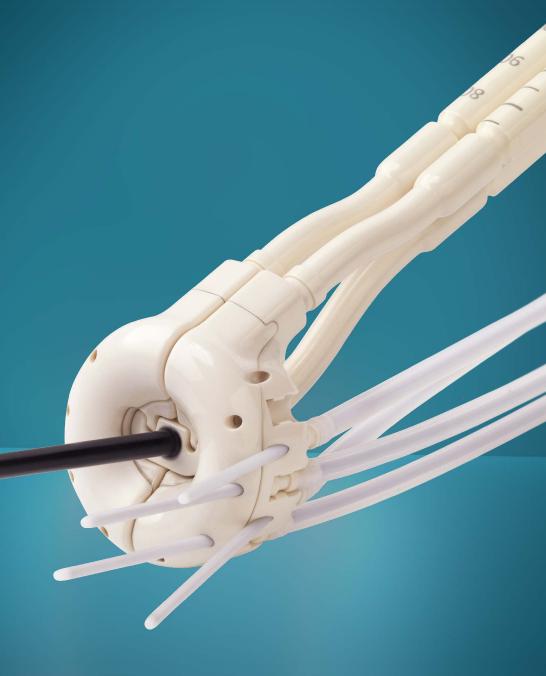




### Gynecological

Applicator

Reaching beyond



Helping clinicians improve patients' lives.



# A new option for treating advanced stage cervical cancer



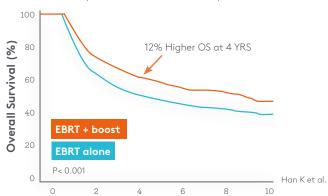
For patients with locally advanced cervical cancer, including those with stage IIIB, chemoradiation is the standard treatment.<sup>1-6</sup>
The radiation component is a combination of external beam radiation therapy (EBRT) and a high dose brachytherapy boost.<sup>1-6</sup> In locally advanced disease, the tumor often extends from the cervix into the parametrium and vagina, making these lesions difficult to reach with current brachytherapy techniques.

Guidelines recommend 3D image-guided adaptive brachytherapy (including interstitial brachytherapy if required) for locally advanced cervical cancer.<sup>1, 2</sup>

Although interstitial catheter insertion can optimize dose distribution in, for example, stage IIIB disease,<sup>2</sup> the procedure requires skill and experience. With Venezia™, the complexity of advanced stage cervical cancer is reduced, benefiting both patients and care providers.

### Higher four-year overall survival

(58.2% vs. 46.2%, P<0.001)



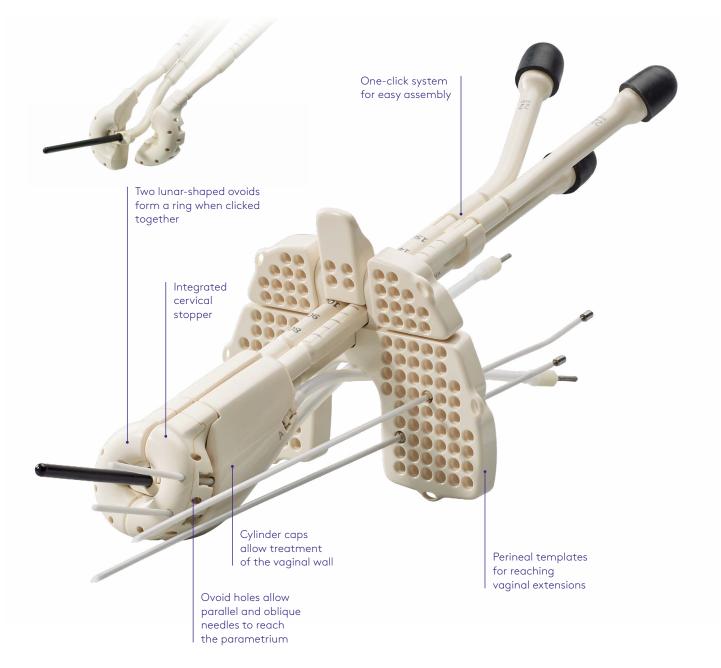
In a recent study, cervical cancer patients who received brachytherapy as a boost after EBRT had a 12 percent better overall survival rate at four years than patients who didn't receive the brachytherapy boost. 7 Studies show that 3D image-

guided brachytherapy is beneficial for patients with locally advanced cervical cancer, and an adaptive technique including interstitial needles as required is associated with improved outcomes, especially in patients with larger tumors. 9-13

## Reaching beyond

With Venezia, clinicians can now easily reach the parametrium and vaginal extensions. Venezia enables physicians to treat IIIB and IIIA tumors with interstitial brachytherapy in a predefined and reproducible way. Venezia ensures optimal dose distribution for the majority of patients.

Venezia allows you to reach beyond what was possible before.





### Why Venezia?

Reach cervix, parametrium and vagina, expanding clinical capabilities

Ensure reproducible dosimetric results

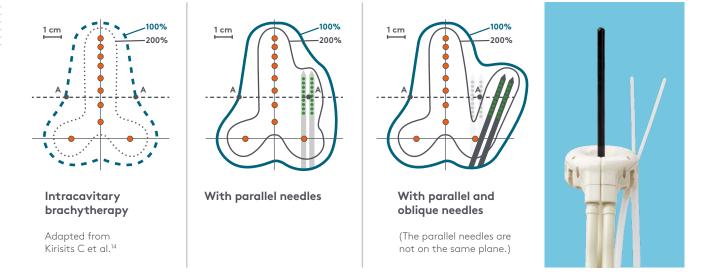
Simplify (interstitial) gynecological brachytherapy

Easily integrate into workflow



# Reach cervix, parametrium and vagina— expanding clinical capabilities

**Venezia:** optimizing dose distribution with interstitial needles

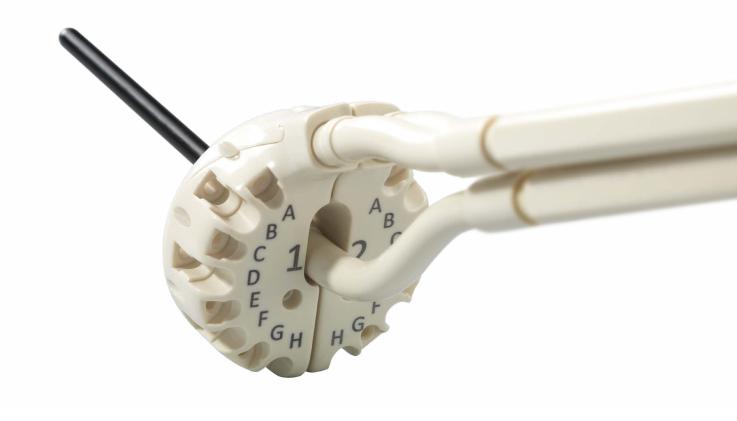


- Reach the parametrium and vaginal extensions
- Obtain optimal dose distribution, sparing OARs
- Use for various patient groups (stages IB, IIA/B, IIIA/B and IVA)

Venezia allows you to reach beyond: access tumors in the parametrium and the vagina with ease. The Advanced Gynecological Applicator allows treatment of patients with IIIB cervical cancer, but also IB, IIA/B, IIIA and stage IVA tumors. One applicator can treat multiple tumor stages, so you can use the same applicator type for various patient groups.

The two lunar-shaped ovoids form a ring when clicked together, allowing you to benefit from the advantages of a tandem and ovoid applicator in combination with the dose distribution of a ring—high dose to the target volume while sparing organs at risk.

### Reproducible dosimetric results



- Ensure consistent needle placement for every fraction
- Insert needles with precision and at the preferred depth with the insertion tool
- $\bullet$  Plan in a predefined way using Applicator Modeling

The numbered hole positions on the Venezia ovoids and template facilitate consistent needle placement for every fraction—every time.

Additionally, the insertion tool helps to insert the needles at the exact prescribed depth.

Venezia is included in the Oncentra® Brachy
Applicator Modeling module, making
reconstruction easy and fast. Simply select
Venezia, then import and modify to meet clinical
needs. Manual reconstruction becomes obsolete,
saving time and streamlining workflow.

# Simplify (interstitial) gynecological brachytherapy



Venezia has no screws, eliminating the need for tools. Applicator insertion and assembly can be done by just one clinical staff member

- Reduce the need for free-hand needle placement
- Easily insert the applicator via two lunar-shaped ovoids
- Quickly assemble the applicator with one-click ease

Interstitial brachytherapy for advanced stage cervical cancer can be performed by free-hand needle placement. Although Venezia still allows free-hand needle placement, it is not necessary, because the parallel and oblique needle holes in the ovoids and perineal template guide the needles to the desired location. In addition, the needle insertion tool enables the physician to advance the ovoid needles to the prescribed depth. This guided needle placement ensures

reproducible dosimetric results, making needle placement easier and more accurate.

Venezia is much easier to insert and assemble than conventional gynecological applicators. Simply insert the first half of the applicator and attach the second half by sliding and clicking the two parts together. The applicator doesn't have screws and doesn't need tools, making applicator assembly and insertion an easy, do-it-yourself task.

## Easily integrate into the workflow



### Venezia fits a wide range of pelvic anatomy dimensions

- Different sizes/angles accommodate various patient anatomies
- Combine vaginal and perineal needle insertion as needed
- Support 2D- and 3D-imaging practices

Venezia comes in various sizes to accommodate every patient's pelvic anatomy, increasing patient comfort. And, depending on the patient's indication, the physician can select vaginal and/or perineal needle insertion. The multipurpose applicator eliminates the need for a separate device for every indication.

Venezia suits all imaging modalities including ultrasound, CT, x-ray and MRI. For virtually any imaging workflow, Venezia will always be clearly visible in the image dataset.

### Compatible with Elekta Brachytherapy solutions



The new Venezia Advanced Gynecological Applicator is part of the Elekta Brachytherapy solutions portfolio and is compatible with Oncentra Brachy treatment planning and our state-of-theart treatment delivery platforms such as the Flexitron® afterloader. The applicator can be easily included in your current brachytherapy practice and workflow.

"With Venezia, I expect to treat advanced cervical cancer patients with more ease. Venezia will allow me to reach

tumors extended to the parametrium because I can position needles at multiple angles, in the vagina and through the perineum."

### Petch Alisanant, MD

Division of Radiation Oncology Chulalongkorn University, Bangko

## BrachyAcademy training and education



Elekta recognizes that there is much more to interstitial brachytherapy for advanced stage cervical cancer than an applicator. This is why we offer peer-to-peer workshops, which allow care providers to familiarize themselves with Venezia.

By joining BrachyAcademy, healthcare providers will 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

- [1] Haie-Meder C et al. Radiotherapy and Oncology 2005;74:235-45
- [2] Viswanathan A et al. Brachytherapy 2012;11:47-52
- [3] Viswanathan A et al. Brachytherapy 2012;11:33-46
- [4] NCCN guidelines: http://www.tri-kobe.org/
- [5] FIGO: http://screening.iarc.fr/
- [6] ESMO guidelines cervix: Haie-Meder C et al. Annals of Oncol 2010;21:V37-40
- [7] Han K et al. Int J Radiation Oncol Biol Phys 2013; 87:111-119

- [8] Charra-Brunaud C et al. Radiotherapy and Oncology 2012;103:305-313
- [9] Potter R et al. Radiotherapy and Oncology 2011;100:116-123
- [10] Fokdal L et al. Radiother Oncol. 2016 Apr 21
- [11] ICRU Report 89, Journal of the ICRU Volume 13 No 1-2 2013, Oxford University Press
- [12] Hannoun-Levi JM et al. Brachytherapy 2013;12(2):148-155
- [13] Hannoun-Levi JM et al. Brachytherapy 8 2009:105-180
- [14] Kirisits C et al. Int J Radiat Oncol Biol Phys 2006;65:624-630

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.



We are healthcare technology innovators, specializing in radiotherapy treatments for cancer and brain disorders.

We help clinicians to improve patients' lives through our forward-thinking treatment solutions and oncology informatics, creating focus where it matters to achieve better outcomes.

F +1 770 448 6338

### South America

F +55 11 5054 4568

T +852 2891 2208 F +852 2575 7133

F +86 10 6970 4685



Box 7593 SE-103 93

Stockholm, Sweden

T +46 8 587 254 00

F +46 8 587 255 00

### Europe, Middle East, Africa

T +46 8 587 254 00 F +46 8 587 255 00

### North America

T +1 770 300 9725

### Latin America,

T +55 11 5054 4550

### **Asia Pacific**

### Japan

T +81 3 6722 3800

F +81 3 6436 4231

### China

T +86 10 8012 5012



elekta.com







Art. no. 888.00655MKT [03] © 2017 Elekta AB (publ.) All mentioned the property of the Elekta Group. All rights

