The European Commission Initiative on Breast Cancer (ECIBC) is a patient-centred action aiming to improve and harmonise breast cancer care in Europe. The project aims to develop a European quality assurance (QA) scheme for breast cancer services supported by accredited certification and based on high-quality, evidence-based recommendations. The QA scheme defines quality criteria to be fulfilled by breast cancer services adhering to ECIBC along the entire care pathway from screening until end-of-life care.

One of the two working groups active on ECIBC, is the Guidelines Development Group (GDG). The group is made up of international experts and patients selected through a public open call. They represent a very wide range of expertise with the aim to be as inclusive as possible. The objective of the GDG is to develop evidence-based European Guidelines for breast cancer screening and diagnosis.

The GDG follows the GRADE approach (a systematic approach to grading the certainty of evidence and strength of recommendations), in defining the healthcare question of interest (population of interest, interventions to be compared and patient-relevant outcomes- PICO format), synthesising the evidence and developing the recommendations for the Guidelines. This is being carried out within virtual working environments and in periodically organised meetings. SciTech Europa Quarterly speaks with GDG clinical co-chair Dr Axel Gräwingholt about breast cancer screening and diagnosis technology, alongside other current topics in breast cancer research.

The aim of the GDG is to develop new European guidelines on breast cancer with the goal to improve and harmonise the approach to screening and diagnosis of breast cancer across Europe.

What is the work and role of the GDG?
The aim of GDG is to develop new European Breast Cancer guidelines with the aim to provide recommendations for screening and diagnosis based on the latest available evidence to improve population-based screening and diagnosis of breast cancer across Europe.

Over the last three and half years the GDG has developed approximately 80 recommendations, 50 are already publicly accessible. The GDG also identifies topics for research because during the process of issuing recommendations, the group finds that additional research is sometimes necessary in order to answer exhaustively a specific healthcare question. This, in my opinion, is also one of the major outcomes of this working group, relevant for policy makers when planning and organising screening programmes.

What are the current trends in breast cancer screening/diagnosis technology?
As a radiologist by profession I am convinced that the future trend in breast cancer detection goes clearly towards the use of tomosynthesis as a...
means of screening and diagnosis as well, but the evaluation of this method is still difficult due to a lack of studies with clear results on the interval-cancer rate or the overdiagnosis rate. But there are also other aspects to be considered for a potential use in large population-based screening programmes which couldn’t exhaustively been answered either with the current information available, such as increased workload through longer reading times and cost of devices. This obviously also applies to tailored screening, meaning the use of different techniques in different subpopulations of the screening group (for example women with dense breasts), along with risk stratified screening.

However, the GDG did use all the evidence available, fulfilling the criteria of the methodology to answer at least some of the relevant questions, but also recommended research where uncertainties are still present.

One fairly new topic is the use of Artificial Intelligence (AI) in reading mammograms. This has not yet been looked at by GDG but it is very important. For example, in case tomosynthesis would ever be implemented in the screening settings, the workload of reading the images would be tremendous. AI programs might be able in the future to help with this, if they are reliable enough of course, and maybe even sort out the true negative benign cases so the radiologist might not have to look at anymore. Also maybe interval cancers could be avoided through AI programs.

In terms of breast cancer screening and diagnosis, what are the current main challenges? How can these be overcome?

One of the main challenges is to implement guideline based organised screening programs throughout Europe. This is quite challenging due to the difference in financial resources between the countries, but providing evidence-based recommendations together with an associated QA scheme shall help implementation and therefore increase equity. This should remain the goal that we are all striving for. The goal regarding the disease itself should be to identify who would profit from early detection and personalised treatment in order to avoid overtreatment rather than overdiagnosis.

As a radiologist I do not like the term overdiagnosis (which in technical terms means detecting cancers that will never threaten the life of a woman even if not detected), because for a radiologist detection is key. However, we must consider that at present we might also treat these cancers for instance with chemotherapy or radiation with all the related side effects, because we cannot identify clearly which cancers will threaten the life of a woman and which will not. We all hope that this issue can be solved in the future somehow.

What is the importance of developing evidence-based European Guidelines for breast cancer screening and diagnosis? What are the main challenges of developing these guidelines?

It is very important to develop guidelines to improve and harmonise the care of the disease in Europe. A woman in Europe has the right to access quality breast cancer services regardless where she lives or her financial resources. Of course this is being idealistic, maybe even almost romantic, but developing medical guidelines is always idealistic.

The guidelines are presented so that women, health professionals and health care providers can equally benefit from them in order to make their decisions. In contrast to the previous guidelines on which most existing European screening programs are based, these guidelines are web based and can be updated much easier than books. The GDG has in fact already started updating some of the recommendations due to the fast development of technology and research in this field.

Also in comparison to the previous edition of the guidelines, all relevant issues are also being translated into lay versions so that women can make a decision of what to do (participate in screening etc.). It also gives them a chance to see if what is being offered is in accordance with what we define as trustworthy guidelines.

What is next for the GDG, and for breast cancer screening/diagnosis?

The group has just voted on the final recommendations of this phase of the project. Now they are being edited in order to make them publicly accessible on the ECIBC website. The work must, and will, continue due to continuous changes in the diagnostic field and the development of new devices. It is de-facto a living project and has to continue, until there is a final and complete cure of breast cancer in all stages. However, this is not very likely to happen soon. The adoption of ECIBC is on a voluntary basis. Thus, in the near future the goal is to disseminate information on ECIBC adequately to support the implementation of these guidelines throughout the EU Member States and beyond, as has already happened in Tunisia or Bahrain.

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