DESIREE 360º Breast Cancer Workshop

The burden of Breast Cancer (BC) consists a hot topic in the agenda of Conferences, Workshops, special topic meetings and various fora around the world, among Healthcare professionals, the Industry, the technological community, Patient & Advocacy groups and Policy makers. Each stakeholder group approaches BC from different viewpoints, shading light to perspectives of the disease. They all share, however, common objectives.

In this context, the **DESIREE Project**, a Horizon 2020 EU funded project on primary BC management, brought together around the same table **all key BC stakeholder groups** in a very special Workshop, which took place at St. Louis Hospital in Paris, in Thursday, 28 March 2019. The interactivity and polyphony of attendees made **DESIREE 360º Breast Cancer Workshop** a very impactful event, the key aspects of which are presented below!

The Workshop

The initiative and organization of this original in concept Workshop belongs to the French team of the DESIREE Project Consortium, representing Assistance Publique – Hôpitaux de Paris (AP-HP) and INSERM Institute. With the **objective** to showcase the DESIREE project and explore opportunities for the advanced decision-support platform for primary breast cancer, they brought together representatives from:

- **Pharmaceutical industry**, and particularly 5 top pharma companies leading BC treatment
- **Clinicians** with year-long expertise in BC
- **Policy makers** and influencers in BC management
- **Technology experts** from the AI, big data and decision-making support field
- **Patient Association & Advocacy group** representatives for BC
- **DESIREE Project** Consortium members
- Other external participants (e.g. Oncologists, Nurses)

Dr. Ivan Macia, DESIREE Project Coordinator, Vicomtech, Spain, presenting the DESIREE project during the DESIREE 360o Breast Cancer Workshop

The format of the Workshop was plain, consisting of a **Round-table discussion** during the morning session, followed by an **Invited Speaker** afternoon session, with presentations and discussion.
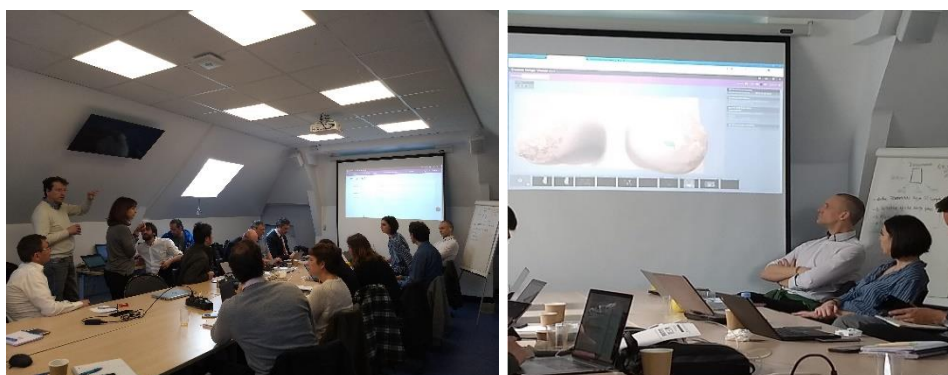
In more detail, the **morning session** was focused on DESIRE decision-support platform, starting with a high-level presentation of its characteristics and architecture and of course a live DEMO. Throughout, there was a vivid **exchange with the Pharma industry representatives** from Roche, Novartis, MSD, Astrazeneca and Lilly Laboratory. They raised questions regarding several system aspects, such as the clinical guidelines incorporation, the patient data handling, platform interoperability and universality, and user acceptance.

Dr. Ivan Macia, DESIREE Project Coordinator, Vicomtech, Spain, exchanging with representatives from Pharma companies.

Moreover, they provided valuable feedback on the platform and business exploitation opportunities, highlighting **strengths** (e.g. user-friendliness, consistency, real world data for analysis) and **challenges** (e.g. practical implementation complexity, doctor acceptance & engagement).

In the **afternoon session,** the DESIREE project & platform demonstration was continued, by **Dr. Ivan Macia**, DESIREE Project Coordinator, Vicomtech, and other team members: **Dr. Luis Teixeira**, M.D,Ph.D. Saint Louis Hospital, **Mrs. Amaia Ugarriza Pinedo**, Software Developer, Bilbomática S.A., **Mr. Jon Belloso Linacisoro**, Innovation Project Manager, Oncologikoa and **Stefan Audersch**, Senior Software Engineer, Arivis AG.

Demo presentation of the DESIREE platform, during the DESIREE 360o Breast Cancer Workshop

The first invited speaker was **Mrs. Nora Benhabiles PhD, EMBA**, Director of the Industrial Partnerships and External Collaborations of the Fundamental Research Division in CEA (French Atomic Energy Agency), Member of the supervisory board of EIT Health representing the French EIT Health academics and member of the board of CEA Investment funds). She presented the *"ITFoC project"*, a radical new approach to personalized drug therapy in many areas of medicine and prevention, and its demonstration in breast cancer.

Mr. Julien Guerin, Head of Health Data Factory, Curie Institute, presented *"AI, big data and decision-making support: the experience of Institute Curie".* With the Curie data legacy of 10.000 patients, 20+ millions of electronic health records, 20+ millions of images, 3 PB of genomic data and so on, their experience from organizing, analyzing and exploiting this vast information, an example being the data models in oncology, was of great interest.

Prof. Serge Uzan, Director of the University Institute of Oncology at Sorbonne University, Member of the National Cancer Institute, presented the *"Risk management platform in oncology"*, elaborating in a vivid manner striking results occurring from the data analysis, which in turn become recommendations for improved cancer screening and management.

Mrs. Nora Benhabiles, Mr. Julien Guerin and Prof. Serge Uzan during their presentations at DESIREE 360o Breast Cancer Workshop

Mrs. Suzette Delaloge, MD MSc, Associate Professor of Medical Oncology and Head of Breast Cancer Department at Gustave Roussy Institute, Paris, France, provided also very interesting insights in her presentation on *"Personalizing Breast Cancer Screening, MyPeBS project"*. This is a unique international project, funded by the European Union, that investigates new approaches for personalised breast cancer screening.

The Workshop concluded with a powerful presentation by **Mrs. Nicole Zernik**, President of Europa Donna France and member of the DESIREE Advisory Board, who contributed the BC patient perspective. With her presentation on *"Breast Cancer Management from the eyes of patients"* highlighted that patients are and must be in the center of every effort against cancer. She presented their activities to empower patients and gave floor to two female patients, who accepted to share their personal experiences with the disease.

Mrs. Suzette Delaloge, MD MSc and *Mrs. Nicole Zernik* during their presentations at DESIREE 360o Breast Cancer Workshop

Significance & Results

Both the dynamics and the positive impact of the Workshop was expressed by all attendees, consisting a statement against the usual segmented discussion on the breast cancer disease. The interaction and exchange between the ~30 participants, in a personal, unofficial tone set the scene for a valuable, very productive event. The variety of the participant backgrounds and viewpoints and the invited speakers who brought in their wide experience in the field, consisted significant success factors and set an example for future activities.

Results of the DESIREE 360° Breast Cancer Workshop at a glance:

- DESIREE decision-support system demonstrated and exposed to a wide, cross-functional audience of experts
- Research, Clinicians & Medical community, Technology providers, Pharmaceutical Industry, Decision-makers and Patients came together around the same table to exchange on breast cancer
- Mutually beneficial exchange and lobbying between all participating stakeholders
- Experience exchange on big data management, security issues, patient data legislation, clinical decision-making practices, breast cancer management, personalized treatment and patient empowerment
- Exchange and alliances with other EU funded projects (ITFoC, OSIRIS, MyPeBS)

About DESIREE Project

The DESIREE project aims to provide a web-based software ecosystem for the personalized, collaborative and multidisciplinary management of primary breast cancer by specialized Breast Units (BUs), from diagnosis to therapy and follow-up. DESIREE will help BC clinicians in their decision-making process, with technology that includes advanced clinical decision support systems (based on formalized clinical guidelines, knowledge discovery, and case-based reasoning), image-based breast and tumour characterization tools and predictive modeling for 3D breast reconstruction.

DESIREE project has received funding from the European Union´s Horizon 2020 research and innovation programme under grant agreement No 690238.

For more information, please visit http://desiree-project.eu or https://twitter.com/desiree_project.