Table 2.10. Meta-analyses of exposure to natural sunlight and cancers of the lip or of the eye

Reference, location, name of study	Study description	Exposure assessment	Organ site (ICD code)	Exposure categories	Relative risk (95% CI)* [Number of studies]	Adjustment for potential confounders	Comments
Acquavella *et al*. (1998)	Meta-analysis of 37 studies published through to 31 December 1994. Studies that did not report results for farmers for three or more diseases were excluded to minimise publication bias.	See individual studies for specific exposure assessment information. Summary relative risks as a weighted average of the log relative risks across studies using inverse variance weights, were calculated..	Lip	*Work as a farmer* No Yes Yes – follow-up studies Yes – PMR studies Yes – Case-control studies	 1.0 1.95 (1.82–2.09) 1.88 (1.74–2.04) 1.82 (1.50–2.21) 2.68 (2.18–3.29)		*P*-value for heterogeneity among studies 0.22
Khuder (1999)	A meta-analysis of 21 studies of lip cancer published between 1981 and 1997.	See individual studies for specific exposure assessment information.	Lip cancer	*Work as a farmer* No Yes (all farmers) Yes (female farmers only) Yes – PMR studies Yes – Case-control studies	 1.0 2.0 (1.74–2.30) 1.28 (0.79–2.08)	See individual studies for details about adjustment for potential confounders	There was little evidence of publication bias in the studies included in the meta-analysis.
Shah *et al*. (2005)	A review of 133 published reports on risk factors for uveal melanoma revealed 12 studies that provided sufficient information to calculate odds ratios (ORs) and standard errors for ultraviolet light exposure factors. A meta-analysis was done only for variables reported from 4 or more studies.	See individual studies for specific exposure assessment information.	Uveal Melanoma	*Welding* Never Ever *Outdoor leisure activities* Lowest exp. category Highest exp. category *Occupational sunlight exposure* Lowest exp. category Highest exp. category *Latitude of birth* Farther from equator Closer to equator	 1.0 2.05 (1.20–3.51) [6] 1.0 0.86 (0.71–1.04) [4] 1.0 1.37 (0.96–1.96) [4] 1.0 1.08 (0.67–1.74) [5]	See individual studies for details about adjustment for potential confounders	*P*-values for heterogeneity: welding 0.014, outside leisure 0.485, outdoor occupation 0.056 and latitude of birth 0.014. There was little evidence of any publication bias for any of the variables.