

Supplement S1: Search strategy

Initial search	(time var*[tiab] OR time dependent*[tiab] AND iptw[tiab] OR inverse probability[tiab]) OR ("Propensity Score"[Mesh] OR propensity score*[tiab])	28373
Included propensity mesh to reduce the number of papers	("Propensity Score"[Mesh] OR propensity score*[tiab]) AND (time var*[tiab] OR time dependent*[tiab] OR iptw[tiab] OR inverse probability[tiab])	1566
Added risk-set matching	(risk-set matching[tiab]) OR ("Propensity Score"[Mesh] OR propensity score*[tiab]) AND (time var*[tiab] OR time dependent*[tiab] OR iptw[tiab] OR inverse probability[tiab])	1570
Added g-methods to the search and studies published before 2021	(risk-set matching[tiab]) OR ("Propensity Score"[Mesh] OR propensity score*[tiab]) OR ("g-methods"[tiab] OR "g-formula"[tiab] OR "g-estimation"[tiab] OR "parametric g-formula"[tiab]) OR (iptw[tiab] OR inverse probability[tiab]) AND (time var*[tiab] OR time dependent*[tiab] OR longitudinal*[tiab]) Filters: from 1992 - 2020	2081
Added "Marginal structural Cox model" to the search	(risk-set matching[tiab]) OR ("Propensity Score"[Mesh] OR propensity score*[tiab]) OR ("g-methods"[tiab] OR "g-formula"[tiab] OR "g-estimation"[tiab] OR "parametric g-formula"[tiab]) OR (iptw[tiab] OR inverse probability[tiab] OR Marginal structural Cox model[tiab]) AND (time var*[tiab] OR time dependent*[tiab] OR longitudinal*[tiab]) Filters: from 1992 - 2020	2087
Total combined		2140