**Appendix 1.**

**Detailed inclusion and exclusion criteria**

For inclusion and exclusion criteria the International Statistical Classification of Diseases and Related Health Problems 10 (ICD10) codes will be used.

**Osteoarthritis cases**

* 1. Inclusion criteria:
* Has at least one of the following ICD10 codes: M15\*, M16\*, M17\*, M18\*, M19\*

**Rheumatoid Arthritis cases**

* + 1. Inclusion criteria:
* Has at least one of the following ICD10 codes: M05\*, M06\*

**Spondylarthritis cases**

* + - 1. Inclusion criteria:
* Has at least one of the following ICD10 codes: M45\*, M46\*

**Arthritis free controls**

* + - * 1. Exclusion criteria
* Has at least one of the following ICD10 codes: M05\*, M06\*, M15\*, M16\*, M17\*, M18\*, M19\*, M45\*, M46\*

NOTE! \* refers to all subcodes under the given main code.