Introduction
The dogma of cancer biology is that tumours arise in a multistep fashion, and colon cancer has been the paradigm of this type of model. It is no surprise that the same model has been adopted in other cancer types, and breast cancer is no exception. Invasive breast cancer is believed to arise via a series of intermediate lesions, which are currently classified as hyperplasias with and without atypia, and in situ carcinomas.

The multistep model has also formed the basis for the screening programmes instituted for cervical and breast cancer. If tumours arise via intermediate steps and it is possible to identify one or more of these steps, it becomes possible to treat the patient before the tumour has had a chance to metastasise.

Whether the screening programme has reduced the mortality from breast cancer is a controversial issue. The consensus view seems to be that it has had an impact on mortality, although the level of reduction is hotly debated. Whatever prejudices one holds, the fact remains that with the introduction of the screening programme there has been an increase in the detection of pre-invasive breast disease, and this has highlighted deficiencies in the classification systems and the lack of knowledge regarding the natural history of the lesions. This lack of knowledge has led to significant problems in diagnosis and management of patients with proliferative breast disease, so that patients are offered diverse treatment options ranging from 'nothing' to mastectomy.

The articles in the present thematic review series were conceived to highlight the problems faced by doctors and scientists dealing with pre-invasive breast disease, and to throw light on the evolving classification systems and molecular techniques that are likely to change the way we approach patients with these disorders.
The series of articles in these reviews intends to educate as well as to raise questions about our knowledge, prompting doctors and scientists to come together to meet the challenge. It is hoped that this will make a difference to the management of patients with pre-invasive breast disease.

**Competing interests**
None declared.

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