Introduction Use of non-steroidal anti-inflammatory drugs (NSAIDs) has been associated with a reduced risk of several cancers. We conducted a systematic literature review to investigate the association between NSAID/aspirin use and risk of head and neck cancer (HNC). Method Medline, Embase, PubMed, Cochrane Library and Web of Science were systematically searched using terms for NSAIDs/aspirin, HNC and observational/intervention study designs. Results Of 926 articles identified, two population-based prescribing database studies and three case-control studies met the selection criteria. The studies investigated different HNC sites. Only one study found a significantly protective effect of aspirin use for HNC risk (OR 0.75, 95% CI 0.58 to 0.96) and one showed a significantly increased risk of oral/oropharangeal cancer with non-low-dose aspirin NSAID use (OR 3.5, 95% CI 1.5 to 6.7). Conclusion No definitive conclusion on the effect of NSAIDs/aspirin on HNC risk was possible. Further robust large-scale studies are required to clarify any possible association.

Introduction To maximise health gain with constrained health sector resources, it is necessary to identify the highest priority risk factor areas for studying preventive interventions. We aimed to develop a process for prioritising such risk factors for further research, in the New Zealand setting. Methods Using WHO data for high-income countries in the Western Pacific Region, the burden of disease in disability-adjusted life years associated with leading risk factors was used as a starting point. Subsequent prioritising steps included: the existence of effective and (likely) cost-effective preventive interventions for each risk factor, and the contribution of the risk factor to health inequalities. Results The top six major risk factors identified were: tobacco use, high blood pressure, high cholesterol, alcohol use, overweight/obesity and physical inactivity. All of these six risk factors contribute to ethnic health inequalities (Maori vs non-Maori). They are also all relevant to reducing the health burden for children/youth and older adults, and four were relevant to reducing health inequalities for socio-economically deprived New Zealanders. For all of the top six risk factor areas there are published studies indicating that one or more preventive interventions are cost-saving (to the health sector or society). Conclusions This process identified risk factor areas associated with high health burden and which are amenable to cost-effective preventive interventions. Our next step is to work with stakeholders to select the range of interventions within each risk factor area that are of most interest for cost-effectiveness analysis.