

New guidelines for reporting epidemiological studies that involve molecular markers

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New guidelines that provide an easy-to-use checklist for the accurate and ethical reporting of epidemiological studies involving molecular markers have been proposed by a group of international researchers and are published in this week's *PLoS Medicine*.

The STROBE-ME guidelines will also be published on the [STROBE website](#) where a forum for discussion and improvement of the checklist and related material will be available. In order to encourage dissemination of this extension to the STROBE Statement, this article will also be published on October 25th by the *European Journal of Clinical Investigation*, *Journal of Clinical Epidemiology*, [Preventive Medicine](#), *Mutagenesis*, [Journal of Epidemiology and Community Health](#), and *European Journal of Epidemiology*.

In recent years, there has been a proliferation of studies involving the use of biomarkers, often conducted within the growing number of biobanks and biomonitoring projects, but such studies can be difficult to interpret and are sometimes poorly reported. This type of work is often referred to as molecular epidemiology and such studies typically involve examining the association between biomarkers (risk factors) and disease processes. Such studies aim to clarify mechanisms of action, identify individuals susceptible to a particular condition, and improve diagnoses or predict future clinical outcomes in patients.

The researchers hope that these new guidelines, which they name STROBE-ME (Strengthening the Reporting of OBservational studies in

Epidemiology – Molecular Epidemiology), will help to uphold researchers' ethical duties and responsibilities, such as accurately, completely, and transparently reporting findings in sufficient detail to allow the scientific community to assess their strengths and weaknesses, make fair comparisons, and clearly interpret the findings.

The authors say that if used widely and systematically, the STROBE-ME checklist should strengthen the reporting of molecular epidemiology studies and the way in which such studies are interpreted.

More information: Gallo V, Egger M, McCormack V, Farmer PB, Ioannidis JPA, et al. (2011) STrengthening the Reporting of OBservational studies in Epidemiology – Molecular Epidemiology (STROBE-ME): An Extension of the STROBE Statement. PLoS Med 8(10): e1001117. [doi:10.1371/journal.pmed.1001117](https://doi.org/10.1371/journal.pmed.1001117)

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