Although the number of breast cancers diagnosed increases each year, more women than ever before are surviving. Higher survival rates are closely linked to earlier detection and better treatment. With high-quality mammography equipment, a breast cancer can be found and treated early and cure rates improving the health and quality of life of women and their families.

Planmed, a trusted leader in screening and diagnostic mammography imaging solutions, has been manufacturing innovative mammography units for over twenty years. We are dedicated to developing new technologies and advanced product applications that aid in the fight against breast cancer. Our products are highly regarded for their ease of use, ergonomics, and imaging performance - all indispensable attributes for any professional in mammography. With the dedication, expertise, and in-depth knowledge, Planmed has become a leading supplier of analog and digital mammography imaging systems.
Planmed Nuance Excel represents the best of digital mammography: ultimate digital imaging performance combined with aesthetic design and excellent user ergonomics. The strongest asset of Planmed Nuance Excel is its clearly superior clinical image quality at a low dose level. Novel X-ray tube with proprietary Tritiller® technology, ingenuous Flex-AEC, and amorphous Selenium (a-Se) flat panel detector with 85 μm pixel size deliver uncompromised image quality—without exposure to unnecessary radiation dose.

Digital imaging procedures are further enhanced with Planmed innovations. Planmed Nuance Excel comes with the MaxView Breast Positioning System, an intelligent breast positioning assistant. With a gentle pull, MaxView can maximize the amount of the breast tissue captured in the field of view. Another unique, but standard feature is the Side Access patient positioning system. With Side Access patient positioning, patient repositioning is made extremely easy, especially in oblique views.

In addition to the comprehensive image acquisition software, Planmed offers a wide variety of optional modules to complement the system. For example, Nuance Softview Workstation provides customizable image hanging protocols for softcopy reading, dedicated review tools, and optional ergonomic short-cut panel.

Planmed CAD is a computer-aided detection solution that enable detection of breast cancers at an even earlier stage. Planmed Mammography Information System (MIS) provides a tailored approach for work-list management, invitation letters, and more. All this software is compliant with Digital Imaging and Communications in Medicine (DICOM), Integrating the Healthcare Enterprise (IHE), and the Health Insurance Portability and Accountability Act of 1996 (HIPAA).
Increased Efficiency

Planmed Nuance Excel is ideal for high throughput screening mammography practices, where the equipment has to be fast, reliable and simple to use. Moreover ultimate precision and versatility are invaluable assets for diagnostic mammography.

The direct digital, large field of view detector is suitable for all breast sizes, and smooth, motorized isocentric C-arm movements drive the unit swiftly and effortlessly. Integrated Side Access and MaxView positioning systems help to overcome the everyday challenges in breast cancer screening.

Flex-AEC is a fully automatic exposure control system that speeds up the examinations while setting the exposure parameters according to the true breast composition. Intelligent image optimization ensures that even the finest details of the breast structure are faultlessly presented in the mammogram. Importantly, the images are previewed on a high-resolution three megapixel grey scale monitor that stands out with its unprecedented clarity and sharpness.

The Nuance Acquire software enables straightforward imaging workflow. Fast, automatic features allow the user to concentrate fully on working with the patient. The optional modality worklist provides correct patient information from the HIS/RIS/MIS, and once the images have been acquired, the system automatically archives the images to PACS. Optionally, the images can be burned on a CD/DVD or printed to a DICOM printer. Planmed Nuance Excel offers unlimited scalability and connectivity that meets the needs of both small practices and large central hospitals.

Enhanced Digital Mammography

Dedicated image processing is the core of digital mammography. A perfect mammogram has to show all the delicate breast tissue structures with optimal contrast and lowest possible X-ray dose, independent of the thickness or density of the tissue, and without losing the subtle signs of breast cancer. Not surprisingly, algorithm development requires very specialized image processing skills and long-term collaboration with the most experienced radiologists in the field.

On this page, you can see some details of Planmed Nuance Excel mammograms with TriFilter® technology for low dose* and specialized image processing. Shown are two examples of malignant ductal carcinomas and one ductal carcinoma in situ (DCIS) with different types of calcifications (a-c), lobular cancer in the subareolar region (skin-line enhancement, e) and a 8 mm ductal cancer (f). When reviewing digital mammography images it is recommended to use a specialized workstation with high-resolution displays, as shown on the opposing page.

Every technologist faces a common challenge when positioning a patient for a mammography exam: How to ensure best possible breast tissue visibility at the chest wall, while maintaining an even compression throughout the whole breast? Frequently, the back of the breast is excluded from the imaging field. Also small breasts tend to be challenging to position due to the limited working space between the Bucky and the compression paddle. Planmed’s proprietary MaxView Breast Positioning System offers an easy solution to these challenges. With MaxView, it is possible to achieve optimal breast tissue visibility in all routine mammography views.

MaxView Breast Positioning System uses moving radiolucent sheets above and below the compressed breast. These sheets are easily and quickly inserted into the upper and lower MaxView traction modules. During compression gentle traction is applied with a dedicated foot control.

When the foot control is pressed the MaxView sheets draw the breast into the imaging field. The sheets can also be moved independently into different positions to further aid breast positioning. After the exposure, the compression is automatically released and the sheets return to the starting position.
MaxView Breast Positioning System

MaxView ensures that the back of the breast will not slip away from the compression and even the smallest breast can be positioned with ease. It has been clinically proven that MaxView Breast Positioning System captures and visualizes more breast tissue in the field of view. Gaining a few millimeters more of tissue means that a significant volume of breast tissue is added to the field of view. The additional volume of tissue imaged translates directly into the potential to detect more cancers at an earlier stage.

Furthermore, MaxView provides sharper visualization of glandular tissue structures. Traction also improves image clarity by separating superimposed breast tissues. Notably disposable MaxView sheets also help to maintain hygiene while providing each patient a clean surface for the sensitive breast tissue.

On the next page are shown typical Cranio Caudal (CC) and Medio-Lateral Oblique (MLO) digital mammograms taken with Planmed Nuance Excel with or without MaxView. CC view should visualize as much medial and lateral tissue as possible including pectoral muscle. Adequate compression should be applied, with no movement or other artefacts, and no skin folds or shoulder in view. MLO view should visualize the full width of the pectoral muscle to the nipple line, which should be in profile. The inframammary fold should be visualized, with no skin folds and ideally symmetrical to the contralateral breast.


Good working ergonomics equals high performance. Proprietary Side Access patient positioning system improves positioning ergonomics by moving the tube head to either side of the breast support table. The tube head rotates up to 30 degrees around the isocentric centre while the table remains stationary. This unique movement allows more space for positioning especially in the oblique views. Moreover, the light field stays focused to the breast, improving positioning accuracy.

Side Access has been designed to be patient-friendly. The feature provides easier and better positioning, while helping the patient to maintain perfect posture for the mammography examination. Side Access allows better patient accessibility and improved workspace for the technologist, resulting in quicker procedures, less retakes and minimal patient discomfort.

Planmed is dedicated to provide solutions for enhancing the working environment for mammography professionals. Our efforts to combine innovative technology and the latest research have earned Planmed the reputation as an accomplished leader in the field of mammography.
Compact size and excellent ergonomics are characteristics that Planmed customers are accustomed to expect. Planmed Nuance Excel features several enhancements for the technologist together with an appealing design. Many of the fully motorized and customizable movements can be automated for optimal workflow performance. Isocentric motorized C-arm movements, Side Access patient positioning, MaxView Breast Positioning System, and the optional motorized Nuance Acquisition Station represent only a few of the unique solutions Planmed offers to improve working ergonomics.

Imaging patients is both efficient and safe with Planmed Nuance Excel. All the central controls of the unit are located at the unit, so that the technologist is never far from the patient. Also, lowering patient anxiety has been considered in the design. The compact form of the unit with rounded edges and progressive compression force provide a more comfortable patient experience and thereby encourages the patient to regularly participate in mammography screening. We feel that by designing well-accepted mammography equipment we can also improve mammography acceptance, and consequently help breast cancer screening.
Planmed Nuance Excel provides ultimate versatility in dedicated diagnostic tools. Optionally available accessories such as interactive and geometric magnification platform transform Planmed Nuance Excel from an efficient screening unit to a high-precision diagnostic system. In addition, Planmed offers a comprehensive selection of other optional accessories and software modules.

The Planmed Nuance DigiGuide is a high-precision digital stereotactic biopsy system. Exceptionally light-weight needle guidance unit, built-in connections, and compatibility with vertical or optional lateral vacuum-assisted biopsy devices, make the Planmed Nuance DigiGuide versatile and simple to use. It is regarded as the most advanced and elegant biopsy system today.

The Planmed Nuance DigiGuide takes the capabilities of the Nuance Acquire software to an entirely new level. Intuitive graphical user interface provides easy and fast examinations. The stereotactic examination is performed with the help of an interactive procedure manager that includes many features, such as automatic needle length selection, to ensure safety throughout the procedure. Also, automatic reference point recognition can be used to further simplify the targeting procedure.

For geometric magnification, Planmed Nuance Excel offers a dedicated magnification track and an optional magnification tower with fixed 1.6 or 1.8 magnification factors. The tower is lightweight and easy to install, and it enables superb magnification imaging with unmatched flexibility. In addition, the ergonomic handles provide a good grip for additional safety during magnification imaging.
The optional Planmed Nuance Softview is a dedicated mammography review workstation for radiologists. The multifunctional software package featuring dual high resolution grey-scale flat panel monitors is adaptable for any imaging environment from a small mammography facility to a large central hospital. Planmed Nuance Softview features softcopy reading with facilitated workflow. The software supports personal image hanging protocols that can display both prior and current mammography images in a predefined, individual sequence. Also mammography dedicated display and measurement tools are provided for diagnostics.

Planmed’s unique design extends to softcopy reading as well. Optional Planmed DigiPad is an unmatched tool for image display management with intelligent features. With only a few keys, the radiologist can handle all the functions required for efficient softcopy reading. The green-illuminated, non-glaring DigiPad keys are easy to see in dark reading environments. DigiPad makes softcopy reading easier and more efficient than ever.

Optionally, Nuance Softview can be extended for multi-modality support with specific image display properties e.g. for US and MRI. The software is Digital Imaging and Communications in Medicine (DICOM), Integrating the Healthcare Enterprise (IHE), and Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliant.

Optional Planmed CAD offers clinically proven decision-making support for the interpreting radiologists. Located in a dedicated Planmed CAD server PC, a sophisticated breast cancer detection algorithm automatically analyzes the digital mammograms for signs of breast cancer, and the radiologist can then display the markers by simply hitting the CAD button on the optional Planmed DigiPad short cut panel.

The CAD server not only communicates seamlessly to the Planmed Acquisition and Review Workstations, but can also be connected to several different PACS and review systems in the hospital network. There are endless possibilities for different configurations, and the Planmed CAD is ready to meet them all.

The Planmed CAD offers an inexhaustible help for early detection of breast cancer. Please ask for your local Planmed representative for more information.
Planmed Mammography Highlights

Planmed Nuance Classic:
- PreDigital unit
- Upgradeable to FFDM (Full Field Digital Mammography)
- Optional MaxView, Side Access and stereotactics
- CR interface available

Planmed Nuance and Planmed Nuance Excel:
- Full Field Digital Mammography with direct image capture
- Standard or large detector size
- Integrated MaxView and Side Access
- Optional digital stereotactics
- Optional Planmed CAD
- Optional Tungsten X-ray tube with TriFilter® Dose Reduction Technology

Planmed Sophie Classic:
- High performance mammography platform for variety of needs
- Retrofittable with versatile options
- CR interface available

Planmed Sophie Classic Mobile:
- Only truly movable mammography unit suitable for screening and diagnostic procedures
- Optional integrated battery back-up
- CR interface available

Digital product line

Analog product line
Planmed Oy develops, manufactures and markets advanced imaging equipment and accessories for breast cancer screening and diagnostics. Planmed’s extensive product range covers digital and analog mammography units, mobile mammography units, stereotactic biopsy devices and breast positioning systems for early detection of breast cancer.