## CancerPredict Rapid and reliable test, for improved breast cancer prediction

## Contact us



רשות החדשנות
L> Israel Innovation
Authority



#### The Problem

# We can reliably diagnose breast cancer, not <u>predict</u> it

- Breast cancer accounts for about 1 in 3 of all new female cancers each year
- Early detection significantly increases effectiveness of treatment
- The current breast cancer screening program is useful only in cancer detection, not prediction
- Reliable breast cancer prediction is critical for effective treatment
- Currently, cancer prediction is based on evaluation of screening and risk factors
- <u>Current prediction tools are far from being accurate or reliable:</u>
  - Many "high-risk" women never develop cancer
  - Many "low-risk" women do develop cancer



<u>CancerPredict team is working on a rapid and reliable program that will enable accurate breast cancer</u> <u>prediction and subsequently cancer prevention</u>

#### The Problem

## Limitations of existing risk models

- Retrospective study\* reveals limitations of Tyrer-Cuzick model (study performed over 19 years and 132,139 women):
  - At the end of the study, 2699 invasive breast cancer cases were diagnosed
  - 4645 predicted as high risk, but only 273 developed cancer -> 10% accuracy
  - False positive rate: 94%
  - The model missed 2426 women (classified as low risk, eventually developed cancer)
- Risk models fail to reliably identify high-risk individuals

<u>Tyrer-Cuzic</u> <u>Prediction</u>	<u>.</u>	<u>Actual</u> Cancer Cases
4645	<u>273</u> 10%	2699

In the study, Tyrer-Cuzick model displayed a 10% accuracy rate and 94% false positive rate, while missing out on 2426 women who were classified as low risk but eventually developed cancer

### The Solution

## CancerPredict kit & software

- Product is based on immunohistochemistry kit for CancerPredict's specific biomarker and dedicated AI software
- Software will give a more accurate and reliable breast cancer prediction based on biomarker data and other relevant background data
- Breast cancer prediction will become more accurate over time, as more data will enter the database



\*Illustration

### The Solution

## CancerPredict

- CancerPredict's program is based on measurements of its biomarker expression level in the biopsy sample
- The biopsy sample is taken as part of the current screening program
- The technology is based on the work of Prof. Ido Wolf, head of oncology division at TLV Medical Center, and studies that were published by known medical centers (i.e Mayo-Clinic)

CancerPredict received grant from the Israel

**Innovation Authority** 



רשות החדשנות
L> Israel Innovation
Authority

#### The Market

## Breast Cancer Diagnostic Market

- The global breast cancer diagnostics market size is estimated to be worth USD 4.82 billion in 2024 and is projected to reach from USD 5.16 billion in 2025 to USD
   9 billion by 2033, growing at a CAGR of 7.62% during the forecast period (2025-2033)
- <u>CancerPredict's Edge:</u>
  - More reliable than current models
  - Potential expansion to other cancer types
  - Strategic fit alongside existing screening methods



#### About Us

- CancerPredict is a portfolio project under BioXL
- BioXL's founders have had management positions in established pharma and startup companies, e.g. Merck-Serono
- BioXL's founders were engaged in establishment of new companies, from the idea to advanced stages, e.g. Ambrosia Bio, Proterec, Biopharm Labs, Enzymogen, PPS, PPSV
- CancerPredict is intended to be registered as a spin-off, independent company





• <u>CancerPredict's target of the current fundraising round is 250,000 USD</u>

- The funds will enable reaching an inflection point:
  - Completion of prototype
  - Pre-IND meeting with health authorities (e.g. FDA)
  - Initiate pilot(s) with major medical centers
- At that point, the engagement of large companies is anticipated as well as better access to large funding opportunities