



  
BRASTER<sup>®</sup>

# About Braster

**Braster S.A.** is an innovative Polish telemedical company listed on the Warsaw Stock Exchange. It was founded in 2008 by a group of scientists who have developed a state-of-the-art technology called contact thermography.

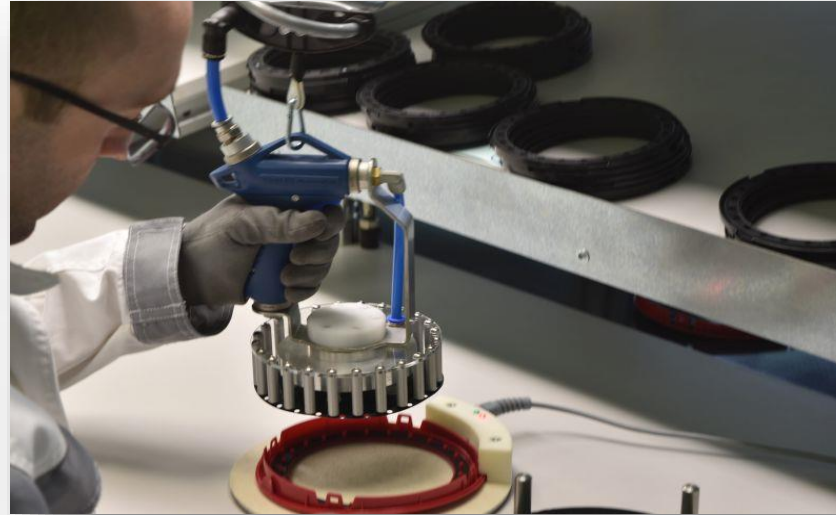
In October 2016 Braster S.A. launched **Braster System** - innovative medical device for in-home breast self-examination.

In August 2018 we launched **Braster Pro** – innovative medical device for professional use by Healthcare professionals.





# Production plant





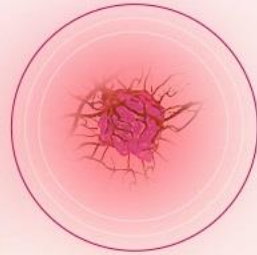
# Quality control



# Cancer growth

There are two major biological processes that influence cancer growth:

- proliferation
- angiogenesis

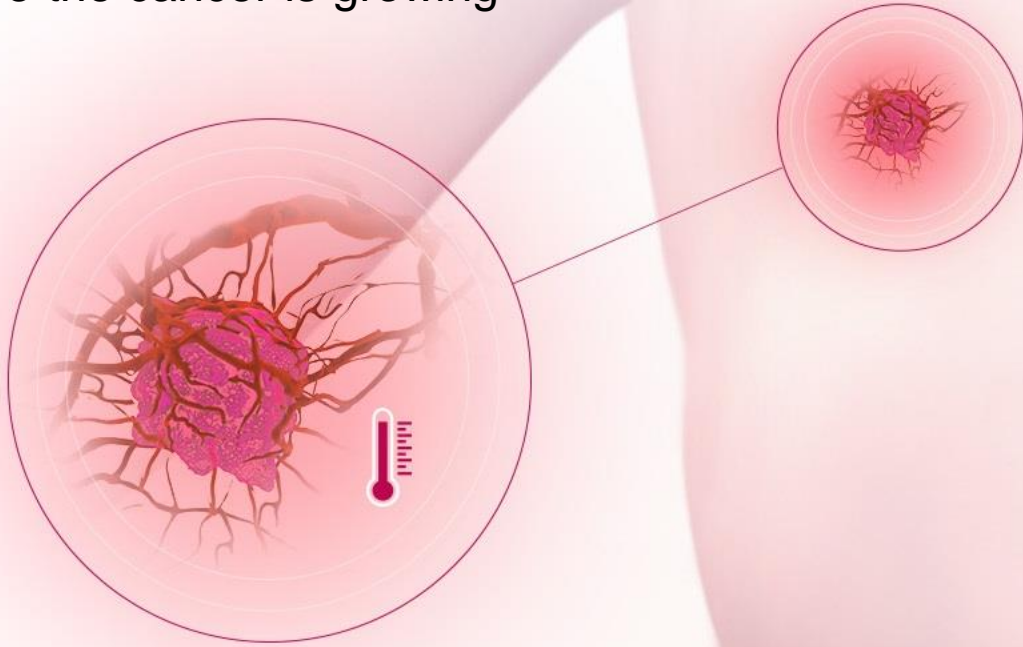


Angiogenesis is the process of forming new vessels, and it plays an essential role in the development of breast cancer and its metastasis

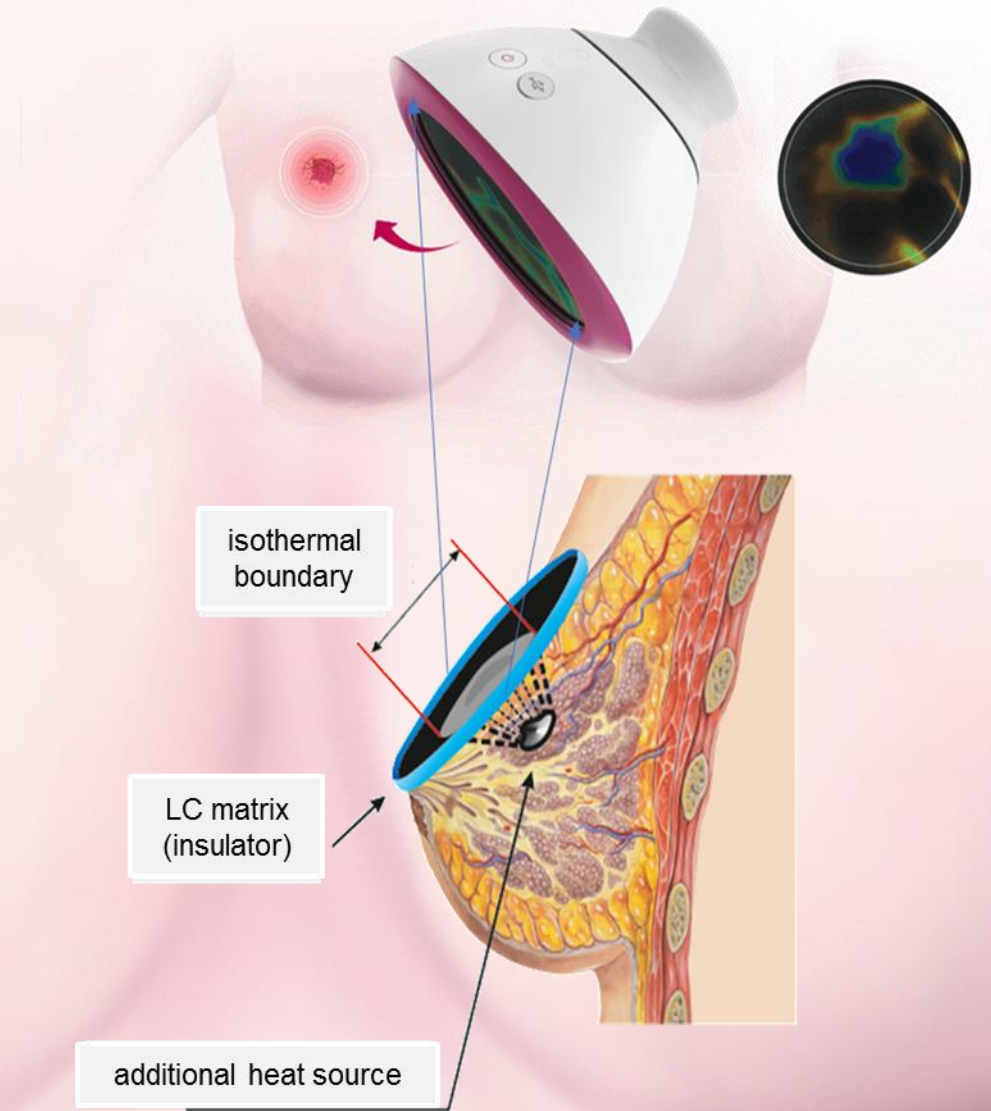


# Cancer growth

These two processes result in an increase in surrounding tissue metabolism, and subsequently a higher temperature in the place where the cancer is growing



The increase in temperature starts in the very early stages of cancer development!





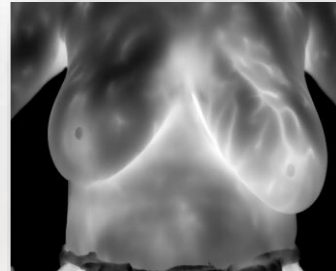
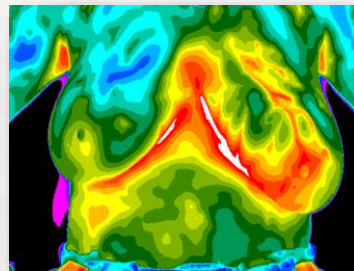
BRASTER<sup>®</sup>

# Method and Product

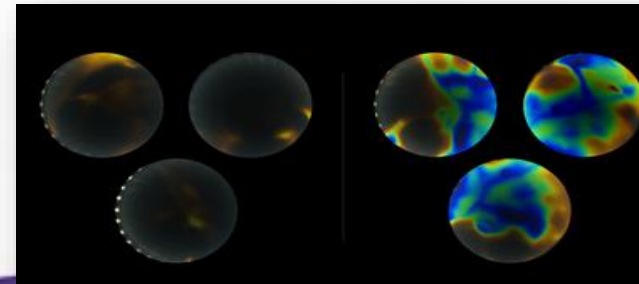


**Thermography**- imaging, detection and registration of the temperature in the examined body.

**Remote-sensing thermography** - the image is obtained without the need of contact of the device and the Surface of examined body; the technique is based on heat transfer through radiation [e.g. infrared (IR) thermographic cameras, pyrometers];



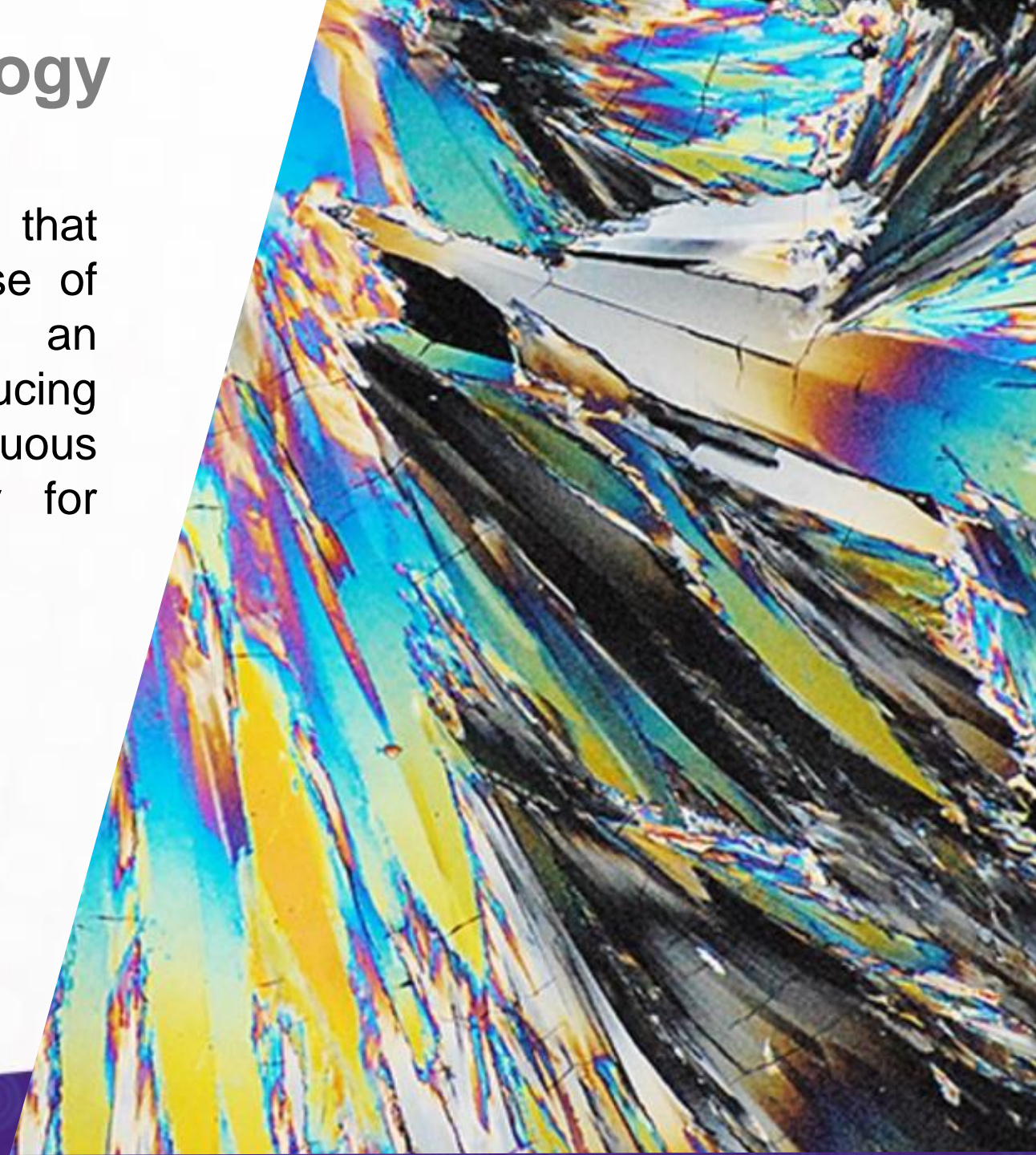
**Contact thermography** - the image is obtained through the contact of the device with examined surface based on heat transfer by thermal conduction [e.g. liquid-crystal forehead thermometers, Braster device].



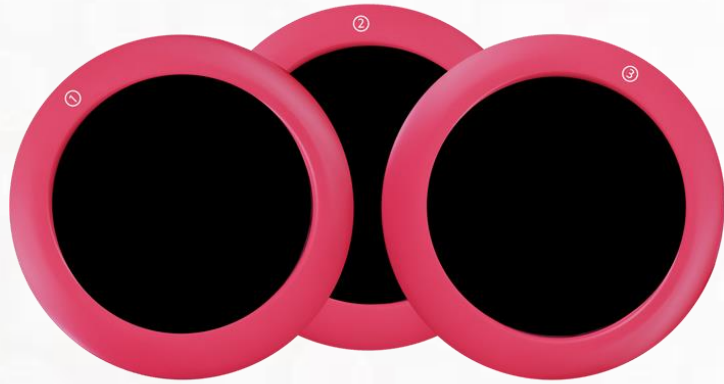


# Unique liquid-crystal technology

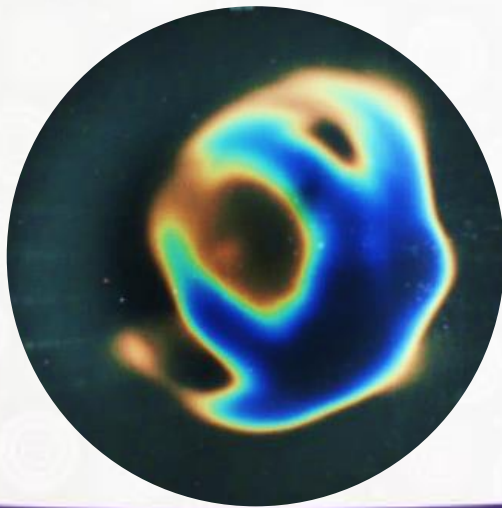
Liquid crystals are chemical compounds that exhibit the properties of liquids and those of crystalline solids. BRASTER S.A. has an innovative, proprietary technology for producing mixtures of liquid crystals and a Continuous Liquid Crystal Film (CLCF) technology for applying liquid-crystal emulsion on the film.



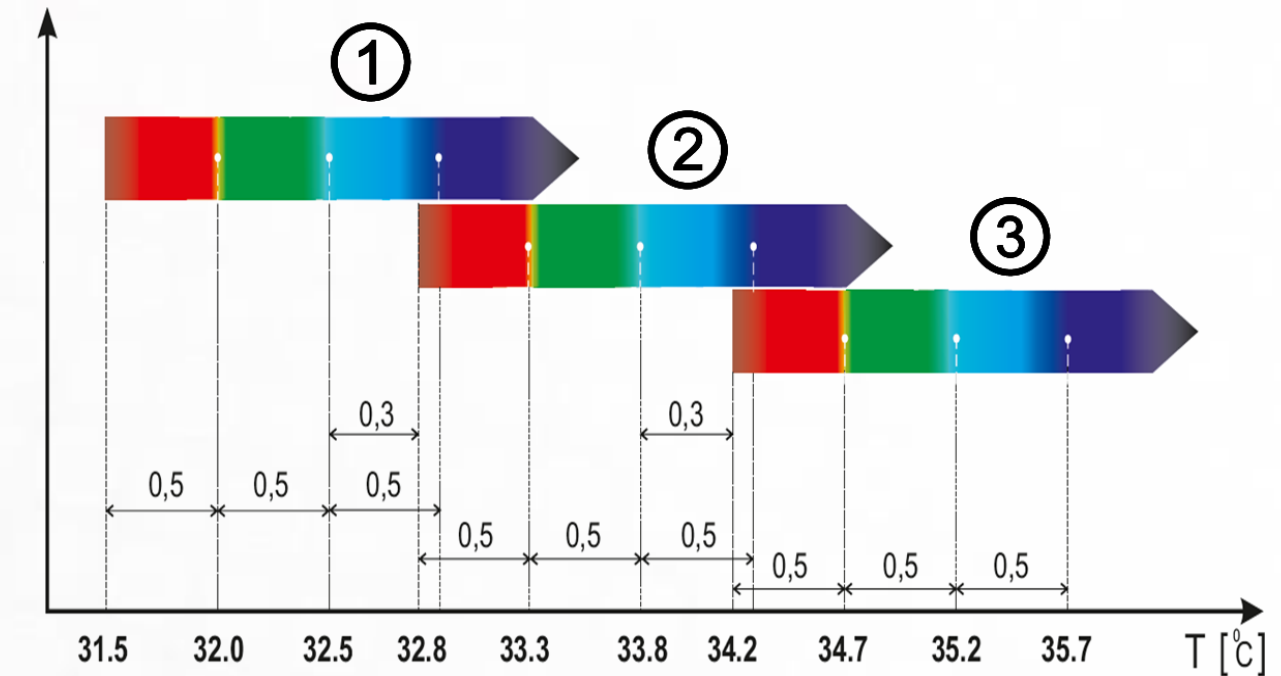
# Thermographic matrices



BRASTER PRO is delivered with a set of 3 thermographic matrices which use liquid crystals to present breast surface heat distribution in the form of a colorful map



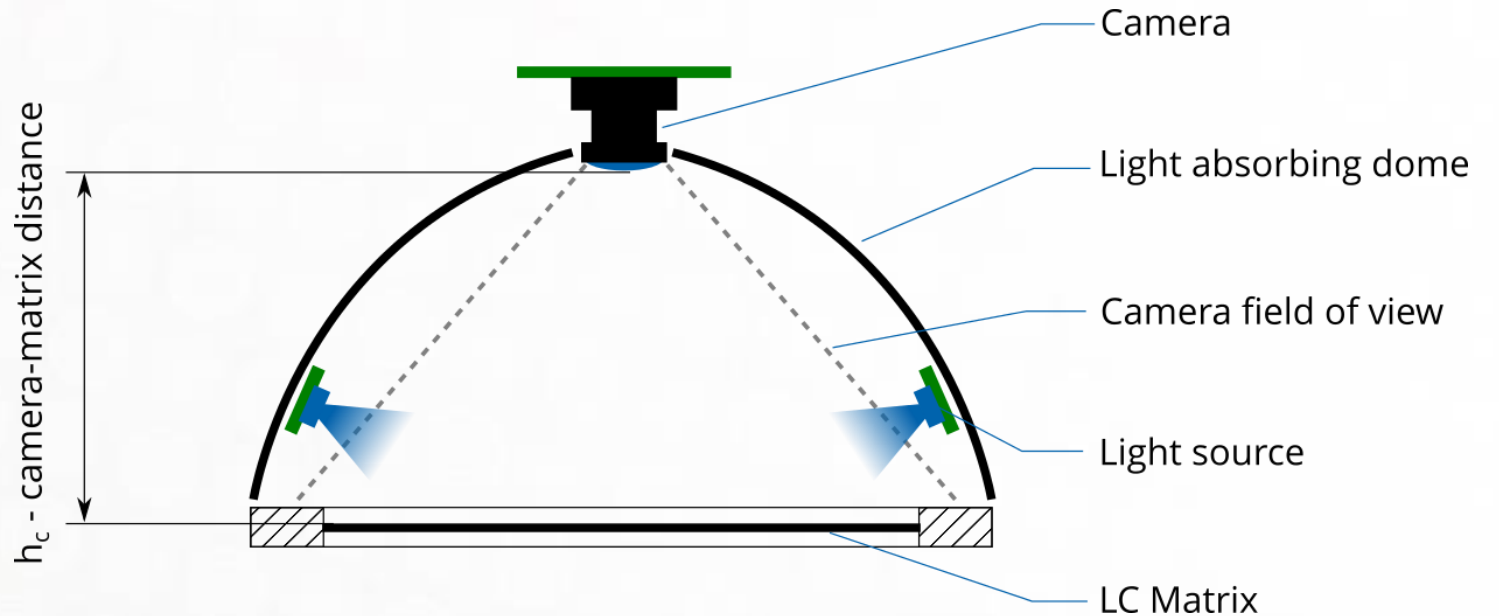
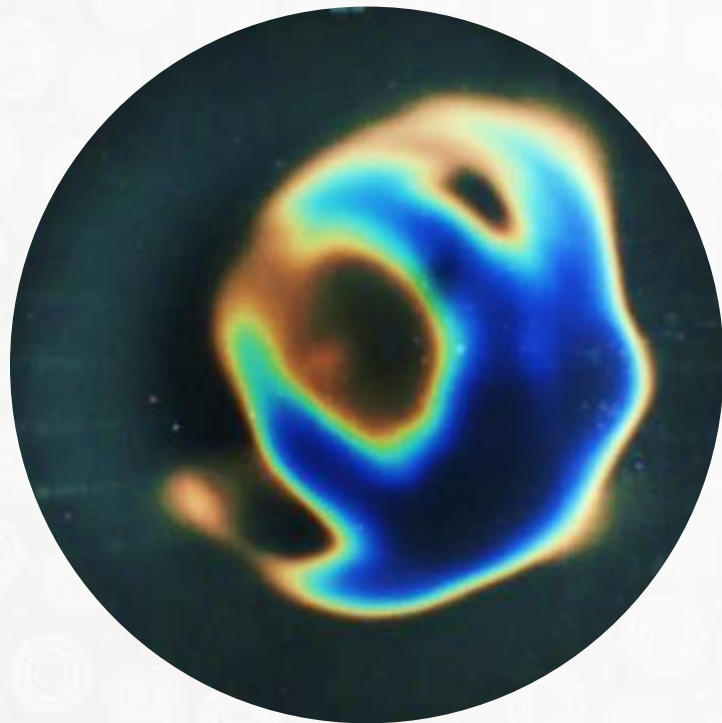
Each matrix in a set is calibrated to a different temperature range to compensate for differences in body temperature across patients:





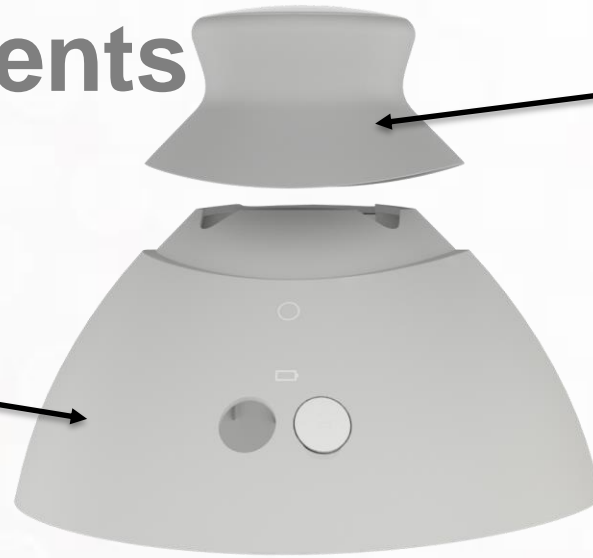
# Image acquisition device

Heat map presented on the surface of liquid crystal matrix during examination is illuminated with LEDs and captured with visible light spectrum camera



# Main components

Housing



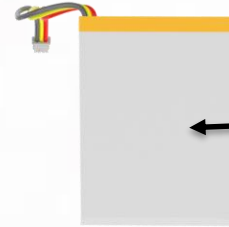
Hand Grip / Examination button



Digital camera



Li-Ion rechargeable battery



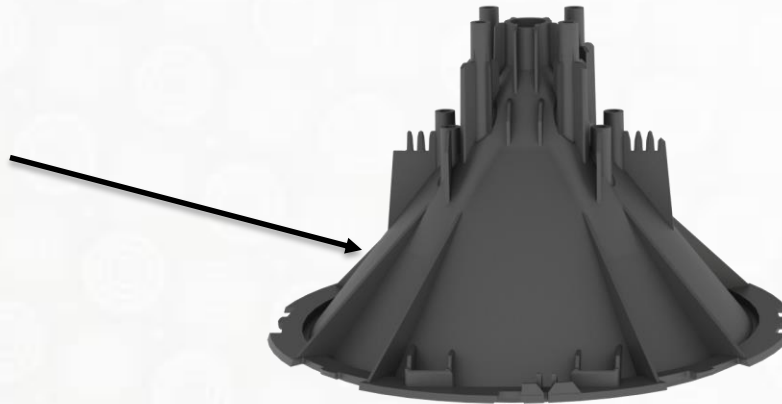
Main PCB



LED strip



Light chamber



Light shield, diffuser





# Braster Pro breast examination

## Mobile app

guides through the examination  
and informs about the result



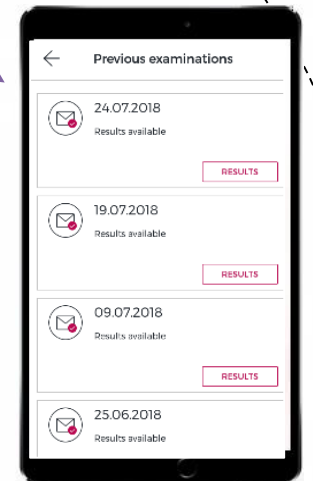
Device  
Braster Pro



Images are sent for  
interpretation to  
telemedical center

Certified medical experts  
control of the interpretation  
process

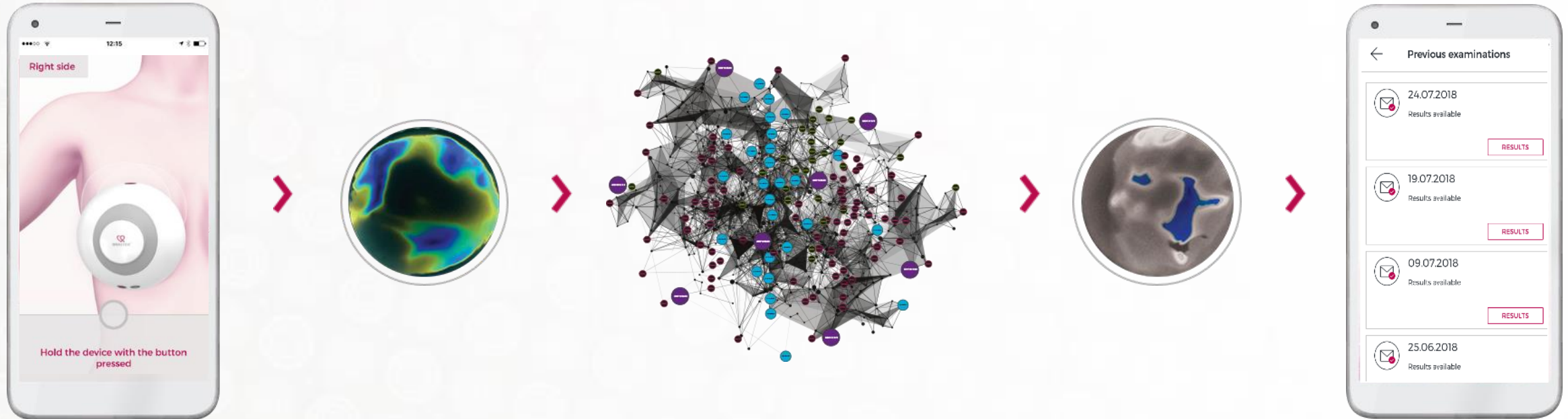
Examination result



Telemedical center  
where the automatic  
interpretation of the  
breast thermographic  
images is performed  
(Braster AI)



# System for automatic interpretation Braster AI



New generation algorithms - **DEEP LEARNING NETS**



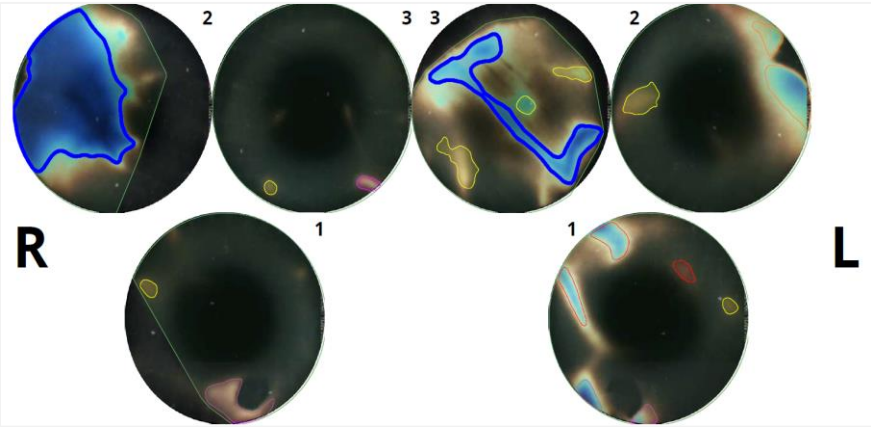
# Braster AI Algorithms

Thermal images of two breasts are analysed and compared in three main parameters:

**Thermal Asymmetry** – a thermal difference between hottest areas in both breasts

**Structural Asymmetry** – difference in number of the thermal structures between both breasts

**Area Asymmetry**- a significant disproportion between the areas of main structures of both breasts



Details of Braster® AI analysis

	Value:	Norm:
Thermal asymmetry parameter:	0.00	from -2 to 2
Structure asymmetry parameter:	0.00	from -2 to 2
Main thermal structure area ratio:	-3.12	from -4 to 4
Main difference ratio of surface thermal structures areas:	-42216.50	from -20,000 to 20,000

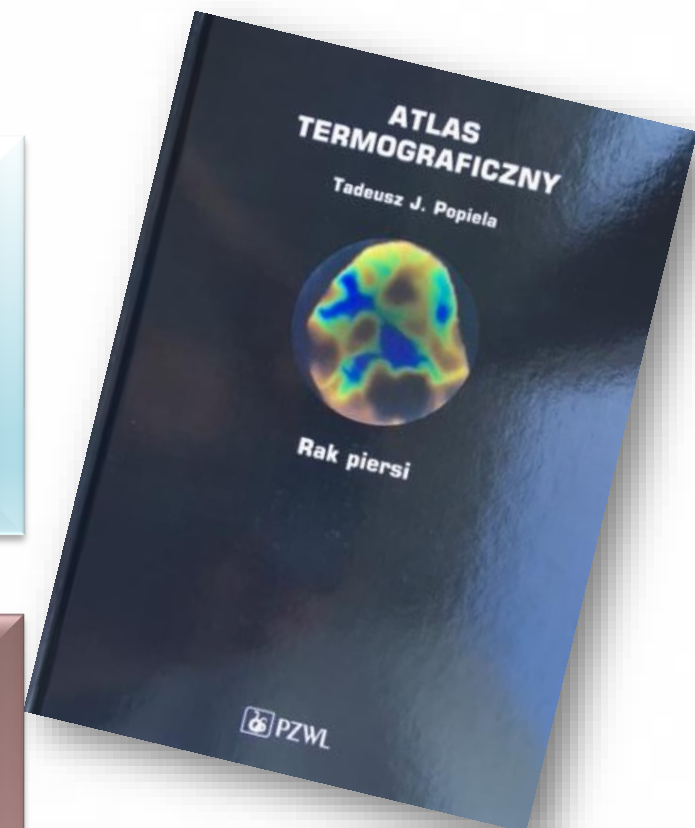
# Braster Pro – clinical validation

**1. BRA/03/2013 (ThermaCRAC)** – „Multicentre, observational study comparing the effectiveness of the Tester BRASTER™ device in diagnosing and differentiating breast pathology in women to standard diagnostic methods; n = 736 (proof of concept)

**2. BRA 03/2014 (ThermaRAK)** - multicentre observational study conducted to collect data from thermographic examination and data from imaging and histopathological examinations necessary to prepare the atlas of thermal pathologies. n = 360;

**3. BRA/11/2014 (ThermaALG)** – Multicentre observational study assessing the diagnostic effectiveness and clinical usefulness of the new version of the interpretation algorithm of the thermographic examination in the diagnosis of breast pathology in women; n=274 (registration study)

**4. INNOMED\_BRASTER\_2016\_01**– Multicentre observational study assessing diagnostic effectiveness of contact thermography in comparison with ultrasound examination, mammography and breast biopsy; n=3000 (PMS)



# Observational study ThermaAlg

<https://clinicaltrials.gov/ct2/show/NCT03858738>



A multicenter study conducted to assess the diagnostic effectiveness of the interpretation algorithm of thermographic images in detecting breast cancer.



**Methodology:** the study included 3 groups of patients, two symptomatic groups with USG or MMG score BIRADS 4/5 divided according to age into patients (50- and 50+) and a control group with the USG score BIRADS 1/2 (n=274)



**The primary goal** of the study was to determine the effectiveness of diagnostic contact thermography using the manual algorithm of assessment the thermographic images compared to breast ultrasound, mammography and histopathological examination of the lesion.

**The secondary goal** was the validation of automatic algorithms using artificial intelligence in the assessment of thermographic images.



## Patients under 50 years of age:

- ❖ Sensitivity 81,5 % (95% CI 64,1; 92,6)
- ❖ Specificity 87% (95%CI: 79,7; 92,4)
- ❖ PPV 71,0% (95%CI: 53,7; 85,8)
- ❖ NPV 93,6% (95%CI: 85,6; 97,8)



# ThermaALG (clinical trial) conclusions

## Braster + US



💡 **positive** result in contact thermography **increases** the likelihood of diagnosis of breast cancer more than **twofold**



💡 **negative** result in contact thermography **decreases** the likelihood of diagnosis of breast cancer more than **threefold**

# Observational study INNOMED

<https://clinicaltrials.gov/ct2/show/NCT03858738>



Prospective multicentre (**24 sites**) observational study conducted by Collegium Medicum Jagiellonian University in Krakow.



**Methodology:** 3000 patients; 3 groups : A: women US BIRADS 4-5 < 50 C: women US BIRADS 4-5 ≥ 50 B: control group of women BIRADS 1-2; 18-49; ≥ 50



## The primary goal :

Diagnostic effectiveness of contact thermography in comparison with ultrasound examination, mammography and breast biopsy

## The secondary goal :

Validation of algorithms for automatic interpretation of thermographic images (deep learning algorithm)



## Results Q4 2019

- The average sensitivity of contact thermography is 60.7-61.8%
- The specificity of contact thermography is between 62.7 – 85.4%
- The results obtained indicate the limited use of contact thermography as an independent screening method



# INNOMED Study Results

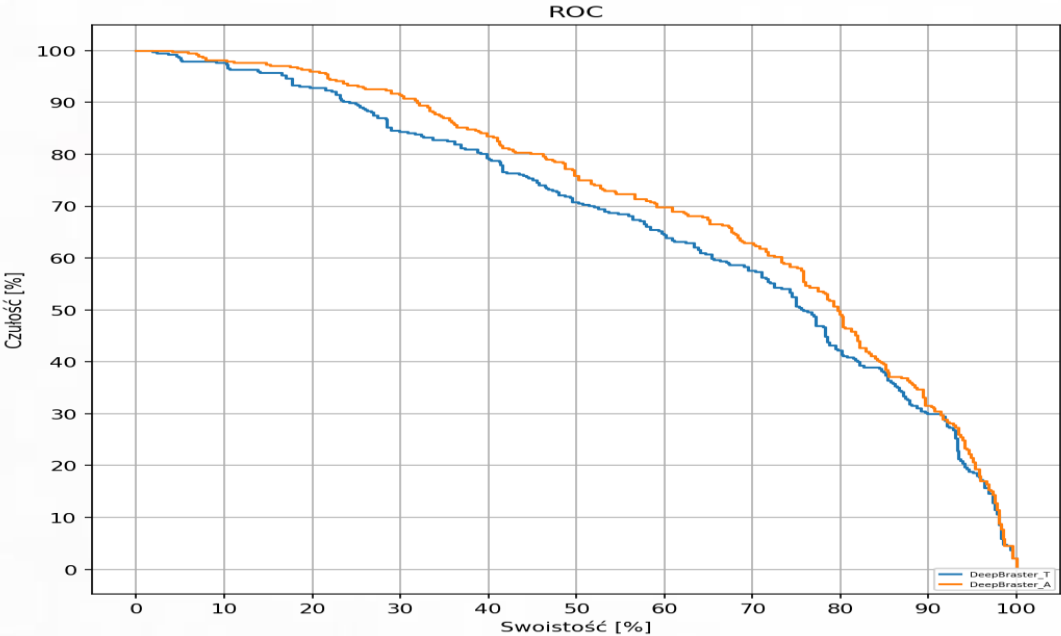


- The average **sensitivity** of contact thermography is 60.7-61.8%
- The **specificity** of contact thermography is between 62.7 – 85.4%

PPV in the group of women <50

BIRADS	PPV-usg	CNT-usg	PPV-Braster+	CNT-Braster+	PPV-Braster-	CNT-Braster-
4a	-	0	-	0	-	0
4b	8.5%	71	19.2%	26	2.2%	45
4c	75.0%	8	100.0%	5	33.3%	3
4a-c	15.2%	79	32.3%	31	4.2%	48
5	100.0%	14	100.0%	10	100.0%	4

ROC Curve (sensitivity-specificity)



Braster + US



BIRADS 4 (from ultrasonography) with a positive result in **thermography increases the positive predictive value more than twofold**, while a negative result of this test **significantly reduces** this value.

This confirms the **use of contact thermography as a complementary method** to breast ultrasound (similar results were obtained in the BRA11 / 2014 ThermaAlg study)

# Braster Pro - intended use & contraindication



- is intended for breast examination of women over 18 by HCP
- is an adjunct to recognized modalities such as ultrasound and mammography
- detects thermal asymmetry in women's breasts which can be correlated with breast pathology
- proved efficient regardless of the size of the breast, its density or aesthetic implants



## **Contraindications** for Braster Pro examination:

- **Patient who are undergoing or have completed anti-cancer therapy of breast cancer**
- Temporary contraindications:
  - pregnancy or breastfeeding (up to three months after weaning);
  - general infection, with a body temperature of or in excess of 38°C;
  - breast infection with pain, skin redness and bruises (when said symptoms are present);
  - surgical procedure in the breast area with benign lesion diagnosis:
    - ❖ fine-needle biopsy (FNB) – up to four weeks after the procedure,
    - ❖ core-needle biopsy (CNB) or Mammotome's breast biopsy – up to 6 months after the procedure,
    - ❖ breast tumor resection – up to 12 months after the procedure;
- **aesthetic implant placement**, filler injections (e.g. hyaluronic acid) and lipotransfer – **up to 12 months after the procedure.**



# Algorithm for Braster Pro



**18-49**



negative



routine check in  
planned time

positive



diagnostic  
examination

\*Polish medical societies recommend routinely performing a breast ultrasound examination at an annual time interval

**50 +**



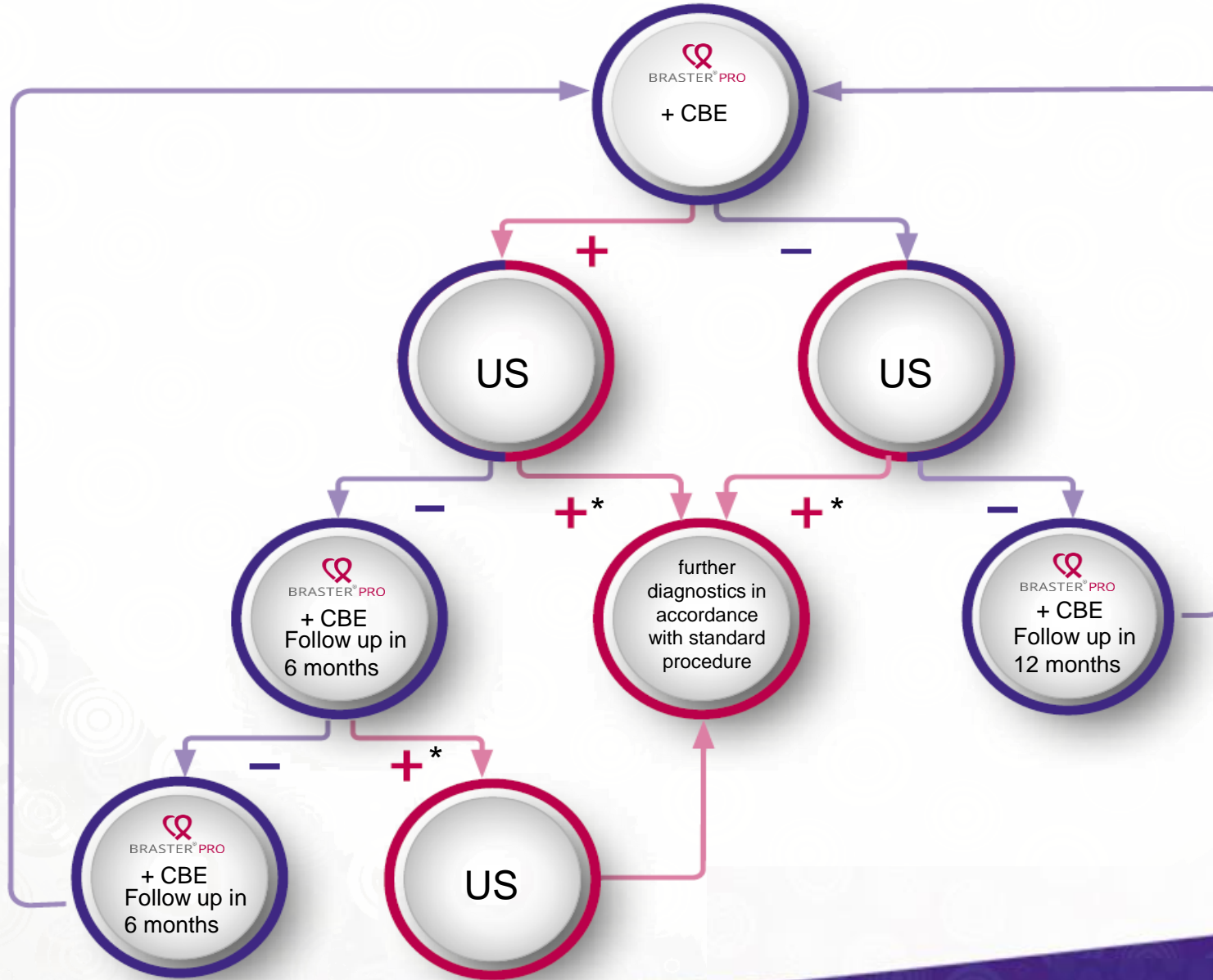
MMG  
screening



After 2 years next  
screening MMG



# Algorithm for Braster Pro



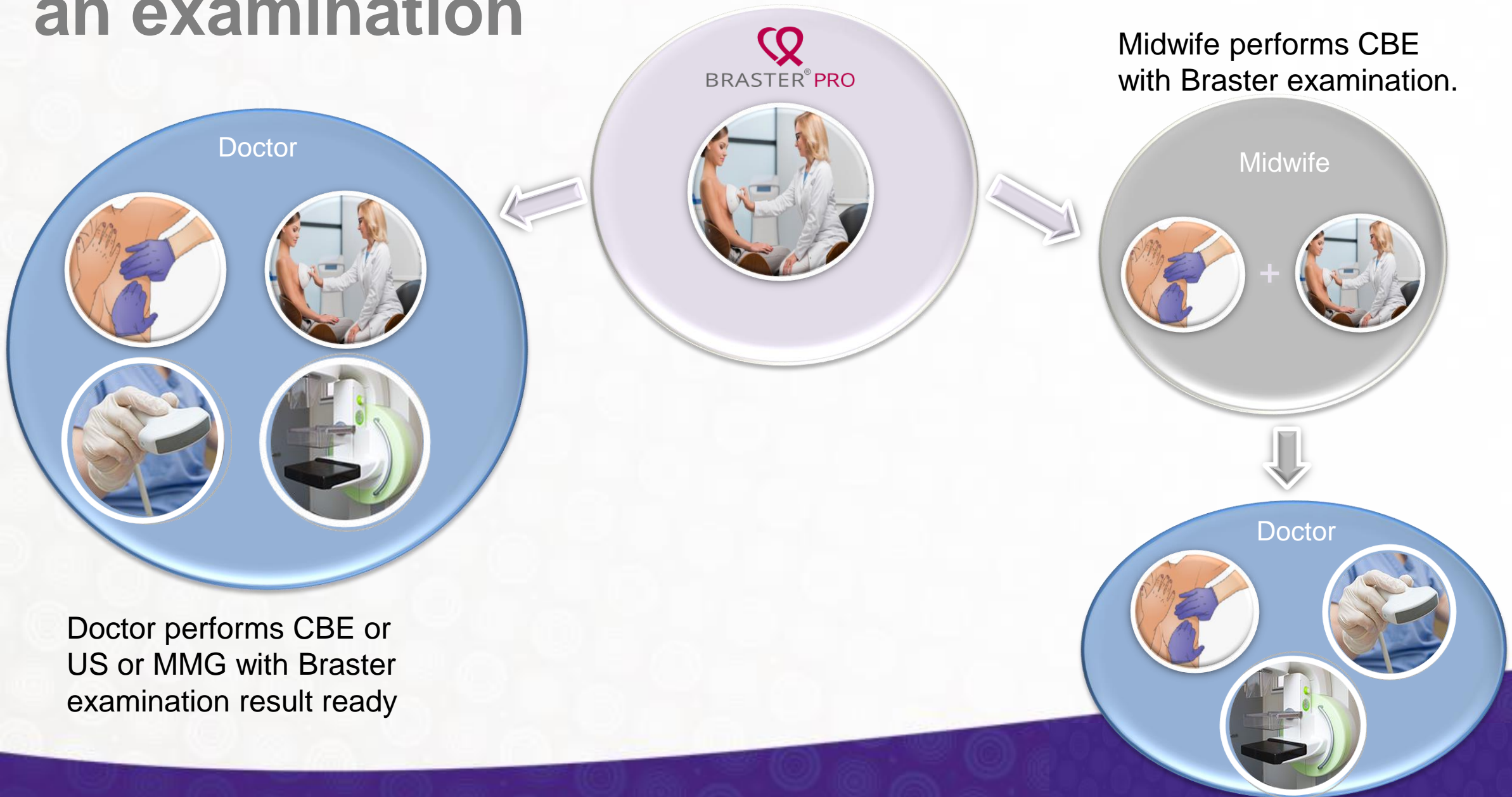
**+** positive  
**-** negative

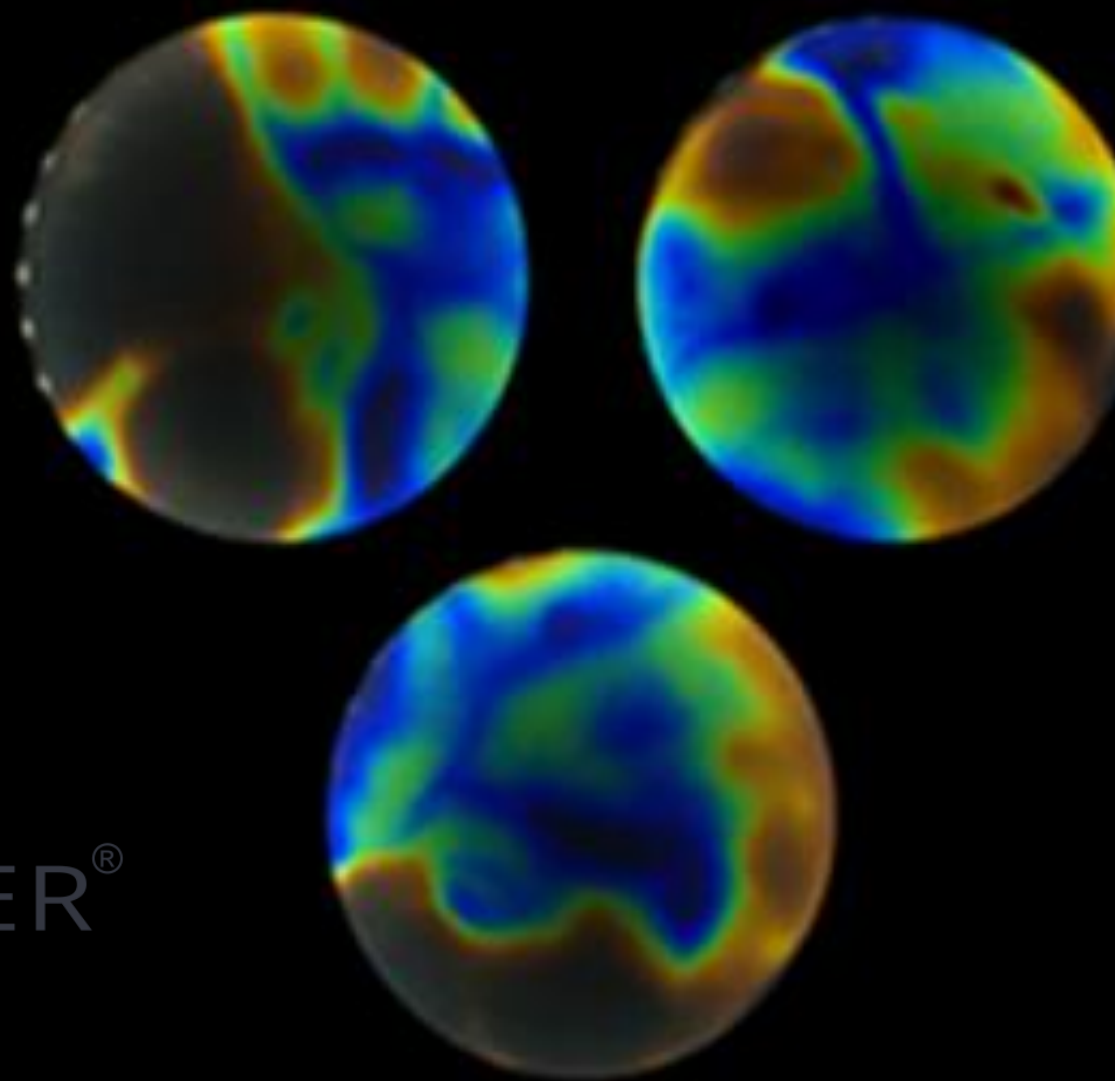
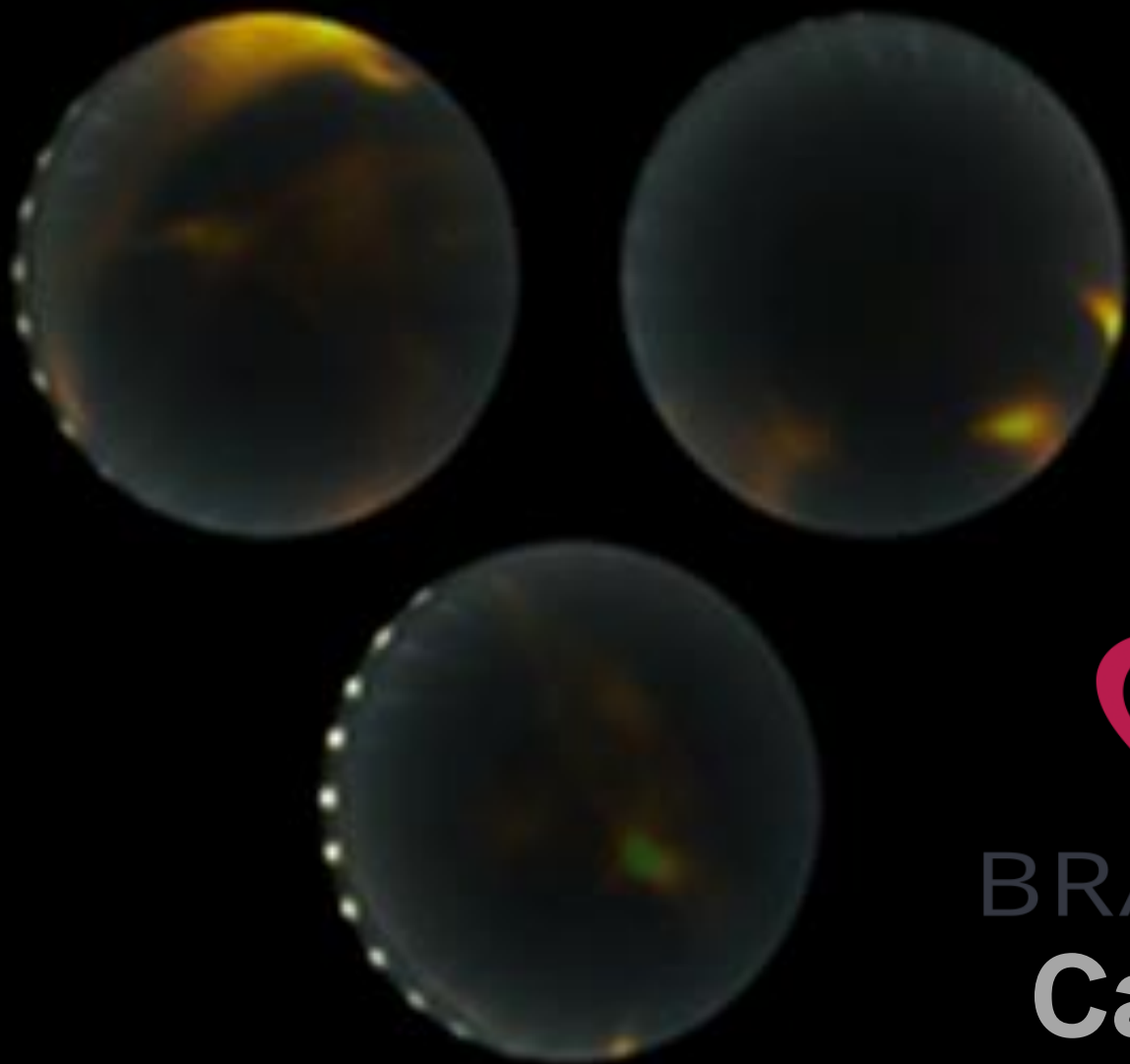
\*BI-RADS 4a – follow up in 6 months according to BI-RADS procedure

CBE – Clinical breast examination (PALPATION)  
US- Ultrasound



# Braster Pro- who can perform an examination





  
BRASTER<sup>®</sup>  
**Cases**

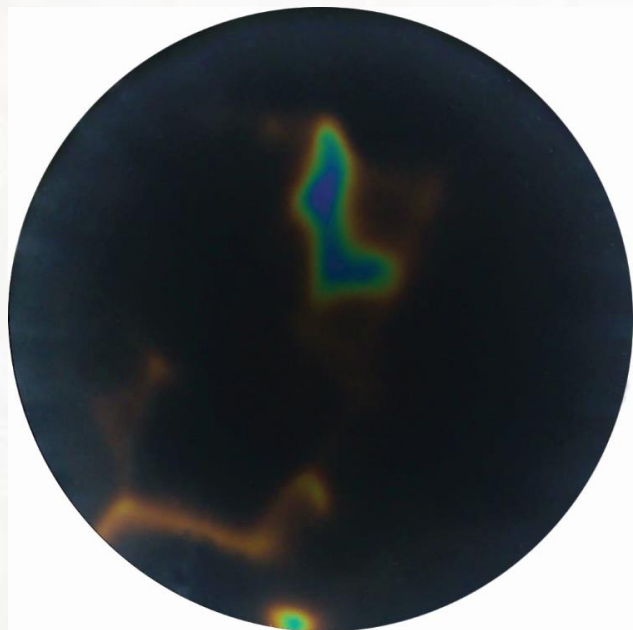
## CASE 1

**Age:** 49 years

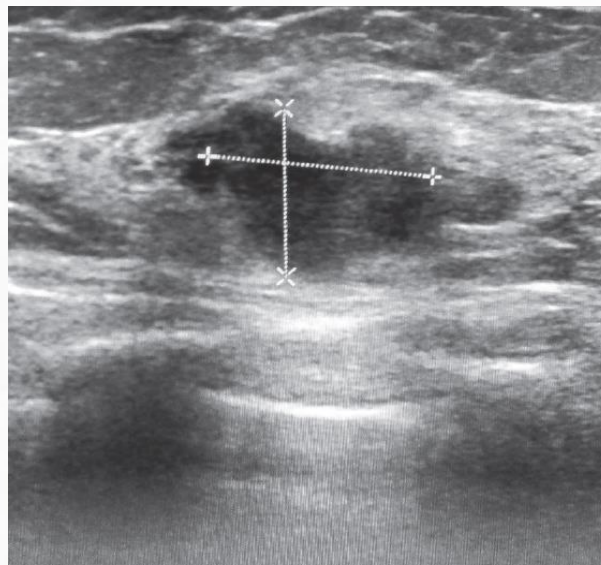
**Breast composition:** fatty-glandular

**Focal change:** palpable

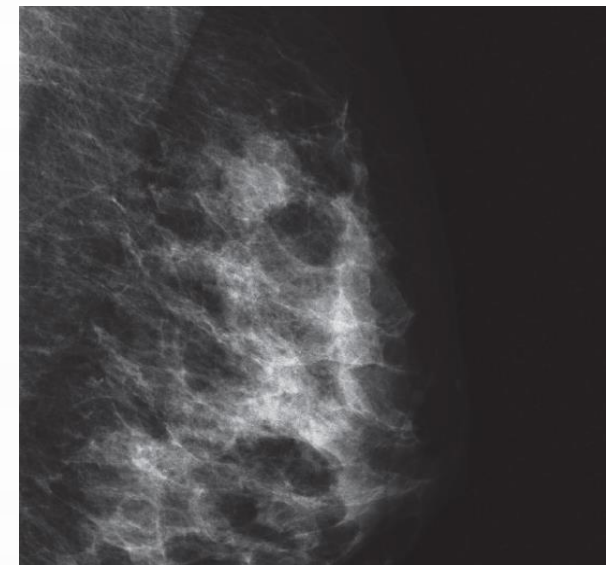
**Hist-pat:** invasive ductal carcinoma (*carcinoma ductale invasivum*)



In the left breast, an irregular focal hyperthermia which is corresponding to a verified cancer.



Ultrasound: In the left breast, at the perimeter of the 2 o'clock position, an irregular hypoechoic mass (measuring 16 x 12 mm) is visible; BI-RADS 4b.



MMG MLO: No suspicious focal changes or clusters of microcalcifications are visible; BI-RADS 1.



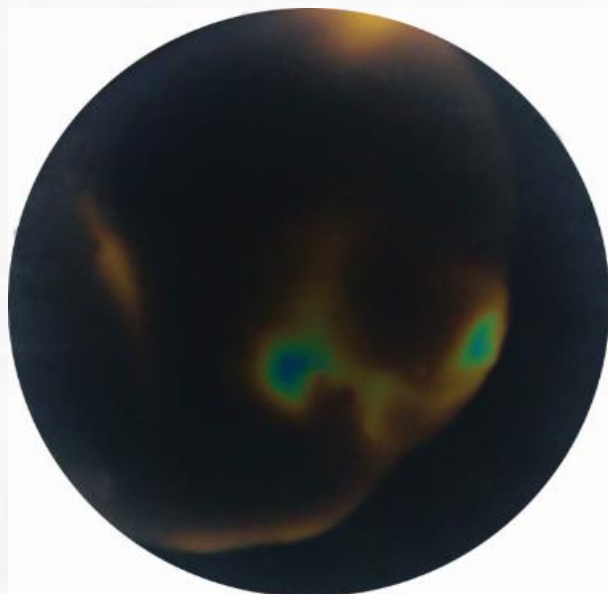
## CASE 2

**Age:** 39 years

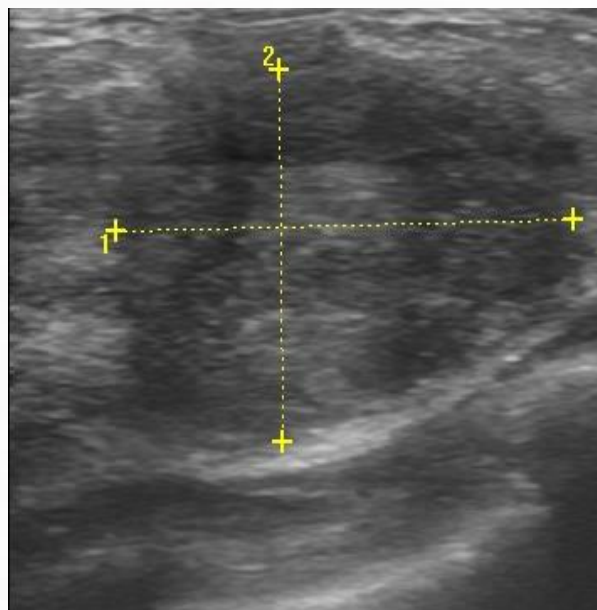
**Breast composition:** dense glandular

**Focal change:** non-palpable

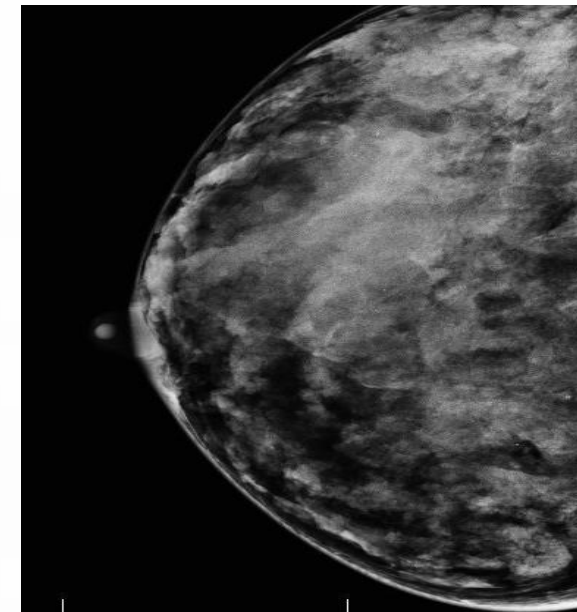
**Hist-pat:** invasive ductal carcinoma (*carcinoma ductale invasivum*)



A focal hyperthermia was observed in the lower outer quadrant of the left breast, in the location previously visualized through ultrasound examination.



Ultrasound examination of the left breast revealed a 17 x 24 mm oval, hypoechoic lesion, with indistinct margins in the lower outer quadrant, at 4 o'clock axis, BI-RADS 4b



Due to the type of breast tissue (i.e., dense glandular tissue according to Wolfe's classification), mammographic examination had reduced sensitivity. The mammogram did not detect any suspicious areas or clusters of calcifications. BI-RADS 0

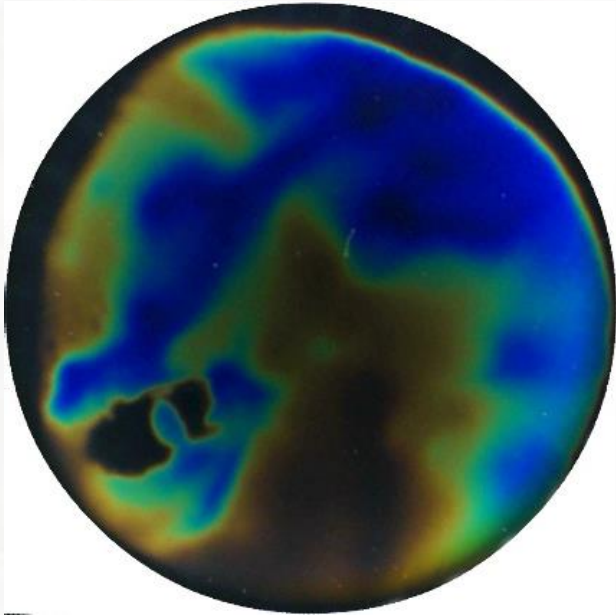
### CASE 3

**Age:** 40 years

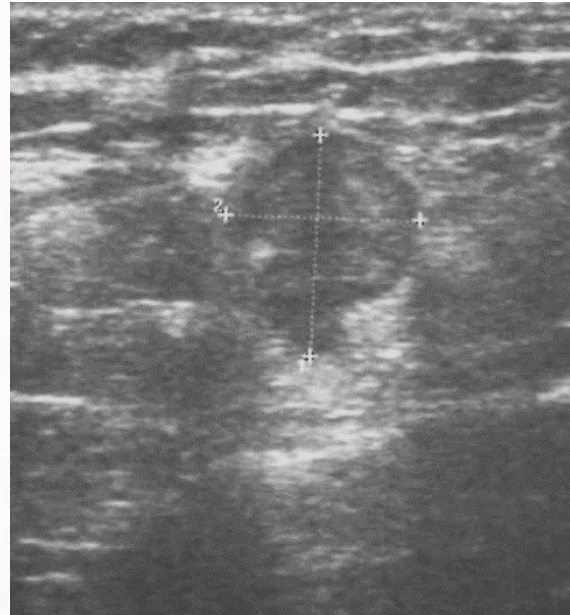
**Breast composition:** dense glandular

**Focal change:** non-palpable

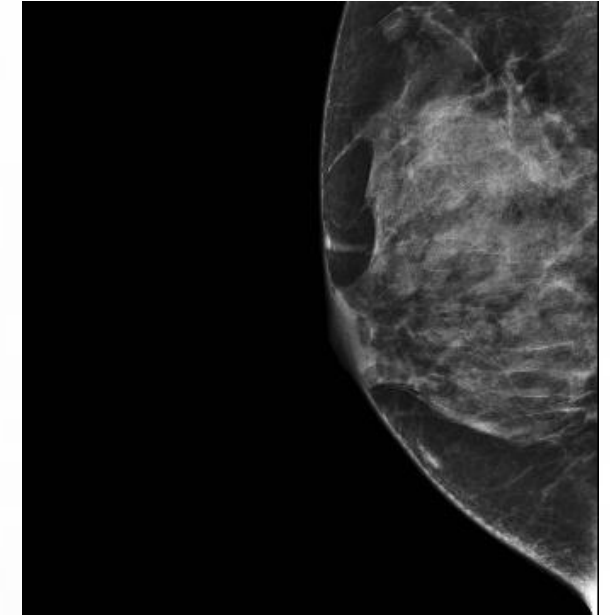
**Hist-pat:** invasive ductal carcinoma(*carcinoma ductale invasivum*)



Thermography showed irregular hyperthermy localised in the centre of right breast, on the border of the upper quadrants.



On ultrasonography several simple cyst were noted in both breast. In the right breast at the 12 o'clock axis irregular hypoechoic lesion 33x18mm was identified, suspicious of malignancy, BI-RADS 4b



Oval, well circumscribed foci up to 10mm in diameter were seen, no suspicious mass or clusters of calcifications was found, qualified patient for an additional ultrasound evaluation, BI-RADS 0



BRASTER<sup>®</sup>

# Opinions & Publications



# Opinions



Medical center Maichin Dom

2, Zdrave str.

1463 Sofia, Bulgaria

To whom it may concern,

This is to confirm that Braster Pro system, manufactured by Braster SA in Poland, has been supplied to our Clinic Maichin Dom in Sofia.

Braster Pro is an innovative solution for breast examinations performed by healthcare professionals in clinical setting. The system consists of a high-tech device which uses contact thermography, user-friendly mobile application, automatic interpretation algorithms detecting potentially dangerous changes in breasts and telemedical centre with experienced medical experts. The examination result is available within 48 hours and is sent directly to the doctor's account. The functionality of the account allows the doctor to review all the patients' results as well as check and download thermographic images.

We want to emphasize that the patients are willing to undergo Braster examination because it is painless, safe and takes only 20 minutes. The system which includes mobile app for smartphones and tablets connects wirelessly to the device, providing intuitive instructions throughout the entire examination.

The results are credible and in case when needed they can be confirmed with other modalities.

We decided to use Braster Pro system as we strongly believe that combining various types of examination increases the chance of detecting alarming changes at an early stage of the disease, which may allow for less invasive treatment and enhance the probability of a complete recovery.

Dr. Miroslav Georgiev

Manager

Medical center Maichin dom



МАМОЛОГИЯ  
КОНФЕРЕНЦИЯ

## Современный подход к профилактике рака молочной железы: всех скрининговых программ рининговых методик

В практике общественного здравоохранения, профилактика обостряет проблему охраны здоровья. Ключевой целью реализации данной программы является повышение качества жизни пациентов с заболеваниями молочной железы – членом Европейского союза разработать и/или внедрить скрининговую программу профилактической диагностики (упреждение и раннее выявление), а также повысить осведомленность целевых групп населения.

Важнейшей задачей среди всех скрининговых программ является раннее выявление рака молочной железы. Согласно 90% случаев рака молочной железы, диагностированных на ранних стадиях, прогноз выживаемости благоприятен. Однако, если рак обнаружен на поздней стадии, прогноз выживаемости неблагоприятен.

При ведении женщин с мастопатией в общей рекомендации по диагностике следует отметить исключение из рутинной процедуры с высоким содержанием метаболитов, коллагена, а также гормонов. Необходимо учитывать количество жиров в рационе и ускорить количество скринингов. Рекомендуется использовать препараты с высоким содержанием витаминов E, витамин профессионального уровня является эффективным средством для поддержания здоровья.

О профилактике злокачественных новообразований следует помнить всегда, независимо от степени риска. Достоинством является, что риск развития РМЖ повышается с возрастом, потому женщины старше 50 лет нуждаются в регулярном скрининге (БШО, УЗИ, МРТ). У женщин из группы высокого риска профилактические мероприятия должны быть более частыми. Скрининг риска развития РМЖ могут способствовать, исключая из программы, первая беременность, возраст до 30 лет, курение, оральные контрацептивы, а также прием гормональных препаратов.

Внедрение скрининга в скрининговую программу и проведение скрининга с целью выявления гиперэстрогенических процессов в молочной железе лежат в основе профилактики РМЖ. Необходимо учитывать категорию и группу риска, в которой живет женщина.

Согласно клиническим рекомендациям, каждая женщина должна проходить скрининг в соответствии с рекомендациями (M.M. Wilson, Y.O. Zborov, 1987). Высокий риск развития РМЖ должен быть основой для скрининга. Критерии (M.M. Wilson, Y.O. Zborov, 1987):

- наличие наследственного заболевания, соответствующего скринингу;
- наличие семейного анамнеза, соответствующего скринингу;
- наличие наследственного заболевания, соответствующего скринингу;
- наличие наследственного заболевания, соответствующего скринингу;

Скрининг должен быть направлен на раннее выявление гиперэстрогенических процессов в молочной железе. Скрининг должен быть направлен на раннее выявление гиперэстрогенических процессов в молочной железе. Скрининг должен быть направлен на раннее выявление гиперэстрогенических процессов в молочной железе.

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A.A. Kozlov

мастографии и в 1982 г. были опубликованы результаты масштабного исследования Р. Итана, роль маммографии в программе скрининга была комплексно рассмотрена. Было доказано, что точность данного метода в выявлении РМЖ составляет 92-99%. Программы скрининга впервые были введены и до сих пор реализуются в США, Швеции, Канаде и Великобритании. За время их существования удалось значительно снизить показатели смертности от РМЖ во многих странах мира.

В Украине реализация программы скрининга регламентируется приказом Министерства здравоохранения Украины от 20.06.2015 № 296. Об утверждении и введении в действие приказа Министерства здравоохранения Украины о стандартизации медицинской помощи при раке молочной железы, которым утверждено Унифицированный клинический протокол первичной, вторичной и третичной (высокодифференцированной) медицинской помощи «Рак молочной железы (далее – протокол)». В соответствии с рекомендациями данного протокола выдают при необходимости программы скрининга РМЖ в зависимости от категории, в которой они проводятся.

Эти программы скрининга должны быть направлены на раннее выявление гиперэстрогенических процессов в молочной железе. Скрининг должен быть направлен на раннее выявление гиперэстрогенических процессов в молочной железе.

- сбор полной информации о наличии факторов, способствующих возникновению РМЖ;
- проведение осмотра и palpации молочной железы с целью определения ее размера, формы, консистенции, наличия узлов, болезненности, асимметрии, изменений кожи, втяжения соска, выделений из соска;
- маммография;

Согласно клиническим рекомендациям, каждая женщина должна проходить скрининг в соответствии с рекомендациями (M.M. Wilson, Y.O. Zborov, 1987). Высокий риск развития РМЖ должен быть основой для скрининга. Критерии (M.M. Wilson, Y.O. Zborov, 1987):

- наличие наследственного заболевания, соответствующего скринингу;
- наличие семейного анамнеза, соответствующего скринингу;
- наличие наследственного заболевания, соответствующего скринингу;
- наличие наследственного заболевания, соответствующего скринингу;

## OPINION REGARDING THE USABILITY OF BRASTER PRO SYSTEM AS A COMPLEMENTARY METHOD FOR BREAST CANCER DIAGNOSTICS IN THE CLINICAL SETTINGS

### Introduction

Cancer is one of the most common causes of death in Poland and in the world. According to the National Cancer Registry data, in 2015, 23.6% of women died because of cancer. In 14.1% the cause of death in women was breast cancer. In 2015, the mortality rate was 14.1% in Poland and 14.1% in the world. In order to provide the best accuracy and benefit from the latest methods of treatment, it is necessary to ensure the widest possible access to effective secondary prevention.

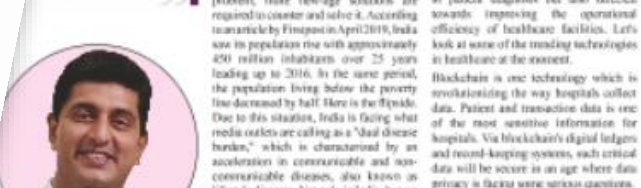
According to the report from the Supreme Audit Office, from January 2018: "in Poland there is no comprehensive, consistent and functional system of secondary health prevention, including planning activities in this area, supervision of their implementation and evaluating the obtained effect." In 2017, doctors providing basic health services implemented limited health prevention tasks to their practice. In the breast examination, we have information about the examination or its refusal in 13.5% of patients. We can therefore assume that 86.5% of women were not a breast examination at the general practitioner's clinics.

According to a survey conducted by the Chair and Department of Preventive Health, Health Sciences, at Poznan University of Medical Sciences, the most common knowledge and preventive activities for women is from a gynecologist. The above data, as oncological-gynecologists, we face the question of how to do of early detection of breast cancer, an important element of prophylaxis, sensitivity (21-41% depending on the patient's age), is self-examination. I do not self-examine their breasts because they are not aware of how to do



## MODERN PROBLEMS REQUIRE MODERN SOLUTIONS NEW TECHNOLOGY IS SHAPING HEALTHCARE

You must have seen this statement quite a few times while scrolling through social media. The statement is quite self-explanatory, meaning that more contemporary the problem, more new-age solutions are required to counter and solve it. According to a report by PwC, in April 2019, India saw its population rise with approximately 400 million inhabitants over 25 years leading up to 2016. In the same period, the population living below the poverty line decreased by half. Here is the flipside. Due to this situation, India is facing what media outlets are calling as a "dual disease burden", which is characterized by an acceleration in communicable and non-communicable diseases, also known as lifestyle diseases. Not only in India, but we are encountering new forms of diseases, infections, and afflictions all around the world, which calls for advanced and modernized healthcare solutions.



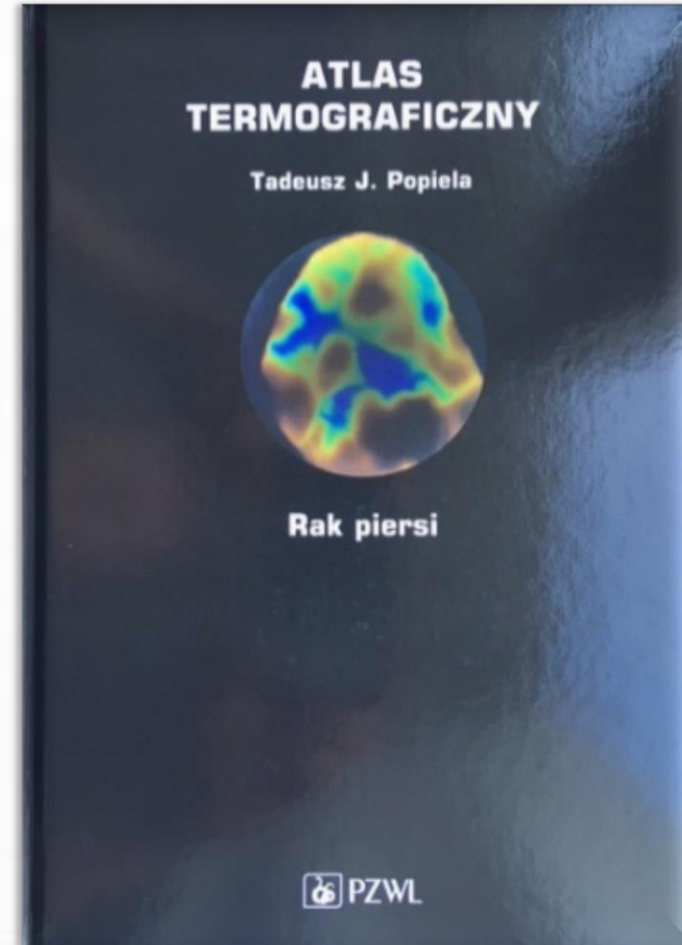
**Vivek Tiwari**  
Founder, and CEO,  
Medikabazaar

Technology's integration with healthcare is and has been providing radical solutions to diagnose and treat patients suffering from complex afflictions. As of this moment, technologically advanced healthcare solutions are no longer in its infancy, 2020 is right around the corner and we are in an era where healthcare is taking the next big step, and this is happening because of various forms of technology. It is to be noted here that as patient diagnosis but also directed towards improving the operational efficiency of healthcare facilities. Let's look at some of the trending technologies in healthcare at the moment.

Blockchain is one technology which is revolutionizing the way hospitals collect data. Patient and transaction data is one of the most sensitive information for hospitals. Via blockchain's digital ledgers and record-keeping systems, such critical data will be secure in an age where data privacy is facing some serious questions. Virtual Reality (VR), according to reports, is poised for a market valuation of \$4 billion by 2020. This technology can help hospitals create new ways of engaging with their patients (virtual tour of facilities, help patients manage their pain), which can help them find less invasive about visiting medical establishments.

I am keeping the best for last. Artificial Intelligence (AI) is the technology which is not only being implemented in you

Passes and safety stock indicator page on VUI














WHY BRASTER<sup>®</sup> PRO ?





# Braster Pro

-  1. Combining various methods increases the efficiency of breast examination
-  2. Certified medical device – CE certificate
-  3. Effectiveness proven in observational studies
-  4. Detects non - palpable lesions (the smallest lesion detected was 3mm)
-  5. Painless, radiation free and efficient regardless of breast density and size
-  6. Handy, mobile, easy to deisinfest and keep clean
-  7. Affordable and easily available





BRASTER<sup>®</sup>

# Communication





# Events and Conferences



2019년 한국유방암학회 창립 20주년이 되었습니다.  
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행사명	2019년 추계학술대회
일 자	2019년 10월 18일 (금) ~ 10월 19일(토)
장 소	제주신라호텔
의협명칭	의협명칭: 18일(금) 4점 / 19일(토) 2점

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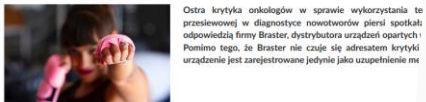




# Medical Conferences and PR Activities



Czy technologia Braster ma sens?  
Joanna Rusecka, 22.03.2019. Tagi: rak piersi, onkologia, termografia kontaktowa, termografia, braster



Firma Braster od 2016 roku sprzedaje urządzenia, które mają pomóc kobietom we wczesnym wykryciu piersi. Braster wykorzystuje technologię cieklikryształicznej termografii kontaktowej, uzyskane termograficzne pozwalają wykazać potencjalnie niebezpieczne zmiany i nieprawidłowości w piersiach. Urząd wszystkie badania i zostało dopuszczone do obrotu na rynku.

W komunikacie wydawanym przez onkologów czytamy, że nie ma żadnych dowodów potwierdzających wykrywanie i rozpoznawanie tego nowotworu oraz jako profilaktycznego badania przesiewowego. Przewidywane zmniejszenie umieralności z powodu raka piersi jest marginalne, którą w Polsce ma kobieta w wieku od 50 do 69 lat. Oświadczenie zostało podpisane między innymi przez konsultantów chirurgii onkologicznej, onkologii klinicznej i radioterapii onkologicznej oraz prezesów Polskiego Onkologicznego, Polskiej Unii Onkologii, Polskiego Towarzystwa Onkologii Klinicznej, Polskiego Towarzystwa

Prezes Polskiej Unii Onkologii i Radioterapii w komentarzu udzielonym dla jednego z portali mówi, że „metody te, które opierają się na cieklikryształach umiary w onkologii śmiertelność naturalną około 30 lat temu, głównie z powodu braku możliwości wykrywania w diagnostyce medycznej. Działania firmy Braster, zamiasz tylko przyczynić się do przeoczenia zmian nowotworowych, a promowanie metod, które nie są skuteczne”.

Nowatorska metoda wczesnego wykrywania raka piersi  
19-06-13



Dość chcemy naszym Czytelnikom opowiedzieć o nowatorskiej metodzie wczesnego wykrywania raka piersi, jaką jest termografia wykorzystywana w urządzeniu o nazwie Braster. Pytamy o to Tomasz Wojno – specjalistę ginekologa-pokoźnika.

– Wszyscy doskonale wiemy, jak niezwykle ważnym nowotworem jest rak piersi – mówi Wojno. – W walce z nim dysponowaliśmy dotychczas metodami wczesnej diagnostyki, które w ostatnich latach na rynku pojawiło się

## МАЙЧИН ДОМ СТАВА ЦЕНТЪР НА БАЛКАНИТЕ



Университетската АГ болница вече е сертифицирана за ранна диагностика на рак на млечната жлеза



## STANOWISKO POLSKIEGO TOWARZYSTWA GINEKOLOGII ONKOLOGICZNEJ

Odnosząc się do publikacji jakie ukazują się ostatnio w prasie, w których twierdzą, że „Braster Pro” jest urządzeniem, które ma służyć do wczesnego wykrywania raka piersi, Polskie Towarzystwo Ginekologii Onkologicznej wyraża stanowisko, że „Braster Pro” nie jest urządzeniem, które ma służyć do wczesnego wykrywania raka piersi, a jedynie do badania piersi w celu wykrycia zmian, które mogą być związane z rakiem piersi.

Nowotwory stanowią jedną z najczęstszych przyczyn zgonów kobiet w Polsce. Zgodnie z danymi Krajowego Rejestru Nowotworów w 2015 r. w Polsce z powodu choroby nowotworowej. W przypadku 14,1% przyczyną zgonu była nowotwór piersi.

W świetle powyższych danych, jako lekarze ginekologów przed pytaniem, jak zapewnić naszym pacjentkom szybki i skuteczny dostęp do skutecznej profilaktyki wtórnej.

W procesie wczesnego wykrywania raka piersi istotny jest pomimo niskiej czułości (21–41%, w zależności od wieku pacjentki) sposobu wykrywania. Najwyższą skuteczność w wykrywaniu raka piersi we wczesnym stadium, sięgającą blisko 90%, moglibyśmy uzyskać łącząc samobadanie piersi z wykonywaniem badań radiologicznych, przy czym pamiętać trzeba, że badania obrazowe wykazują obrazowanie rezonansu magnetycznym. Niestety koszty tych badań są wysokie i ich ograniczona dostępność.

Wymagających specjalistycznej wiedzy i doświadczenia, dla kobiet młodych, kobiet zdrowych, dla kobiet z rodziną chorą na raka piersi, wczesnego wykrywania raka piersi. W tym celu należy wykonać badania mamograficzne.

Metodą mogącą spełnić powyższe wymagania jest Braster Pro, który wykrywa zmiany w piersiach, w tym nowotwory.

Braster Pro to urządzenie, które ma służyć do wczesnego wykrywania raka piersi, a nie do badania piersi w celu wykrycia zmian, które mogą być związane z rakiem piersi.

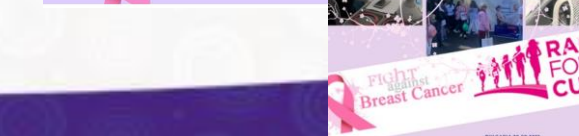
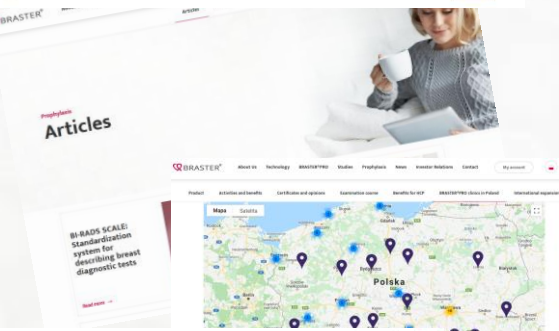
Braster (PL - polski, angielski)  
Opublikowane przez Barbara Tarczyńska (?) - 25 października o 04:22

Poświęćcie dziś kilkanaście minut, aby dowiedzieć się bezpośrednio od Pana doktora Bogdana Siwka, jakie są standardy w diagnostyce piersi. Szczególnie gdy ma się 25 lat. Jakiego nawyku trzeba w sobie wyrobić, w czym nieoceniona staje się aktywność partnera, jak badanie piersi wpisuje się w kalendarz profilaktyki raka piersi i wiele innych, niezwykle ciekawych zagadnień widzianych oczami Specjalisty. Prelekcja obowiązkowa

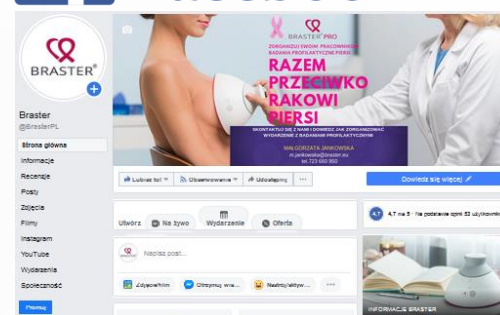




# Own Media Activities



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