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CED
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Concise Report

Gaining exposure on perceptions of sunscreen: a national survey of patients with melanoma

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Abstract

The incidence of melanoma is increasing. We ascertained perceptions regarding sunscreen and factors influencing choice in patients with melanoma. A survey was distributed to all members of a support group for people with melanoma. In total, 571 responses were received across 6 weeks. Most respondents (n=452/571; 79.2%) indicated that they knew how much sunscreen to apply; the most popular frequency of application was once daily (n=180/571; 31.5%). The most popular cosmetic benefit respondents indicated was reduced redness on sun-exposed areas of the skin (n=418/571; 73.2%). Most respondents (n=552/571; 96.7%) agreed that more education is needed regarding the importance of wearing sunscreen. The three most popular factors influencing sunscreen choice were a sun protection factor (SPF) > 50 (n=299/571; 52.4%), dermatologist recommendation (n=267/571; 46.8%) and price (n=262/571; 45.9). Sustainable packaging (n=45/571; 7.9%) and ethical sourcing of ingredients (n=65/571; 11.4%) were not ranked highly. Given that 42.0% (n=240/571) only applied sunscreen on sunny days, an education campaign is required. Industry should consider public education regarding sustainability. A further study ascertaining the views and perceptions of sunscreen in a cohort of people without melanoma is strongly encouraged.

There are more than 16 000 new cases of melanoma per year in the UK, with 86% of cases being preventable.[1] Ultraviolet (UV) light exposure is a modifiable risk factor for melanoma and other skin cancers. In addition to sun protective behaviours, sunscreen is a readily available, cheap and effective modality in reducing the risk of skin cancer. While the medical benefits of sunscreen are known, its use and the factors influencing patient choice of product are less well understood.

Report

A semistructured online questionnaire was sent to a support group for patients with melanoma in the UK (Melanoma UK). Data were collected for 6 weeks from July to August 2023, collating 571 responses. The baseline respondent characteristics are shown in Table 1.

While most respondents indicated that they knew how much sunscreen to apply (n=452/571; 79.2%), there were varying responses as to the methodology of measuring the amount needed, with finger lengths (n=216/571; 37.8%) and teaspoons (n=140/571; 24.5%) being the most popular. There was significant variability in the frequency of application (Table 2), the most popular being once daily (n=180/571; 31.5%). Most respondents (n=278/571; 48.7%) applied sunscreen every day vs. 42.0% (n=240/571) who only applied it when sunny. Most respondents (n=360/561; 64.2%) had been using sunblock for > 10 years (Table 2).

The most popular benefit of sunscreen indicated was reduced redness on sun-exposed areas of the skin (n=418/571; 73.2%); 16.3% (n=93/571) were not aware of any cosmetic benefits. Others reported reduced sunspots or pigmentation (n=401/571; 70.2%), fewer fine lines and wrinkles (n=343/571; 60.0%) and reduced photoageing (n=338/571; 59.2).

An overwhelming majority (n=541/571; 94.7%) used additional forms of sun protection. Of 560 responses, the most popular additional form of sun protection was sunglasses

Table 1 Baseline characteristics of respondents to a national survey on perceptions of sunscreen

Patient characteristics	Number of respondents (n=571)
Age (years)	
18–30	24
31–40	50
41–50	115
51–60	182
61–70	138
71–80	55
> 80	7
Sex	
Male	100
Female	471
Respondents with previous skin cancer	
Melanoma	343
Nonmelanoma skin cancer	98

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Table 2 Frequency of sunscreen use in respondents to a national survey on perceptions of sunscreen

Daily application frequency of sunscreen	Number of responses
Once daily	180/563
Twice daily	160/563
Three times daily	88/563
Four times daily	87/563
Not applicable	48/563
Frequency of sunscreen use	
Every day	278/571
Only when it is sunny	240/571
Only when I remember	16/571
Occasionally	33/571
Never	4/571
Duration of sunscreen use (years)	
> 10	360/561
5–10	68/561
1–5	107/561
< 1 year	26/561

(*n*=506/560; 90.4%). Other forms included seeking shade (*n*=494/560; 88.2%), wearing a wide-brimmed hat (*n*=396/560; 70.7%), avoiding the sun between 11.00 h and 15.00 h (*n*=343/560; 61.3%) and long-sleeved clothing (*n*=339/560; 60.5%).

In terms of UV light exposure activities, 19.6% (*n*=112/571) had frequent holidays to countries with high sun exposure, with 5.8% (*n*=33/571) partaking in sun tanning and 1.8% (*n*=10/571) admitting to sunbed use. However, 76.0% (*n*=434/571) did not partake in any of those activities. In total, 564 of 571 respondents (98.8%) noted an awareness of the potential risks of prolonged sun exposure; 50.3% (*n*=287/571) were aware of their burn time; 96.7% (*n*=552/571) agreed that more education is needed regarding the importance of wearing sunscreen; and 43.3% (*n*=247/571) knew the difference between physical and chemical sunscreen.

In total, 278 of 571 respondents (48.7%) found the labelling of sunscreen bottles confusing. Most respondents (*n*=352/571; 61.6%) did not suffer from skin irritation or allergy from using sunscreen. Table 3 shows the factors that influenced the choice of sunscreen in our cohort: sunscreen with an SPF > 50 (*n*=299/571; 52.4%) was the most popular factor.

Table 3 Factors affecting choice of sunscreen in respondents to a national survey on perceptions of sunscreen

Factors	Number of responses (*n*=571)
Sunscreen with a sun protection factor > 50	299
Dermatologist recommendation	267
Price	262
Texture	239
Recognizable brand	108
Recommendation by a patient support group	98
Recommendation by another patient	88
Odour of the sunscreen	81
Ethical sourcing of ingredients	65
Sustainable packaging	45
Colour	40
Recommendation via TV or social media advert	10
Recommendation by a social media influencer or celebrity	3

Our results demonstrate a pressing need for informed patient education with regard to the frequency of application: 42.0% (*n*=240/571) of respondents only applied sunscreen when it was sunny. This may indicate a perception that UV rays are not present during cloudy weather. This provides an opportunity for targeted health promotion at local and national levels, to potentially reduce the future incidence of skin cancer. Current National Institute for Health and Care Excellence guidance on sunlight exposure does not iterate the need for sunscreen use during all weather,[2] and sunscreen use is only advocated as primary prevention in those at risk of developing melanoma.[3] This should be reflected to allow clinicians to adapt their health promotion for patients with melanoma.

Certain aspects of the sampled cohort are encouraging. A significant proportion (*n*=541/571; 94.7%) used additional forms of sun protection. This highlights a strong awareness of the importance of using alternative sun protection measures. However, these data do not specifically differentiate between those using additional sun protection measures as an adjunct to sunscreen and those using additional sun protection measures instead of sunscreen.

The top three most popular factors in influencing choice of sunscreen were an SPF > 50 (*n*=299/571; 52.4%), dermatologist recommendation (*n*=267/571; 46.8%) and price (*n*=262/571; 45.9%). A randomized controlled trial conducted in the USA found that patients were more likely to use alcohol-based spray sunscreen because it was less greasy and less likely to leave a film; patients were less likely to feel hot relative to other types of sunscreen.[4] Sustainability is one of the least important factors when choosing a sunscreen. Sustainable packaging (*n*=45/571; 7.9%) and ethical sourcing of ingredients (*n*=65/571; 11.4%) were not ranked highly. This demonstrates an incongruence between governmental objectives and patient priorities when considering the importance of sustainability in sunscreen products to satisfy the net zero emissions target by 2050, as mandated by the Paris Agreement.[5] Industry should be encouraged to lead a public education campaign regarding sustainability in sunscreen products.[6]

Inevitably, this study had some limitations. A significant limitation is that the study focused on the secondary prevention of melanoma. The study did not consider the views and perceptions of individuals without melanoma, negating the general population. It is difficult to generalize the findings of this study to the wider population; thus, in the UK, the perceptions of individuals without skin cancer regarding sunscreen use are unknown.

We acknowledge the distribution of the study using online methods to members of a patient support group, who may be more motivated and educated than the general population. Limited access to the internet may neglect older individuals and those living in rural settings, who are relatively more likely to have skin cancer owing to UV exposure across their lifespan. This is reflected in our demographic: 10% of respondents were between the age of 71 and 80 years, while 1% were above the age of 80 years.

We are also cognizant of the unbalanced sex skewing. Most respondents were women [*n*=471/571 (82.5%) vs. *n*=100/571 (17.5%) men]. There may be some plausible

reasons for the lack of male representation. The first is that the sampled community may have had a sex imbalance as there was no method to ascertain the sex characteristics of the patient support group. The second is that there may be an indication that men are not as invested in general skincare as women, which risks potentially aggravating a sex-based inequity in skin cancer prevention. Colleagues in the USA have assessed male behaviour towards skincare and sunscreen use in 705 participants.[7] In that study, most men ($n=612$; 83%) did not use sunscreen daily vs. 38% who used it on a weekly basis. Driving factors for sunscreen use included medical and cosmetic concerns: a significant proportion ($n=575$; 82%) used it to reduce the risk of skin cancer, with 42% ($n=299$) using it to look younger. Men are also less likely to adhere to sun protection behaviour.[8] This is in agreement with our conclusion that more targeted education may be needed to encourage men to increase their interest in sunscreen use.

To our knowledge, this is the first study to ascertain perceptions of sunscreen use in individuals with melanoma. The study has demonstrated a breadth of issues pertaining to individuals with melanoma, regarding secondary prevention, education and factors affecting the choice of sunscreen. A further study ascertaining the views and perceptions of sunscreen in a cohort of people without melanoma is strongly encouraged.

Learning points

- The incidence of melanoma continues to increase.
- Sunscreen is a vital tool to protect against and reduce the risk of developing skin cancer.
- Sunscreen is readily available and relatively cheap in protecting against the risk of developing skin cancer.
- There were disparities in sunscreen use (patients generally used sunscreen on sunny days), while the frequency of application varied.
- The three most important factors influencing patient choice of sunscreen were sun protection factor, dermatologist recommendation and price.

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Conflicts of interest

F.R.A. has received honoraria for advisory work and speaker fees from L'Oréal and Galderma. The other authors declare no conflicts of interest.

Data availability

The data underlying this article are available in the article.

Ethics statement

Not applicable.

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No trend toward increased AE rates over time (pooled PsA, AS, PsO):*[6]

AEs of select interest (EAIR per 100 PY)	1 year	2 years	3 years	4 years	5 years	6 years	Cumulative rate
Serious infections Cases	2.0 n=149	1.7 n=475	0.7 n=649	1.3 n=1,841	1.3 n=2,285	1.1 n=2,226	1.3 n=8,719
Malignant or unspecified tumours Cases	0.2 n=15	0.2 n=50	0.2 n=225	0.3 n=422	0.3 n=520	0.3 n=573	0.3 n=1,896
MACE Cases	0.2 n=15	0.1 n=39	0.2 n=151	0.2 n=238	0.2 n=264	0.1 n=287	0.2 n=1,031
Total IBD Cases	0.2 n=12	0.2 n=46	0.2 n=185	0.3 n=340	0.2 n=312	0.1 n=261	0.2 n=1,291
Exposure (PY)	7450	28,549	93,744	137,325	182,024	212,636	680,470

No trend towards increased rates of malignancy, MACE or IBD over time[6]

The most frequently reported adverse reactions are upper respiratory tract infections (17.1%) (most frequently nasopharyngitis, rhinitis).[1,2] Refer to the prescribing information for a summary of adverse events.

Adapted from Novartis Data on File. 2021.[6]

Refer to the Cosentyx Summary of Product Characteristics for full details, dosing and administration, including special populations.

Cosentyx is indicated for the treatment of moderate to severe **PsO** in adults, children and adolescents from the age of 6 years who are candidates for systemic therapy; active **PsA** in adult patients (alone or in combination with methotrexate) when the response to previous disease-modifying anti-rheumatic drug therapy has been inadequate; active **AS** in adults who have responded inadequately to conventional therapy; active **nr-axSpA** with objective signs of inflammation as indicated by elevated C-reactive protein and/or magnetic resonance imaging evidence in adults who have responded inadequately to non-steroidal anti-inflammatory drugs; active moderate to severe **HS** (acne inversa) in adults with an inadequate response to conventional systemic HS therapy; active **ERA** in patients 6 years and older (alone or in combination with methotrexate) whose disease has responded inadequately to, or who cannot tolerate, conventional therapy; active **JPsA** in patients 6 years and older (alone or in combination with methotrexate) whose disease has responded inadequately to, or who cannot tolerate, conventional therapy.[1,2]

Prescribing information, adverse event reporting and full indication can be found on the next page.

*Successive time periods of PSUR shown with cumulative rate: 26 Dec 2014 to 25 Dec 2015; 26 Dec 2015 to 25 Dec 2016; 26 Dec 2016 to 25 Dec 2017; 26 Dec 2017 to 25 Dec 2018: 26 Dec 2018 to 25 Dec 2019; 26 Dec 2019 to 25 Dec 2020.[6]

Abbreviations: AE, adverse event; AS, ankylosing spondylitis; EIAR, exposure-adjusted incidence rate; ERA, enthesitis-related arthritis; HCP, healthcare professional; HS, hidradenitis suppurativa; IBD, inflammatory bowel disease; JPsA, juvenile psoriatic arthritis; MACE, major adverse cardiac event; nr-axSpA, non-radiographic axial spondyloarthritis; PsA, psoriatic arthritis; PsO, plaque psoriasis; PY, patient year.

References: 1. Cosentyx® (secukinumab) GB Summary of Product Characteristics; **2.** Cosentyx® (secukinumab) NI Summary of Product Characteristics; **3.** European Medicines Agency. European public assessment report. Available at: https://www.ema.europa.eu/en/documents/overview/cosentyx-epar-medicine-overview_en.pdf [Accessed August 2024]; **4.** Novartis Data on File. Secukinumab – Sec008. 2023; **5.** ClinicalTrials.gov. Search results for 'secukinumab', completed, terminated and active, not recruiting trials. Available at: https://clinicaltrials.gov/search?term=Secukinumab,&aggFilters=status:com [Accessed August 2024]; **6.** Novartis data on file. Cosentyx Periodic Safety Update Report (PSUR); 26 December 2019 – 25 December 2020. 22 February 2021; **7.** Deodhar A, et al. Arthritis Res Ther 2019;21(1):111.

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Cosentyx® (secukinumab) Northern Ireland Prescribing Information.

Please refer to the Summary of Product Characteristics (SmPC) before prescribing.

Indications: Treatment of: moderate to severe plaque psoriasis in adults, children and adolescents from the age of 6 years who are candidates for systemic therapy; active psoriatic arthritis in adults (alone or in combination with methotrexate) who have responded inadequately to disease-modifying anti-rheumatic drug therapy; active ankylosing spondylitis in adults who have responded inadequately to conventional therapy; active non-radiographic axial spondyloarthritis (nr-axSpA) with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) evidence in adults who have responded inadequately to non-steroidal anti-inflammatory drugs; active enthesitis-related arthritis and juvenile psoriatic arthritis in patients 6 years and older (alone or in combination with methotrexate) whose disease has responded inadequately to, or who cannot tolerate, conventional therapy; active moderate to severe hidradenitis suppurativa (acne inversa) in adults with an inadequate response to conventional systemic HS therapy. **Presentations:** Cosentyx 150 mg solution for injection in pre-filled pen; Cosentyx 300 mg solution for injection in pre-filled pen. **Dosage & Administration:** Administered by subcutaneous injection at weeks 0, 1, 2, 3 and 4, followed by monthly maintenance dosing. Consider discontinuation if no response after 16 weeks of treatment. Each 150 mg dose is given as one injection of 150 mg. Each 300 mg dose is given as two injections of 150 mg or one injection of 300 mg. If possible avoid areas of the skin showing psoriasis. *Plaque Psoriasis:* Adult recommended dose is 300 mg monthly. Based on clinical response, a maintenance dose of 300 mg every 2 weeks may provide additional benefit for patients with a body weight of 90 kg or higher. Adolescents and children from the age of 6 years: if weight ≥ 50 kg, recommended dose is 150 mg (may be increased to 300 mg as some patients may derive additional benefit from the higher dose). If weight < 50 kg, recommended dose is 75 mg. However, 150mg solution for injection in pre-filled pen is not indicated for administration of this dose and no suitable alternative formulation is available. *Psoriatic Arthritis:* For patients with concomitant moderate to severe plaque psoriasis see adult plaque psoriasis recommendation. For patients who are anti-TNFα inadequate responders, the recommended dose is 300 mg, 150 mg in other patients. Can be increased to 300 mg based on clinical response. *Ankylosing Spondylitis:* Recommended dose 150 mg. Can be increased to 300 mg based on clinical response. *nr-axSpA:* Recommended dose 150 mg. *Enthesitis-related arthritis and juvenile psoriatic arthritis:* From the age of 6 years, if weight ≥ 50 kg, recommended dose is 150 mg. If weight < 50 kg, recommended dose is 75 mg. However, 150mg solution for injection in pre-filled pen is not indicated for administration of this dose and no suitable alternative formulation is available. *Hidradenitis suppurativa:* Recommended dose is 300 mg monthly. Based on clinical response, the maintenance dose can be increased to 300 mg every 2 weeks. **Contraindications:** Hypersensitivity to the active substance or excipients. Clinically important, active infection. **Warnings & Precautions:** *Infections:* Potential to increase risk of infections; serious infections have been observed. Caution in patients with chronic infection or history of recurrent infection. Advise patients to seek medical advice if signs/symptoms of infection occur. Monitor patients with serious infection closely and do not administer Cosentyx until the infection resolves. Non-serious mucocutaneous candida infections were more frequently reported for secukinumab than placebo in the psoriasis clinical studies. Should not be given to patients with active tuberculosis (TB). Consider anti-tuberculosis therapy before starting Cosentyx in patients with latent TB. *Inflammatory bowel disease (including Crohn's disease and ulcerative colitis):* New cases or exacerbations of inflammatory bowel disease have been reported with secukinumab. Secukinumab, is not recommended in patients with inflammatory bowel disease. If a patient develops signs and symptoms of inflammatory bowel disease or experiences an exacerbation of pre-existing inflammatory bowel disease, secukinumab should be discontinued and appropriate medical management should be initiated. *Hypersensitivity reactions:* Rare cases of anaphylactic reactions have been observed. If an anaphylactic or serious allergic reactions occur, discontinue immediately and initiate appropriate therapy. *Vaccinations:* Do not give live vaccines concurrently with Cosentyx; inactivated or non-live vaccinations may be given. Paediatric patients should receive all age appropriate immunisations before treatment with Cosentyx. *Latex-Sensitive Individuals:* The removable needle cap of the 150mg pre-filled pen contains a derivative of natural rubber latex. *Concomitant immunosuppressive therapy:* Combination with immunosuppressants, including biologics, or phototherapy has not been evaluated in psoriasis studies. Cosentyx was given concomitantly with methotrexate, sulfasalazine and/or corticosteroids in arthritis studies. Caution when considering concomitant use of other immunosuppressants. **Interactions:** Live vaccines should not be given concurrently with secukinumab. No interaction between Cosentyx and midazolam (CYP3A4 substrate) seen in adult psoriasis study. No interaction between Cosentyx and methotrexate and/or corticosteroids seen in arthritis studies. **Fertility, pregnancy and lactation:** *Women of childbearing potential:* Use an effective method of contraception during and for at least 20 weeks after treatment. *Pregnancy:* Preferably avoid use of Cosentyx in pregnancy. *Breast feeding:* It is not known if secukinumab is excreted in human breast milk. A clinical decision should be made on continuation of breast feeding during Cosentyx treatment (and up to 20 weeks after discontinuation) based on benefit of breast feeding to the child and benefit of Cosentyx therapy to the woman. *Fertility:* Effect on human fertility not evaluated. **Adverse Reactions**: *Very Common* (≥1/10): Upper respiratory tract infection. *Common* (≥1/100 to <1/10): Oral herpes, headache, rhinorrhoea, diarrhoea, nausea, fatigue. *Uncommon (≥1/1,000 to <1/100):* Oral candidiasis, lower respiratory tract infections, neutropenia, inflammatory bowel disease. *Rare (≥1/10,000 to <1/1,000)*: anaphylactic reactions, exfoliative dermatitis (psoriasis patients), hypersensitivity vasculitis. *Not known:* Mucosal and cutaneous candidiasis (including oesophageal candidiasis). *Infections:* Most infections were non-serious and mild to moderate upper respiratory tract infections, e.g. nasopharyngitis, and did not necessitate treatment discontinuation. There was an increase in mucosal and cutaneous (including oesophageal) candidiasis, but cases were mild or moderate in severity, non-serious, responsive to standard treatment and did not necessitate treatment discontinuation. Serious infections occurred in a small proportion of patients (0.015 serious infections reported per patient year of follow up). *Neutropenia:* Neutropenia was more frequent with secukinumab than placebo, but most cases were mild, transient and reversible. Rare cases of neutropenia CTCAE Grade 4 were reported. *Hypersensitivity reactions:* Urticaria and rare cases of anaphylactic reactions were seen. *Immunogenicity*: Less than 1% of patients treated with Cosentyx developed antibodies to secukinumab up to 52 weeks of treatment. *Other Adverse Effects:* The list of adverse events is not exhaustive, please consult the SmPC for a detailed listing of all adverse events before prescribing. **Legal Category:** POM. **MA Number & List Price:** EU/1/14/980/005 - 150 mg pre-filled pen x2 £1,218.78; EU/1/14/980/010 – 300 mg pre-filled pen x 1 £1218.78. **PI Last Revised:** May 2023. Full prescribing information, (SmPC) is available from: Novartis Pharmaceuticals UK Limited, 2nd Floor, The WestWorks Building, White City Place, 195 Wood Lane, London, W12 7FQ. Telephone: (01276) 692255.

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Adverse Event Reporting:

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Novartis via uk.patientsafety@novartis.com or online through the pharmacovigilance intake (PVI) tool at www.novartis.com/report

If you have a question about the product, please contact Medical Information on 01276 698370 or by email at medinfo.uk@novartis.com

Cosentyx® (secukinumab) Great Britain Prescribing Information.

Please refer to the Summary of Product Characteristics (SmPC) before prescribing.

Indications: Treatment of: moderate to severe plaque psoriasis in adults, children and adolescents from the age of 6 years who are candidates for systemic therapy; active psoriatic arthritis in adults (alone or in combination with methotrexate) who have responded inadequately to disease-modifying anti-rheumatic drug therapy; active ankylosing spondylitis in adults who have responded inadequately to conventional therapy; active non-radiographic axial spondyloarthritis (nr-axSpA) with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) evidence in adults who have responded inadequately to non-steroidal anti-inflammatory drugs; active enthesitis-related arthritis and juvenile psoriatic arthritis in patients 6 years and older (alone or in combination with methotrexate) whose disease has responded inadequately to, or who cannot tolerate, conventional therapy; active moderate to severe hidradenitis suppurativa (acne inversa) in adults with an inadequate response to conventional systemic HS therapy. **Presentations:** Cosentyx 75 mg solution for injection in pre-filled syringe; Cosentyx 150 mg solution for injection in pre-filled syringe; Cosentyx 150 mg solution for injection in pre-filled pen; Cosentyx 300 mg solution for injection in pre-filled pen. **Dosage & Administration:** Administered by subcutaneous injection at weeks 0, 1, 2, 3 and 4, followed by monthly maintenance dosing. Consider discontinuation if no response after 16 weeks of treatment. Each 75 mg dose is given as one injection of 75 mg. Each 150 mg dose is given as one injection of 150 mg. Each 300 mg dose is given as two injections of 150 mg or one injection of 300 mg. If possible avoid areas of the skin showing psoriasis. *Plaque Psoriasis:* Adult recommended dose is 300 mg. Based on clinical response, a maintenance dose of 300 mg every 2 weeks may provide additional benefit for patients with a body weight of 90 kg or higher. Adolescents and children from the age of 6 years: if weight ≥ 50 kg, recommended dose is 150 mg (may be increased to 300 mg as some patients may derive additional benefit from the higher dose). If weight < 50 kg, recommended dose is 75 mg. *Psoriatic Arthritis:* For patients with concomitant moderate to severe plaque psoriasis see adult plaque psoriasis recommendation. For patients who are anti-TNFα inadequate responders, the recommended dose is 300 mg, 150 mg in other patients. Can be increased to 300 mg based on clinical response. *Ankylosing Spondylitis:* Recommended dose 150 mg. Can be increased to 300 mg based on clinical response. *nr-axSpA:* Recommended dose 150 mg. *Enthesitis-related arthritis and juvenile psoriatic arthritis:* From the age of 6 years, if weight ≥ 50 kg, recommended dose is 150 mg. If weight < 50 kg, recommended dose is 75 mg. *Hidradenitis suppurativa:* Recommended dose is 300 mg monthly. Based on clinical response, the maintenance dose can be increased to 300 mg every 2 weeks. **Contraindications:** Hypersensitivity to the active substance or excipients. Clinically important, active infection. **Warnings & Precautions:** *Infections:* Potential to increase risk of infections; serious infections have been observed. Caution in patients with chronic infection or history of recurrent infection. Advise patients to seek medical advice if signs/symptoms of infection occur. Monitor patients with serious infection closely and do not administer Cosentyx until the infection resolves. Non-serious mucocutaneous candida infections were more frequently reported for secukinumab in the psoriasis clinical studies. Should not be given to patients with active tuberculosis (TB). Consider anti-tuberculosis therapy before starting Cosentyx in patients with latent TB. *Inflammatory bowel disease (including Crohn's disease and ulcerative colitis):* New cases or exacerbations of inflammatory bowel disease have been reported with secukinumab. Secukinumab, is not recommended in patients with inflammatory bowel disease. If a patient develops signs and symptoms of inflammatory bowel disease or experiences an exacerbation of pre-existing inflammatory bowel disease, secukinumab should be discontinued and appropriate medical management should be initiated. *Hypersensitivity reactions:* Rare cases of anaphylactic reactions have been observed. If an anaphylactic or serious allergic reactions occur, discontinue immediately and initiate appropriate therapy. *Vaccinations:* Do not give live vaccines concurrently with Cosentyx; inactivated or non-live vaccinations may be given. Paediatric patients should receive all age appropriate immunisations before treatment with Cosentyx. *Latex-Sensitive Individuals:* The removable needle cap of the 75mg and 150 mg pre-filled syringe and 150mg pre-filled pen contains a derivative of natural rubber latex. *Concomitant immunosuppressive therapy:* Combination with immunosuppressants, including biologics, or phototherapy has not been evaluated in psoriasis studies. Cosentyx was given concomitantly with methotrexate, sulfasalazine and/or corticosteroids in arthritis studies. Caution when considering concomitant use of other immunosuppressants. **Interactions:** Live vaccines should not be given concurrently with secukinumab. No interaction between Cosentyx and midazolam (CYP3A4 substrate) seen in adult psoriasis study. No interaction between Cosentyx and methotrexate and/or corticosteroids seen in arthritis studies. **Fertility, pregnancy and lactation:** *Women of childbearing potential:* Use an effective method of contraception during and for at least 20 weeks after treatment. *Pregnancy:* Preferably avoid use of Cosentyx in pregnancy. *Breast feeding:* It is not known if secukinumab is excreted in human breast milk. A clinical decision should be made on continuation of breast feeding during Cosentyx treatment (and up to 20 weeks after discontinuation) based on benefit of breast feeding to the child and benefit of Cosentyx therapy to the woman. *Fertility:* Effect on human fertility not evaluated. **Adverse Reactions**: *Very Common (≥1/10):* Upper respiratory tract infection. *Common (≥1/100 to <1/10):* Oral herpes, headache, rhinorrhoea, diarrhoea, nausea, fatigue. *Uncommon (≥1/1,000 to <1/100):* Oral candidiasis, lower respiratory tract infections, neutropenia, inflammatory bowel disease. *Rare (≥1/10,000 to <1/1,000)*: anaphylactic reactions, exfoliative dermatitis (psoriasis patients), hypersensitivity vasculitis. *Not known:* Mucosal and cutaneous candidiasis (including oesophageal candidiasis). *Infections:* Most infections were non-serious and mild to moderate upper respiratory tract infections, e.g. nasopharyngitis, and did not necessitate treatment discontinuation. There was an increase in mucosal and cutaneous (including oesophageal) candidiasis, but cases were mild or moderate in severity, non-serious, responsive to standard treatment and did not necessitate treatment discontinuation. Serious infections occurred in a small proportion of patients (0.015 serious infections reported per patient year of follow up). *Neutropenia:* Neutropenia was more frequent with secukinumab than placebo, but most cases were mild, transient and reversible. Rare cases of neutropenia CTCAE Grade 4 were reported. *Hypersensitivity reactions:* Urticaria and rare cases of anaphylactic reactions were seen. *Immunogenicity*: Less than 1% of patients treated with Cosentyx developed antibodies to secukinumab up to 52 weeks of treatment. *Other Adverse Effects:* The list of adverse events is not exhaustive, please consult the SmPC for a detailed listing of all adverse events before prescribing. **Legal Category:** POM. **MA Number & List Price:** PLGB 00101/1205 – 75 mg pre-filled syringe x 1 - £304.70; PLGB 00101/1029 - 150 mg pre-filled pen x2 £1,218.78; PLGB 00101/1030 - 150 mg pre-filled syringe x2 £1,218.78; PLGB 00101/1198 – 300 mg pre-filled pen x 1 £1218.78. **PI Last Revised:** June 2023. Full prescribing information, (SmPC) is available from: Novartis Pharmaceuticals UK Limited, 2nd Floor, The WestWorks Building, White City Place, 195 Wood Lane, London, W12 7FQ. Telephone: (01276) 692255.

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Adverse Event Reporting:

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Novartis via uk.patientsafety@novartis.com or online through the pharmacovigilance intake (PVI) tool at www.novartis.com/report.

If you have a question about the product, please contact Medical Information on 01276 698370 or by email at medinfo.uk@novartis.com