Tool to Assess Risk of Bias in Longitudinal Symptom Research Studies Aimed at the General Population

1. Is the source population (sampling frame) representative of the general population?

Definitely yes (low risk of bias)	Probably yes	Probably no	Definitely no (high risk of bias)

Examples of low risk of bias:

- Selection of target population from a representative population roster such as national population registry

Examples of intermediate risk of bias:

- Single community-based study

Examples of high risk of bias:

- Hospital-based patient records; studies where the source population cannot be defined (or enumerated), i.e. any volunteer studies using self-recruitment

2. Is the assessment of the outcome accurate both at baseline and at follow-up?

Definitely yes
(low risk of bias)

Probably yes

Probably no

Definitely no
(high risk of bias)

Examples of low risk of bias:

- Repeated interview or other ascertainment asking about state with validated instrument or method (with demonstrated validity).

Examples of intermediate risk of bias:

- Instrument or method with limited validity assessment and concern of accuracy of responses
- Simple assessment of the presence (or absence) of the symptom(s) without making an effort to quantify the severity/extent
- Use of different instruments at different time points with concern of accuracy of responses

Examples of high risk of bias:

- Unvalidated instrument or method with concern of accuracy of responses
- Uncertain how information was obtained
- Studies with standardized clinical interviews (including physicians' unstructured assessment of symptoms)
- Studies, which assessed primary outcome as "physician-diagnosed condition"

3. Is there little missing data?

| Definitely yes (low risk of bias) | Probably yes | Probably no | Definitely no (high risk of bias) |

Examples of low risk of bias:

- High response proportion (rate) both at baseline and follow-up with little missing data
- For instance, response proportions were more than 75% both at baseline and follow-up(s) and missing data within questionnaires less than 10%

Examples of intermediate risk of bias:

- Moderate response proportions both at baseline and follow-up with moderate level of missing data
- For instance, response proportions were 50% to 75% (at baseline and follow-up(s) and missing data with questionnaires less than 15%

Examples of high risk of bias:

- Low response proportion both at baseline and follow-up with high level of missing data
- For instance, response proportions were <50% and missing data with questionnaires more than 15%

Example proportions may not apply to all situations. At times, lower proportions may be acceptable. At times, higher may be legitimately demanded