BACKGROUND: Chemotherapy-induced nausea and vomiting (CINV) remains a major adverse effect of cancer therapy. We aimed to determine outcomes associated with use of aprepitant in outpatients undergoing highly emetogenic chemotherapy in Germany from a patient's and payer's perspective. METHODS: A decision-analytic model compared an aprepitant regimen (aprepitant/ondansetron/dexamethasone) to a control regimen (ondansetron/dexamethasone) over a five days period. Clinical results and resource utilisation observed in aprepitant phase III clinical trials were assigned German unit cost data. RESULTS: Complete response over one chemotherapy cycle was observed in 68% of patients in the aprepitant group (N=514) compared to 48% of patients in the control group (N=518). Patients were estimated to have gained an equivalent of 15 additional hours of perfect health per cycle (0.63 quality-adjusted life days) with aprepitant-based regimen compared to control regimen. Cost per quality-adjusted life year gained with aprepitant was estimated at euro28,891. CONCLUSIONS: Aprepitant substantially improved CINV-related health outcomes in patients undergoing highly emetogenic chemotherapy. Incremental benefits materialised in a cost-effective manner.