



**BEBIG**

Affordable healthcare for everyone



Precise targeting

**SagiNova<sup>®</sup>**

Unique choices in HDR brachytherapy

[www.bebigmedical.com](http://www.bebigmedical.com)

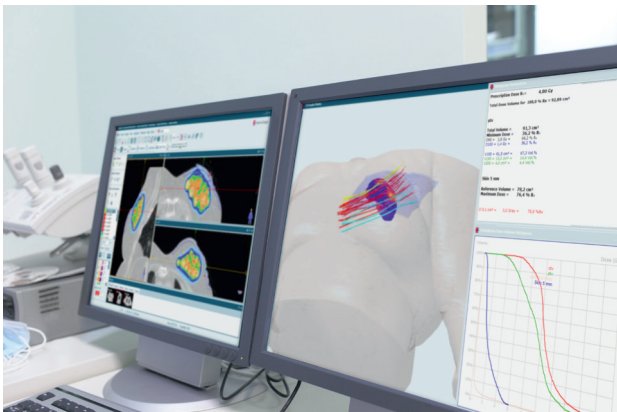
# Unique Choices in High-Dose-Rate Brachytherapy

## SagiNova® Afterloader

- Ability to choose between widely used Ir-192 or long-lasting Co-60 source
- Exclusive, integrated In-Vivo Dosimetry for real-time dose monitoring
- QAssist supports quality assurance responsibilities
- Unique features to help ensure patient safety
- User-friendly GUI and intuitive design for streamlined workflow
- Advanced German engineering

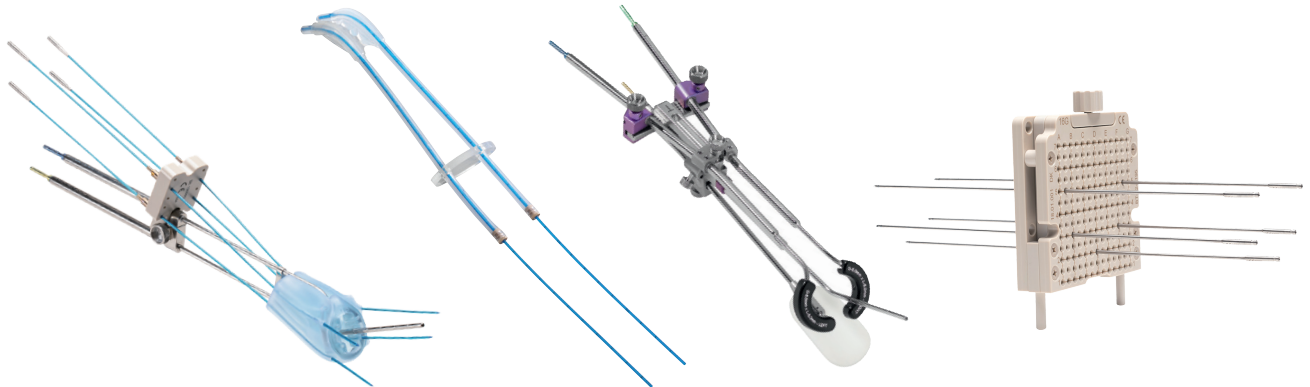
Sagitta [sə'ɡɪtə] (lat): arrow  
Novum ['nɒvəm] (lat): novelty

SagiNova [sə'ɡɪ'nɒvə]:  
new HDR afterloader for precise,  
arrow-like targeting



## SagiPlan® Treatment Planning

- One platform for all HDR planning needs
- User-friendly and intuitive
- Precise, targeted and conformal
- Full and flexible connectivity
- Comprehensive plan evaluation



### Complete Range of HDR Applicators

- Expansive portfolio of applicators by BEBIG Medical and Mick Radio-Nuclear Instruments
- Precise and durable
- Broad spectrum of MR capable applicators
- Unique system wide integration
- Full clinical support

### Round-the-Clock Service Excellence

- Customizable service and support plans
- Scalable education and training programs

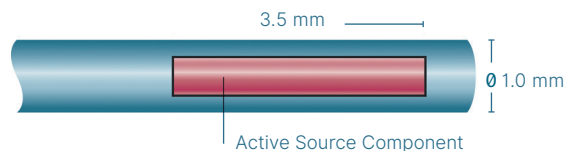
# SagiNova® Technology

The Disposable Steel Needle Set is intended for various interstitial brachytherapy applications. The SagiNova® HDR afterloader was designed to address today's needs for HDR brachytherapy applications regarding safety, seamless workflows and cost efficiency. It distinguishes itself through outstanding features:

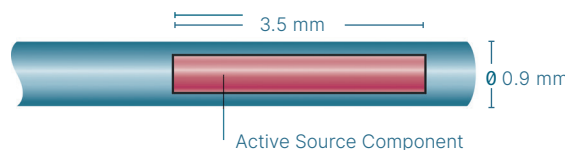
## Ability to Choose between Widely Used Ir-192 or Long-Lasting Co-60 Source

BEBIG Medical provides the choice of two isotopes, Ir-192 and Co-60, according to individual institutional needs and preferences. The dose distributions based on the AAPM TG-43 formalism are equivalent for cobalt-60 and iridium-192. Both miniaturized sources have been in clinical use for more than 10 years and are suitable for the same clinical applications.

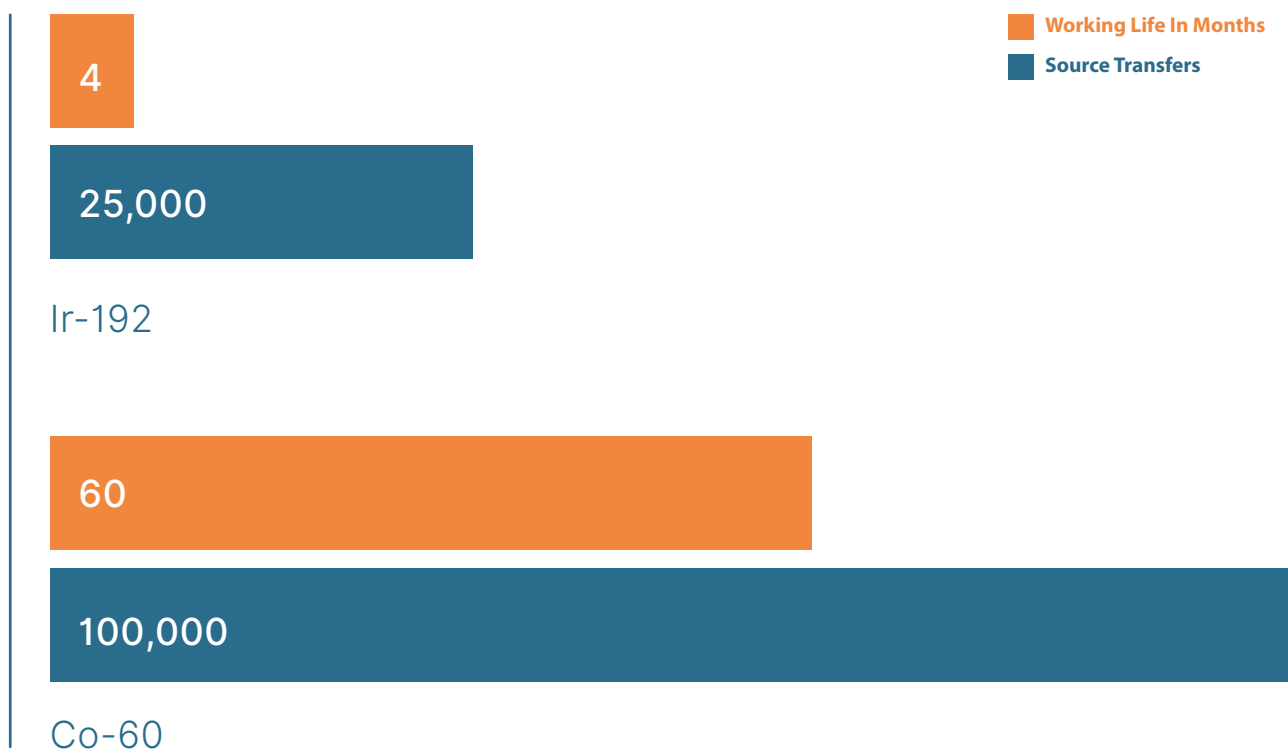
The high quantity of source transfers and the long working life of the miniaturized cobalt-60 source, developed by BEBIG Medical, reduce time for source exchange logistics and increase valuable clinic uptime.

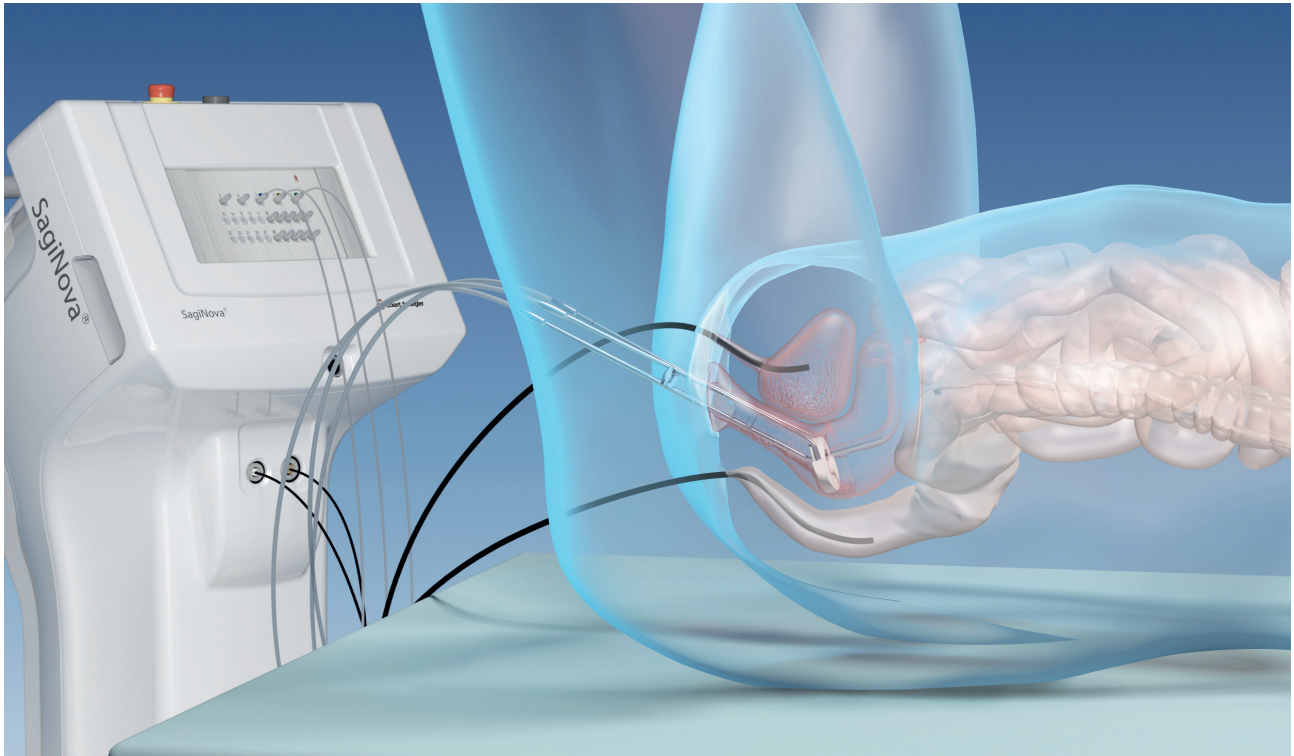


Miniaturized Co-60 source



Miniaturized Ir-192 source





## Precise Tumor Targeting

### Exclusive, Integrated In-Vivo Dosimetry for Real-Time Dose Monitoring

The unique In-Vivo Dosimetry System allows direct independent monitoring of doses to rectum and bladder at the control console alongside treatment information. Dose limit values can be defined via the SagiNova® treatment control software and warnings are displayed if bladder or rectum dose limits are exceeded. The complete data is integrated in the treatment report for a convenient documentation.

Since the system is operated directly from the SagiNova® treatment control station, In-Vivo Dosimetry is easily integrated into the treatment process with no additional equipment or screens.

### QAssist Supports Quality Assurance Responsibilities

The highly customizable tool QAssist supports the user in a straightforward way to adhere to the highest quality assurance standards with full digital documentation. It offers pre-defined quality assurance tests which are performed in sequence and verify whether the system and critical components are operating correctly.

QAssist configurations can be shared with partnering departments to allow for consistent quality reporting.



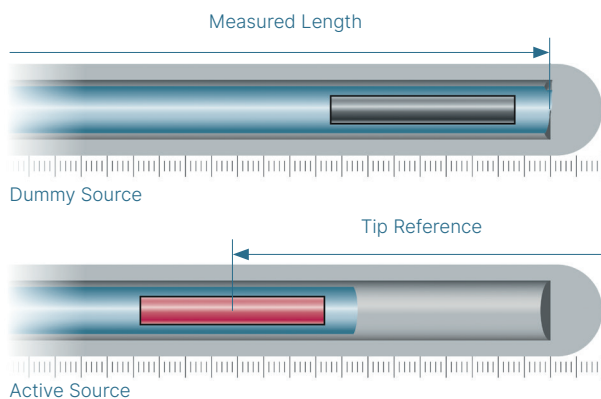


## Patient Safety

### Unique Features to Help Ensure Patient Safety

The Automatic Length Measurement allows for convenient and safe multi-channel applications. By choosing an applicator in SagiPlan®, the length of the applicator and the overall length of the application are digitally transferred to SagiNova® without requiring any manual input. Hence, the afterloader is able to vali-date the correct overall length per channel prior to each source movement. SagiNova® measures the internal length of the catheter or applicator allowing the user to review and complete acceptance while the unit completes a verification of the length before the treatment is delivered.

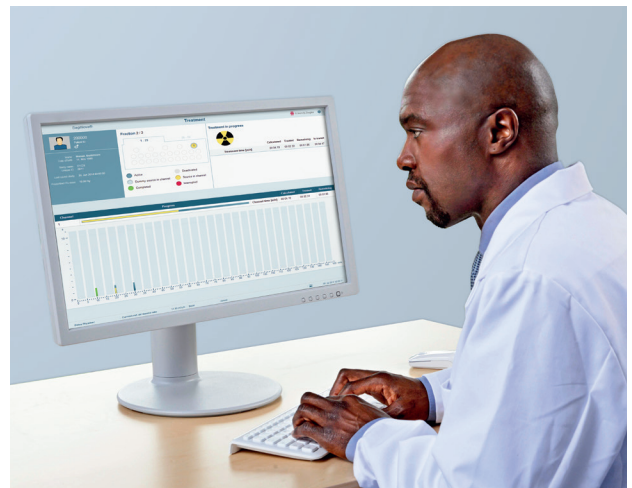
The ultimate benefits of the Automatic Length Measure-ment are improved patient safety and peace of mind for clinicians when treating body sites such as head & neck, breast and skin with flexible catheters or breast balloons. With the Channel Color Coding of three-channel gynecological applicators,



transfer tubes and the SagiNova® channel indexer, it is virtually impossible to mix up channels during treatment preparations and hence SagiNova® comfortably assures patient safety by design.

### User-Friendly GUI and Intuitive Design for Streamlined Workflow

The new SagiNova® graphical user interface was developed in cooperation with brachytherapy experts and usability engineers leading to the development of the next level of smooth and efficient workflow guidance.





### **SagiNova®**

SagiNova's world-class technology is based on BEBIG Medical's innovative approach to incorporate customer needs into product development.

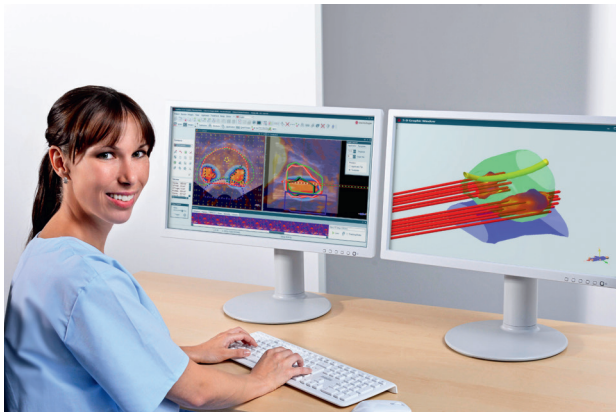
# SagiPlan® Platform

## One Platform for All HDR Planning Needs

SagiPlan® ensures that all body sites can be planned from the same software environment. With the fast and accurate image registration, you can have the best of different image datasets including fusion of the live ultrasound video stream for online real-time prostate planning.

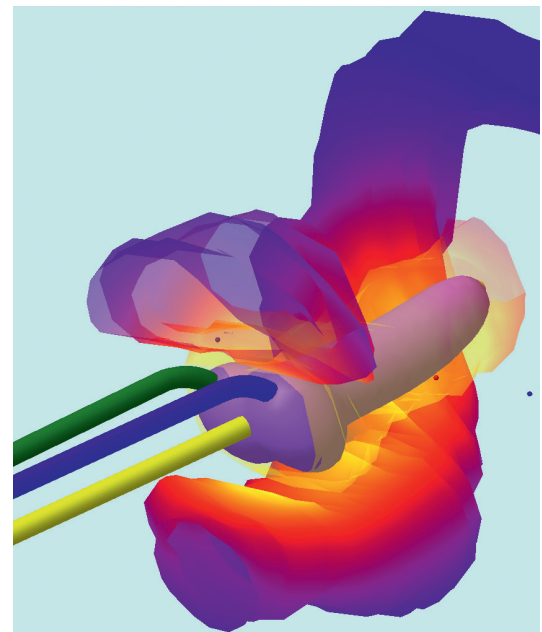
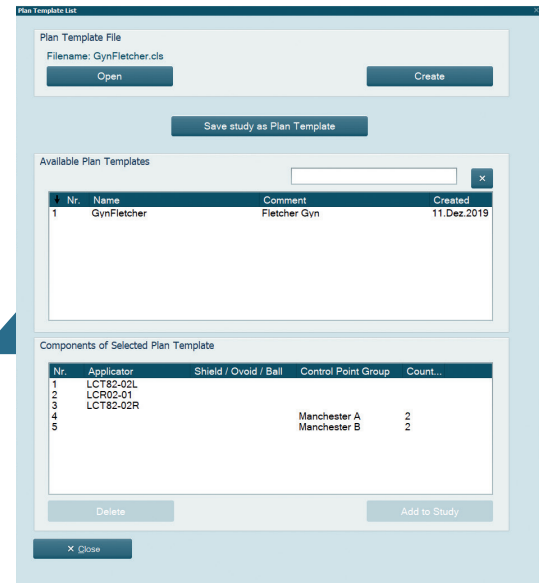
## User-Friendly and Intuitive

Individual user and treatment settings for different applications, combined with the complete portfolio of applicators in the Applicator List, make SagiPlan® very user-friendly and convenient. Furthermore, the intuitive order of the register tabs guides the user efficiently through the whole planning process. When a certain treatment type is frequently used, the complete setup of applicator type, retention positions, control points and prescribed dose can be saved as a plan template. A quick search function makes these templates easy to retrieve, enabling a quick planning process.



## Precise, Targeted and Conformal

Following the individual shape of a tumor for each unique patient, the dose planning is accurate and fast. Various tools like manual dose shaping and inverse optimization are at your service for this purpose.







## Comprehensive and Convenient

### Full and Flexible Connectivity

Fully integrated DICOM import and export allows for a seamless integration of the SagiPlan® system in hospital networks. The virtual license model of SagiPlan® facilitates centralized and distributed planning.



### Comprehensive Plan Evaluation

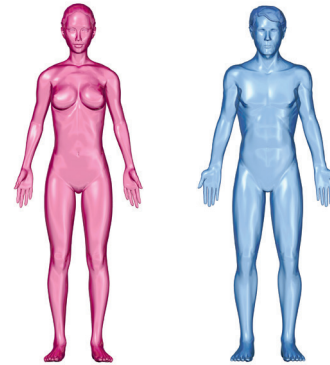
SagiPlan® offers a comprehensive set of plan evaluation tools. The 3D display together with the realtime visualization of DVH's and histogram parameters creates the perfect environment to focus on the quality of the plan. The unique BED evaluation tool provides full information about the target and organs at risk (OAR) doses in combined brachytherapy and EBRT treatment courses.

# HDR Applicators

## Expansive Portfolio of Applicators by BEBIG Medical and Mick Radio-Nuclear Instruments

BEBIG Medical develops and provides an extensive offering of state-of-the-art applicators for HDR brachytherapy. With applicators for intracavitary, interstitial and intraluminal access to gynecological, rectal, breast, esophagus, bronchus, head, neck and skin tumors, sites from head to toe may be treated.

With the addition of the prominent Mick® HDR Applicators to the BEBIG Medical portfolio, the HDR applicator offering spans an even broader range of applications.



### Highlights include:

The **CT/MR M.A.C. Interstitial GYN Template** features a template design with optional intrauterine tube enabling complete or targeted treatment of the vagina, cervix, endometrium and parametrium. The set is available with 36 needle concentric channels and a variety of diameters.

The **CT/MR Prostate Template** facilitates interstitial needles for the treatment of the prostate. Needles can be positioned and locked individually which allows the reconstruction on the treatment planning system directly after insertion.

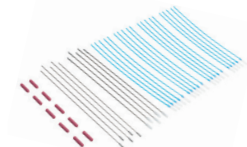
The **CT/MR Split Ring Applicator's** patented design combines the benefits of several other intracavitary applicators, with the ability to be configured as a closed ring or split into four different diameter distances in either symmetric or asymmetric arrangements.

The **CT/MR Segmented Vaginal Applicator** is designed to treat accurately and completely with vaginal and cervical coverage. The four-segment design in multiple widths allows for a range of both lengths as well as diameters to fit a variety of anatomies.

The **CT/MR Ring & Tandem Applicator with Tulip** is designed to treat accurately and reliably in nearly any anatomy with a range of ring angles, intrauterine tube lengths, build-up cap sizes and an optional rectal retractor to increase distance to organs at risk and eliminate the need for packing.



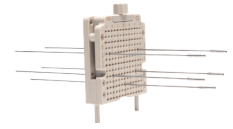
Breast Bridge



Plastic Needle Set



CT/MR Split Ring Applicator



CT/MR Prostate Template



CT/MR Segmented Vaginal Applicator



H.A.M. Applicators (Flaps)



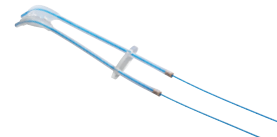
CT/MR Miami Applicator



Valencia Applicator



CT/MR Ring & Tandem Applicator with Tulip



Nasopharynx Applicator



CT/MR M.A.C. Interstitial GYN Template



Esophagus Applicator

# Safe and Reliable



“The integration of applicator information between SagiPlan® and SagiNova® reduces the risk of treatment error due to incorrect applicator selection at either planning or treatment.”

Antony Palmer,  
Head of Radiotherapy Physics & Lead Scientist Medical Physics,  
Queen Alexandra Hospital, Portsmouth/United Kingdom

## Precise and Durable

BEBIG Medical and Mick Radio-Nuclear Instruments create applicators according to European and FDA regulations. We only use highly dedicated materials like titanium certified for surgical implant application or amorphous high performance thermo-plastic (PPSU). Our standards make our applicators long-lasting with optimal robustness in clinical use.

## Broad Spectrum of MR Capable Applicators

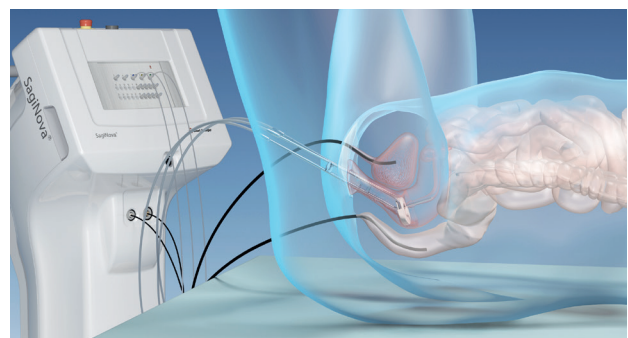
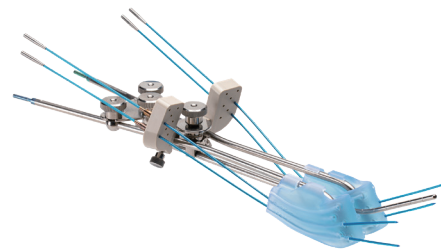
MR Safe and MR Conditional Applicators allow for a broad choice of treatment options and individualized image guided brachytherapy treatments.

## Unique System Wide Integration

All BEBIG Medical and Mick® HDR Applicators are implemented in the SagiPlan® and SagiNova® databases. This allows for fast and accurate reconstruction in the planning system and enables precise automatic measurement of the internal length of the applicator.

## Full Clinical Support

BEBIG Medical is a complete brachytherapy provider whose staff consists of experienced application specialists and service technicians, supported by an extensive network of reference sites, technical and clinical experts. We provide and organize the assistance needed to achieve the prerequisites to start and maintain a safe and efficient brachytherapy routine practice.





## Service Excellence

### Application–Complete System Training and Full Clinical Support

Our team of qualified and experienced application specialists

- provides training on our treatment planning systems in-house and on-site
- shows you how to use the entire range of HDR brachytherapy applicators
- provides updates and upgrades to keep your system up-to-date at all times
- is available 24 hours, 7 days a week

### Support–Individual Service Plans and Streamlined Logistics

Our highly motivated and proficient back office team

- customizes service and support plans to your individual needs
- supplies you with required equipment and spare parts in short order, due to smart stock management
- arranges on-time delivery of the sources in line with local regulations for radiation safety

### Service–Pre-installation Consulting, Preventive Maintenance, and Immediate Technical Assistance

Our dedicated team of expert service engineers

- helps you to plan the necessary steps in the course of preparing the site before the installation of our HDR afterloader system, in particular calculating the room shielding requirements
- carries out the installation of the device at the hospital, including all accessories as well as the introduction to the use of the system
- performs maintenances once a year to uphold functionality on a sustained basis
- services your system in case of a repair request worldwide
- updates your SagiPlan® software to keep up with the evolving technology and to maintain the highest level of performance
- offers you technical training and refresher courses





## Experience and Innovation

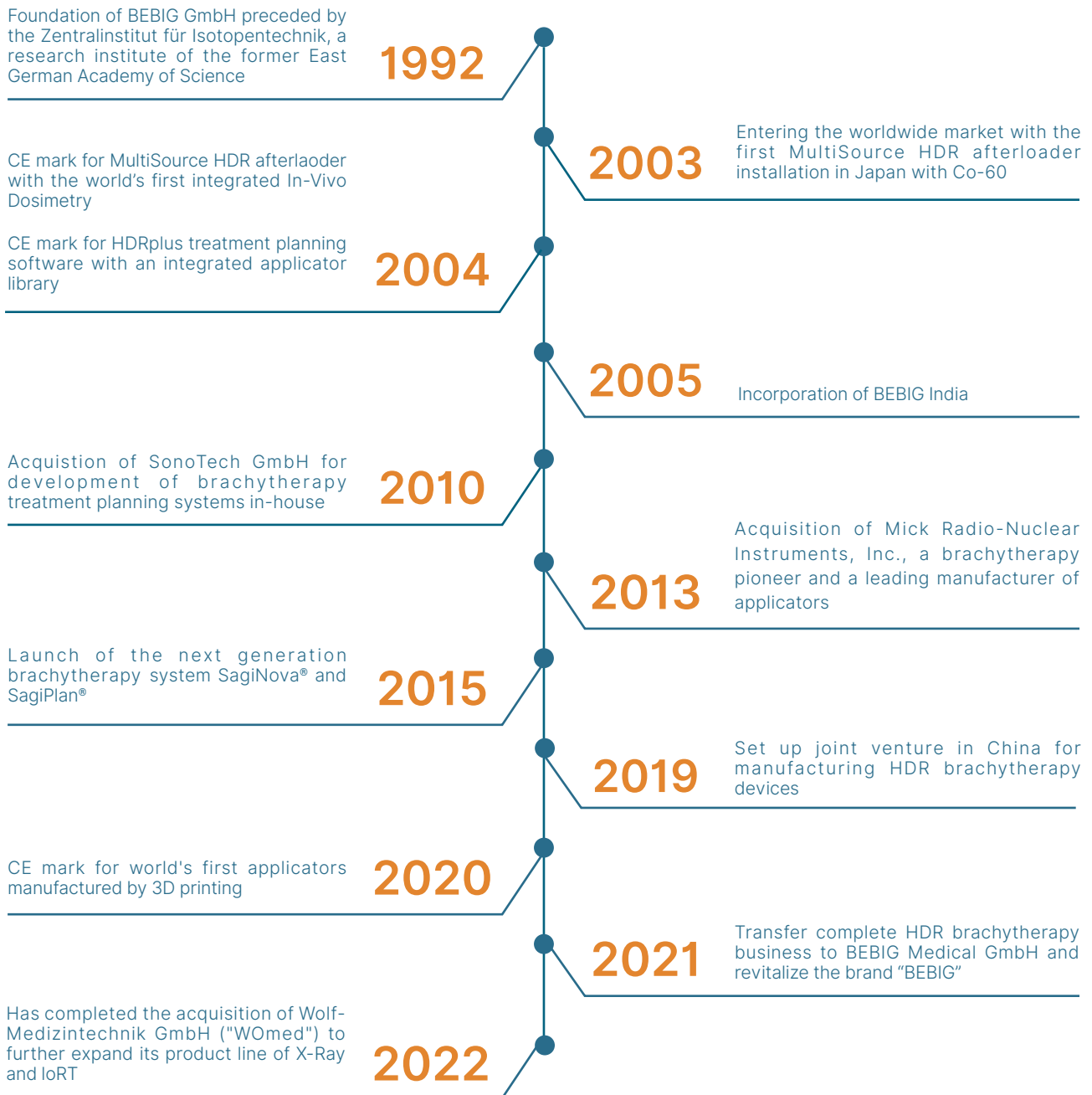
# BEBIG Medical

BEBIG Medical GmbH (“BEBIG Medical”) is a global provider of high-quality radiation therapy products for cancer treatment headquartered in Berlin, Germany. Preceded by the high dose brachytherapy business unit of Eckert & Ziegler AG, BEBIG Medical has a heritage of more than 40 years’ experience in brachytherapy field and continues to provide affordable healthcare with proven clinical outcomes via strong and viable technology.

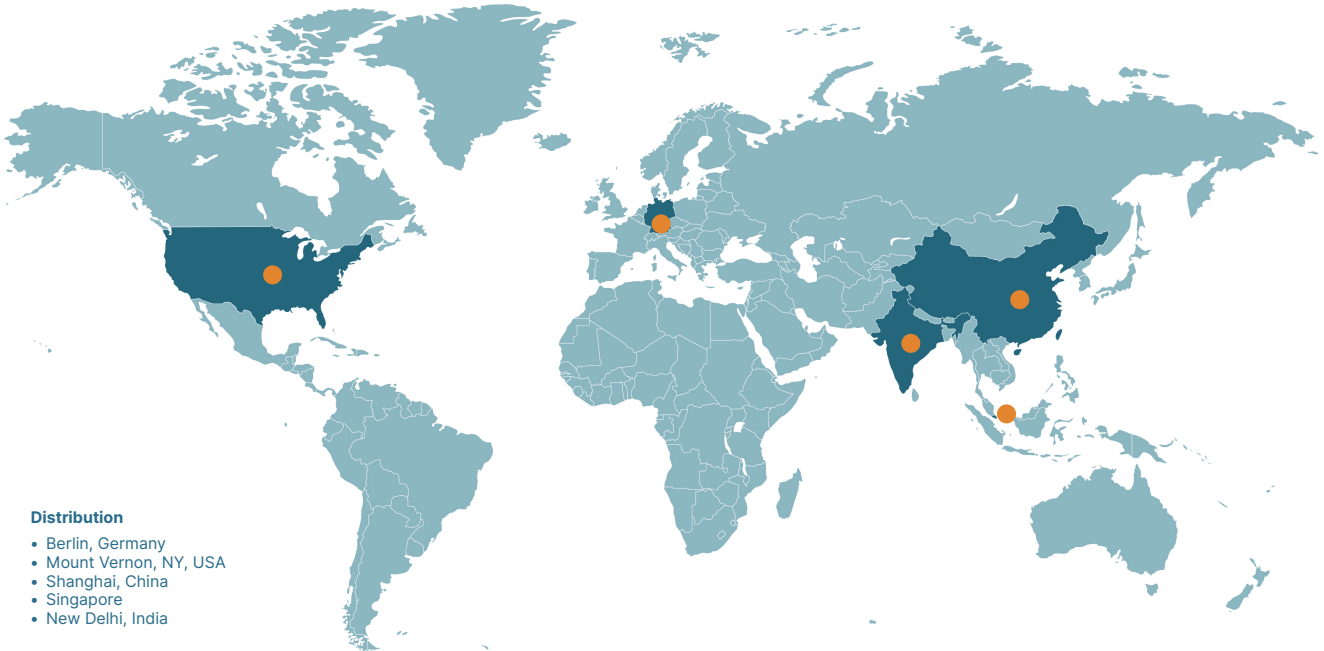
In 2013, Mick Radio-Nuclear Instruments, Inc., known internationally for its 40 years’ manufacturing expertise in the field of applicators and accessories for radiation therapy, became a member of BEBIG Medical. Since 2022, the acquisition of Wolf-Medizintechnik GmbH (Womed), a Germany based manufacturer for reliable X-ray therapy and innovative intraoperative radiation therapy, expands BEBIG Medical’s portfolio and distribution network.

With a team of professionals and offices in Europe, United States and Asia, the company is empowered to serve customers in more than 70 countries and regions together with a worldwide distribution network.

**BEBIG Medical –**  
Affordable healthcare for everyone



# BEBIG Medical



**Distribution**

- Berlin, Germany
- Mount Vernon, NY, USA
- Shanghai, China
- Singapore
- New Delhi, India

**Production**

- Berlin, Germany
- St.Gangloff, Germany
- Mount Vernon, NY, USA
- Shanghai, China

**Manufacturer:**

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