UZPRUVO®
ustekinumab

Made for us

UZPRUVO (ustekinumab) is indicated for the treatment of moderate to severe Crohn's disease in adults, moderate to severe plaque psoriasis in adults, moderate to severe paediatric plaque psoriasis and psoriatic arthritis in adults.[1]

Uzpruvo® is currently not approved for the Ulcerative Colitis indication (since the originator still has exclusivity for this indication)

Adverse events should be reported to Thornton and Ross Limited by emailing thorntonross@medinformation.co.uk or by calling 01484 848164. Additionally, reporting forms and information can be found at: https://yellowcard.mhra.gov.uk or search for MHRA Yellow Card in the Google Play or Apple App Store.

For UK healthcare professionals only. Always read the Summary of Product Characteristics (SmPC) before administration.
Prescribing Information can be found on the **final page** and **online**.

UK-UZPRU-06 | July 2024

UZPRUVO®
ustekinumab

CONTENTS

INTRODUCTION

UK-UZPRU-06 | July 2024

INTRODUCTION

Background

Ustekinumab is a fully human IgG1κ monoclonal antibody that binds with specificity to the shared p40 protein subunit of pro-inflammatory cytokines IL-12 and IL-23 to prevent them from binding to their receptors, expressed on the surface of immune cells, therefore inhibiting inflammatory processes early.[1]

Uzpruvo is STADA's ustekinumab biosimilar and offers a cost-effective alternative to the reference product.[1,2]

Place in therapy

Uzpruvo has received marketing authorisation for equivalent indications to Stelara with the exception of ulcerative colitis (since the originator still has exclusivity for this indication).[1]

Uzpruvo® is currently not approved for the Ulcerative Colitis indication (since the originator still has exclusivity for this indication)

Therapeutic indications

Plaque psoriasis: Adults with moderate to severe plaque psoriasis who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapies including ciclosporin, methotrexate (MTX) or psoralen and ultraviolet A (PUVA).[1]

Paediatric plaque psoriasis: Uzpruvo is indicated for the treatment of moderate to severe plaque psoriasis in children and adolescent patients from the age of 6 years and older, who are inadequately controlled by, or are intolerant to, other systemic therapies or phototherapies.[1]

Psoriatic arthritis: Adult patients with active psoriatic arthritis, alone or in combination with MTX, when the response to previous non-biological disease-modifying anti-rheumatic drug (DMARD) therapy has been inadequate.[1]

Crohn's disease: Adult patients with moderately to severely active Crohn's disease who have had an inadequate response with, or lost response to, or were intolerant to either conventional therapy or a tumour necrosis factor.[1]

AUTOIMMUNE DISEASE PREVALENCE & STADA SPECIALTY CARE

Prevalence

The prevalence of autoimmune diseases is increasing worldwide,[3] affecting approximately one in ten individuals in the UK alone.[4]

Prevalence of selected autoimmune diseases:

- At least 1 in every 323 people in the UK are living with Crohn's Disease.[5]
- Plaque Psoriasis affects almost 2% of the UK population.[6]
- Psoriatic Arthritis affects about 325,000 people, around 0.5% of the UK population.[6]

There are a number of unmet needs associated with autoimmune diseases:

Living with these conditions can have an impact on patients' quality of life[7]

They present financial and resourcing burdens on healthcare systems*[8]

The high cost of biologic medicines can limit access for patients[9]

* Through hospital admissions, inpatient services, readmission rates and longer length of stay[8]

STADA Specialty Care

At STADA, caring for people's health is at the centre of everything we do. STADA Specialty Care is dedicated to developing medicines in areas where there is a considerable unmet need.

For more than 15 years, our rapidly expanding portfolio of biosimilar medicines has been improving access to life-altering biologic therapies and providing patients with an affordable way to access the treatments they need.

STADA at a glance

- **15+** years of biosimilars experience[10]
- **~115** countries selling STADA products[11]
- **11,000+** employees around the globe[11]
- **125+** years of heritage[11]
- **25%** reduction in total carbon emissions by STADA between 2020 and 2023[12]
- Supply chain excellence with **supply service levels exceeding 95%** throughout 2022.[13]

POSOLOGY[1]

Uzpruvo is intended for use under the guidance and supervision of physicians experienced in the diagnosis and treatment of conditions for which Uzpruvo is indicated.

Uzpruvo is available as 45 mg and 90 mg solution for injection in prefilled syringe for subcutaneous use. For intravenous use as well as for subcutaneous administration of doses lower than 45 mg, other ustekinumab products should be used.

Plaque psoriasis

The recommended posology of Uzpruvo is an initial dose of 45 mg administered subcutaneously, followed by a 45 mg dose 4 weeks later, and then every 12 weeks thereafter. Consideration should be given to discontinuing treatment in patients who have shown no response up to 28 weeks of treatment.

Patients with body weight > 100 kg: For patients with a body weight > 100 kg the initial dose is 90 mg administered subcutaneously, followed by a 90 mg dose 4 weeks later, and then every 12 weeks thereafter. In these patients, 45 mg was also shown to be efficacious. However, 90 mg resulted in greater efficacy

Psoriatic arthritis (PsA):

The recommended posology of Uzpruvo is an initial dose of 45 mg administered subcutaneously, followed by a 45 mg dose 4 weeks later, and then every 12 weeks thereafter. Alternatively, 90 mg may be used in patients with a body weight > 100 kg. Consideration should be given to discontinuing treatment in patients who have shown no response up to 28 weeks of treatment.

Elderly (≥ 65 years): No dose adjustment is needed for elderly patients

Renal and hepatic impairment: Uzpruvo has not been studied in these patient populations. No dose recommendations can be made.

Paediatric population: The safety and efficacy of Uzpruvo in children with psoriasis less than 6 years of age or in children with psoriatic arthritis less than 18 years of age have not yet been established. No data are available.

POSOLOGY[1]

Paediatric plaque psoriasis (6 years and older):

The recommended dose of Uzpruvo based on body weight is shown below (Table 1). Uzpruvo should be administered at Weeks 0 and 4, then every 12 weeks thereafter.

Table 1. Recommended dose of Uzpruvo for paediatric psoriasis

Body weight at time of dosing	Recommended dose
< 60 kg	-
≥ 60 kg to ≤ 100 kg	45 mg
> 100 kg	90mg

There is no dosage form for Uzpruvo that allows weight-based dosing for paediatric patients below 60 kg.

Uzpruvo is only currently available as 45 mg and 90 mg solution for injection in pre-filled syringe. Thus, it is not possible to administer Uzpruvo to patients that require less than a full 45 mg dose. If an alternate dose is required, another ustekinumab product 45 mg solution for injection in vials offering weight based dosing should be used instead.

Consideration should be given to discontinuing treatment in patients who have shown no response up to 28 weeks of treatment.

POSOLOGY[1]

Crohn's disease:

Uzpruvo is only currently available in pre-filled syringes for subcutaneous use. Since treatment of CD should be initiated by intravenous infusion, another ustekinumab product must be used as first intravenous dose (130 mg concentrate for solution for infusion). The first subcutaneous administration of 90 mg Uzpruvo should take place at week 8 after the intravenous dose. After this, dosing every 12 weeks is recommended.

Patients who have not shown adequate response at 8 weeks after the first subcutaneous dose, may receive a second subcutaneous dose at this time. Patients who lose response on dosing every 12 weeks may benefit from an increase in dosing frequency to every 8 weeks.

Patients may subsequently be dosed every 8 weeks or every 12 weeks according to clinical judgment. Consideration should be given to discontinuing treatment in patients who show no evidence of therapeutic benefit 16 weeks after the IV induction dose or 16 weeks after switching to the 8-weekly maintenance dose.

Immunomodulators and/or corticosteroids may be continued during treatment with Uzpruvo. In patients who have responded to treatment with Uzpruvo, corticosteroids may be reduced or discontinued in accordance with standard of care.

In Crohn's disease, if therapy is interrupted, resumption of treatment can be managed with subcutaneous dosing every 8 weeks.

Elderly (≥ 65 years): No dose adjustment is needed for elderly patients

Renal and hepatic impairment: Ustekinumab has not been studied in these patient populations. No dose recommendations can be made.

Paediatric population: The safety and efficacy of ustekinumab for the treatment of Crohn's disease in children less than 18 years have not yet been established. No data are available.

METHOD OF ADMINISTRATION AND PRODUCT SUMMARY[1]

Uzpruvo 45mg

Method of administration: Uzpruvo 45 mg pre-filled syringe is for subcutaneous injection only. If possible, areas of the skin that show psoriasis should be avoided as injection sites. After proper training in subcutaneous injection technique, patients or their caregivers may inject Uzpruvo if a physician determines that it is appropriate. However, the physician should ensure appropriate follow-up of patients. Patients or their caregivers should be instructed to inject the prescribed amount of Uzpruvo according to the directions provided in the package leaflet. Comprehensive instructions for administration are given in the package leaflet.

Name of the medicinal product: Uzpruvo 45 mg solution for injection in pre-filled syringe

Qualitative and quantitative composition: Uzpruvo 45 mg solution for injection in pre-filled syringe. Each pre-filled syringe contains 45 mg ustekinumab in 0.5 mL. Ustekinumab is a fully human IgG1κ monoclonal antibody to interleukin (IL)-12/23 produced in a murine myeloma cell line using recombinant DNA technology.

Pharmaceutical form: Solution for injection (injection). The solution is clear and colourless to slightly yellow and practically free of visible particles.

Special precautions for storage: Store in a refrigerator (2°C – 8°C). Do not freeze. Keep the pre-filled syringe in the outer carton in order to protect from light. When necessary (e.g. when travelling), individual pre-filled syringes may be stored at room temperature up to 30°C for a maximum single period of up to 30 days in the original carton in order to protect from light. Further details are provided in the package leaflet and SmPC.

Excipients: Histidine, Histidine monohydrochloride, Polysorbate 80, Sucrose, Water for injections

Shelf life: 2 years

Marketing Authorisation: Genus Pharmaceuticals Holdings Ltd. (trading as STADA), Linthwaite, Huddersfield, HD7 5QH, UK

Uzpruvo is manufactured in Europe.

METHOD OF ADMINISTRATION AND PRODUCT SUMMARY[1]

Uzpruvo 90mg

Method of administration: Uzpruvo 90 mg pre-filled syringe is for subcutaneous injection only. If possible, areas of the skin that show psoriasis should be avoided as injection sites. After proper training in subcutaneous injection technique, patients or their caregivers may inject Uzpruvo if a physician determines that it is appropriate. However, the physician should ensure appropriate follow-up of patients. Patients or their caregivers should be instructed to inject the prescribed amount of Uzpruvo according to the directions provided in the package leaflet. Comprehensive instructions for administration are given in the package leaflet.

Name of the medicinal product: Uzpruvo 90 mg solution for injection in pre-filled syringe.

Qualitative and quantitative composition: Uzpruvo 90 mg solution for injection in pre-filled syringe. Each pre-filled syringe contains 90 mg ustekinumab in 1 mL. Ustekinumab is a fully human IgG1κ monoclonal antibody to interleukin (IL)-12/23 produced in a murine myeloma cell line using recombinant DNA technology.

Pharmaceutical form: Solution for injection (injection). The solution is clear and colourless to slightly yellow and practically free of visible particles.

Special precautions for storage: Store in a refrigerator (2°C – 8°C). Do not freeze. Keep the pre-filled syringe in the outer carton in order to protect from light. When necessary (e.g. when travelling), individual pre-filled syringes may be stored at room temperature up to 30°C for a maximum single period of up to 30 days in the original carton in order to protect from light. Further details are provided in the package leaflet and SmPC.

Excipients: Histidine, Histidine monohydrochloride, Polysorbate 80, Sucrose, Water for injections

Shelf life: 2 years

Marketing Authorisation: Genus Pharmaceuticals Holdings Ltd. (trading as STADA), Linthwaite, Huddersfield, HD7 5QH, UK

Uzpruvo is manufactured in Europe.

UZPRUVO PRE-FILLED SYRINGE & HOMECARE

Uzpruvo pre-filled syringe

Uzpruvo's pre-filled syringe (PFS) has been designed specifically for easy handling and a patient-friendly injection experience.

Thin needle: The Uzpruvo PFS has a thinner 29-gauge needle than reference product which has a 27-gauge needle to help improve patient comfort.[1,14,15]

Latex free: The Uzpruvo PFS is suitable for patients with latex allergies. The plunger stopper is made of bromobutyl rubber.[1]

Additionally the Uzpruvo PFS features an extended finger flange and improved grip for easy handling.[1]

After injection, the needle springs back into the protective cover to help prevent needlestick injury.[1]

Uzpruvo solution for injection (within the PFS) is citrate free.

Homecare

Uzpruvo is available from three homecare partners offering flexible delivery and nurse support for your patients.

HealthNet Homecare

HealthNet Homecare
www.healthnethomecare.co.uk
Phone: 0800 083 3060

LloydsPharmacy Clinical Homecare

Lloyds Pharmacy Clinical Homecare
www.lpclinicalhomecare.co.uk
Phone: 0345 263 6123 (England and Wales)
Phone: 0345 263 6135 (Northern Ireland and Scotland)

Sciensus

Sciensus
www.sciensus.com
Phone: 0333 1039 499

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UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

BIOSIMILARS

UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

BIOSIMILARS

What is a biosimilar medicine?

Biological medicines are complex medicines made or derived from a biological source. Biological medicines are used to treat many conditions including cancers, diabetes, arthritis, psoriasis, neutropenia and enzyme or hormone deficiencies.[16]

A biosimilar medicine (known as a 'biosimilar') contains a version of an active substance of an approved biological medicinal product, known as the reference product.[16]

Biosimilar development aims to establish similarity between the biosimilar and the reference product based on a comprehensive comparability process. This ensures the previously proven safety and efficacy of the reference product also applies to the biosimilar.[16]

Uzpruvo is STADA's ustekinumab biosimilar and offers a cost-effective alternative to the reference product.[1,2]

Why should biosimilars be used?

According to NHS England, biosimilars should be used because they offer the same clinical effectiveness and safety as their reference products, but usually at substantially lower cost.[16]

Their approval is based on comprehensive comparability studies with the reference product, which is a well-established approach used to ensure any changes during manufacture do not affect the quality, safety and efficacy of biological medicines.[16]

Biosimilars are interchangeable with the original biological product and with other biosimilars when approved, which is reflected in government guidance on the licensing of biosimilar products and supported by the joint EMA-HMA statement on interchangeability.[16]

By increasing the cost-effectiveness of medicines, biosimilars allow more patients to access treatment sooner, and release funding for innovative treatments and improvements in pathways of care.[16]

Uzpruvo® is currently not approved for the Ulcerative Colitis indication (since the originator still has exclusivity for this indication)

LANDSCAPE
GASTROENTEROLOGY
DERMATOLOGY & RHEUMATOLOGY

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UK-UZPRU-06 | July 2024

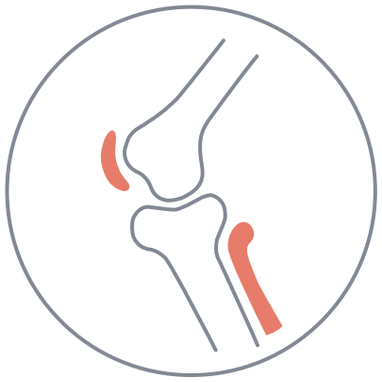
UZPRUVO® ustekinumab

INDICATIONS IN GASTROENTEROLOGY, DERMATOLOGY AND RHEUMATOLOGY

Uzpruvo® is approved to treat:[1]

Moderate to severe Crohn's disease in adults

Moderate to severe plaque psoriasis in adults and moderate to severe paediatric plaque psoriasis



Psoriatic arthritis in adults

Uzpruvo® is currently not approved for the Ulcerative Colitis indication (since the originator still has exclusivity for this indication)

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UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

NICE GUIDELINES
FOR CROHN'S DISEASE[17]

Recommendations[17]

Ustekinumab is recommended, within its marketing authorisation, as an option for treating moderately to severely active Crohn's disease, that is, for adults who have had an inadequate response with, lost response to, or were intolerant to either conventional therapy or a TNF-alpha inhibitor or have medical contraindications to such therapies.

The choice of treatment between ustekinumab or another biological therapy should be made on an individual basis after discussion between the patient and their clinician about the advantages and disadvantages of the treatments available. If more than 1 treatment is suitable, the least expensive should be chosen (taking into account administration costs, dosage and price per dose).

Ustekinumab should be given until treatment failure (including the need for surgery) or until 12 months after the start of treatment, whichever is shorter. People should then have their disease reassessed in accordance with NICE's recommendations for infliximab and adalimumab for the treatment of Crohn's disease to see whether treatment should continue.

Taken from NICE technology appraisal guidance, reference number: TA456. *Ustekinumab for moderately to severely active Crohn's disease after previous treatment.* Published: 12 July 2017. Last updated: 03 March 2017.[17]

NICE GUIDELINES FOR USTEKINUMAB WHEN TREATING ADULTS WITH PLAQUE PSORIASIS[18]

Recommendations[18]

Ustekinumab is recommended as a treatment option for adults with plaque psoriasis when the following criteria are met.

- The disease is severe, as defined by a total Psoriasis Area Severity Index (PASI) score of 10 or more and a Dermatology Life Quality Index (DLQI) score of more than 10.
- The psoriasis has not responded to standard systemic therapies, including ciclosporin, methotrexate and PUVA (psoralen and long-wave ultraviolet radiation), or the person is intolerant of or has a contraindication to these treatments.

Ustekinumab treatment should be stopped in people whose psoriasis has not responded adequately by 16 weeks after starting treatment. An adequate response is defined as either:

- A 75% reduction in the PASI score (PASI 75) from when treatment started or
- A 50% reduction in the PASI score (PASI 50) and a 5-point reduction in the DLQI score from when treatment started.

When using the DLQI, healthcare professionals should take into account any physical, sensory or learning disabilities, or communication difficulties that could affect the responses to the DLQI and make any adjustments they consider appropriate.

Taken from NICE technology appraisal guidance, reference number: TA180. *Ustekinumab for the treatment of adults with moderate to severe psoriasis.* Published: 23 September 2009. Last updated: 03 March 2017.[18]

NICE GUIDELINES FOR USTEKINUMAB WHEN TREATING PLAQUE PSORIASIS IN CHILDREN AND YOUNG PEOPLE[19]

Recommendations relating to Ustekinumab[19]

Ustekinumab is recommended as an option for treating plaque psoriasis in children and young people aged 12 years or older, only if the disease:

- is severe, as defined by a total PASI of 10 or more
- has not responded to standard systemic therapy, such as ciclosporin, methotrexate or phototherapy, or these options are contraindicated or not tolerated.

Stop ustekinumab treatment at 16 weeks, if the psoriasis has not responded adequately. An adequate response is defined as a 75% reduction in the PASI score from the start of treatment.

The choice of treatment should be made on an individual basis after discussion between the responsible clinician and the patient, or their parents or carers, about the advantages and disadvantages of the treatments available.

Where a **biosimilar product** is available, start treatment with the **least expensive option,** taking into account administration costs, the dose needed and the product cost per dose.

When using the PASI, healthcare professionals should take into account skin colour and how this could affect the PASI score, and make the clinical adjustments they consider appropriate.

Taken from NICE technology appraisal guidance, reference number: TA455. *Adalimumab, etanercept and ustekinumab for treating plaque psoriasis in children and young people.* Published: 12 July 2017. Abridged to include guidance relating to Ustekinumab only.[19]

NICE GUIDELINES FOR USTEKINUMAB WHEN TREATING ACTIVE PSORIATIC ARTHRITIS[20]

Ustekinumab is recommended as an option, alone or in combination with methotrexate, for treating active psoriatic arthritis in adults only when:

- treatment with tumour necrosis factor (TNF) alpha inhibitors is contraindicated but would otherwise be considered (as described in NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis and golimumab for the treatment of psoriatic arthritis) or
- the person has had treatment with 1 or more TNF–alpha inhibitors.

Ustekinumab treatment should be stopped if the person's psoriatic arthritis has not shown an adequate response using the Psoriatic Arthritis Response Criteria (PsARC) at 24 weeks. An adequate response is defined as an improvement in at least 2 of the 4 criteria (1 of which must be joint tenderness or swelling score), with no worsening in any of the 4 criteria. As recommended in NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis, people whose disease has a Psoriasis Area and Severity Index (PASI) 75 response but whose PsARC response does not justify continuing treatment should be assessed by a dermatologist to determine whether continuing treatment is appropriate on the basis of skin response (see NICE technology appraisal guidance on ustekinumab for the treatment of adults with moderate to severe psoriasis).

When using the Psoriatic Arthritis Response Criteria (PsARC) healthcare professionals should take into account any physical, sensory or learning disabilities, or communication difficulties that could affect a person's responses to components of the PsARC and make any adjustments they consider appropriate.

Excerpt from NICE technology appraisal guidance, reference number: TA340. *Ustekinumab for treating active psoriatic arthritis.* Published: 4 June 2015. Last updated: 3 March 2017.[20]

EVIDENCE
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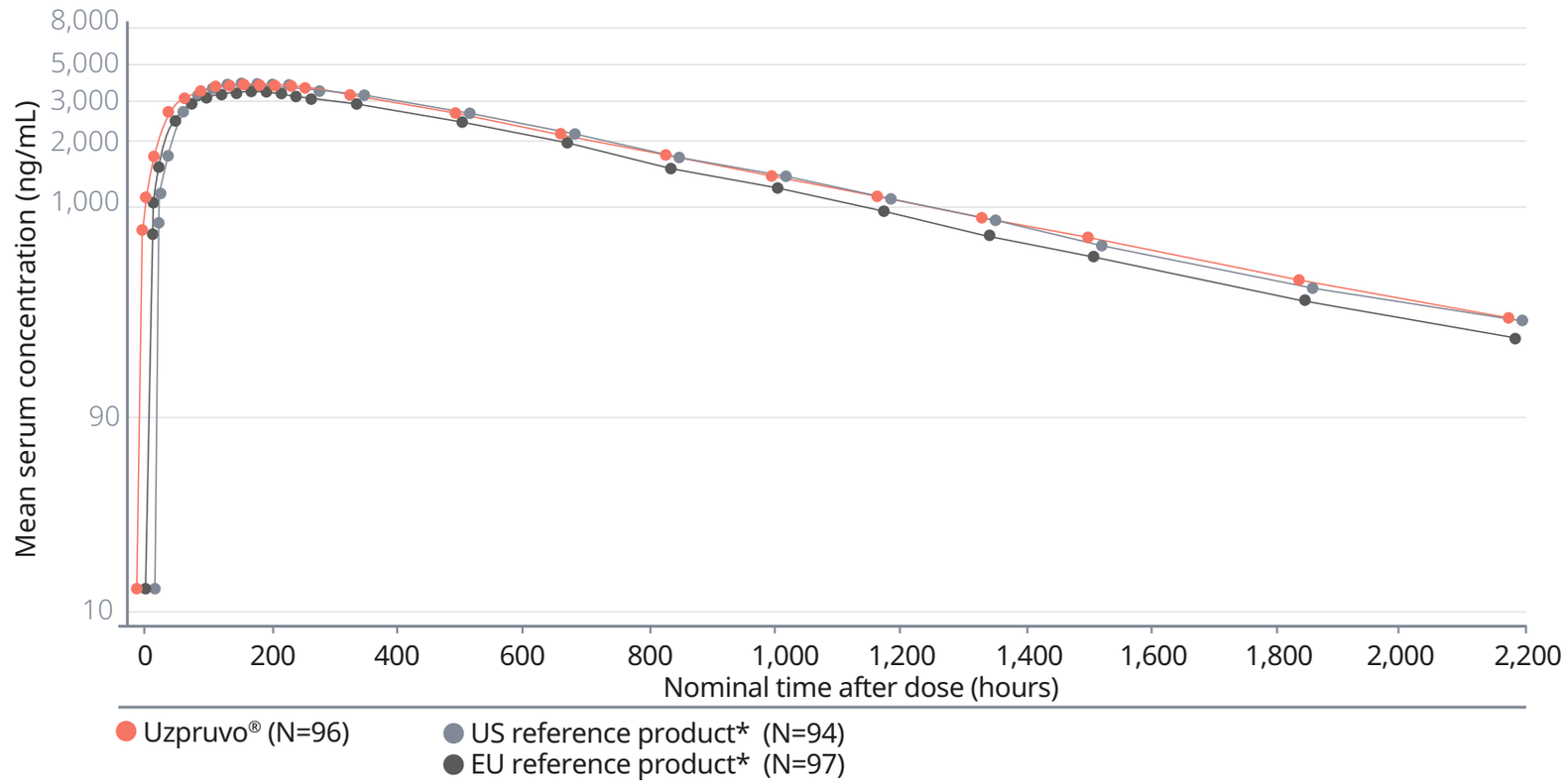
UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

UZPRUVO® VS THE REFERENCE PRODUCT*:
SIMILAR PK PROFILE[21]

Similar mean serum ustekinumab concentration-time profiles for Uzpruvo®
and the reference products*

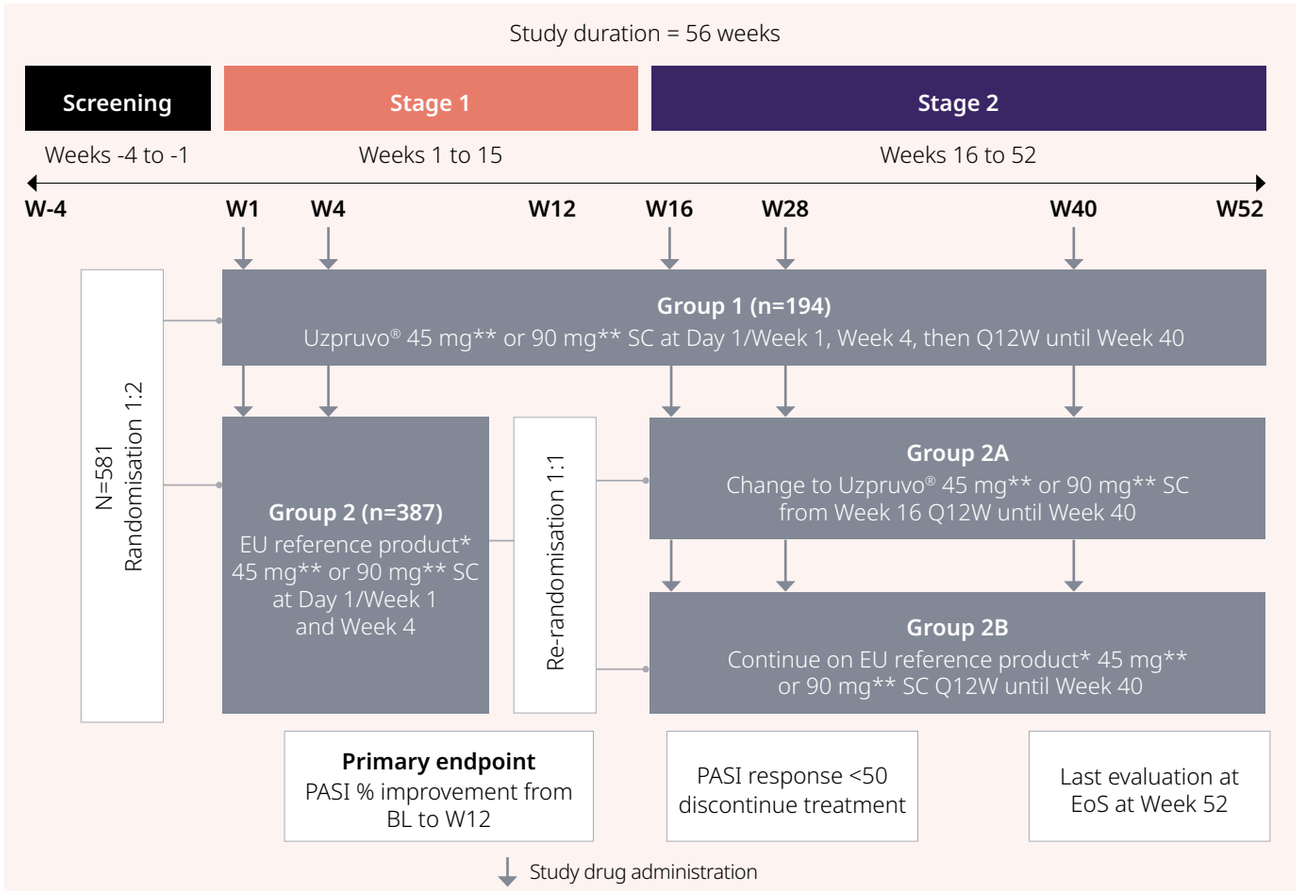
Primary endpoint: Mean (± SD) serum concentration-time profile of ustekinumab by treatment group (PK population)



Adapted from Wynne C et al. 2023[21]

*EU-approved Stelara® and
US-approved Stelara®

UZPRUVO® VS THE REFERENCE PRODUCT*:
PHASE III TRIAL DESIGN[22]



Primary objective:

PASI % improvement from BL to Week 12

Secondary objective

- ✓ PASI 50/75/90/100 response rates from BL at Weeks 4, 8, 12, 16, 28, 40 and 52
- ✓ PASI % improvement from BL to Weeks 4, 8, 16, 28, 40 and 52
- ✓ sPGA responses
- ✓ Change from baseline in DLQI and BSA affected by psoriasis
- ✓ Additional secondary assessments were safety, serum trough concentrations at steady state and immunogenicity

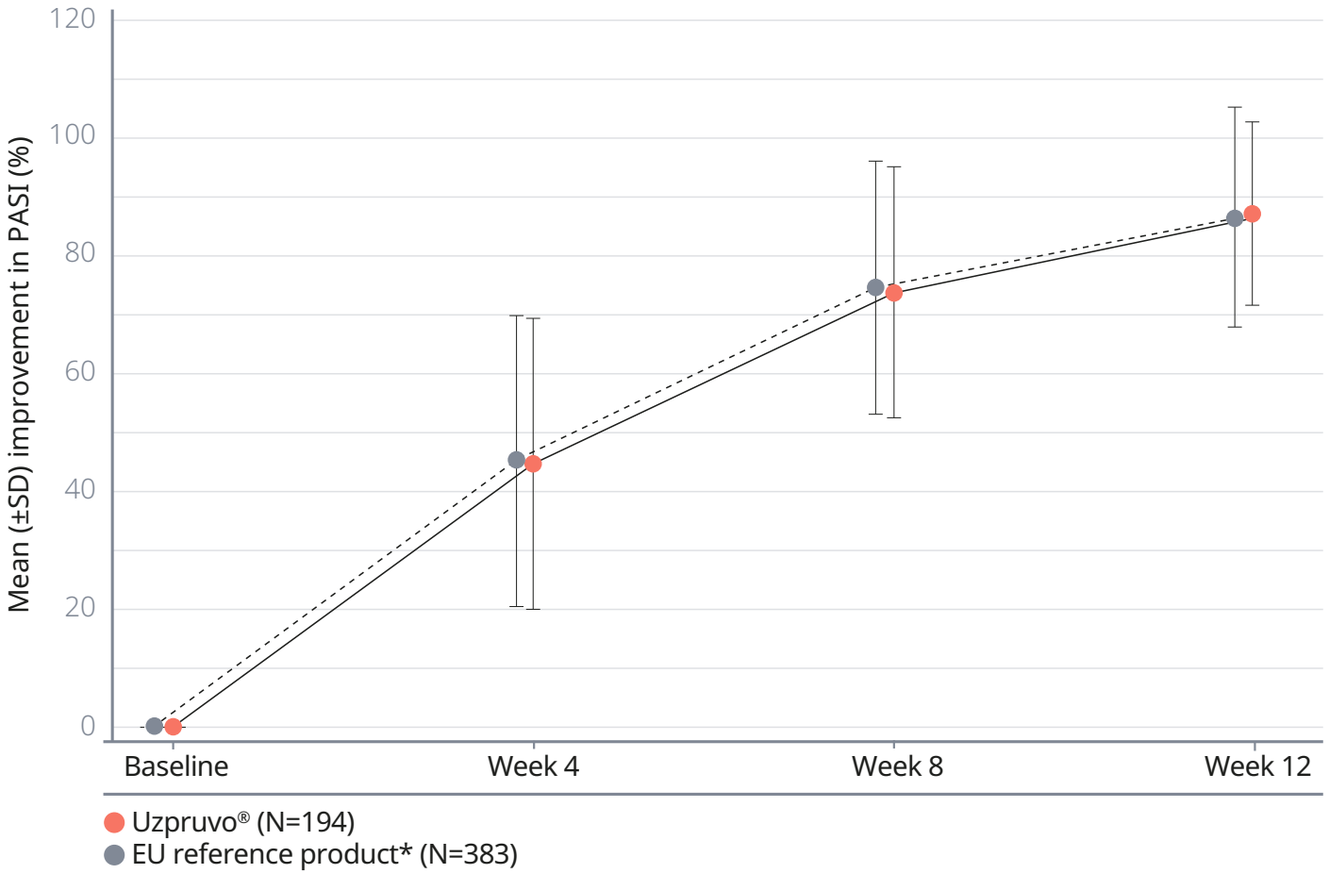
Adapted from Feldman SR et al. 2023[22]

BL, baseline; BSA, body surface area; DLQI, Dermatology life quality index; EoS, end of study; PASI, Psoriasis Area and Severity Index; Q12W, every 12 weeks; SC, subcutaneous; sPGA, statistic physician's global assessment
*Stelara®; **≤100 kg body weight: 45 mg, >100 kg body weight: 90 mg

UZPRUVO® VS THE REFERENCE PRODUCT*: **SIMILAR EFFICACY**[22]

The study primary endpoint was met: the percent **improvement in PASI** from BL to Week 12 for Uzpruvo® (87.3%) and the reference product* (86.8%) **was similar****

Primary endpoint: Improvement in PASI from BL up to Week 12



Adapted from Feldman SR et al. 2023[22]

ANCOVA, analysis of covariance; BL, baseline; CI, confidence interval; PASI, Psoriasis Area and Severity Index; SD, standard deviation

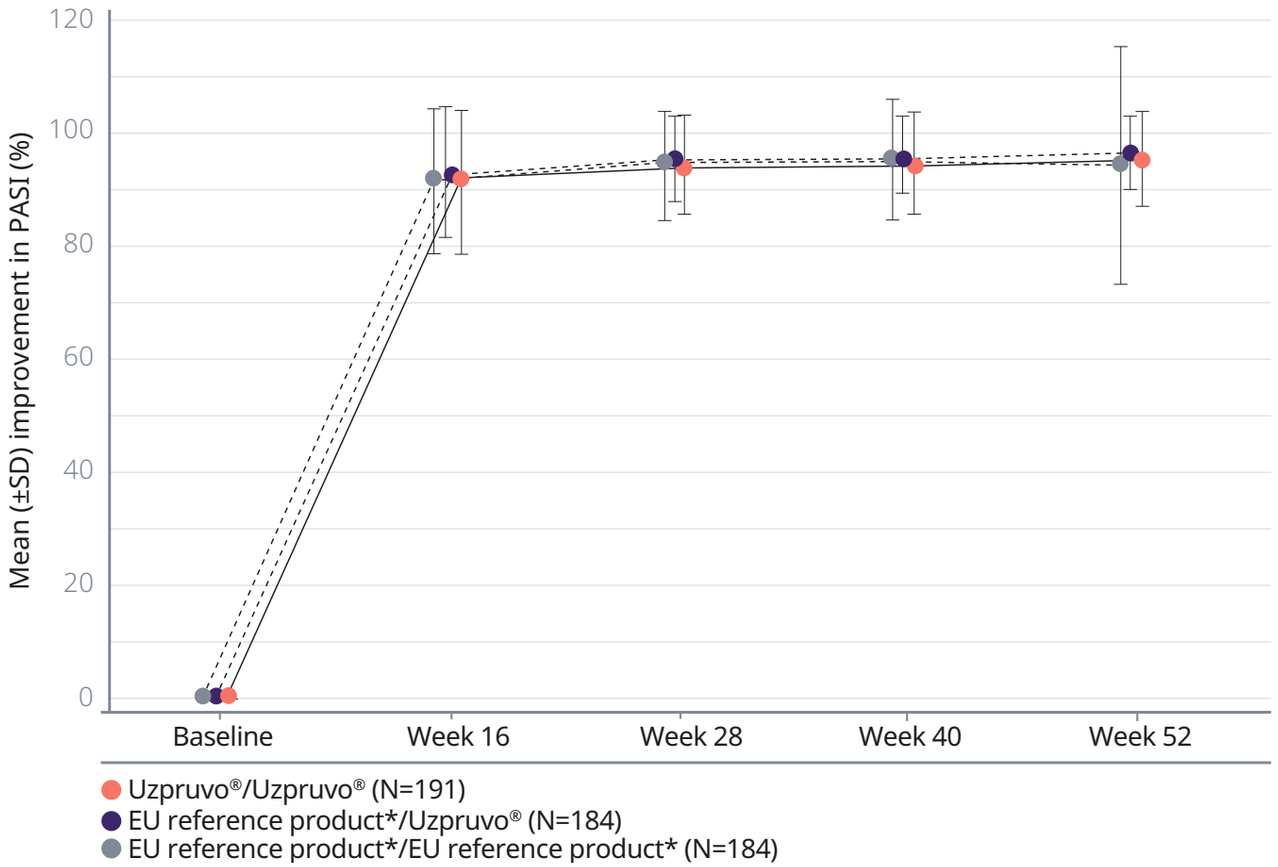
ANCOVA analysis. The 90% CI (-2.14, 3.01) and 95% CI (□2.63, 3.50) for the primary endpoint were within the equivalence margins (±10%/±15%)

*Stelara®; **In patients with body weight ≤100 kg, similar PASI improvement was observed in both treatment arms (Uzpruvo® 86.9% vs EU reference product 86.8%); the 95% CI for the LS means difference (0.1) in percent PASI improvement from baseline to Week 12 was -3.25%, 3.43%, within the predefined EMA equivalence margin of ±15%

UZPRUVO® VS THE REFERENCE PRODUCT*: **SIMILAR EFFICACY**[22]

Similar long-term efficacy, even after treatment change: the percent **improvement in PASI** from BL to Week 52 for Uzpruvo® and the reference product* **was comparable**

Secondary endpoint: Improvement in PASI from BL up to Week 52



Adapted from Feldman SR et al. 2023[22]

BL, baseline; PASI, Psoriasis Area and Severity Index; SD, standard deviation

*Stelara®

UZPRUVO® VS THE REFERENCE PRODUCT*: **SIMILAR EFFICACY, EVEN AFTER TREATMENT CHANGE**[22]

Change of treatment from the reference product* to Uzpruvo® did not result in any clinically meaningful differences in secondary efficacy endpoints

When comparing the group that changed treament and the group that continued with the reference product*, there was no clinically meaningful difference in...

Percent improvement in PASI

sPGA responses

DLQI improvement

Percentage BSA affected by chronic PsO

BSA, body surface area; DLQI, dermatology life quality index; PASI, Psoriasis Area and Severity Index; PsO, plaque psoriasis; sPGA, static Physician Global Assessment
*Stelara®

UZPRUVO® VS THE REFERENCE PRODUCT*:
SIMILAR SAFETY PROFILE, EVEN AFTER TREAMENT CHANGE[22]

Comparable AE profiles for Uzpruvo® and the reference product* up to Week 52, even after treatment change.

Secondary endpoint: Overview of TEAEs per therapeutic indication (safety analysis set)

	Up to Week 16		Weeks 16 to 28			Weeks 28 to 52		
System organ class preferred term	Uzpruvo®	EU RP*	Uzpruvo®/ Uzpruvo®	EU RP*/ Uzpruvo®	EU RP*/ EU RP*	Uzpruvo®/ Uzpruvo®	EU RP*/ Uzpruvo®	EU RP*/ EU RP*
Patients n (%)	(N=194)	(N=387)	(N=193)	(N=192)	(N=189)	(N=191)	(N=184)	(N=184)
Any TEAE	67 (34.5)	130 (33.6)	21 (10.9)	30 (15.6)	29 (15.3)	32 (16.8)	42 (22.8)	39 (21.2)
Treatment-related TEAEs	10 (5.2)	37 (9.6)	0	5 (2.6)	2 (1.1)	0	3 (1.6)	6 (3.3)
Serious TEAEs	0	7 (1.8)	0	0	1 (0.5)	1 (0.5)	1 (0.5)	1 (0.5)
Serious TEAEs (treatment-related)	0	0	0	0	0	0	0	0
TEAE leading to discontinuation	0	3 (0.8)	1 (0.5)	3 (1.6)	4 (2.1)	0	0	1 (0.5)
TEAE leading to discontinuation (treatment-related)	0	0	0	0	0	0	0	0
Death	0	0	0	0	0	0	0	0
Injection site reation	2 (1.0)	9 (2.3)	0	1 (0.5)	1 (0.5)	0	1 (0.5)	2 (1.1)
Skin and subcutaneous tissue disorder	0	2 (0.5)	0	0	0	0	0	0
Infections and infestations	0	0	0	0	0	0	1 (0.5)	0
Lower respiratory tract infection	0	0	0	0	0	0	1 (0.5)	0

Adapted from Feldman SR et al. 2023[22]

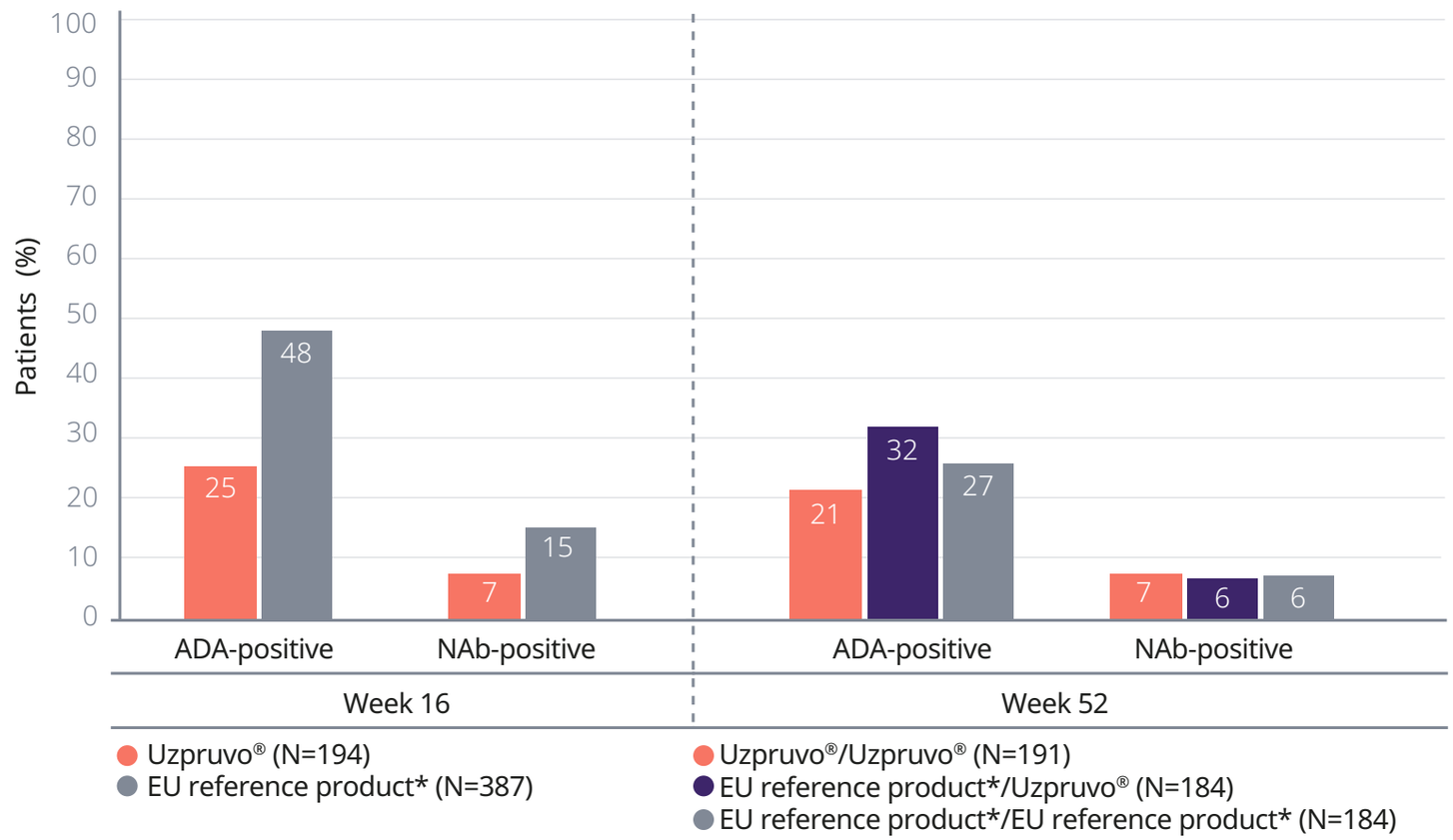
AE, adverse event; RP, reference product; TEAE, treatment-emergent adverse event
*Stelara®

Uzpruvo contraindications: Hypersensitivity to the active substance or to any of the excipients. Clinically important, active infection (e.g. active tuberculosis).

UZPRUVO® VS THE REFERENCE PRODUCT*: **SIMILAR IMMUNOGENICITY, EVEN AFTER TREATMENT CHANGE**[22]

The incidence of treatment emergent ADAs up to Week 52 **did not have any clinically meaningful difference** for Uzpruvo® and the reference product*, even after changing treatments. NAb frequencies remained **consistent over time**

Confirmed positive ADA- and Nab incidence by visits (safety analysis set)



Adapted from Feldman SR et al. 2023[22]

ADA, anti-drug antibodies; NAbs, neutralising antibodies
*Stelara®

SUMMARY & COST

UK-UZPRU-06 | July 2024

SUMMARY OF NHS/NICE GUIDANCE & COST OF UZPRUVO

Uzpruvo is STADA's ustekinumab biosimilar and offers a cost-effective alternative to the reference product.[1,2]

NHS England and NHS Improvement supports the appropriate use of biosimilar medicines which will drive greater competition and release cost savings to support the treatment of an increasing number of patients and the uptake of new and innovative medicines.[23]

Excerpt from NHS Commissioning framework for biological medicines:[23]

> *Aim: **At least 90% of new patients** will be prescribed the best value biological medicine within 3 months of launch of a biosimilar medicine.*
>
> *Aim: **At least 80% of existing patients** will be prescribed the best value biological medicine within 12 months, or sooner if possible.*

NICE guidance on biosimilars

If NICE guidance exists for a biological medicine, the same guidance applies to the biosimilar. NICE technology appraisal guidance often recommends treatment with the least expensive option, taking into account administration costs, dosages, mode of administration and treatment schedules. Biosimilars will often be the least expensive option when compared to their reference medicines.[24]

Uzpruvo cost

Dose	Cost[2]	Saving vs. reference product[2]
45 mg	£1,932.30	10%
90 mg	£1,932.30	10%

WHY CHOOSE UZPRUVO?

Cost-effective option enabling improved access to ustekinumab treatment[1,2]

Three homecare partners offering flexible delivery and nurse support for your patients

Manufactured in Iceland and packaged in the United Kingdom. STADA supply chain excellence with service levels exceeding 95% throughout 2022*,[13]

Patient-friendly pre-filled syringe: easy handling, thinner needle than the reference product‡ & latex-free¥,[1,14,15]

Equivalent efficacy, safety, immunogenicity & PK profile to the reference product†,[21,22]

Manufactured using 100% renewable energy sources. 25% reduction in total carbon emissions by STADA between 2020 and 2023[12]

PFS, pre-filled syringe

*Supply chain is constantly being optimised and manufacturing location is subject to change; † Stelara®; ‡ 29 vs 27-gauge needle of the reference product, Stelara®[4]; ¥ Plunger stopper made of bromobutyl rubber

For UK healthcare professionals only. Always read the Summary of Product Characteristics (SmPC) before administration.
Prescribing Information can be found on the **final page** and **online**.

UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

REFERENCES AND PRESCRIBING INFORMATION

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UK-UZPRU-06 | July 2024

UZPRUVO® ustekinumab

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UZPRUVO PRESCRIBING INFORMATION

Prescribing Information

▼ Uzpruvo 45 mg solution for injection in pre-filled syringe.

▼ Uzpruvo 90 mg solution for injection in pre-filled syringe.

Please refer to the Summary of Product Characteristics before prescribing Uzpruvo

Presentation: Each 45 mg pre-filled syringe contains 45 mg ustekinumab in 0.5 mL. Each 90 mg pre-filled syringe contains 90 mg ustekinumab in 1 mL.

Indications: Treatment of moderate to severe plaque psoriasis in adults who failed to respond to, have a contraindication to or are intolerant to other systemic therapies. Moderate to severe plaque psoriasis in children from the age of 6 years who are inadequately controlled by, or intolerant to other systemic therapies or phototherapies. Active psoriatic arthritis (PsA) in adults when response to non-biological disease-modifying anti-rheumatic drug (DMARD) therapy has been inadequate. Moderate to severe Crohn's disease in adults who have an inadequate response with, lost response to, or were intolerant to either conventional therapy or a TNF *α* antagonist or have medical contraindications to such therapies.

Dosage and administration: Use under the guidance and supervision of physicians experienced in the diagnosis and treatment of the indicated conditions**.** ***Plaque psoriasis*** **-** initial dose of 45 mg administered subcutaneously, followed by a 45 mg dose 4 weeks later, and then every 12 weeks thereafter. ***Psoriatic arthritis (PsA)*** **-** initial dose of 45 mg administered subcutaneously, followed by a 45 mg dose 4 weeks later, and then every 12 weeks thereafter, alternatively, 90 mg may be used in patients with a body weight > 100 kg. ***Paediatric plaque psoriasis (6 years and older)*** **-** dose is based on body weight see SmPC for the recommended dose, Uzpruvo should be administered at weeks 0 and 4, then every 12 weeks thereafter. ***Crohn's disease*** **-** treatment of CD should be initiated by intravenous infusion, another ustekinumab product must be used as first intravenous dose (130 mg concentrate for solution for infusion). The first subcutaneous administration of 90 mg Uzpruvo should take place at week 8 after the intravenous dose. After this, dosing every 12 weeks is recommended. ***Method of administration*** **-** subcutaneous injection only.

Contraindications: Hypersensitivity to the active substance or to any of the excipients. Clinically important, active infection (e.g. active tuberculosis).

Warnings and Precautions: ***Infections*** **-** ustekinumab may have the potential to increase the risk of infections and reactivate latent infections. Opportunistic infections including reactivation of tuberculosis, other opportunistic bacterial infections, opportunistic fungal infections, opportunistic viral infections, and parasitic infections have been reported. ***Malignancies*** **–** immunosuppressants have the potential to increase the risk of malignancy. All patients, in particular those greater than 60 years, patients with a medical history of prolonged immunosuppressant therapy or those with a history of PUVA treatment, should be monitored for the appearance of non-melanoma skin cancer. ***Systemic and respiratory hypersensitivity reactions – systemic***, serious hypersensitivity reactions including anaphylaxis and angioedema have occurred. ***Respiratory***, allergic alveolitis, eosinophilic pneumonia, and non-infectious organising pneumonia have been reported. ***Cardiovascular events*** **-** in patients with psoriasis exposed to ustekinumab cardiovascular events including myocardial infarction and cerebrovascular accident have been observed. ***Vaccinations*** **-** live viral or live bacterial vaccines should not be given concurrently with Uzpruvo. ***Serious skin conditions*** **-** in patients with psoriasis, exfoliative dermatitis has been reported. Patients with plaque psoriasis may develop erythrodermic psoriasis. ***Lupus-related conditions*** - lupus-related conditions have been reported.

Fertility, Pregnancy and lactation: Women of childbearing potential should use effective methods of contraception during treatment and for at least 15 weeks after treatment. ***Pregnancy*** **-** avoid the use of Uzpruvo in pregnancy. ***Breast-feeding*** - ustekinumab is excreted in breast milk, risk to the breastfed infant cannot be excluded. ***Fertility*** - effect on fertility is unknown.

Undesirable effects: Serious side effects: cellulitis, herpes zoster, serious hypersensitivity reactions, anaphylaxis, angioedema, organising pneumonia, eosinophilic pneumonia, exfoliative dermatitis, erythrodermic psoriasis, hypersensitivity vasculitis, myocardial infarction, cerebrovascular accident, lupus-like syndrome, cutaneous lupus erythematosus. Common side effects: upper respiratory tract infection, nasopharyngitis, sinusitis, dizziness, headache, oropharyngeal pain, diarrhoea, nausea, vomiting, pruritus, back pain, myalgia, arthralgia. For full list of side effects, consult SmPC.

Legal Category: POM

Pack size and price: Solution for injection in pre-filled syringe - 1 x 45 mg (£1,932.30), 1 x 90 mg (£1,932.30)

MA Number: PLGB 17225/0022, PLGB 17225/0023

MA Holder: Genus Pharmaceuticals Holdings Limited (trading as STADA), Linthwaite, Huddersfield, HD7 5QH, UK

Date of preparation: April 2024

Unique ID number: UK-Uzpru-9

Adverse events should be reported to Thornton and Ross Limited by emailing thorntonross@medinformation.co.uk or by calling 01484 848164. Additionally, reporting forms and information can be found at: https://yellowcard.mhra.gov.uk or search for MHRA Yellow Card in the Google Play or Apple App Store.

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UZPRUVO® ustekinumab ▼