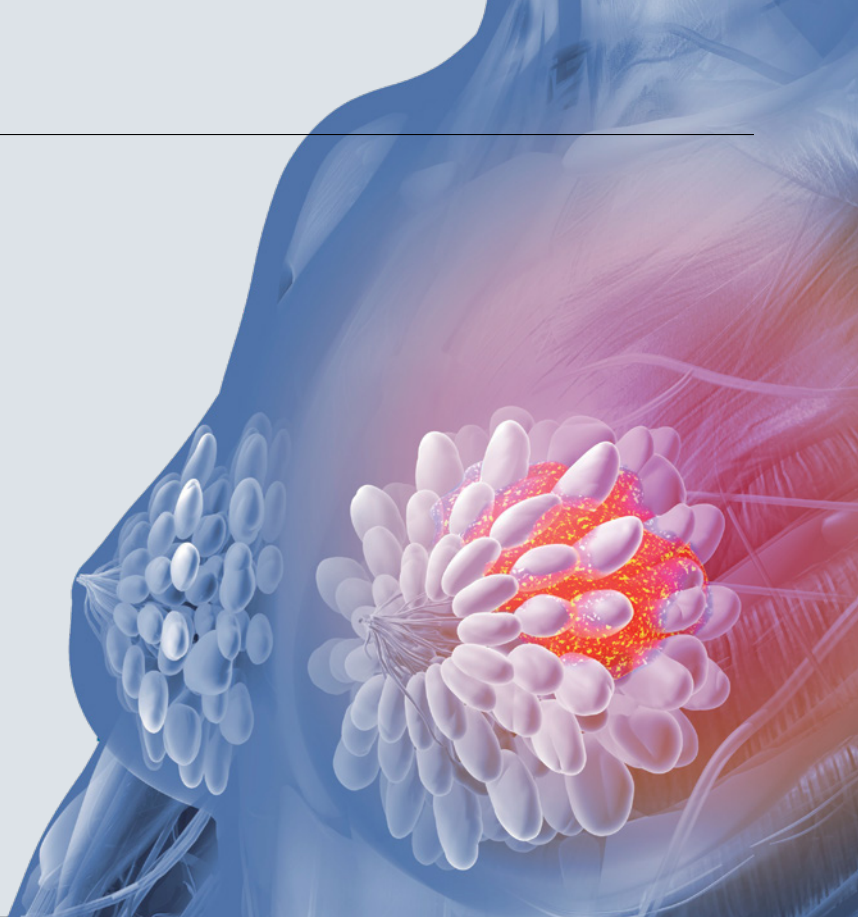


# BREAST CANCER ON THE RADAR

China-specific screening guidelines for earlier diagnosis and improved prognosis.



Researchers from Tianjin Medical University Cancer Institute and Hospital (TMUCIH), and the China Anti-Cancer Association are hoping to improve the speed of breast cancer diagnosis and survival rates with guidelines and research specific to local needs.

The rate of breast cancer has increased rapidly in China in recent years and is now the most common cancer for women in the country, according to cancer statisticians GLOBOCAN 2020.

TMUCIH researchers conducted China's largest ever breast cancer screening study, between March 2008 and November 2009 for urban women, and from July 2009 to December 2011 for rural women, covering 1.26 million people in total.

"Prior to this, there was no mature early diagnosis and treatment system suitable for Chinese women," says Xishan Hao, the former chairman of the Chinese Anti-Cancer

Association and honorary president of TMUCIH.

By looking at the results of the study, considering China's socioeconomic conditions and referring to screening guidelines in Western and east Asian countries, researchers then launched the Breast Cancer Screening Guideline for Chinese women in 2019. The guidelines, published in *Cancer Biology & Medicine*, provide a China-specific framework for women at average risk and high risk of breast cancer for earlier diagnosis and treatment as well as better survival rates and quality of life.

Hao says guidelines specific to Chinese women are "imperative" due to their biological differences from Western women, such as typically smaller and denser breasts. "The peak onset age for breast cancer in Chinese women is between 40 and 50 years, which is younger than that in Western countries by five to 10 years."

Based on high-quality studies, the researchers

recommend that women aged 45–69, with an average risk of breast cancer, should undergo regular screening. They also note that women aged 40–44 years with an average risk of breast cancer should also have the opportunity to be screened. "They are encouraged to fully understand the potential benefits, risks and limitations of breast cancer screening, and then consult with their doctors to make individualized decisions on screening," adds Hao.

When it comes to screening options, the researchers strongly recommend mammography as the primary method for women with an average risk of breast cancer.

They recommend breast ultrasonography as a supplementary screening method after mammography in women with dense breasts—which have a lot of fibrous or glandular tissue, but not much fat. "Breast ultrasonography can effectively increase the detection rate of breast cancer among women with

dense breasts after negative mammography results," says Hao.

Citing another study by Dong published in *Clinical Breast Cancer*, Hao explains that supplementary ultrasound screening increased the detection rate of breast cancer by 11.9%, from 2.6 in 1,000 to 2.9 in 1,000.

The research also recommends ultrasonography screening for women with high breast density, small breast size, and low body mass index (BMI) as it is possible for breast cancer in those cases to be missed by screening through mammography.

In terms of screening interval, the researchers for the *Cancer Biology & Medicine* paper highly recommend mammography every two years for women with an average risk of breast cancer and recommend breast MRI every year for high-risk women, such as those with a family history of early-onset breast cancer and pathogenic genetic mutations. ■