Health Technology Briefing
January 2026

Povorcitinib for treating of non-segmental vitiligo

Company/Developer	Incyte Corp

☒ New Active Substance ☐ Significant Licence Extension (SLE)

NIHRIO ID: 31473	NICE ID: Not available	UKPS ID: Not available

Licensing and Market Availability Plans

Currently in phase III clinical trials.

Summary

Povorcitinib is being developed as a treatment for non-segmental vitiligo. Vitiligo is a long-term skin condition caused by a lack of pigment in the skin (melanin) produced by cells called melanocytes, white leads to the development of pale white patches. In non-segmental vitiligo, the symptoms often appear on both sides of the body as symmetric white patches. Non-segmental vitiligo is thought to be an autoimmune condition, where the immune system destroys the body's own melanocyte skin cells that make melanin. Non-segmental vitiligo is the most common type of vitiligo, affecting around 9 in 10 people with the condition. The often highly visible and chronic nature of vitiligo as well as its unpredictable disease course have negative psychosocial impacts on most patients, affecting quality of life. Current treatment options are limited and often require lengthy treatment and/or have limited efficacy. Therefore, there is a need for new treatments.

Povorcitinib is an inhibitor of a protein called Janus kinase (JAK)1, which plays a crucial role in the immune response and inflammation. It works by blocking the action of JAK1, thereby reducing inflammation and keeping the immune system from overreacting. Povorcitinib is taken as an oral tablet. If approved, povorcitinib would offer an additional treatment option for patients with non-segmental vitiligo.

This briefing reflects the evidence available at the time of writing and a limited literature search. It is not intended to be a definitive statement on the safety, efficacy or effectiveness of the health technology covered and should not be used for commercial purposes or commissioning without additional information. A version of the briefing was sent to the company for a factual accuracy check. The company was available to comment.
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Proposed Indication

Treatment of non-segmental vitiligo.[1,2]

Technology

Description

Povorcitinib (INCB54707) is an oral small-molecule Janus kinase (JAK)1 inhibitor.[3] It works by targeting the JAK enzymes, which are pivotal in the signalling pathways of various cytokines and growth factors. These signalling pathways play crucial roles in the immune response and inflammation. By inhibiting these enzymes, povorcitinib effectively disrupts the signalling process, thereby reducing inflammation and modulating the immune response.[4] Vitiligo is caused by an autoimmune response that results in the progressive loss of melanocytes (melanin-producing cells). JAK inhibitors intervene in vitiligo pathogenesis by targeting the inactivation of both IFN- and IL-15 mediated downstream signalling, thereby disrupting autoimmune responses and mitigating melanocyte destruction.[5]

Povorcitinib is in clinical development for the treatment of non-segmental vitiligo. In the phase III trials (STOP-V1, NCT06113445; STOP-V2, NCT06113471), povorcitinib was administered as an oral tablet for 104 weeks.[1,2]

Key Innovation

Current treatment options for vitiligo are limited and often require lengthy treatment and/or have limited efficacy.[6] Treatment for vitiligo is based on changing the appearance of the skin by restoring its colour. For some people, treatment is not permanent, and it cannot always control the spread of the condition.[7] Furthermore, many vitiligo treatments are not licenced and can only be prescribed 'off-label'.[8] The often highly visible and chronic nature of vitiligo as well as its unpredictable disease course have negative psychosocial impacts on most patients, affecting quality of life.[9] Therefore, there is a need for novel treatments.[10] Vitiligo disease pathogenesis is largely regulated by interferon-γ activation of the JAK signalling pathway.[9] JAK inhibitors have strengths that include rapid therapeutic effects, convenient administration, and dosage flexibility.[11] JAK inhibitors have been found to be effective in re-pigmentation and well tolerated in patients with vitiligo.[12] If licenced, povorcitinib would offer an additional treatment option for patients with non-segmental vitiligo.

Regulatory & Development Status

Povorcitinib does not currently have Marketing Authorisation in the EU/UK for any indication.

Povorcitinib is also in phase II/III clinical development for:[13]

- Hidradenitis suppurativa
- Chronic spontaneous urticaria
- Asthma
- Prurigo nodularis

Patient Group

Disease Area and Clinical Need

Vitiligo is a long-term condition where pale white patches develop on the skin. It is caused by the lack of melanin, which is the pigment in skin. Vitiligo can affect any area of skin, but it commonly happens on the

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face, neck and hands, and in skin creases.[14] The areas of skin most commonly affected by vitiligo include: mouth and eyes; fingers and wrists; armpits; groin, genitals; inside the mouth. Vitiligo often starts as a pale patch of skin that gradually turns completely white. The edges of the patch may be smooth or irregular. They're sometimes red and inflamed, or there's brownish discolouration (hyperpigmentation). Vitiligo does not cause discomfort to the skin, such as dryness, but the patches may occasionally be itchy. The condition varies from person to person. Some people only get a few small, white patches, but others get bigger white patches that join up across large areas of skin. The white patches are usually permanent. In non-segmental vitiligo (also called bilateral or generalised vitiligo), the symptoms often appear on both sides of the body as symmetrical white patches. Non-segmental vitiligo is thought to be an autoimmune condition, where the immune system destroys the melanocyte skin cells that make melanin. Non-segmental vitiligo is the most common type of vitiligo, affecting around 9 in 10 people with the condition.[14]

In the UK, the lifetime incidence of vitiligo is 0.92%, meaning that 1 in 109 people will develop the disease. The lifetime incidence of vitiligo is almost five times higher in people of Asian ethnicity than those belonging to White ethnic groups.[15] In England (2024-2025), there were 39 finished consultant episodes (FCEs) and 39 finished admission episodes for vitiligo (ICD-10 code L80.X), which resulted in 32 FCE day cases and 1 FCE bed day.[16]

Recommended Treatment Options

There are currently no treatment options for vitiligo recommended by the National Institute for Health and Care Excellence (NICE).

The British Association of Dermatologists recommends the following pharmacological treatments:[17]
First line:

- Potent or very potent topical corticosteroid
- Topical tacrolimus

Second line:

- Narrowband ultraviolet B (whole body or localised) with or without topical corticosteroid or calcineurin inhibitors
- For rapidly progressive disease, oral betamethasone

Clinical Trial Information

Trial	**STOP-V2,** NCT06113471**;** A Phase 3, Randomized, Double-Blind, 52-Week, Placebo-Controlled, Efficacy and Safety Study of Povorcitinib in Participants With Nonsegmental Vitiligo **Phase III –** Active, not recruiting **Location(s):** Six EU countries, UK, USA and Canada **Primary completion date:** March 2026
Trial Design	Randomised, parallel assignment, triple-blinded
Population	N=450; aged 18 years and older; clinical diagnosis of non-segmental vitiligo
Intervention(s)	Povorcitinib (oral tablet)
Comparator(s)	Placebo (oral tablet)

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Outcome(s)	Primary outcome: proportion of patients achieving a ≥ 75% improvement from baseline in the Facial Vitiligo Area Scoring Index (F-VASI75) [time frame: week 52] See trial record for full list of other outcomes.
Results (efficacy)	-
Results (safety)	-

Clinical Trial Information	
Trial	**STOP-V1,** NCT06113445**;** A Phase 3, Randomized, Double-Blind, 52-Week, Placebo-Controlled, Efficacy and Safety Study of Povorcitinib in Participants With Nonsegmental Vitiligo **Phase III –** Active, not recruiting **Location(s):** Six EU countries, USA, Canada, Japan and Mexico **Primary completion date:** February 2026
Trial Design	Randomised, parallel assignment, triple-blinded
Population	N=467; aged 18 years and older; clinical diagnosis of non-segmental vitiligo
Intervention(s)	Povorcitinib (oral tablet)
Comparator(s)	Placebo (oral tablet)
Outcome(s)	Primary outcome measure: proportion of participants achieving a ≥ 75% improvement from baseline in the F-VASI75 [time frame: week 52] See trial record for full list of other outcomes.
Results (efficacy)	-
Results (safety)	-

Clinical Trial Information	
Trial	NCT04818346**;** A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Dose Ranging Study of the Efficacy and Safety of INCB054707 Followed by an Extension Period in Participants With Vitiligo **Phase II –** Completed **Location(s):** USA and Canada **Study completion date:** May 2023
Trial Design	Randomised, parallel assignment, double blinded
Population	N=171; aged 18 to 75 years; clinical diagnosis of non-segmental vitiligo; history of prior vitiligo treatment with a total duration of at least 3 months
Intervention(s)	Povorcitinib administered once daily
Comparator(s)	Placebo for 24 weeks followed by povorcitinib for 28 weeks

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Outcome(s)	Primary outcome: percent change from baseline in total vitiligo area scoring index (T-VASI) [time frame: baseline; week 24] See trial record for full list of other outcomes.
Results (efficacy)	At Week 24, the primary efficacy endpoint, T-VASI percentage change from baseline with povorcitinib (15 mg, −19.1%; 45 mg, −17.8%; 75 mg, −15.7%; least square means povorcitinib vs placebo, P<0.01), was statistically superior to placebo (+2.3%). Percentages of patients achieving F-VASI50 at Week 24 were higher for povorcitinib (16.3%, 34.9%, and 23.8% for 15, 45, and 75 mg, respectively) than placebo (7.0%). Improved re-pigmentation was seen across treatment groups at Week 52; mean percentage changes from baseline in T-VASI for povorcitinib 15-to-75-mg, 45-mg, 75-mg, and placebo-to-75-mg subgroups were −40.7%, −42.7%, −41.3%, and −18.1%, respectively; F-VASI mean percentage changes from baseline were −63.6%, −63.8%, −64.4%, and −54.8%, respectively. T-VASI50 was achieved by 45.2%, 37.0%, 37.9%, and 15.2%; F-VASI50 by 71.0%, 77.8%, 69.0%, and 63.6%; and F-VASI75 by 48.4%, 55.6%, 58.6%, and 45.5% of patients, respectively. A total of 34 patients entered the follow-up period, with 32 completing Week 76. T-VASI mean percentage changes from baseline to Week 76 were −41.3%, −43.6%, −27.1%, and −34.8%, respectively; F-VASI mean changes were −48.9%, −63.0%, −46.4%, and −73.5%, suggesting durability of response after discontinuation of povorcitinib.[9]
Results (safety)	Treatment-emergent adverse events (TEAEs) occurred in 89.2% and serious adverse events in 2.4% among patients who received povorcitinib 45 or 75 mg through 52 weeks. The most common TEAEs were COVID-19 (36.1%), blood creatine phosphokinase increased (13.3%), acne (12.0%), fatigue (10.8%), and headache (9.6%).[9]

Estimated Cost

The cost of povorcitinib is not yet known.

Relevant Guidance

NICE Guidance

- NICE technology appraisal awaiting development. Ritlecitinib for treating non-segmental vitiligo in people 12 years and over (TA11744). Expected date of issue to be confirmed.
- NICE technology appraisal. Ruxolitinib cream for treating non-segmental vitiligo in people 12 years and over (TA1088). August 2025.

NHS England (Policy/Commissioning) Guidance

- NHS England.2024 NHS Standard Contract for Specialised Dermatology Services (Adults and Children). A12/S/a.

Other Guidance

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- van Geel N, Speeckaert R, Taïeb A, Ezzedine K, Lim HW, Pandya AG, et al. Worldwide expert recommendations for the diagnosis and management of vitiligo: Position statement from the International Vitiligo Task Force Part 1: towards a new management algorithm. 2023.[18]
- Seneschal J, Speeckaert R, Taïeb A, Wolkerstorfer A, Passeron T, Pandya AG, et al. Worldwide expert recommendations for the diagnosis and management of vitiligo: Position statement from the international Vitiligo Task Force—Part 2: Specific treatment recommendations. 2023.[8]
- British Association of Dermatologists. British Association of Dermatologists guidelines for the management of people with vitiligo 2021. 2022.[17]

Additional Information

Incyte Corp did not enter information about this technology onto the UK PharmaScan database; the primary source of information for UK horizon scanning organisations on new medicines in development. As a result, the NIHR Innovation Observatory has had to obtain data from other sources. UK PharmaScan is an essential tool to support effective NHS forward planning; allowing more effective decision making and faster uptake of innovative new medicines for patients who could benefit. We urge pharmaceutical companies to use UK PharmaScan so that we can be assured of up-to-date, accurate and comprehensive information on new medicines.

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