day; 1200 mg/day with add-in-medication) and pregabalin (PG; 300 mg/day and 600 mg/day; 300 mg/day with add-in-medication) for the treatment of post-herpetic neuralgia (PHN) from the perspective of the German Sickness Funds. METHODS: The costs and benefits of gabapentin, PG and the lidocaine plaster were calculated using a Markov model taking a six-month time horizon. Transition probabilities were mainly based on clinical trials identified through a systematic review. Missing data, data on resource utilization and add-in/switch medication were obtained from a Delphi panel. Cost data were taken from official price lists. A modified TWIST (time without symptoms) analysis was conducted to calculate the cost per additional month with sufficient pain relief and no intolerable side-effects.

RESULTS: Treatment with the lidocaine plaster costs a total of €937 per patient, compared with €728 for generic gabapentin, €875 for PG300 mg and dominated PG600 mg. Patients treated with the lidocaine plaster spent an average of 4.06 months (67.7% of the total treatment period) with adequate pain relief and no intolerable side-effects, compared with 2.72 months (45.3% of the total treatment period) for gabapentin, 3.02 months (50.3% of the total treatment period) for PG300 mg and 3.22 months (53.7% of the total treatment period) for PG600 mg. Lidocaine plaster therefore costs €156 per additional month with sufficient pain relief and no side-effects relative to gabapentin, €60 relative to PG300 mg. The lidocaine plaster was dominant over PG600 mg. Scenario analyses and extensive one-way sensitivity analyses on all parameters including the time horizon confirmed the robustness of the results. CONCLUSIONS: Patients receiving the lidocaine 5% plaster for PHN spend more time with sufficient pain relief and no intolerable side-effects than those treated with gabapentin or pregabalin.