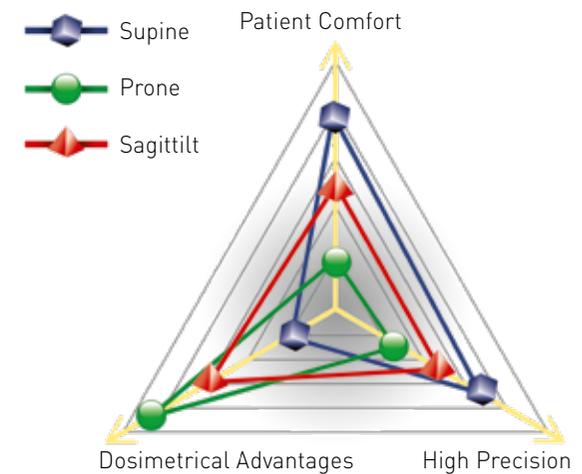


# SAGITTILT® PRONE BREAST SOLUTION

Radiation therapy of breast cancer in prone position is an increasingly used treatment technique. Several publications, also recent ones, prove the dosimetrical advantage of this technique. When treating a patient in the prone position the heart and lung tissue and the contra-lateral breast will be less affected.



*Developed in collaboration with the University Hospital of Liège, Belgium (Prof. P. Coucke)*

## CLINICAL STUDIES

Mulliez, T. et al. (2013), Hypofractionated whole breast irradiation for patients with large breasts: A randomized trial comparing prone and supine positions, *Radiotherapy and Oncology*, vol. 108, issue 2, p. 203-208

*"Prone treatment resulted in: improved dose coverage, better homogeneity, less volumes of over-dosage, reduced acute skin desquamation, a 3-fold decrease of moist desquamation, lower incidence of dermatitis, edema, pruritus, and pain. 2- to 4-fold reduction of grades 2-3 toxicity, lower ipsilateral lung and mean LAD dose."*

Stegman, L.D. et al. (2007), Long-Term Clinical outcomes of whole-breast irradiation delivered in the prone position, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 68, No 1, p. 73-81

*"Prone position breast radiation results in similar long-term disease control with a favourable toxicity profile compared with standard supine tangents. The anatomic advantages of prone positioning may contribute to improving the therapeutic ratio of post-lumpectomy radiation by improving dose homogeneity and minimizing incidental cardiac and lung dose."*

De Wyngaert J.K et al. (2007), Accelerated Intensity- Modulated Radiotherapy to Breast in Prone Position: Dosimetric Results, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 68, No. 4, p. 1251-1259

*"This technique for whole breast radiotherapy is feasible and enables an accelerated regimen in the prone position while sparing the lung and heart."*

Merchant, T.E. et al. (1994), Prone position breast irradiation, *Int. J. Radiation Oncology Biol. Phys.*, Vol. 30, No. 1, p. 197-203

*"Irradiation of the heart, lungs, chest wall and contralateral breast are minimized with this technique. Prone position breast irradiation appears to be a simple and effective alternative to irradiation of the breast in the conventional supine position when the supine position is likely to result in unacceptable dose inhomogeneity or significant doses to normal tissue."*

Olson, K.N. (2014), Improving treatment outcomes of breast radiation therapy: the prone position, *Radiation therapist*, Vol. 23, No. 1, p. 21-26

*"The prone position has been shown to reduce skin reactions by eliminating skin folds." "This position can reduce late toxicities by greatly reducing the amount of dose to critical organs." "Dose homogeneity can be improved up to 1.2%." "The prone position also has shown reduced intrafractional motion while having interfractional motion within tolerance."*

Treatment of the breast with the patient in prone position is perceived by many to be less comfortable and also less reproducible than the supine position. The Sagittilt Prone Breast Solution solves these issues.

When developing the Sagittilt we looked at those aspects that make the supine breast position comfortable and translated that into a prone immobilization device.



Art. N° 32070



# SAGITTILT®

## FEATURES AND BENEFITS

### TILTING OF THE PATIENT

Sagittilt has a mechanism that allows to rotate a patient along the sagittal axis in a reproducible and safe way. This rotation makes the breast hang further away from heart and lung and at the same time it decreases pressure on the ribs and the contralateral breast to improve the comfort.

The advantage of tilting the entire length of the body along the sagittal axis is that it remains flat on the device. The patient can be tilted from 0° to 10° with increments of 1 degree. One person only can perform the tilt.



## SAGITTILT® FEATURES AND BENEFITS

### HIGH REPRODUCIBILITY OF PATIENT POSITION

Sagittilt allows for an optimal reproducibility of the position of a patient by means of supports for the arms, hands, elbows, head and feet that are individually adjustable and indexed, which creates a comfortable, stable and reproducible position for the patient.

The patient's elbows are positioned in a cup shaped support structure, similar to what is used in supine breast boards. Once the elbows are positioned on the Sagittilt, the position of the shoulders will also be reproducible for each session and the upper body will remain still during treatment.



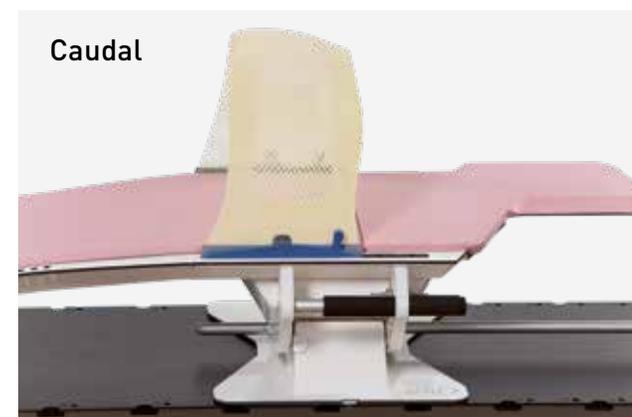
## SAGITTILT® FEATURES AND BENEFITS

### IMMOBILIZATION WITH A THERMOPLASTIC MASK

A dedicated thermoplastic mask (Art. N° 33774/2MA/12MI+N) for the Sagittilt immobilizes the hips of the patient and keeps the patient in place in a secure way when tilting the system.

Both the thermoplastic mask and the elbow support prevent the patient from sliding sideways when using the tilt function. There are three different positions for the thermoplastic mask: cranial, middle and caudal.

The mask is locked into the board by using two High Precision profiles, which is a patented technology by Orfit.



## SAGITTILT® FEATURES AND BENEFITS

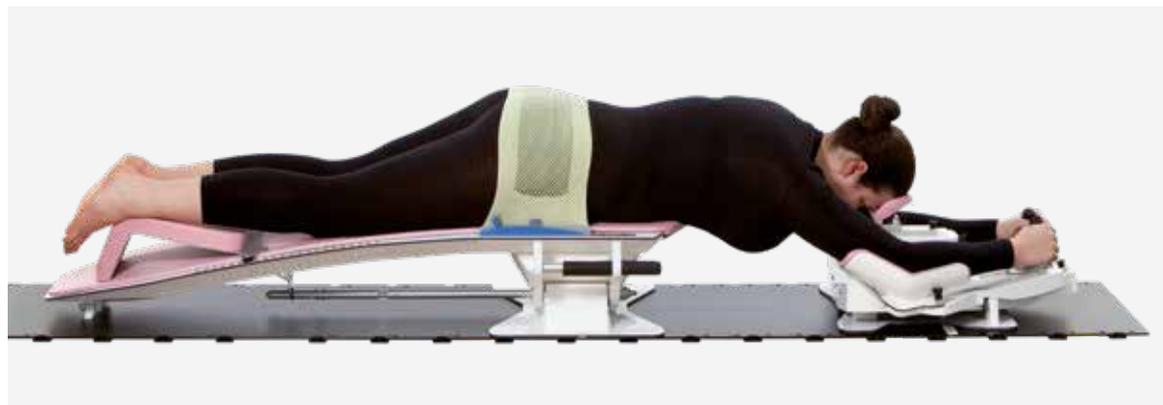
### EASY STORAGE

A smartly designed storage cart comes with each Sagittilt so that the system can be moved around effortlessly and placed on the treatment couch without performing heavy lifting.



### COUCH INDEXATION

The Sagittilt Prone Breast Solution is attached to the simulation and treatment couch by means of two dedicated 2-pin indexing bars, allowing to place it in a reproducible and safe way on most of the couch tops that are in use.



## SAGITTILT® FEATURES AND BENEFITS

### HIGH-TECH DESIGN PRODUCT

Sagittilt is the result of an innovative development process and a high-tech production method involving carbon fiber techniques from the aviation industry.

Special attention was given to the design of the product with the purpose of making it patient and user friendly while taking up a minimum amount of space in a treatment or simulation room.



#### CLINICAL PUBLICATIONS ABOUT THE SAGITTILT PRONE BREAST SOLUTION

Cucchiaro, S. et al. (2014), Clinical Introduction of an all-in class solution for prone breast hypofractionated SIB with multibeam IMRT, *Radiotherapy & Oncology*, Vol. 111, Supplement 1, p. 47

Lakosi, F. et al. (2014), Hypofractionated whole prone breast RT using Sagittilt system: patient comfort, setup accuracy and acute toxicity, *Radiotherapy & Oncology*, Vol. 111, Supplement 1, p. 477

Lakosi, F. et al. (2013), Introduction of Sagittilt prone breastboard into daily practice: from pre-clinical to first clinical experience, *Radiotherapy & Oncology*, Vol. 106, Supplement 2, p. 487

Lakosi, F. et al. (2016), Feasibility evaluation of prone breast irradiation with the Sagittilt system including residual-intrafractional error assessment, *Radiothérapie Cancer*, 20(8), p. 776-782

SAGITTILT®

# SAGITTILT® ANTIBACTERIAL MASK



Art. N° 33774/2MA/12MI+N  
2-points hybrid hip mask



# SAGITTILT® ACCESSORIES



Art. N° 32070/16

Comfort cushion with aluminium post for Sagittilt



Art. N° 32070/21

Sagittilt sanitary cover for comfort cushion (package of 50 pieces)



Art. N° 32070/14

Sanitary cover for Sagittilt forehead support (package of 50 pieces)