

## **EUSOBI recommendations for breast imaging and cancer diagnosis during and after the COVID-19 pandemic**

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The coronavirus disease 2019 (COVID-19) pandemic has led to a sudden disruption of routine medical care affecting all aspects of breast imaging. Early breast cancer can be fatal if left untreated, so adequate and timely treatment is still required in these circumstances.

It is well-known that early detection contributes to decrease in breast cancer specific mortality. In women at average risk breast cancer grows relatively slowly and a short delay in screening (e.g. 6–12 weeks) will not adversely affect overall outcomes from this disease.

In women with breast cancer outcomes are dependent on timely and high-quality multidisciplinary interventions, usually guided by advanced imaging techniques. Delays in this process might likewise only cause limited effects in breast cancer related outcomes, but the psychological effects for women may be very large if they are mid investigations or have breast symptoms.

**Where capacity of breast imaging has been limited (by redeployment or reduction of patient attendance), triage may become necessary to identify which patients should undergo immediate care versus further delay.**

In this document the European Society of Breast Imaging (EUSOBI) provides recommendations for breast care provision and procedural prioritization at the times of the COVID-19 pandemic, being aware that medical decisions must be taken balancing individual and community safety as well as the safety of healthcare workers.

Each country, region and even city will face a different set of changing circumstances and be guided by their health policy advisors as to when to resume activities. Having postponed breast imaging to a greater or lesser extent breast units are facing smaller or larger backlogs in patient care and screening. EUSOBI cannot determine the optimum time for each specific location to restart breast imaging. Moreover, the recommendations below are limited to screening, diagnosis and management of the breast itself. Recommendations for whole-body

oncologic imaging are left to general oncologic imaging recommendations ([www.esmo.org](http://www.esmo.org), 2020; [www.asco.org](http://www.asco.org), 2020).

EUSOBI has defined the following recommendations, adapting general schemes already proposed by the Italian College of Breast Radiologists by SIRM, French health professional societies, the Dutch working group for breast surgery, the United States Society of Breast Imaging and the Canadian Society of Breast Imaging:

- 1) women who have symptoms suspicious for breast cancer (in particular: new onset palpable nodule; skin or nipple retraction; orange peel skin; unilateral nipple discharge) should undergo regular diagnostic work-up as soon as possible.
- 2) women with an indication for needle biopsy (BI-RADS 4 or 5) should undergo this procedure as soon as possible.
- 3) women with breast cancer requiring staging examinations or evaluation of ongoing (neoadjuvant) therapy should undergo these studies without further delay.
- 4) asymptomatic women at increased risk for breast cancer for whom a screening appointment was cancelled, should undergo a screening examination preferably within 1 year and three months from the previous appointment. In women undergoing combined screening with MRI and mammography, mammographic screening can safely be skipped a year, provided that the MRI examination is performed.
- 5) asymptomatic women performing annual mammographic follow-up after breast cancer treatment, should preferably schedule the appointment within one year and three months from the previous check, compatibly with the local organizational conditions; depending on the individual risk of local recurrence a delay of up to one year may be acceptable.
- 6) asymptomatic women who have not responded to the invitation for screening mammography after the onset of the COVID-19 pandemic or have been informed of the suspension of the screening activity, should schedule the check preferably within three to six months of the due date, compatibly with local organizational conditions. In women at average risk a delay of up to one year for biennial screening may be acceptable.

EUSOBI recommends precautions to protect both patients and healthcare workers (radiologist, radiographer, nurse, and reception staff) from infection or disease spread on the occasion of breast imaging procedures, particularly mammography, breast ultrasound, breast MRI and breast interventional procedures by using the appropriate personal protective equipment (consider aprons or gowns, masks and/or shielding, and gloves for all procedures). Special care should be taken to avoid breast imaging in patients suspected of having COVID-19.

Please note that local health regulations may differ from EUSOBI general recommendations. In such cases, the official local rules should be followed.

It should be noted that as the pandemic rapidly evolves we are learning increasingly about viral transmission and the impact on the healthcare system. Thus, these recommendations may change over time with a need to be updated.

**Table 1. Prioritization of actions to be performed**

Breast imaging is usually not justified in a patient with an active COVID-19 infection.

**High priority - Rapid appointment**

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- Imaging in women presenting with suspicious breast symptoms or suspicious axillary findings
- Diagnostic imaging in women with an abnormal screening examination
- MRI screening in women at very high risk for breast cancer
- Exploration of incidentally detected abnormalities in other imaging modalities (e.g. chest CT)
- Search for occult primary cancer

**Medium Priority - Appointment within 3 months**

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- Follow-up imaging in women with BI-RADS 3 findings on a previous examination
- Mammographic screening in women at high risk for breast cancer
- Systematic follow-up after breast cancer

**Low priority - Appointment within 6 months**

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- Breast MRI for breast implant evaluation
- Screening mammography in healthy women at average risk for breast cancer

**Sources:**

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