Appendix 1 (as supplied by the authors): Detailed inclusion criteria

Criterion	Description
IC 1: Patients	Any patient population was eligible.
IC 2: Intervention	The following medical interventions were eligible: drugs, biologics, dietary supplements, devices, diagnostic procedures, surgery, radiotherapy. Studies investigating structural or organizational interventions, or care management questions were not included (e. g. effects of rehabilitation, of specific service providers, of specialist consultation, of disease management programs et cetera).
IC 2: Comparator	We included the following active comparisons: drugs, biologics, dietary supplements, devices, diagnostic procedures, surgery, radiotherapy Comparisons with usual care / standard treatment were also included. We accepted comparisons of treatment variations such as different dosing schemes, ways of application, or timing of application when these variations were concretely defined (e.g. i.m. vs. i.v., continuous infusion vs. bolus infusion, initiation of drug treatment within a defined period of time after an event vs. later initiation, open vs. endoscopic surgery, on-pump vs. off-pump cardiac surgery). Comparisons of not clearly defined treatment variations, regimens, or concepts were not eligible (e.g. implementation of guidelines).
IC 3: Outcome	Studies reporting treatment effects on mortality were included. Any definition of mortality was accepted. Composite outcomes including mortality were not accepted. Studies with zero fatal events were excluded.
IC 4: Propensity scores	We included all studies reporting at least one treatment effect on mortality analyzed using approaches based on propensity scores.
IC 5: RCD-study	We included studies based only on data which is routinely collected for purposes of health care and not for the purpose of a specific study that is specified before data collection. We also included studies based on data from registries. The data used for the analyses must have been available in any kind of database or other electronically accessible form. Typical eligible data sources fulfilling this criterion are: databases of administrative and/or health care utilization data (such as claims or prescription data), data derived from registries, electronic health records or electronic patient records. Studies with treatments allocated by the investigator (experimental studies like RCTs) and post-hoc analyses of such studies were excluded. During title/abstract screening we accepted any description of the data source indicating (1) use of health care utilization data (i.e. by mentioning terms like “claims”, “prescription data”, “administrative data”, “reimbursement”, “insurance”, “routinely collected”); (2) use of registry data; (3) use of “records” (when any indication was that they were “electronic” or in any form digitalized or that information technology was used). In addition, any article describing the use of any kind of “database” as well as any otherwise eligible observational study which included more than 1000 participants has been scrutinized in full text. Studies primarily investigating statistical methods were not included.
IC 6: Language	Articles in English

RCD: Routinely collected data

Appendix to: Hemkens LG, Contopoulos-Ioannidis DG, Ioannidis JPA. Current use of routinely collected health data to complement randomized controlled trials: a meta-epidemiological survey. *CMAJ Open* 2016. DOI:10.9778/cmajo.20150036.