

Chairperson's introduction

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The goal of cancer screening is to detect cancer when it is early and treatable, if not curable. For a screening test to be useful there must be a test or procedure that will detect cancer earlier and at the same time there must be evidence that an earlier diagnosis will also result in improved outcome, i.e. a reduction in cancer-specific mortality. The screening procedure is itself not diagnostic, and positive or suspicious findings must be evaluated further to determine diagnosis and appropriate treatment. Several characteristics make particular cancers more suitable for screening than others:

- (1) The cancer must be a major public health problem with substantial morbidity and mortality.
- (2) It must be possible to detect the cancer in the preclinical state.
- (3) There must be a possibility of effective and improved treatment because of early detection.
- (4) A good screening test with a high sensitivity and specificity, low cost and little discomfort must be available.

Each screening programme has its specific benefits and harms. It is therefore important to evaluate the effectiveness of a screening programme by specific criteria. In recent years mounting evidence has emerged for the role of CT screening in lung cancer.

The purpose of this Educational Symposium on *Screening for Cancer: Sense and Sensibilities* is to provide you with a comprehensive update on cancer screening. The general introduction on how to measure the effectiveness of a screening programme and the potential sources of bias that should be taken into account will be followed by a State-of-the-Art update, written by experts in the field of Breast, Prostate, Colon and Lung Cancer screening. For each particular form of screening a historical background will be provided, the epidemiology of the cancer, a description of the screening tool, its diagnostic performance, the available evidence for (cost)-effectiveness, potential benefits and harms, and the issue of overdiagnosis will be addressed. In addition, a future perspective will be provided for cancer screening programmes that are not yet part of health care policies, such as prostate and lung cancer screening. We hope that this educational symposium will contribute to the understanding and acceptance of screening as one of the approaches to fighting cancer.

Conflict of interest statement

The author has no conflict of interest to declare.