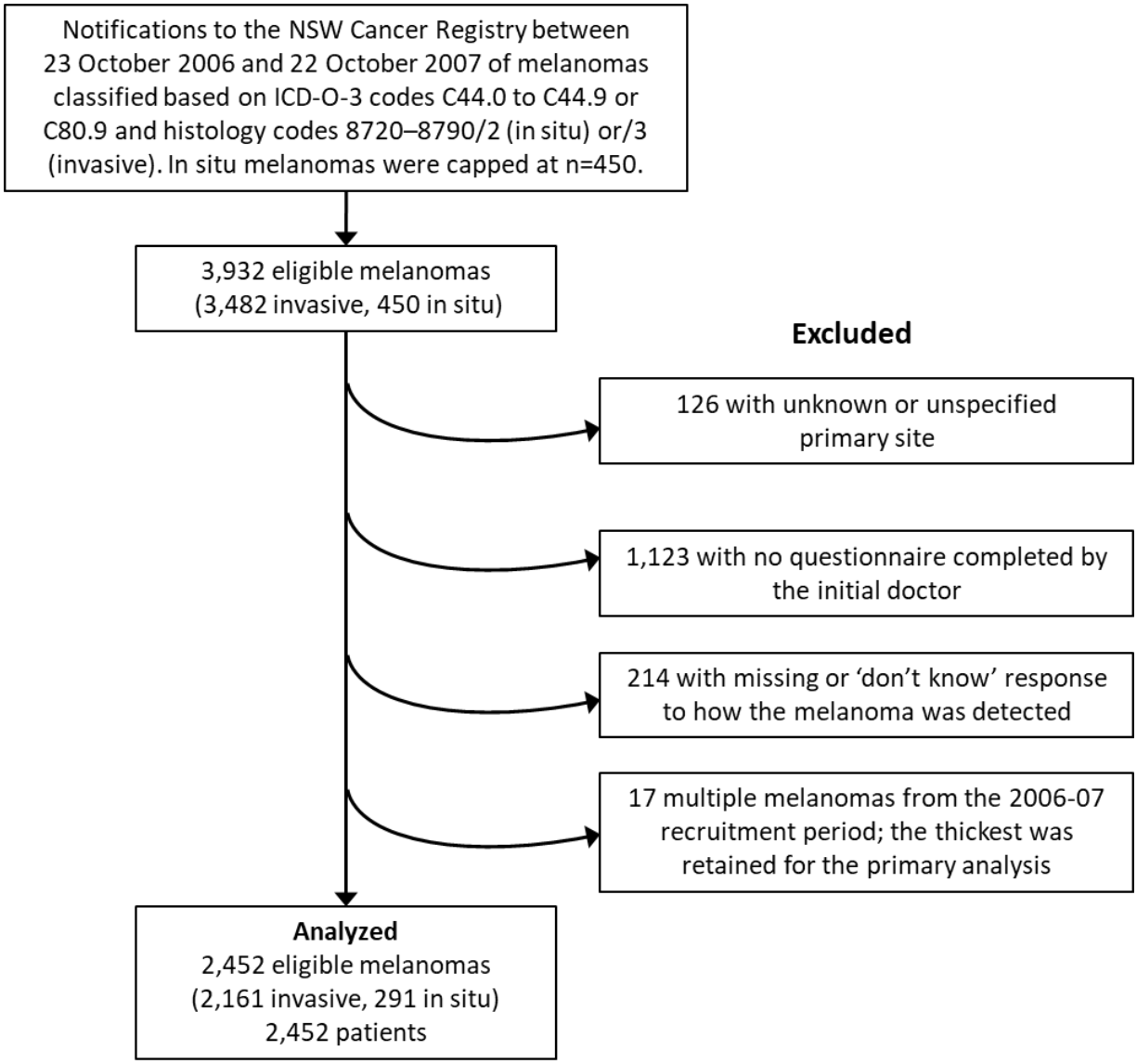
# Supplementary Online Content

Watts CG, McLoughlin K, Goumas C, et al. Association between melanoma detected during routine skin checks and mortality. *JAMA Dermatol*. Published online November 3, 2021. doi:10.1001/jamadermatol.2021.3884

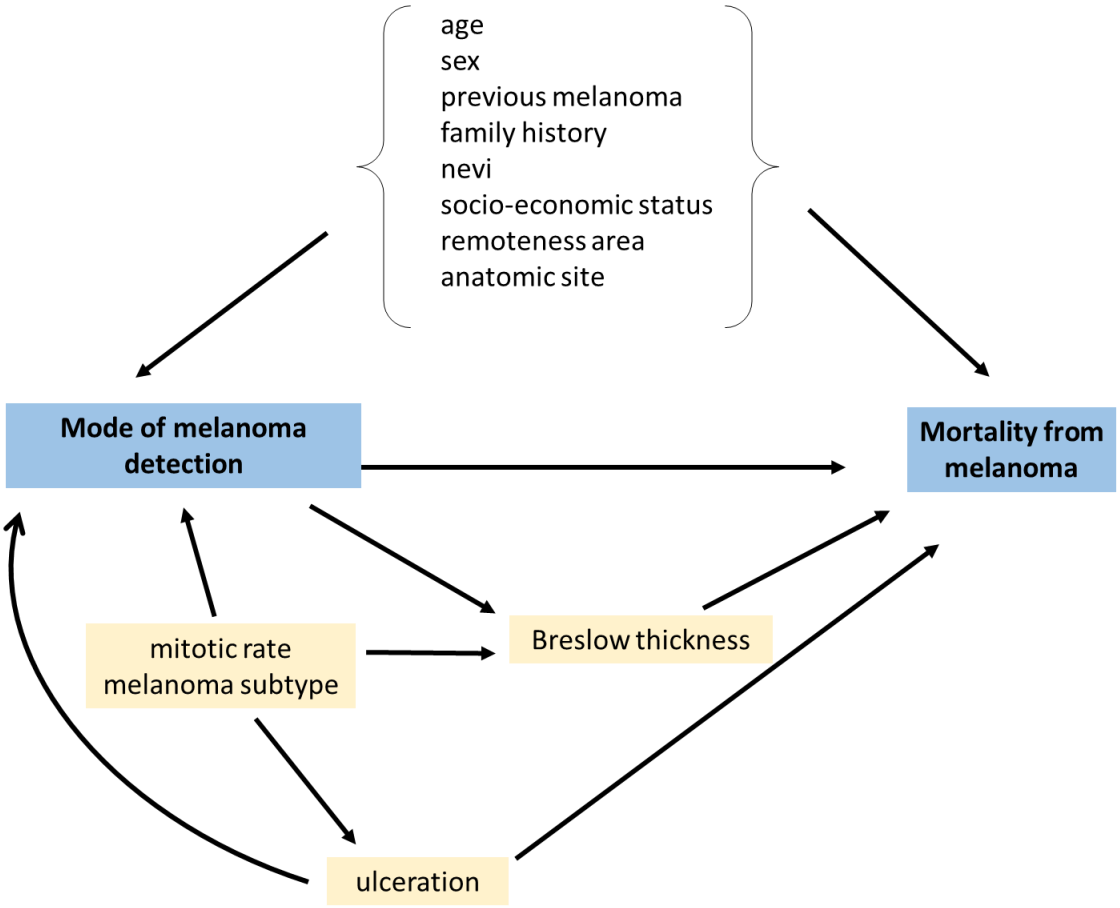


This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure 1.** Flow Chart Showing Creation of the Analysis Data Set



**eFigure 2.** Directed Acyclic Graph (DAG) Showing Relationships Between Variables and Assessment of Confounding. The arrows represent the hypothesized direction of the causal relationship. Breslow thickness was not included in the multivariable models, as although it is an important prognostic marker, it is a direct intermediate variable on the causal pathway between exposure (i.e. mode of melanoma detection such as routine skin-check) and outcome (mortality).[1] As such, Breslow thickness is directly altered by early detection and excision of melanoma and as such is more like a surrogate endpoint. Mitotic rate and ulceration, on the other hand, are markers of biologic activity and aggressiveness of the melanoma[2] and are less directly altered by mode of detection, but mitotic rate in particular is strongly correlated with Breslow thickness.




**eReferences**

1. Rothman KJ, Greenland S, Lash TL. *Modern Epidemiology, 3rd Edition.* USA: Lippincott Williams & Wilkins; 2013.
2. Shen S, Wolfe R, McLean CA, Haskett M, Kelly JW. Characteristics and associations of high-mitotic-rate melanoma. *JAMA Dermatol.* 2014;150(10):1048-1055.