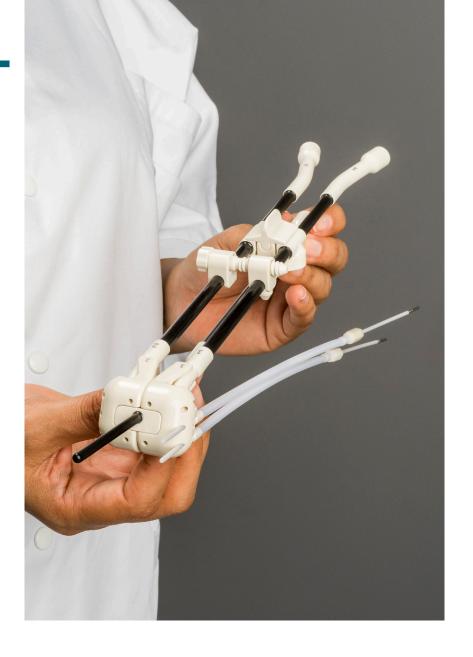
Geneva

Universal Gynecological Applicator



Modular without compromising

There is now one straightforward and affordable yet robust brachytherapy applicator designed to be used for all cervical cancer patients up to stage IIB.



At last—just one applicator for most cervical cancer patients up to stage IIB

Brachytherapy is used widely alongside external beam radiation therapy (EBRT) and chemotherapy in the treatment of patients with locally advanced cervical cancer.¹⁻⁶ A 2016 SEER database study revealed that cervical cancer patients receiving a brachytherapy boost after EBRT had improved overall survival compared to those who didn't receive brachytherapy boost.⁷

The majority of patients treated for cervical cancer (around 75% of cases) are FIGO stage I or II.⁸

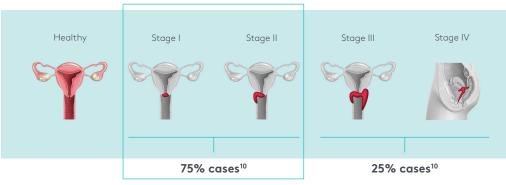
In the past, clinicians had to choose from a wide range of different gynecological applicators for treating the most common cases of cervical cancer (stages I and II). Many of these applicators are challenging to assemble and require the use of free-hand needles for patients that need treatment following a hysterectomy.

Geneva addresses the inherent challenges of previous generation gynecological applicators, and offers all the advantages of each of its predecessors, with enhanced functionality and user experience. Now clinicians need only one applicator to treat most cervical cancer patients.



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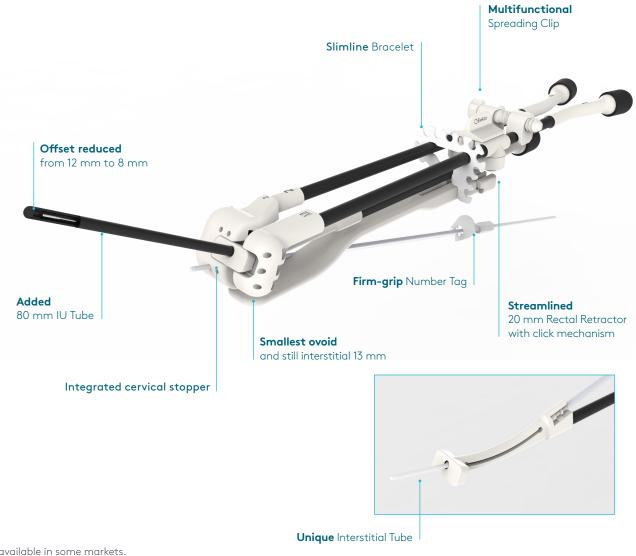
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Modular without compromising

Easy to assemble and insert, Geneva accommodates most female pelvic anatomies and is suitable for treating the majority of cervical cancer cases up to stage IIB.



Geneva applicator is CE Marked and has U.S. FDA 510(k) clearance. Geneva is not available in some markets.

Why Geneva?

- · Adaptable for a diverse patient population
- Interstitial option always available
- Precise treatment planning and accurate dose delivery
- Easy to use in current clinical workflows



Adaptable for a diverse patient population

- Accommodates most female pelvic anatomies
- Provides interstitial option for post-hysterectomy cases
- For every gynecological brachytherapy center



With its modular design, Geneva can be configured to suit every female pelvic anatomy.

- Every ovoid size—from the smallest (13 mm) to the largest (40 mm)—offers the option of interstitial brachytherapy.
- The intrauterine tube is available in six different lengths (30–80 mm) and three different angles (15°, 30°, 45°). The integrated cervical stopper aligns with the ovoids to provide a flat contact surface and an even

dose distribution.

- The new interstitial tube expands treatment options following hysterectomy.
- The rectal retractor, available in three different sizes (20-40 mm), can be located at three set positions to ensure maximum protection of the rectum.

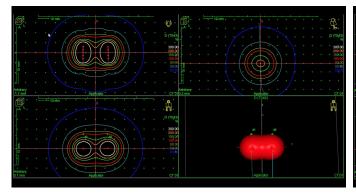
Interstitial option

Geneva ensures that the option for guided interstitial brachytherapy is always available-even with the smallest ovoids—for optimal target coverage.

The unique interstitial tube also enables clinicians to reach cancerous tissue around the vaginal cuff following hysterectomy. With ProGuide needles and guiding tube, the interstitial tube facilitates accurate and reproducible dose distributions in hysterectomy patients and eliminates the need for free-hand needle placement.

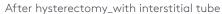
Geneva full set with interstitial tube

Geneva interstitial tube



After hysterectomy_without interstitial tube



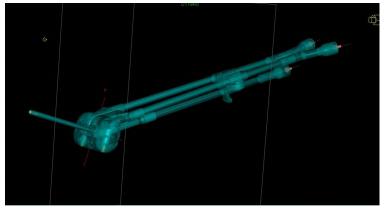


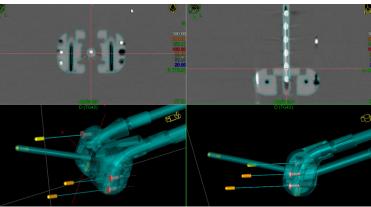
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Precise treatment planning and accurate dose delivery

- MR safe, supporting all image guided brachytherapy options
- Fixed geometry ensures rapid and accurate applicator modeling
- Allows easy applicator mapping every time

The RetroEMBRACE study has shown that image-guided brachytherapy (IGABT) combined with radiochemotherapy results in excellent local control and overall survival with limited severe morbidity.⁸ EMBRACE recommends MRI for brachytherapy treatment planning, according to GEC-ESTRO guidelines.¹⁰





Images from Geneva applicator in a water phantom

Geneva is completely MR-safe, offering distortion-free image guidance using all 2D and 3D imaging options. In addition, interstitial capability with every configuration supports image-guided adaptive brachytherapy (IGABT).

Geneva is included in the Oncentra® Brachy applicator modeling module, making applicator reconstruction easy and fast (in a few minutes). The applicator's fixed and stable geometry ensures accurate planning and reproducible dosimetric results. The Geneva universal gynecological applicator fits seamlessly into current 2D and 3D image modalities and is compatible with Oncentra Brachy treatment planning software (version 4.5.3 and higher) and state-of-the-art Elekta treatment delivery platforms, such as the Flexitron® digital afterloader.

Multifunctional spreading clip

Click. Ready.

- Assembled, ready for use in 4 clicks
- Modular setup, pick and choose system
- Individualized solution for each patient
- Interstitial is always available
- No compromise to flexibility due to the spreading clip



Clicking the tubes



Clicking the ovoids

Geneva is quick and easy to assemble without the need for small screws or additional tools. Using the unique Elekta clicking system, the applicator is ready for use in just four clicks, ensuring a faster workflow.

The modular design is completely adaptable to suit user needs, and the innovative spreading clip allows flexibility for a wider reach if required. The applicator clamp can be used to immobilize and stabilize the applicator once assembled.



Using the spreading clip to fix the applicator

Using the spreading clip to spread the ovoids



BrachyAcademy training and education

Elekta offers peer-to-peer workshops and education programs to allow healthcare providers to familiarize themselves with Geneva.

By joining BrachyAcademy, healthcare professionals benefit from complete Elekta support, training and education. Visit **BrachyAcademy.com** for an overview of brachytherapy workshops, peer-to-peer education, literature, videos and additional resources.



References

- Haie-Meder C, et al. Recommendations from gynaecological (GYN) GEC-ESTRO Working Group (I): Concepts and terms in 3D image based 3D treatment planning in cervix cancer brachytherapy with emphasis on MRI assessment of GTV and CTV. Radiother Oncol. 2005;74(3):235–45.
- 2. Viswanathan A, et al. American Brachytherapy Society consensus guidelines for locally advanced carcinoma of the cervix. Part I: general principles. Brachytherapy 2012;11:33–46.
- 3. Viswanathan A, et al. American Brachytherapy Society consensus guidelines for locally advanced carcinoma of the cervix. Part II: high-dose-rate brachytherapy. Brachytherapy 2012;11:47–52.
- 4. NCCN guidelines. https://www.brachyjournal.com/article/S1538-4721(18)30739-6/fulltext
- 5. FIGO. https://screening.iarc.fr/viaviliappendix1.php

- 6. Marth C, et al. Cervical cancer: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2017:28(suppl_4):iv72-iv83.
- 7. Han K, et al. Trends in the utilization of brachytherapy in cervical cancer in the United States. Int J Radiat Oncol. 2013;87:111–119.
- Sturdza A, et al. Image guided brachytherapy in locally advanced cervical cancer: Improved pelvic control and survival in retroEMBRACE, a multicenter cohort study. Radiother Oncol. 2016;120(3):428–433.
- 9. Fokdal L, et al. Image guided adaptive brachytherapy with combined intracavitary and interstitial technique improves the therapeutic ratio in locally advanced cervical cancer: analysis from the retro EMBRACE study. Radiother Oncol. 2016;120(3):434–40.
- 10. EMBRACE II. https://www.embracestudy.dk/

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Get the most from your Elekta brachytherapy solution

Elekta Care is designed to help you maximize the use of your Elekta technology, so you can focus on your patients and your practice.

Elekta Care supports you from startup through your product's lifecycle with comprehensive options from education, training and upgrades to solutions allowing you the highest uptime and improved operational efficiency.



For almost five decades, Elekta has been a leader in precision radiation medicine.

Our more than 4,000 employees worldwide are committed to ensuring everyone in the world with cancer has access to—and benefits from—more precise, personalized radiotherapy treatments.

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