

## Appendix A. Supplementary data

### **Rheumatoid arthritis as an emergency department risk factor for acute coronary syndrome**

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#### **Table of contents**

Supplemental methods - registers .....	1
eTable 1 – Hypertension definitions .....	<b>Fel! Bokmärket är inte definierat.</b>
eTable 2 – Diabetes, hyperlipidemia and CVD definitions.....	<b>Fel! Bokmärket är inte definierat.</b>
eTable 3 – Components of the composite outcome ACS in relation to pre-existing RA-diagnosis.....	4
Supplemental Figure S1 - Flow chart of exclusion criteria .....	5

## Supplemental methods

### *The Population Register*

The Population Register is managed by statistics Sweden and includes information on deaths, emigration and immigration for the entire Swedish population. All residents are assigned a unique personal identity number that can be used for linkage of different data resources including several national health registers of high quality.

### *The Swedish Patient Register*

Swedish Patient Register is managed by the National Board of Health and Welfare and covers inpatient care since 1964- (nationwide since 1987) and non-primary outpatient care since 2001. The register is nationwide with a near complete coverage during the study period.

### *The Swedish Prescribed Drug Register*

The Swedish Prescribed Drug Register is managed by the National Board of Health and Welfare and started on July 1, 2005. The register covers all drugs except over-the-counter medication (which is not covered at all) and medications administered at hospitals (which is only covered to some extent in the Prescribed Drug Register and completely covered through the National Patient Register in some counties).

***eTable 1 – Hypertension definition.***

Anti-hypertensive drugs	ATC-codes	Exclusion diagnosis (ICD-10)
Diuretics	C03A, C03D, C03E	
Beta-blockers *	C07A, C07F	Angina pectoris (I208, I209) Atrial fibrillation (I48) MI (I21, I22) Heart failure (I50)
Calcium channel blockers	C08C, C08D	
ACE-inhibitors †	C09A, C09B	Heart failure (I50)
Angiotensin receptor blockers ‡	C09C, C09DA, C09DB	Heart failure (I50)
Other drugs targeting blood vessels	C02C, C02D	

Patients with a pick-up of a prescription of the anti-hypertensive drugs within the preceding 12 months of the index date were considered as having hypertension. As beta-blockers, ACE-inhibitors, and Angiotensin receptor blockers may be prescribed for other diagnoses than hypertension. Patients were not classified as having hypertension if these drugs were found in combinations with any such diagnosis\* † ‡. An existing record of hypertension (I109) was superior to the pick-ups of prescribed drugs.

\* Patients with a diagnosis of angina pectoris (I208, I209), atrial fibrillation (I48), MI (I21, I22) or heart failure (I50) and simultaneously prescribed with beta-blockers were not classified as having hypertension.

† ‡ Patients with a diagnosis of heart failure (I50) with concurrently prescription of ACE inhibitors or angiotensin receptor blockers were not classified as having hypertension.

***eTable2. Definition of diabetes mellitus, hyperlipidemia and CVD.***

<b>Diagnosis</b>	<b>ATC-codes</b>	<b>ICD-codes</b>
Diabetes Mellitus	A10	E10, E11
Hyperlipidemia	C10	-
CVD	-	I21, I22, I25, I63, I73.9

***eTable3. Components of the composite outcome ACS in relation to pre-existing RA-diagnosis.***

	Individuals without RA	Individuals with RA
<b>Fulfilled definition of incident ACS</b>	2,258	42
<b>Admitted:</b>	2175 (96 %)	40 (95%)
MI	1892 (84%)	38 (90%)
Unstable angina with revascularisation	283 (13 %)	2 (5%)
<b>Not admitted (events within 30 days from discharge):</b>	83 (4%)	2 (5%)
MI (non-fatal)	34 (2%)	1 (2%)
Unstable angina with revascularisation	12 (1%)	0
Fatal MI	16 (1%)	0
Death (other causes)	21 (1%)	1 (2%)

Abbreviations: ACS: Acute coronary syndrome, *range*, MI: *myocardial infarction*, RA; *rheumatoid arthritis*.

Supplemental Fig. S1 - Flow chart of exclusion criteria

