

capsaicin cutaneous patch (Qutenza®)

Grünenthal

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The Scottish Medicines Consortium (SMC) has completed its assessment of the above product and advises NHS Boards and Area Drug and Therapeutic Committees (ADTCs) on its use in NHSScotland. The advice is summarised as follows:

ADVICE: following a full submission

capsaicin cutaneous patch (Qutenza®) is accepted for restricted use within NHSScotland.

Indication under review: treatment of peripheral neuropathic pain in diabetic adults either alone or in combination with other medicinal products for pain.

SMC restriction: alone or in combination with other medicinal products for the treatment of painful diabetic peripheral neuropathy in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first- and second-line treatments.

In a double-blind, phase III study, capsaicin cutaneous patch, compared with placebo, significantly improved average daily pain score by a small amount in patients with painful diabetic peripheral neuropathy.

SMC has previously accepted capsaicin for treatment of peripheral neuropathic pain in non-diabetic adults (SMC673/11). This advice remains valid.

Chair

Scottish Medicines Consortium

1. Clinical Context

1.1. Medicine background

Capsaicin is an agonist for the transient receptor potential vanilloid 1 receptor (TRPV1). The initial effect of capsaicin patch is activation of TRPV1-expressing cutaneous nociceptors, which results in pungency and erythema due to the release of vasoactive neuropeptides. Following capsaicin exposure, cutaneous nociceptors become less sensitive to a variety of stimuli. This desensitisation is thought to underlie pain relief but the alterations in cutaneous nociceptors are reversible, and normal function returns within weeks. Capsaicin patch is applied by or under the supervision of a physician to the most painful skin areas, up to a maximum of 4 patches, for 30 minutes for the feet and 60 minutes for other locations. Treatment may be repeated every 90 days but can be given sooner, but not before the minimum interval between treatments of 60 days. Effectiveness should be assessed after three treatments. See summary of product characteristic (SPC) for further information.¹

In October 2014, SMC issued advice (SMC673/11) that capsaicin patch is accepted for restricted use for the treatment of peripheral neuropathic pain in non-diabetic adults either alone or in combination with other medicinal products for pain, with a restriction to use in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first and second line treatments.

1.2. Disease background

Typical diabetic peripheral neuropathy is a chronic, symmetrical, sensorimotor polyneuropathy, with longer nerves affected first in the most distal segments, such as the feet. Approximately 30% of patients experience painful symptoms requiring pharmacological and other treatments. Pain arises primarily from peripheral nerve injury but the central nervous system may also have a role.²

1.3. Company proposed position

Alone or in combination with other medicinal products for the treatment of painful diabetic peripheral neuropathy in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first- and second-line treatments.

1.4. Treatment pathway and relevant comparators

Setting realistic expectations is important in the management of diabetic peripheral neuropathy as treatments may reduce but not completely eliminate pain.² Initial treatment can be with one of the following medicines: amitriptyline, duloxetine, gabapentin or pregabalin and if this is not effective or not tolerated, another of these medicines can be tried. Some patients may require a combination of treatments.^{2, 3} In November 2006, SMC issued advice (285/06) that duloxetine is accepted for restricted use for the treatment of diabetic peripheral neuropathic pain in adults when initiated by prescribers experienced in the management of diabetic peripheral neuropathic pain and as second- or third-line therapy. Similarly, in May 2009, SMC published advice (157/05) that pregabalin is accepted for restricted use in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first- and second-line treatments for peripheral neuropathic pain. Capsaicin 0.075 % cream is licensed for symptomatic management of painful

diabetic peripheral polyneuropathy.⁴ It is recommended by the National Institute for Health and Care Excellence (NICE) for people with localised neuropathic pain who wish to avoid, or who cannot tolerate, oral treatments.³ In addition to these treatments, clinical experts consulted by SMC also note the use of the opioid analgesic, tramadol, for some patients and off-label use of lidocaine patches.

The submitting company consider the relevant comparator to be standard of care (SoC) that includes oral therapies such as amitriptyline, gabapentin, pregabalin, and duloxetine.

2. Summary of Clinical Evidence

2.1. Evidence for the licensed indication under review

Evidence is from the PACE and STEP studies, detailed in Table 2.1.⁵⁻⁷

Table 2.1. Overview of relevant studies.⁵⁻⁷

Criteria	PACE	STEP
Study design	Open-label phase III long-term safety study	Double-blind phase III study in USA
Eligible patients	Adults with painful, distal, symmetrical, sensorimotor polyneuropathy due to diabetes for ≥ 1 year, with MNSI score ≥ 3 . Average NPRS score over preceding 24 hours ≥ 4 . Stable glycaemic control.	
Treatments	Capsaicin patch* for 30 minutes plus SoC or capsaicin patch* for 60 minutes plus SoC or SoC. Retreatment with capsaicin patch was permitted up to 6 times over one year at intervals of at least 8 weeks.	Capsaicin patch* for 30 minutes plus SoC or placebo plus SoC. No retreatment.
Randomisation	Equally assigned to treatments, stratified by study site.	
Primary outcome	Safety via change from baseline to EoS in Norfolk QOL-DN total score.	Percent change from baseline to weeks 2 to 8 in average daily pain score on question 5 of BPI-DN.
Secondary outcomes	Various measures of pain relief.	Various measures of pain relief.
Statistical analysis	Efficacy assessed in all randomised and treated (ITT). No adjustment for multiplicity.	Efficacy assessed in all randomised and treated (ITT). No adjustment for multiplicity.

Abbreviations: BPI-DN = Brief Pain Inventory-Diabetic Neuropathy; EoS = end of study; ITT = intention-to-treat; MNSI = Michigan Neuropathy Screening Instrument; NPRS = Neuropathic Pain Rating Scale; QOL-DN = Quality of life diabetic neuropathy scale; SoC = standard of care, which in STEP could include up to two analgesics from different drug classes (antidepressants and antiepileptics), excluding opioids, at fixed doses, if the patient has been on stable doses for more than 4 weeks prior to screening and these were maintained during the study; and in PACE could include any pain medication at the investigator's discretion, excluding oral or transdermal opioids with daily dose ≥ 80 mg morphine (or equivalent) or parenteral opioids. * Capsaicin patches were applied to painful areas of the feet up to a maximum of four patches per application.

In STEP, capsaicin patch, compared with placebo, significantly improved the primary outcome, percent change from baseline to weeks 2 to 8 in average daily pain score on question 5 of the Brief Pain Inventory-Diabetic Neuropathy (BPI-DN), which assesses pain in the preceding 24 hours on an 11-point scale (0 = 'no pain' to 10 = 'pain as bad as you can imagine'). There were improvements with capsaicin patch in secondary measures of pain that were not adjusted for multiplicity in this study and in PACE, which primarily assessed safety.⁵⁻⁷ Results are detailed in Tables 2.2 and 2.3, omitting those for capsaicin patch 60 minute application as this is unlicensed for feet. A post hoc analysis of 313 patients in PACE found that 68 and 43 patients achieved their first response ($\geq 30\%$ reduction in pain on question 5 of BPI-DN), after second and third capsaicin patch applications, respectively, suggesting benefit with continued treatment.⁸

Table 2.2: Results of STEP study.^{5, 6, 9}

Average daily pain score on question 5 of Brief Pain Inventory-Diabetic Neuropathy	Capsaicin* + SoC (N=186)	Placebo + SoC (N=183)	Difference (95% CI)
Percent mean change ^A at weeks 2 to 8, %	-27	-21	-6.6 % (-12.3, -0.8) ^B
Percent mean change ^A at weeks 2 to 12, %	-28	-21	-7.1 % (-12.9, -1.2)
Absolute mean change ^A at weeks 2 to 8	-1.7	-1.4	0.3
Absolute mean change ^A at weeks 2 to 12	-1.8	-1.4	0.4
≥30% reduction ^A at weeks 2 to 8, % responders (n)	40 (74)	33 (60)	7.0 %
≥30% reduction ^A at weeks 2 to 12, % responders (n)	41 (76)	32 (58)	9.2 %
≥50% reduction ^A at weeks 2 to 8, % responders (n)	21 (39)	18 (33)	3.0 %
≥50% reduction ^A at weeks 2 to 12, % responders (n)	22 (41)	19 (35)	2.9 %

Abbreviations: CI = confidence interval; SoC = standard of care. A = changes and reductions are assessed versus baseline; B = p=0.025; * = 30-minute application.

Table 2.3: Results of PACE study.^{5, 7, 10}

Average daily pain score on question 5 of Brief Pain Inventory-Diabetic Neuropathy	Capsaicin* + SoC (N=156)	SoC (N=155)	Difference (95% CI)
Mean change from baseline to end of study	-2.0	-1.1	-1.0 (-1.4, -0.6)
≥30% reduction during study, % (n)	67 (105)	41 (63)	27 %
≥50% reduction during study, % (n)	45 (70)	24 (37)	21 %

Abbreviations: CI = confidence interval; min = minutes; SoC = standard of care; * = 30-minute application.

2.2. Evidence to support the positioning proposed by the submitting company

Capsaicin patch is positioned for use alone or in combination with other medicinal products for painful diabetic peripheral neuropathy in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first- and second-line treatments. In STEP and PACE, within 30 days prior to study entry, 70% (257/369) and 47% (220/468) of patients had received pain medications in the respective studies, with the most common being analgesics (52% and 36%).^{6, 7} Fewer patients had received medicines typically used in NHS Scotland for initial treatment of neuropathic pain, that is, antiepileptics (41% and 31%), and psychoanalgeptics such as antidepressants.^{6, 9} Subgroup analyses of BPI-DN question 5 by concomitant pain medication at baseline were assessed.^{9, 10}

*Other data were also assessed but remain confidential.**

2.3. Health-related quality of life outcomes

PACE primarily assessed safety, via Norfolk quality of life diabetic neuropathy (QOL-DN) total score, which ranges from -4 to 136, with lower scores indicating better quality of life. Capsaicin patch appeared to be associated with improvements, compared with SoC on this scale.^{7, 10} Results are detailed in Table 2.5. Quality of life outcomes were not formally tested in PACE or STEP.

Table 2.5: Results of PACE on Quality of life.^{7, 10}

Norfolk Quality of Life Diabetic Neuropathy (QOL-DN) total score	Capsaicin* + SoC (N=156)	SoC (N=155)	Difference (95% confidence interval)
Percent change in mean at EoS, %	-28	-6.7	-21 (-32, -10)

Abbreviations: EoS = end of study. * = 30-minute application.

In PACE mean change from baseline to end of study in EQ-5D visual analogue scale score was 10.4 and 5.5 with SoC plus capsaicin patch 30-minute application and SoC alone, respectively. In the

respective groups, Patient Global Impression of Change (PGI-C) was 'improved' or 'very much improved' at the end of the study for 24% and 0.5% of patients.^{5, 11}

In STEP, there were no notable differences between EQ-5D score for change from baseline. Within the capsaicin patch and placebo groups PGI-C was 'improved' or 'very much improved' at week 8 for 39% and 30% of patients and at week 12 for 40% and 30% of patients, respectively.⁶

*Other data were also assessed but remain confidential.**

2.4. Supportive studies

An open-label, retrospective, phase IV study (CASPAR) included data from patients with painful diabetic peripheral neuropathy who received 1 to 4 capsaicin patch applications within the preceding year at German treatment centres between 2015 and 2022. Response was measured 3 months after each patch application and defined as $\geq 30\%$ reduction and/or a reduction of ≥ 20 mm (on 0–100 mm visual analogue scale [VAS]) for average 24-hour pain intensity versus baseline. The proportions of patients who received 1, 2, 3 and 4 patches over the year were 21%, 23%, 22%, and 34%, respectively. After the initial patch application, the response rate was 40% (327/826) but was higher in those who chose to receive second, third and fourth applications: 86% (563/653), 98% (456/464) and 99% (276/279), respectively. The mean number of concomitant medications (opioids, antiepileptics, and/or antidepressants) for neuropathic pain decreased from 4.0 at baseline to 2.4 at 12 months.¹²

In a single UK centre, open-label, randomised study in patients with painful diabetic peripheral neuropathy, mean reductions at 3 months in average daily pain score on 11-point numerical pain rating scale (0 = no pain and 10 = worst imaginable pain) with a single capsaicin patch application plus SoC (n=32) versus SoC (n=18) were -1.87 versus -0.58, respectively. In the respective groups concomitant medications included pregabalin (40% and 67%), duloxetine (24% and 33%), amitriptyline (16% and 8%), gabapentin (8% and 8%), non-steroidal anti-inflammatory drugs (NSAIDs; 20% and 25%) and opioids (20% and 50%).¹³

3. Summary of Safety Evidence

In STEP, there was a higher rate of adverse events with capsaicin patch compared with placebo, 47% (87/186) versus 34% (62/183), which were treatment-related in 35% versus 13% and serious in 1.1% and 3.8%. Adverse events led one patient (in the placebo group) to discontinue treatment. The difference in adverse events was mainly due to application site adverse events, 34% versus 8.2%, such as application site pain (9.7% and 2.2%). Other adverse events include burning sensation (14% and 2.7%) and pain in extremity (11% and 5.5%).⁶

In PACE, within the SoC plus capsaicin patch 30-minute application and SoC alone groups, adverse events after randomisation were reported by 67% (105/156) and 48% (75/155). Treatment-related adverse events occurred in 40% and not assessed (NA), respectively. Adverse events led to treatment discontinuation in 4.5% and NA, respectively. Common adverse events included pain (28% versus 0%) and erythema (7.7% versus 0%) at the application site.⁷

A regulator concluded that the safety profile of capsaicin patch in diabetic patients was similar to that previously characterised in the broader neuropathic pain population. Most adverse events

reported with capsaicin patch in STEP and PACE were attributable to application site reactions and the most common were application site pain and erythema, burning sensation, pain in extremity, and erythema.⁵

Patients with diabetes may be particularly susceptible to adverse events associated with capsaicin patch due to co-morbidities. A regulator noted that patients with diabetic peripheral neuropathy may have coexisting peripheral autonomic neuropathy which may increase vulnerability of the skin to breakdown and the irritant effect of capsaicin may result in cutaneous lesions at the treatment site. Therefore, a warning has been added to the SPC that a careful visual examination of patients' feet should be performed prior to every application to detect skin lesions related to underlying neuropathy and vascular insufficiency. Tissue regeneration is known to be impaired in diabetic patients, therefore, persistent hypoaesthesia of the feet is considered a particular risk for diabetic patients and a warning has been added to the SPC. The pain associated with application of capsaicin patch has been associated with transient increases in blood pressure and it is recommended that this should be monitored during the treatment procedure. For patients with unstable or poorly controlled hypertension or a history of cardiovascular disease, the risk of adverse cardiovascular events due to the potential stress of the procedure should be considered prior to initiating treatment. Particular attention should be given to diabetic patients with comorbidities of coronary artery disease, hypertension and cardiovascular autonomic neuropathy.^{1, 5}

4. Summary of Clinical Effectiveness Considerations

4.1. Key strengths

- In the double-blind STEP study, capsaicin patch compared with placebo significantly improved average daily pain score over week 2 to 8 by 6.6%, with an absolute difference of 0.3 on a scale from 0 to 10.⁶ A regulator considered this treatment effect to be relatively small.⁵ The increase over placebo in the proportion of patients achieving at least 30% and 50% reductions in this pain score was 7% and 3%, respectively.⁶
- In the open-label PACE study, addition of capsaicin patch applied for 30 minutes to SoC appeared to improve average daily pain score at the end of study by 1.0 on a scale from 0 to 10. The increase over SoC in the proportion of patients achieving at least 30% and 50% reductions in this pain score was 27% and 21%, respectively.⁷ Some patients who did not have at least a 30% reduction in pain with the initial application subsequently achieved this with the second or third applications.⁸

4.2. Key uncertainties

- In STEP and PACE, 70% and 47% of patients, respectively, had received pain medications within 30 days prior to study entry, with antiepileptics being used by 41% and 31% in the respective studies and psychoanaleptics such as antidepressants by smaller percentages. STEP was conducted in the USA and PACE was conducted mainly in Ukraine, Czech Republic, Russia, and Poland with small numbers of patients from other European countries, including the UK.^{6, 7} The regulator noted that in PACE background medication in

the EU countries was typically in line with UK neuropathic pain treatment guidelines (that is, pregabalin, gabapentin, duloxetine, tramadol) while in Russia and Ukraine emphasis was on other treatment options, such as vitamin preparations. Efficacy differed between regions but the regulator noted that as capsaicin patch was favoured over placebo in all geographical regions, the regional variation did not impact the overall validity of the study.^{5, 10} The study populations may not be representative of patients in Scotland in terms of background medication and previous therapies relevant to the positioning. The supportive studies included patients receiving SoC medicines but were limited by open-label design and small patient numbers in the UK single-centre study and in CASPAR the analysis was retrospective and uncontrolled.

- Subgroup analysis of average daily pain score on BPI-DN question 5 in STEP and PACE examined the benefit with capsaicin patch in patients receiving concomitant pain medications as part of SoC.^{9, 10} Although subgroup analysis cannot support definitive conclusions, these add to concerns about the magnitude of benefit for those who use capsaicin patch in combination with other medicinal products for painful diabetic peripheral neuropathy.

*Other data were also assessed but remain confidential.**

- The open-label design of PACE limits assessment of subjective outcomes such as the primary outcome, Norfolk QOL-DN scale, a quality-of-life measure that was to assess safety and measures of pain, such as BPI-DN question 5. The burning or hot sensation that is experienced with application of capsaicin patch may have had an impact on blinding in the STEP study.
- Clinical experts consulted by SMC note that capsaicin patch may be used in place of capsaicin 0.075 % cream. There are no comparative data on the relative efficacy and safety of these two formulations of capsaicin.
- In STEP and PACE, capsaicin patches were only applied to the feet. Patients with primary pain in the ankles or above were excluded. Although, painful diabetic neuropathy typically presents in a stocking-and-glove distribution in the distal extremities, in advanced cases it may be seen in upper extremities.⁵ The studies do not provide evidence for the use of capsaicin patch for painful diabetic neuropathy in these situations.

4.3. Clinical expert input

Clinical experts consulted by SMC note that capsaicin patch may fulfil an unmet need for an additional treatment option for painful diabetic peripheral neuropathy, which is difficult to treat. Some regard it as a therapeutic advance as it offers an additional treatment option that may be particularly useful for patients with localised pain and those who cannot receive or have poor pain control with systemic therapies.

4.4. Service implications

Capsaicin patch is applied by or under the supervision of a physician. Clinical experts advise that it may be administered in secondary care to accommodate its application procedure which would be carried out by healthcare staff with appropriate training.

5. Summary of Patient and Carer Involvement

No patient group submission was received.

6. Summary of Comparative Health Economic Evidence

6.1. Economic case

The economic analysis is detailed in Table 6.1.

Table 6.1 Description of economic analysis

Criteria	Overview
Analysis type	Cost-utility analysis
Time horizon	Lifetime, maximum of 50 years with baseline age 60.4
Population	The company positioned this medicine for use in a sub-population of the licensed indication; for the treatment of PDPN, either alone or in combination with other medicinal products for the treatment of pain, in patients who have not achieved adequate pain relief from, or have not tolerated, conventional first- and second-line treatments.
Comparators	The comparator is standard of care (SoC) consisting of a mixed basket of therapies, including: anti- epileptics (pregabalin, gabapentin and carbamazepine), antidepressants (duloxetine and amitriptyline) and opioids (tapentadol and fentanyl). The distribution of patients across these SoC treatment components in the model is based on the capsaicin PDPN clinical studies.
Model description	A cohort-level Markov model was developed with 9 health states: on treatment (mild, moderate, severe or no pain), subsequent therapy (mild, moderate, severe or no pain) and death. Health states were based on absolute pain scores measured using the neuropathic pain rating scale (NPRS). The model runs in 3-month cycles, aligning with the treatment interval for capsaicin specified in the SPC.
Clinical data	The main clinical data comes from the PACE study¹⁰ where 52-week data on patient characteristics, transition probabilities, discontinuations and adverse events (for capsaicin) were used in the model. Supporting evidence relating to proportion of male patients, baseline age, gradual return to baseline, and quality of life is provided from STRIDE,¹⁴ ELEVATE,¹⁵ ASCEND,¹⁶ CASPAR¹² and STEP.⁹ The model assumed no excess mortality for patients with PDPN. Therefore, survival rates are based on the Scottish general population, using age- and sex-matched data across all health states. Adverse event rates were taken from the PACE study for the capsaicin arm, and from literature for the SoC arm.
Extrapolation	There are no available study data for capsaicin beyond 12 months, nor has relevant literature been identified to inform transition probabilities beyond this period. As a result, the model assumed no further movement between health states after 12 months, except in situations where there is discontinuation or a gradual return to baseline over time if the patients do not receive any further treatment. Discontinuation due to intolerable adverse events was assumed to occur only within the first 3-month cycle, and rates for both arms were obtained from the PACE study. Discontinuations due to unplanned reasons were assumed to occur after the first cycle at a rate of 1% per cycle in each treatment arm.

	Following treatment discontinuation, patients were assumed to return to their baseline health state via tunnel states, except for those who discontinue due to a lack of response, who remain in the “severe pain” health state. For capsaicin-treated patients, this return to baseline happens gradually over time, in line with existing evidence from CASPAR and PACE studies. For patients treated with SoC, the baseline health state is assumed to be reached in the first cycle after discontinuation, based on Stacey et al (2008) which found that pain returned to baseline within 1 week or less during treatment holidays with pregabalin.
Quality of life	EQ-5D data were pooled from five PNP studies: ASCEND, PACE, STEP, STRIDE (3-level) and ELEVATE (5-level). A total of 10,079 observations from 2,114 participants were included in the pooled analysis. Utilities were specific for each health state: no pain= 0.83, mild pain= 0.72, moderate pain= 0.59, severe pain= 0.35. Alternative utility values were tested in sensitivity analysis using values from published literature including the National Institute for Health and Care Excellence (NICE) guidelines (McDermott 2006, Gore 2005 and Tolle 2006). Furthermore, a utility multiplier was applied to represent QoL decreases due to ageing. Adverse event disutilities were taken from the literature, identified through a targeted literature review and were assumed to apply for the full cycle. As diabetic patients are at high risk for skin irritation, the inclusion of application site erythema and pain are appropriate.
Costs and resource use	Costs included medicine acquisition and administration costs, monitoring and adverse event costs. It was assumed that the first administration of capsaicin will occur in secondary care and subsequent applications can be carried out in primary care. For subsequent treatments, once patients discontinue their initial therapy (whether capsaicin + SoC or SoC alone), they transitioned to a combination of oral therapies, similar to those in SoC, as well as one-off procedures and devices.
PAS/contract price	There are no PAS/contract prices in place for any medicine.

6.2. Results

Table 6.2 Base Case Results

	Total costs (£)	Total QALYs	Inc. costs (£)	Inc. QALYs	ICER (£/QALY)
SoC	CIC	CIC	-	-	17,408
Capsaicin + SOC	CIC	CIC	CIC	CIC	

Abbreviations: CIC = commercial in confidence; Incr. = incremental; ICER = incremental cost-effectiveness ratio; QALYs =quality-adjusted life years

6.3. Sensitivity analyses

A range of sensitivity and scenario analyses were considered, and descriptions of these key scenarios are provided in Table 6.3 below.

Table 6.3 Scenario Analysis Results

	Parameter	Base case	Scenario	ICER (£/QALY)
0	Base case results			£17,408
1	Transition probabilities	PACE - SoC - Month 6 to 9 - From Pain Score 4-6 to 1-3	PACE - SoC - Month 6 to 9 - From Pain Score 4-6 to 1-3 (upper)	£19,082

	Parameter	Base case	Scenario	ICER (£/QALY)
2		PACE - SoC - Month 0 to 3 - From Pain Score 4-6 to 1-3	PACE - SoC - Month 0 to 3 - From Pain Score 4-6 to 1-3 (upper)	£18,331
3		PACE - SoC - Month 0 to 3 - From Pain Score 4-6 to 4-6	PACE - SoC - Month 6 to 9 - From Pain Score 4-6 to 4-6 (upper)	£17,985
4		PACE - SoC - Month 0 to 3 - From Pain Score 4-6 to 4-6	PACE - SoC - Month 0 to 3 - From Pain Score 4-6 to 4-6 (upper)	£17,181
5		PACE - SoC - Month 9 to 12 - From Pain Score 4-6 to 1-3	PACE - SoC - Month 9 to 12 - From Pain Score 4-6 to 1-3 (upper)	£19,032
6	Patches per treatment	1.78 (mean)	2.48 (upper)	£23,923
7	Time horizon	Lifetime	Time horizon of 5 years	£24,723
8			Time horizon of 20 years	£18,446
9	Treatment waning	None	Include waning in comparator arm of 1% per cycle	£10,699
10	Discontinuations	Unplanned discontinuations in QUTENZA arm occur at rate of 1% per cycle	Unplanned discontinuations in QUTENZA arm occur at rate of 2% per cycle	£18,157
11	Combined Scenario: Patches per treatment - Upper = 2.48 Treatment interval after 12 months - Pain score 1-3 (Upper = 1.39 treatments per cycle) Treatment interval after 12 months - Pain score 4-6 (Upper = 1.39 treatments per cycle)			£32,575

Abbreviations: AE, adverse event; ICER, incremental cost-effectiveness ratio; PDPN, painful diabetic peripheral neuropathy; QALY, quality-adjusted life year; SoC, standard of care.

6.4. Key strengths

- Justification is provided for the model structure and health states.
- EQ-5D data were pooled from five PNP studies, reducing reliance on single study estimates.

6.5. Key uncertainties

- The model assumed no further movement between health states after 12 months, except in cases where discontinuation or gradual return to baseline may occur. Justification was provided on the basis that there are no available trial data for capsaicin beyond 12 months,

nor has relevant literature been identified to inform transition probabilities beyond this period. The company argued this assumption was conservative, as capsaicin may continue to reduce pain scores through its disease-modifying mechanism. However, there is also no evidence to assume that benefit continues over the time horizon. A scenario analysis was provided where the pain reduction was limited to 3 months; this increased the incremental cost-effectiveness ratio (ICER) to £22,499. However, the company note this scenario does not reflect the available clinical evidence for capsaicin.

- Some of the inputs were derived from only one study (PACE) which has significant limitations; subsequently there is some uncertainty around the robustness of these estimates. However, some of these parameters are key drivers of the cost-effectiveness results, such as the transition probabilities and the number of patches per treatment. The company later addressed that the limitations and representativeness of PACE in relation to routine clinical practice have been considered, including population characteristics, background therapy use, and regional conduct. To address residual uncertainty, the company provided a range of scenario analyses focusing on key drivers identified by the Committee; these include more conservative assumptions around treatment continuation and response. Overall, these analyses support the robustness of the cost-effectiveness results presented.
- No additional mortality was assumed for patients with PDPN. As there is evidence that PDPN can increase mortality, a scenario with excess mortality would have been beneficial. The company subsequently provided a scenario where excess mortality was included via a hazard ratio of 1.713. This had a minor impact on the ICER.

7. Conclusion

After considering all the available evidence, the Committee accepted capsaicin for restricted use in NHSScotland

8. Guidelines and Protocols

In December 2025, the Scottish Intercollegiate Guidelines Network (SIGN) published SIGN 173, 'Management of chronic pain (part 1)'. The second part of the guideline is expected to be published in Summer 2026.¹⁸

In April 2021, the National Institute for Health and Care Excellence (NICE), published NICE guideline NG193, 'Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain.'¹⁹

In September 2020, NICE updated NICE guideline CG193, 'Neuropathic pain in adults: pharmacological management in non-specialist settings.'³

9. Additional Information

9.1. Product availability date

20 August 2015

Table 9.1 List price of medicine under review

Medicine	Dose regimen	Cost per treatment (£)
Capsaicin 179 mg cutaneous patch	Apply for 30 to 60 minutes	210

Costs from BNF online on 25 February 2026. Costs do not take any patient access schemes into consideration.

10. Company Estimate of Eligible Population and Estimated Budget Impact

The company estimated there would be 6,753 patients eligible for treatment with capsaicin from year 1 to year 3, to which confidential uptake rates were applied.

The gross impact on the medicines budget was estimated to be £160k in year 1 rising to £213k in year 3. As the medicine is an add-on therapy, no other medicines would be displaced.

Subsequently, the net medicines budget impact is equivalent to the gross impact.

References

1. Grunenthal. Capsaicin cutaneous patch (Qutenza®) Summary of Product Characteristics. Electronic Medicines Compendium www.medicines.org.uk/emc/ Last updated 28 November 2023.
2. British Medical Journal. BMJ Best practice: diabetic neuropathy, last updated 29 January 2026.
3. National Institute for Health and Care Excellence (NICE). Clinical guideline 173 (CG173): neuropathic pain in adults: pharmacological management in non-specialist settings, last update 22 September 2020.
4. Ennogen. Capsaicin 0.075% cream (Axsain®) Summary of Product Characteristics. Electronic Medicines Compendium www.medicines.org.uk/emc/ Last updated 16 December 2025.
5. European Medicines Agency (EMA). Capsaicin cutaneous patch (Qutenza®) Assessment report, EMEA/H/C/000909/II/0039, 23 July 2015.
6. Simpson DM, Robinson-Papp J, Van J, et al. Capsaicin 8% patch in painful diabetic peripheral neuropathy: a randomized, double-blind, placebo-controlled study. *The journal of pain* 2017; 18(1): 42-53.
7. Vinik AI, Perrot S, Vinik EJ, et al. Capsaicin 8% patch repeat treatment plus standard of care (SOC) versus SOC alone in painful diabetic peripheral neuropathy: a randomised, 52-week, open-label, safety study. *BMC neurology* 2016; 16(1): 251.
8. Freynhagen R, Argoff C, Eerdekens M, et al. Progressive response to repeat application of capsaicin 179 mg (8% w/w) cutaneous patch in peripheral neuropathic pain: comprehensive new analysis and clinical Implications. *Pain medicine* 2021; 22(10): 2324-36.
9. Astellas Pharma. Clinical study report for E05-CL-3004 (STEP), 3 October 2014.
10. Astellas Pharma. Clinical study report for E05-CL-3002 (PACE), 13 October 2014.
11. Vinik AI, Perrot S, Vinik EJ, et al. Repeat treatment with capsaicin 8% patch (179mg capsaicin cutaneous patch): effects on pain, quality of life, and patient satisfaction in painful diabetic peripheral neuropathy: an open-label, randomized controlled clinical trial. *Journal of Current Medical Research and Opinion* 2019; 02(12): 388-401.
12. Uberall MA, Kender Z, Quandel T, et al. Progressive improvements in patient-reported outcomes with the high-concentration capsaicin patch: a retrospective cohort study in patients with painful diabetic peripheral neuropathy (CASPAR study). *Journal of diabetes and its complications* 2025; 39(9): 109085.
13. Anand P, Privitera R, Donatien P, et al. Reversing painful and non-painful diabetic neuropathy with the capsaicin 8% patch: Clinical evidence for pain relief and restoration of function via nerve fiber regeneration. *Frontiers in neurology* 2022; 13: 998904.
14. Grunenthal. Clinical Study Report for STRIDE, 2014.
15. Grunenthal. Clinical Study Report for ELEVATE, 2014.
16. Grunenthal. Clinical Study Report for ASCEND, 2015.
17. Burns PB, Rohrich RJ, Chung KC. The levels of evidence and their role in evidence-based medicine. *Plast Reconstr Surg* 2011; 128(1): 305-10.
18. Scottish Intercollegiate Guidelines Network (SIGN). Publication number 173: management of chronic pain (part 1), December 2025.
19. National Institute for Health and Care Excellence (NICE). NICE guideline 193 (NG193): chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain, April 2021.

This assessment is based on data submitted by the applicant company up to and including 17 April 2026.

**Agreement between the Association of the British Pharmaceutical Industry (ABPI) and the SMC on guidelines for the release of company data into the public domain during a health technology appraisal:*<https://www.scottishmedicines.org.uk/about-us/policies-publications/>

Medicine prices are those available at the time the papers were issued to SMC for consideration. SMC includes Scottish national contract prices in its decision-making. These contract prices are commercial in confidence and cannot be put in the public domain, including via the SMC Detailed Advice Document.

Patient Access Schemes (PAS): A PAS is a scheme proposed by a pharmaceutical company in order to improve the cost-effectiveness of a medicine and enable patients to receive access to cost-effective innovative medicines. The Patient Access Scheme Assessment Group (PASAG), established under the auspices of Public Services Delivery Scotland, reviews and advises NHS Scotland on the feasibility and acceptability on implementing proposed schemes. PASAG operates separately from SMC to maintain the integrity and independence of the assessment process of the SMC. When SMC accepts a medicine for use in NHS Scotland on the basis of a PAS that has been considered acceptable for implementation by PASAG, a set of guidance notes on the operation of the scheme will be circulated to health boards' Area Drugs and Therapeutics Committees prior to publication of SMC advice.

Advice context:

No part of this advice may be used without the whole of the advice being quoted in full.

This advice represents the view of the Scottish Medicines Consortium and was arrived at after careful consideration and evaluation of the available evidence. It is provided to inform the considerations of Area Drug & Therapeutics Committees and NHS Boards in Scotland in determining medicines for local use or local formulary inclusion. This advice does not override the individual responsibility of health professionals to make decisions in the exercise of their clinical judgement in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.