

The ‘Mammography Programme’: an essential tool for early detection and a better prognosis

The Directorate of Health and the Epican Cancer Epidemiology and Prevention Group at the Luxembourg Institute of Health (LIH) have jointly published a report on the evaluation of the ‘Mammography Programme’ (PM), the national organised breast cancer screening programme. This is the first evaluation of its kind, and is the result of a new methodology developed by the Epican group to cross-reference data from the National Cancer Register (RNC) and the PM programme.

The report highlights that, in addition to the quality of its organisation, the PM is effective in detecting cases of cancer at less advanced stages than those detected outside the programme. This effectiveness underlines the importance of the PM in early detection, which helps to optimise the recovery process. Analysis of the data highlights the programme's strengths, but also identifies possible areas for improvement to maximise its impact on the target population.

Drawn up under the direction of Dr Claudine Backes, Scientific Director of the RNC and head of the Epican group, this report makes it possible to assess the country's compliance in monitoring and improving the effectiveness of cancer screening by confirming the indicators at international level.

‘By developing this new methodology, which links data from the National Cancer Registry with data from the Mammography Programme, Luxembourg now joins a small group of European countries capable of assessing the effectiveness of breast cancer screening at such a high level. We hope that the results of this report will be used for public health actions and future evaluations to detect breast cancer as early as possible in Luxembourg. This could make it possible to optimise the management of these cancers, leading to a better prognosis and less burdensome and costly treatments, an increase in quality of life and a reduction in the number of deaths associated with them’, commented Dr Backes.

Some results

Between 2011 and 2018, the PM participation rate was higher than the rates reported by neighbouring countries, but lower than the European recommendations [1]. Participation rates have also fallen steadily over time, a trend whose causes remain to be investigated.

As part of the organised screening programme, mammograms are read twice, enabling one breast cancer in five to be detected that would not have been found by a single reader. This process, which involves each mammogram being examined by two independent radiologists, not only improves cancer detection, but also reduces the number of false-positives. As a result, the number of additional examinations (such as MRIs or biopsies) is reduced, which saves costs, and, more importantly, the emotional stress for many participants waiting for confirmed results is reduced to the time between the mammogram and the second reading.

The data analysis carried out as part of the report demonstrates the effectiveness of the PM in detecting cancers at earlier stages, of smaller size in younger women and with fewer cases of lymph node invasion, compared with cancers detected outside participation in the programme. In most cases, tumours detected as part of the programme are still localised, without metastases, which can facilitate treatment [2].

Funding and collaborations

This first report, the result of collaboration between the National Cancer Registry and the coordination centre for organised cancer screening programmes for the ‘Mammography

Programme', has helped to strengthen national and international collaboration on the evaluation of screening programmes. In the future, this methodology could be replicated in order to assess the effects of implementing international recommendations to extend the age of inclusion for PM.

The Ministry of Health and Social Security also points out that since 1 July 2024, the age of access to the organised breast cancer screening programme has been extended. It is now available to all women affiliated to the CNS, from the age of 45 up to 74.

'This report marks an important step in our efforts to improve the health and well-being of women in Luxembourg. The recommendations made will be implemented with determination and commitment. The work carried out will enable us to strengthen our screening programme, encourage participation in examinations and, above all, improve the chances of recovery. This approach aims to reduce the incidence and mortality of breast cancer in our country, by offering every woman a chance to detect the disease as early as possible and to fight it more effectively', concluded Martine Deprez, Minister for Health and Social Security.

For further information

- on the evaluation report in the professional area of sante.lu
- on the 'Mammography Programme' on sante.lu
- on the National Cancer Register on rnc.lu
- on the Luxembourg Institute of Health at lih.lu

[1] Rapport national évaluation du programme de dépistage organisé du cancer du sein au Luxembourg, p. 37

[2] Rapport national évaluation du programme de dépistage organisé du cancer du sein au Luxembourg, p. 36