# Case Study: Systemic Treatments in Localised High Impact Psoriasis

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## Introduction

This case study follows the 5-step process for accessing and using evidence in response to a request from the Joint Formulary Group (JFG) in the Bristol, North Somerset, and South Gloucestershire Integrated Care System (BNSSG ICS). A search was conducted to find evidence on the use of certain systemic treatments, namely biologic medications and apremilast, a small molecule drug, in the management of severe psoriasis at localised, high impact sites.

## Identify

Using PICO, the scope of the evidence search was defined as:

**Population**: adults and children with psoriasis at localised high impact sites

**Intervention**: adalimumab, infliximab, etanercept, tildrakizumab, certolizumab, risankizumab, guselkumab, brodalumab, ixekizumab, secukinumab, bimekizumab, ustekinumab, apremilast

**Comparison**:

**Outcomes**: Patient safety, efficacy and clinical effectiveness, cost-effectiveness, and resource impact.

## Access

A Clinical Effectiveness Programme Officer was asked to conduct the search and report findings.

The search strategy involved searching the following databases and websites:

* *Cochrane Database of Systematic Reviews*
* *PubMed*

The following search strategy was used:

*psoriasis AND skin AND [drug name]*

Additional articles were identified through recommendations and ‘snowballing,’ i.e., following up on reference lists of the documents returned using the search strategy outlined above.

## Appraisal

In total, 16 articles were identified. The bulk of the evidence pertaining to the use of biologics and/or apremilast for the management of chronic psoriasis predominantly comprises of studies whose participants were diagnosed with extensive, rather than localised, moderate-to-severe psoriasis. Considerable heterogeneity in inclusion criteria was observed in the included systematic reviews.

## Apply

Findings were reported in an evidence review. This review found some evidence to support biologic or apremilast use in the treatment of adults experiencing chronic plaque psoriasis with limited skin involvement. The review found that there was insufficient evidence of a significant difference between any of the listed medications for risk of serious adverse events (SAEs).

## Share and Manage

The findings of the review were consolidated into an evidence review. This report was shared with the JFG to inform decision making around using systemic treatments for high impact localised psoriasis. With permission from the JFG, the report was shared on Health Innovation West of England’s Evidence Repository on the Future NHS platform, to promote a culture of shared learning.