

Supplementary Index:

	Item No.	RECORD items	Location in manuscript where items are reported
Title and abstract			
	1	<p>The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included.</p> <p>If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract.</p> <p>If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.</p>	Abstract
Introduction			
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 1
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 1,2
Methods			
Study Design	4	Present key elements of study design early in the paper	Page 2
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 2
Participants	6	<p>The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided.</p> <p>Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided.</p>	Page 2,3, Supplementary Table 2

		If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	
Variables	7	A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	Page 2,3,4 Table 1
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Page 2
Bias	9	Describe any efforts to address potential sources of bias	Page 2 and 6
Study size	10	Explain how the study size was arrived at	Page 2
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	Page 2
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) <i>Cohort study</i> - If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> - If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> - If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses	Page 2
Data access and cleaning methods	13	Authors should describe the extent to which the investigators had access to the database population used to create the study population. Authors should provide information on the data cleaning methods used in the study.	Page 2 and Supplemental Table 2
Linkage	14	State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	Not Applicable
Results			

Participants	15	Describe in detail the selection of the persons included in the study (<i>i.e.</i> , study population selection) including filtering based on data quality, data availability and linkage. The	Page 3
		selection of included persons can be described in the text and/or by means of the study flow diagram.	
Descriptive data	16	(a) Give characteristics of study participants (<i>e.g.</i> , demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) <i>Cohort study</i> - summarize follow-up time (<i>e.g.</i> , average and total amount)	Page 3 Table 1
Outcome data	17	<i>Cohort study</i> - Report numbers of outcome events or summary measures over time <i>Case-control study</i> - Report numbers in each exposure category, or summary measures of exposure <i>Cross-sectional study</i> - Report numbers of outcome events or summary measures	Page 3,4, Table 1,2
Main results	18	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (<i>e.g.</i> , 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Page 3,4, Table 1,2 Figure 1
Other analyses	19	Report other analyses done— <i>e.g.</i> , analyses of subgroups and interactions, and sensitivity analyses	Not Applicable
Discussion			
Key results	20	Summarize key results with reference to study objectives	Page 3,4
Limitations	21	Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	Page 7
Interpretation	22	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 7
Generalizability	23	Discuss the generalizability (external validity) of the study results	Page 7
Other Information			

Funding	24	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Not Applicable
Accessibility of protocol, raw data, and programming code	25	Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	Page 2, Supplemental Index Table 1.

Table S1: RECORD statement

*Reference: Benchimol EI, Smeeth L, Guttman A, Harron K, Moher D, Petersen I, Sørensen HT, von Elm E, Langan SM, the RECORD Working Committee. The Reporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement. *PLoS Medicine* 2015.

	ICD/PCS-10 code(s)
Acute myeloid leukemia	C92.0x, C92.4x, C92.5x, C92.6x, C92.Ax
Acute Kidney Injury	N17
Hemodialysis	5A1D00Z, 5A1D90Z, 5A1D60Z
Blood Transfusion	3023, 3024, 3028
Platelet Transfusion	30233R, 30243R
Palliative Care Encounter	Z51.5
Tumor Lysis Syndrome	E88.3

Table S2: The International Classification of Diseases, 9th and 10th Revision, Clinical Modification/ Procedure Coding System (ICD-9-CM/ PCS) used for the analysis.

The variables for all-cause mortality, cardiogenic shock, cardiac arrhythmias, septic shock were already pre-coded and available through the National Inpatient Sample database.