic arthritis, psoriatic disease, dermatology, epidemiology, real-world data, real-world evidence

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