

**inFlow™**  
RESTORING CONTROL™

## PHYSICIAN INSTRUCTIONS FOR USE

### Intraurethral Valve-Pump and Activator Non-Surgical Urinary Prosthesis for Women

#### Description and Principles of Operation

The inFlow urinary prosthesis is intended to provide controlled bladder drainage for women with impaired detrusor contractility. The inFlow urinary prosthesis is a system with two components:

1. The inFlow Intraurethral Valve-Pump (the “inFlow device”) – a single-use urethral insert with an internal valve-pump mechanism in a biocompatible silicone housing. The inFlow device is supplied sterile with its Introducer attached (**Figure 1**). It is intended for a maximum indwelling time of 29 days and is available in nine (9) sizes in order to accommodate individual patient anatomy.
2. The Activator – a hand-held remote control required to operate the internal valve-pump mechanism in the inFlow device (**Figure 2**). The Activator is powered by a rechargeable lithium battery and comes with a Base Station for recharging.

**Figure 1.** The inFlow device as supplied with its disposable introducer (top) and after being deployed (bottom)



**Figure 2.** Activator  
remote control

To operate the inFlow device, the Activator is held at the patient's lower pubic area near the urethral opening and its “on” button is depressed. This magnetically activates the device pump, which drains the bladder at a normal flow rate. When the button is released, the device valve is automatically engaged, stopping urine flow.

Prior to initial insertion, determine the appropriate device size by using the inFlow Sizing Device to measure the patient's urethral length. See inFlow Sizing Device Physician Instructions.

Insertion of the inFlow device is conducted in an ambulatory procedure similar to that for indwelling or intermittent catheters. The inFlow Device is inserted into the urethra until its outer silicone tab touches the edge of the meatus, preventing proximal migration. By depressing the Introducer, the Device's flexible silicone fins expand in a "flower petal" configuration within the bladder at the bladder neck, preventing migration out of the bladder.

To urinate, the patient places the Activator against her lower pubic area. The Activator's operating button is depressed and held to open the Device valve and turn on the pump, which actively draws urine out of the bladder at a flow rate similar to that of normal urination. When urination is complete, the patient releases the button but continues to hold the Activator in place for approximately 3 seconds until it beeps and its LED turns from red to green. This signals that pumping has ceased and the valve has closed, restoring continence until the next desired voided time.

### **Enclosed Patient Instructions for Use must be given to the patient upon each device insertion**

Additional information for clinicians is available in the *inFlow Supplemental Instructions*, which can be downloaded from [http://vesiflo.com/how\\_it\\_works.php](http://vesiflo.com/how_it_works.php)

### **One-Week Trial**

The inFlow device has the potential to improve the quality of your patient's life, but it is not for everyone. The best way to find out if a patient is a device candidate is to have them try the device for a week.

### **QuickStart Guide**

After confirming that the patient is a suitable candidate for inFlow use, follow these 5 simple steps to successfully start them on the inFlow:

- 1. One Week Prior to Initial Insertion:** a) measure urethral length using the inFlow Sizing Device in order to determine appropriate device size and b) consider starting patient on a course of anticholinergics.
- 2. Patient Education:** Setting realistic expectations is critical to success. Educate patient on the insertion process and potential for device awareness during the first week or so of use.
- 3. Insertion Procedure:** Use of lubrication, local anesthetic cream/gel or oral analgesics may alleviate discomfort during initial insertion and throughout first 1-2 weeks.
- 4. Device Training:** Immediately after insertion, take patient to the bathroom to practice using a device under guidance.
- 5. Follow Up:** Provide active nursing support during the accommodation period. Follow-up calls by a nurse or continence consultant are recommended about 6 hours after initial insertion and again within the first week.

For more information, please refer to the Guidance for New Patients section of this IFU.



## Device Sizes

The inFlow device diameter is 24F. The inFlow is available in 9 different lengths to match the length of the patient's urethra (**Table 1**).

Table 1: The inFlow Device - Available Lengths	
Device Lengths (cm)	3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0

One week prior to initial Device insertion, the physician determines the appropriate Device size by using the inFlow Sizing Device to measure the patient's urethral length. Please refer to *inFlow Sizing Device Physician Instructions for Use* for a description of this procedure.



Figure 3. inFlow Sizing Device

## Sterility

The inFlow device is provided STERILE (Gamma sterilization). The sterile packaging of the inFlow should be inspected for visible damage prior to use. Do not use if damage is suspected.

## Indication

The inFlow Intraurethral Valve-Pump is a replaceable urinary prosthesis that is intended for use in female patients 18 years of age or older who have incomplete bladder emptying due to impaired detrusor contractility of neurologic origin, and who are capable of operating it in accordance with instructions or who have trained caregivers. The device must be replaced every 29 days (or less).

## Contraindications

Use of the inFlow is contraindicated in patients with the following conditions:

1. Active urinary tract infection. The inFlow can be used once the infection has been treated.
2. Patients who are allergic to or otherwise cannot take any oral antibiotics.

## Warnings

1. The inFlow device is intended for a maximum indwelling time of 29 days. Failure to replace the device at this frequency can increase the risks of infection and device malfunction.
2. Patients (and caregivers, where appropriate) must receive proper education and instruction in the insertion, removal, and use of the device. Specifically, emphasis must be placed on their responsibility to:
  - Keep the Activator available for use at all times;
  - Keep both an extra inFlow and an alternate means of bladder drainage on hand at all times, to use in the event that the current inFlow is expelled, removed, or is not working properly;
  - Urinate every three to four hours during waking hours, even if they do not have bladder sensations;
  - Contact their physician if they see blood in their urine, sense irritation or burning when urinating, suspect that the device is not functioning properly, or require MRI or radiation procedures (the device must be removed).

3. The safety and effectiveness of the inFlow device have not been evaluated and are unknown in patients with the following conditions:
  - Contracted, low-volume bladder (bladder capacity < 200 cc).
  - History of vesicoureteral reflux (Grade II or higher), impaired kidney function, recurrent pyelonephritis or hydronephrosis (moderate to severe).
  - Uninhibited bladder contractions (as documented by urodynamics study) that are not controlled by medication.
  - Neoplastic or inflammatory processes involving the lower urinary tract, uterus, cervix, or vagina.
  - History of urolithiasis within the last year.
  - Urinary tract fistula.
  - Bladder diverticula.
  - Concurrent use of external or internal medical devices with electronic or magnetic components (e.g., pacemakers).
  - Compromised immune system.
  - Significant pelvic organ prolapse (Grade III/IV) requiring surgical treatment. Physician discretion is required for patients with Grade I/II, as they may be at increased risk of device-related discomfort.
  - Pregnancy.
4. Patients with cognitive impairment (e.g., dementia) may be unable to effectively communicate discomfort or other symptoms related to inFlow device use. To ensure the benefits of device use outweigh the risks, such patients should be closely monitored for potential complications.
5. Patients with physical conditions (e.g., poor manual dexterity) that impede their ability to use the Activator as directed for routine voiding or remove the inFlow device in an emergency should have a trained caregiver who will attend to bladder emptying for the patient at least four times daily.
6. Patients with hypersensitivity of the urethra or bladder neck, as evidenced by any level of discomfort/pain observed in response to either frictional stimulus (passage of urodynamics catheter or cystoscope) or pressure stimulus (pushing on the urethra and bladder neck during pelvic exam), may not be able to tolerate the inFlow device due to increased risk of device-related discomfort.
7. Patients undergoing MRI studies or Radiation Treatments - The inFlow device contains a magnet. Therefore, the device should be removed from the urethra during imaging or treatment, and replaced by a new one after the session is complete.

## Precuations

1. A physician must insert the first inFlow device after proper sizing of the urethra, using the inFlow Sizing Device. Subsequent insertions may be performed by a nurse, healthcare provider, caregiver or patient who has received appropriate training in device insertion, removal and use.

2. The sterile packaging of the inFlow device should be inspected for visible damage prior to use. Do not use if damage is suspected.
- 3 The inFlow device is a single use device and reuse should not be attempted due to increased risk of infection. Do not attempt to reassemble a fully or partially deployed device onto its Introducer.
4. Device may not be an effective treatment option in subjects with concomitant urge incontinence that is not controlled by medication.
5. The inFlow Sizing Device is not intended for dilation.
6. When the Activator is not in its base station (**Figure 4**) or covered by its optional magnetic shield (**Figure 5**), it may attract metal items and may damage magnetic strips (such as those on credit cards). To minimize damage from magnetic interference, always keep the uncovered Activator at least  $\frac{1}{2}$  meter ( $1\frac{1}{2}$  feet) from such items.
7. Do not immerse the Activator in water. Clean with a damp cloth only.



**Figure 4.** Activator in its Base Station for safe storage and charging



**Figure 5.** Activator with its optional magnetic shield in place

## Complications

Possible complications associated with the use of the inFlow device are similar to those associated with indwelling or intermittent urinary catheters and include:

1. Leaking / urinary incontinence
2. Device awareness / discomfort
3. Frequency, urgency or bladder spasms
4. Hematuria / scant perineal bleeding
5. Device malfunction, blockage or other issues
6. Device expulsion / migration
7. Urinary tract infection
8. Accidental injury
9. Asymptomatic bacteriuria
10. Bladder inflammation
11. Autonomic dysreflexia
12. Dyspareunia
13. Dysuria
14. Gastrointestinal disorders
15. Urinary tract disorder
16. Vulvovaginal / periurethral disorders

## Patient Selection

Women appropriate for the inFlow device are unable to spontaneously urinate and/or present with clinically significant post-void residuals (PVRs), typically  $>75\text{cc}$  as measured on at least three occasions, and exhibit none of the listed contraindications. Urodynamics study is recommended to confirm diagnosis, but more importantly as the most robust way to identify contraindications. As always, a medical history including voiding diary and physical exam should be performed.

## Device Insertion

After determining the correct device size using the inFlow Sizing Device, follow this procedure to insert the inFlow:

1. With the patient in the lithotomy position, clean the meatus area as for Foley catheter insertion.
2. Lubricate the external body of device with an analgesic medical lubricant.
3. Insert the lubricated inFlow into the urethra until its outer tab (flange) touches the edge of the meatus (**Figure 6**). The tab should be pointing down, towards the vagina.
4. Completely depress the Introducer's pusher (**Figure 7**) until the device is released (**Figure 8**). Do not pull out the Introducer until the device is completely released.
5. Discard the Introducer.
6. When there is urine in the bladder, check for leakage and for proper device functioning using the Activator (see To Urinate section of this IFU).

### Tips

Generally, the outer tab should be positioned at 6 o'clock, toward the vagina; however, some women find that a 3, 9 or even 12 o'clock position, toward the Mons, is more comfortable. To change the tab position, push the device slightly inwards toward the bladder, then rotate gently. Rotating without lifting the "petals" off the bladder neck may cause discomfort.

During the accommodation period, should a patient become unable or unwilling to tolerate the device, it can be safely and easily removed at any time and by anyone – by simply grasping the tab and pulling the device straight out. (The patient should then be instructed to resume her former method of bladder drainage).

For sexually active patients, recommend use of adequate vaginal lubrication and positions that reduce direct friction with the urethral area. Rotating the tab away from the clitoris as discussed above may also be a good practice.

Encourage patients to drink between 1 and 2 liters (up to 2.5 quarts) of liquid per 24 hours.

Remind patients to always carry the Activator with them!

Provide patients with a contact number of a nurse or continence advisor that she can call during and outside normal business hours should she experience problems.

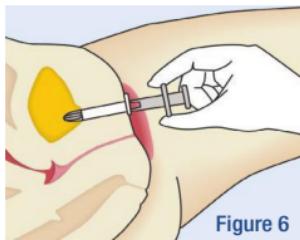


Figure 6

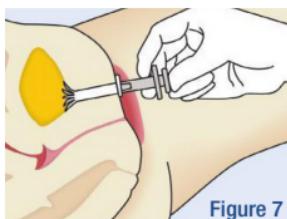


Figure 7

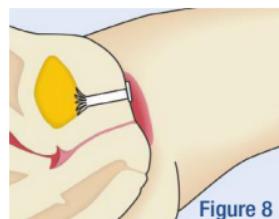
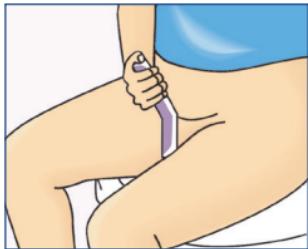


Figure 8

## To Urinate

1. The patient sits on the toilet as for normal urination.
2. The Activator is removed from its Base Station or magnetic shield. NOTE: The Activator will not operate unless the protective shield is removed.
3. The Activator is held against the lower pubic area, just above the urethral opening (**Figure 9**).
4. The Activator's button is pressed continuously to initiate urination. (The LED will turn **red**).
5. When urine flow has completely stopped, the button is released, but the Activator is held in place for an additional 3 seconds until it beeps and the LED turns from **red** to **green**. This signals that the valve has closed, completing the urination process.
6. To prevent dislodging of the device, the vaginal area should be patted dry, not wiped.
7. If necessary, the Activator should be wiped dry.
8. Place the Activator back in its Base Station or in its magnetic shield.



**Figure 9.** Proper Activator Position for Urination

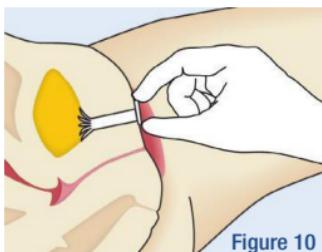
**If the patient moves the Activator before the inFlow valve closes, they will leak.** If that happens, instruct the patient as follows:

- a. Sit on the toilet again.
- b. Position the Activator so that its bottom section pushes into your body, as described in Step 3 above.
- c. Press the button for 10 seconds and then let go.
- d. Keep the Activator in position until you hear a loud beep and see the LED light change from **red** to **green**.

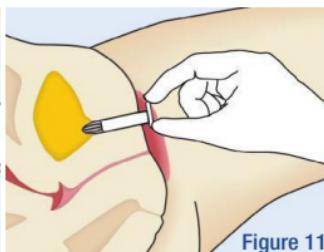
## Device Removal

With the patient in the lithotomy position, gently pull the device straight out of the urethra. (**Figure 10**).

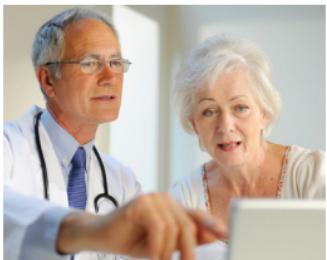
Due to the flexibility of the silicone fixation system, no damage to the bladder neck or urethra should result (**Figure 11**).



**Figure 10**



**Figure 11**



## Guidance for New Patients

The following sections expand on the QuickStart Guide and provide recommendations intended to successfully start a new patient on the inFlow device.

Three office visits are recommended in the first three weeks: the first to measure urethral length, start a course of anticholinergics and orient the patient; the second to insert the device and fully in-service the patient and/or her caregiver; and the third to follow up.

### 1. One Week Prior to Initial Insertion

Measure urethral length using the inFlow Sizing Device in order to determine appropriate device size. Please refer to inFlow Sizing Device Physician Instructions for Use for instructions on device sizing.

To relieve possible sensation of urgency, consider prescribing anticholinergics prior to initial device insertion and continue for the first 2 weeks of use. Since the drugs take up to 5 days to work up to full effect, this therapy should commence 5-7 days prior, or the patient should be informed of this fact if commencing such medication after insertion of the inFlow device. The patient may need to be warned that these drugs have some common side effects, such as blurred vision, dry mouth and constipation.

Explain to the patient that the first week of device use will be a trial period and schedule a follow-up appointment for one week following device insertion. Prior to initial insertion, the patient may wish to view the Patient Instructions for Use, to see the actual device and/or to speak with other users.

### 2. Pre-Insertion Patient Education

Patient education is important for successful inFlow use. When properly introduced, the inFlow device has the potential to improve the quality of your patient's life, but it is not for everyone. Some women cannot or will not tolerate the inFlow device. The urethra is a sensitive part of the body and at least initially many patients will experience a sense of device awareness/discomfort. For many patients who experience it, this sensation will subside in 1-2 weeks as they accommodate to the device and can be helped with pain relievers and hot baths.

Clinicians report that for patients who experience discomfort, the key determinant of device success is their motivation to persevere through the accommodation period. Such motivation is best achieved with patient education and active nursing support. To set appropriate expectations and increase motivation, use these clinically-tested talking points for all patients:

- A. Explain that the inFlow will be inserted into the urethra, which is a very sensitive part of the body. As a result, it can require a period of accommodation similar to that required for hard contact lenses.
- B. Let her know that some discomfort is normal and is unlikely to have any serious or lasting effects. Instruct the patient to contact you or your nurse immediately if she is concerned about the level of her discomfort and remind her that she can easily and safely remove the device at any time.

Note: Should discomfort be acute, slightly manipulating the device position may help as well. (Please refer to the Tips section of this IFU.)

- C. Emphasize that persistence with the inFlow can potentially improve her daily life in very tangible ways by: a) eliminating the need to self-catheterize multiple times daily; or b) eliminating tubes and bags, improving body image (as well as hygiene); and c) likely allowing her to void without assistance, increasing self-reliance, and d) allowing use of a toilet again - a psychologically significant benefit, since it is the "normal" way to void.

Provide active nursing support for all patients in the first two weeks and invite them to call with questions or concerns.

3. **Insertion Procedure:** For initial device insertion, many physicians use a topical anesthetic and administer a course of prophylactic antibiotics for the first 5 days of device use. Please refer to the Device Insertion section of this IFU for instructions on inserting the device.
4. **Device Training:** After device insertion, patients need to practice voiding and using the Activator before they leave the office. A supportive nurse is usually the best person to train the patient and/or caregiver.
5. **Follow Up:** Follow-up calls by nurses are crucial to appropriately identify any problems and reassure patients. Suggested points of contact are about 6 hours after the initial insertion, with further phone follow-up again within the first week.

### Recharging the Activator

The Activator contains a rechargeable lithium battery. If the battery is low, the Activator LED will flash red and you will hear a beep when its button is pushed. To recharge, follow this simple procedure:

1. Insert the Vesiflo-supplied charger (**Figure 12**) into the jack in the back of the Base Station (**Figure 13**).
2. Plug the Charger into an AC outlet.
3. Place the Activator in its Base Station.

The LED light on the Activator will turn **red** and blink while it is being charged. When the Activator is fully charged, the LED light will change to a solid **green**.

Instruct patients as follows:

- Tell them to leave the Activator in its Base Station each night so that it will always be fully charged to start the day.
- Emphasize that they should **always** keep the Activator close at hand during the day.
- Remind them that the Activator magnet can attract metal objects and damage credit cards when the Activator is not in its Base Station or its magnetic shield is not in place.



**Figure 12.** Vesiflo-supplied charger



**Figure 13.** Charger input

### Enclosed Patient Instructions for Use must be given to the patient upon each device insertion

Additional information for clinicians is available in the inFlow Supplemental Instructions, which can be downloaded from [http://vesiflo.com/how\\_it\\_works.php](http://vesiflo.com/how_it_works.php)

## Clinical Trials

An 18-site, single-arm crossover study (n=273) was performed to compare safety, effectiveness, and patient satisfaction of the inFlow device versus clean intermittent catheterization ("CIC"), the current standard of care. The study was limited to females with atonic bladder who were successfully using CIC. Clinically minor adverse events, primarily foreign body awareness/discomfort, caused approximately 50% of subjects to discontinue device use (see below); however, 97% of subjects who completed the study chose to continue device use. Clinical endpoints and results for this study were as follows:

**Primary Endpoint:** Post-void residual (PVR). All subjects with PVR data available for both Baseline and Treatment were considered to be evaluable. This resulted in a total of 115 evaluable subjects (including some dropouts). 98% (113/115) of evaluable subjects had a median inFlow Treatment PVR that was no greater than the median CIC Baseline PVR or both medians were <50 cc, with median PVR at each visit during inFlow Treatment ranging from 10-20cc. (1-sided exact 95% confidence lower limit: 95%; 2-sided exact 95% confidence interval 94-99.8%). 92-98% of all subjects had comparable PVRs at every treatment visit.

**Secondary Endpoint:** Quality of life (QOL). Among those subjects with both Baseline and Treatment QOL data (n=85), on a 100-point scale, patient scores for the Wagner I-QOL increased by a mean of 25 points while using the inFlow. The median percent improvement was 54%. The results were clinically significant.

**Safety:** Rate of Urinary Tract Infection (UTI). Per subject-month rates for subjects completing the study declined with continued inFlow use (CIC Baseline=0.12, first half of inFlow Treatment period=0.11 and second half of Treatment period=0.08). This analysis was performed with completers (n=77) only in order to compare event rates during different study periods with the same set of subjects; however, the UTI experience presented in this study is based on 417 patient-months cumulative exposure in 157 patients. Thus, the observed UTI rate is a representative and robust estimate of what might be expected with device use and the finding of equivalence is notable in that no indwelling bladder drainage device has ever been shown to have the same UTI rate as intermittent catheters.

**Safety: Other Adverse Events.** No serious or long-lasting adverse events associated with inFlow use were reported. The most common adverse events and their incidence rates are listed here:

There were no significant differences in event rates between the CIC Baseline and inFlow Treatment periods except for hematuria, genitourinary pain, bladder inflammation, and urinary incontinence. All hematuria events were of mild or moderate severity and none required treatment or device removal. All bladder inflammation events were mild

Table 2: Most Common Adverse Events in Pivotal Trial

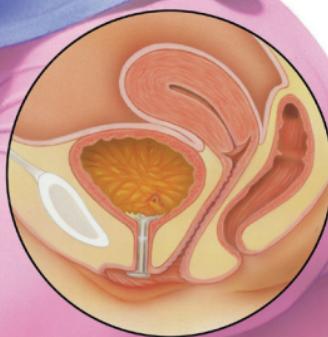
Adverse Event	Baseline (N=190)	Treatment (N=157)
Asymptomatic bacteriuria	69 36%	47 30%
Bladder inflammation	0 0%	9 5.7%
Frequency, urgency, bladder spasms	26 14%	32 20%
Gastrointestinal disorder	10 5.3%	17 11%
Genitourinary pain	43 23%	48 31%
Hematuria / scant perineal bleeding	3 1.6%	17 11%
Urinary incontinence1 / leakage	40 21%	83 53%
Urinary tract infection	40 21%	44 28%
Vulvovaginal / per urethral disorders	17 8.9%	24 15%

<sup>1</sup> 42% of all subjects reported pre-existing UI

in severity. All genitourinary pain and incontinence events were mild to moderate in severity. Device awareness/discomfort increased during inFlow Treatment and although all cases were mild in severity, this was the primary reason given for device discontinuance. Approximately 50% of subjects discontinued use for device-related reasons, a rate similar to that reported for contact lenses.\* As a result of this discontinuation rate, caution should be exercised when interpreting the above stated adverse event rates. Per post-analysis, the safety profiles for subjects who withdrew from the study did not differ significantly from those who completed the study.

Six additional studies (total n=190 unique patients) have been published in peer-reviewed journals; two were long-term studies (n=41) of between one and almost four years. All six studies concerned similar populations to the pivotal study and for the most part reported similar findings. The device performed as expected in all instances and no serious or lasting adverse events were reported. These studies reported a similar device discontinuance rate to the pivotal study, with the exception of Lynch et al (2003), who reported only one subject dropped out due to device-related reasons in their one-year study (n=20), which they attributed to pre-insertion patient education and post-insertion nursing support, particularly during the first two weeks following initial insertion.

\*The TFOS International Workshop on Contact Lens Discomfort: Report of the Subcommittee on Neurobiology (2013)



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## Device and Activator

### INFORMATION FOR PATIENTS AND INSTRUCTIONS FOR USE

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## 1. Purpose of the inFlow Device

Your doctor has prescribed the inFlow device to help you empty your bladder. The inFlow is intended for women who cannot empty their bladders because of injured nerves. It is for women who are 18 years of age or older. You should use the inFlow only if you can operate it or if you have a caregiver who can operate it. Doctors also prescribe urinary catheters to empty the bladder, such as intermittent catheters and indwelling catheters. Intermittent catheters are hollow tubes that are inserted into the bladder every time you need to urinate. Indwelling catheters are hollow tubes that stay in the bladder for extended periods of time, and drain urine into a bag. Discuss these different bladder drainage methods with your doctor to help you decide which method to use.

## 2. Description of the inFlow Device

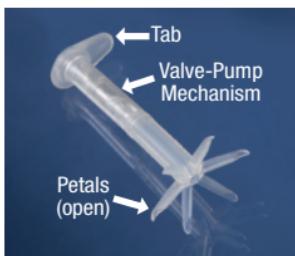
The inFlow is actually a system that has two main parts, the inFlow device (provided on a disposable Introducer) and the Activator. A third part, the inFlow Sizing Device, is used by your doctor to determine which length inFlow device is right for you.

The inFlow device is 2-3 inches long and about 1/3 inch in diameter. Its body is made of silicone. (The inFlow is not made with natural rubber latex.) Inside is a miniature valve and pump. The inFlow is supplied with its Introducer attached (**Figure 1**). The Introducer is used only once. Its first job is to insert the inFlow into the urethra, the tube in the body that carries urine from the bladder to the outside of the body. Its second job is to open the “petals” on one end of the inFlow that hold the device from inside the bladder. (**Figure 2**) A small tab on the other end of the inFlow holds the inFlow in place from outside the urethra. After it is used to insert the inFlow, the Introducer is thrown away. The inFlow can remain in the urethra for 29 days (or less). After the device has remained in the urethra for 29 days it should be removed, discarded and replaced with a new InFlow.

The Activator (**Figure 3**) is a battery-powered remote control you use to operate the inFlow device. The Activator contains a powerful magnet that “activates” the inFlow’s valve and pump.



**Figure 1:** The inFlow device, shown as supplied with its disposable Introducer (top) and without (bottom)



**Figure 2:** inFlow device components, including internal valve-pump mechanism



**Figure 3:** Activator magnetic remote control

When the Activator is held over the lower pubic area and turned on, the magnet in the Activator causes the valve in the inFlow to open, and the pump to start which removes urine from the bladder. When the Activator is turned off, the pump stops and the valve closes, stopping urine flow. When not in use, the Activator should be placed in its Base Station (**Figure 4**), which recharges it, or its magnetic shield (optional) should be on (**Figure 5**).

Your doctor or a member of his/her staff will train you in the proper use of the inFlow. You should ask your doctor or his/her staff any questions you have about the use of the inFlow. See Section 7- Instructions for Use for step by step directions on how to insert and remove the inFlow and how to use the Activator to empty your bladder.



**Figure 4:** Activator shown in its Base Station for safe storage and charging



**Figure 5:** Activator with its optional magnetic shield in place

### **3. When should this Device NOT be used?**

Your doctor has prescribed the inFlow device because s/he believes it can help you empty your bladder. Also, s/he has evaluated you to make sure you do not have any conditions that make using this device unsafe. Make sure you always give your doctor complete information regarding your medical history so that s/he can properly prescribe this device. If you have, or think you have, any of the following conditions you should not use the inFlow and you should talk with your doctor about other ways to empty your bladder. You should not use the inFlow if you have any of the following conditions:

- Untreated urinary tract infection.
- Inability to take oral antibiotics.

### **4. Warnings and Cautions**

- Change the inFlow device every 29 days or less. This minimizes the risk of infection.
- Use the inFlow device to empty the bladder every 3-4 hours during the day or as instructed by your doctor.
- Always have the Activator on hand. Otherwise, you will not be able to void.
- Some women find the inFlow device too uncomfortable to tolerate. If you are concerned about the level of your discomfort, contact your doctor. You and your doctor may decide to remove the inFlow and use another type of bladder drainage method. The discomfort should stop following device removal.

- !**
- The device must be removed if you need to undergo MRI or radiation treatment. The presence of and use of the inFlow device during these procedures could cause harm to you and negatively impact the results of the procedures. Consult your doctor about device removal and bladder drainage options.
  - The inFlow device should not be re-inserted once it has been removed from the urethra. Risk of infection or other problems could result if the device is re-inserted.
  - Notify your physician immediately if you suspect you may be pregnant. The inFlow has not been tested in pregnant women and so any risks specific to pregnant women, if any, are not known.
  - Notify your doctor if you use other medical devices with electronic or magnetic parts, including pacemakers. The inFlow device and Activator both contain magnets, which may interfere with other medical devices causing malfunctions and harm to you. Consult your doctor to understand what side effects could result if the devices are used at the same time.
  - Do not immerse the Activator in water. If it gets wet, the Activator may not work. If the Activator does not work, you will not be able to empty your bladder.
  - Always keep the uncovered Activator at least 18 inches from metal objects and magnetic strips (such as those on credit cards). When its magnetic shield is off, the Activator may attract metal items and may damage magnetic strips (such as those on credit cards).
  - If you remove the device and do not replace it, talk with your doctor to determine another means of bladder drainage. Without a means to drain your bladder you may experience discomfort or more serious medical problems.
  - Keep your Activator charged. The inFlow device will not drain your bladder if the battery in the Activator loses its charge.
  - Keep an alternative means of bladder drainage with you at all times. If the inFlow does not drain your bladder for any reason, remove the inFlow and use an alternative means of bladder drainage

## 5. Risks and Benefits of Using the inFlow

**Risks:** In a U.S. clinical trial of the inFlow device, no serious or long-lasting side effects (adverse events) were reported. This trial showed that the problems associated with inFlow use were similar to those with intermittent catheters. Eight-five percent (85%) of women experienced at least one problem while using the inFlow. The most common problems that were reported were leaking and discomfort. The rates reported for these and other problems with the inFlow are:

- Leaking/Urinary incontinence (53%)
- Discomfort (31%)
- Urinary tract infection (28%)
- Bladder spasms, increases in frequency and urgency (strong need to urinate) (20%)
- Blood in the urine (11%)
- Other risks - ask your doctor about other risks that have occurred or could occur with the use of the inFlow device and about the severity of such events if they do occur.

\*The percentage after each side effect above shows the percent of people in the U.S. clinical trial that experienced the problem at least once while using the device during the trial.

**Benefits:** A U.S. clinical trial was conducted to compare the use of the inFlow to the use of intermittent catheters. In this clinical trial the inFlow was shown to:

- Empty the bladder as well or better than intermittent catheters;
- Have the same number or fewer urinary tract infections (UTIs); and
- Improve quality-of-life, as measured on a questionnaire.

To find out more about the risks and benefits of the inFlow device, ask your doctor.

## 6. What to Expect When Using the inFlow

The inFlow can provide women with more comfort and independence associated with bladder emptying. Patients who successfully use the inFlow experience an improved quality of life. Freed from the chores of catheter use, they can sit on a toilet to urinate and feel more in control of their voiding. They take a normal amount of time in the bathroom and do not need special facilities.

If this is the first time you've used the inFlow, your doctor or their nurse will be monitoring your response closely for the first 1-2 weeks. This is considered a trial period. Do not hesitate, because of embarrassment or any other reason, to contact them with your concerns during this trial period or at anytime when you have questions or concerns about the inFlow.

At first, the inFlow may take some getting used to. This reaction is normal. Initially, you may be very aware of the inFlow being there and it may feel uncomfortable. Your doctor or nurse may suggest some helpful ways to reduce unease - such as warm baths, calm walks, or meditation. It is important to create an attitude of acceptance in this time of transition. This can give your body a chance to adapt. Your doctor may prescribe an antibiotic to prevent infection and a vaginal cream to ease your adjustment. "The Guide for New Patients" contains more information to help adapt to the inFlow.

In the U.S. clinical trial which compared the use of the inFlow to the use of intermittent catheters, only about half the women completed the trial. Most of the women who stopped using the device did so in the first couple of weeks because they found it uncomfortable. However, 97% of those who completed the trial chose to continue using the device because of how it improved their quality of life. If you are concerned about the level of your discomfort while using the device, contact your doctor or nurse.

Most women use the Activator every three hours throughout the day and once before going to bed. They set up a daily routine to empty their bladder in a timely, comfortable way. inFlow users find that sexual relations are possible. You and your partner may want to try different positions for sexual relations to determine those that are most comfortable. You may also want to talk with your doctor about sex while using the inFlow.

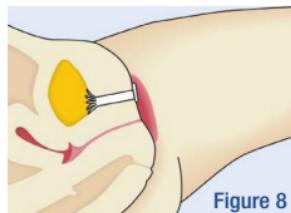
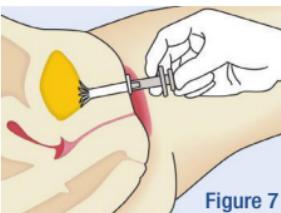
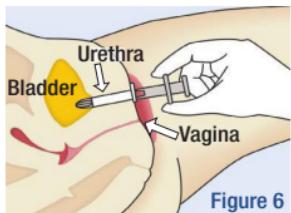
## 7. Instructions for Use

The first time the inFlow is inserted, your doctor or their nurse should instruct you on how to use the Activator to urinate. When you get home, you should practice so you are comfortable with how to urinate this way, but not more than once per hour. If you or your caregiver has any questions, you should contact your doctor or nurse. For more information, ask your doctor for a copy of The Guide for New Patients or download it from [vesiflo.com/how\\_it\\_works.php](http://vesiflo.com/how_it_works.php)

**A. First time use:** Your doctor will determine the correct size of inFlow for you and insert the inFlow the first time. Your doctor or a member of his/her staff will also instruct you and/or your caregiver on insertion and on how to use the Activator to urinate. After you see how it is inserted, and you have practiced the insertion, you should talk with your doctor about whether you are or your caregiver is capable of replacing the device every 29 days.

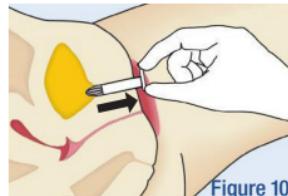
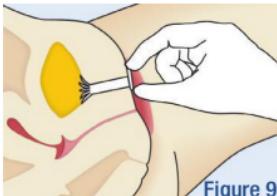
**B. Device insertion (by you or a caregiver):**

1. Lie down on your back and open your legs so that you or your caregiver has access to your urethral opening.
2. Clean the area around the urethral opening with a sterile alcohol wipe, by patting the area from above the urethral opening and then moving back towards the vagina.
3. Open the sterile inFlow device package (contains the inFlow + Introducer) and hold the Introducer without touching or dropping the inFlow device to avoid contamination.
4. Lubricate the external body of the inFlow device with a medical lubricant that is recommended by your doctor.
5. Insert the lubricated inFlow device into the urethra until its outer tab touches the urethra opening (**Figure 6**). The tab can be pointed up or down, depending on personal preference. The tab is shown facing up in the following Figures; however, many women find it more comfortable pointing down, towards the vagina.



6. Push the plunger on the Introducer (**Figure 7**) until the device is released (**Figure 8**).
7. Dispose of the Introducer. It can go in the trash.
8. Sit on the toilet and practice using the Activator one time. Check to see that you get a continuous flow of urine.

**C. Device removal:** To remove the device, hold it by its outside tab (**Figure 9**) and gently pull it straight out. (**Figure 10**) The petals of the inFlow which keep the device in place inside the bladder, are soft and flexible. Once you start to pull the device out the petals will come together allowing the device to be pulled out without any other tool and without harm. Put the used device in a plastic bag, seal it and dispose of it in the trash.



If you are replacing the device, insert a new sterile device following the directions above. If you remove the device and do not replace it, tell your doctor. If you are not sure, also ask your doctor what you should do instead for bladder drainage.

## 8. How to Use the Activator to Urinate

To urinate, follow these simple instructions:

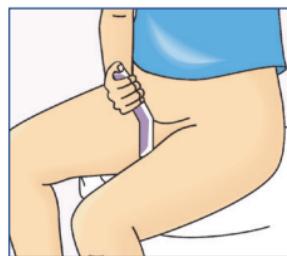
1. **Remove** the Activator from its Base Station or magnetic shield.
2. **Sit** on the toilet as you normally would when urinating.
3. **Grasp** the Activator with your dominant hand (**Figure 11**). Your index finger should be in the groove on the back of the Activator and your thumb should be on its button (**Figure 12**).
4. **Hold** the Activator so that its bottom is close to the inFlow tab and press the Activator magnet (the heavy section at the bottom) into your lower pubic area (**Figure 13**).



**Figure 11.** Grasp the Activator like this and use your thumb to push its button



**Figure 12.** Activator button, LED light and magnet positions



**Figure 13.** Hold Activator in this position to urinate

5. To urinate, **press the button continuously** while holding the Activator in position. The LED light will turn **red** and you will hear a whirring sound. This activates the inFlow pump, which will then empty your bladder. Keep on pushing the button until you no longer hear or feel a urine stream.
6. **Let go of the button** when you finish voiding, but continue to hold the Activator in position for another 3 seconds. Do not move the Activator away from your body until you hear a loud beep and the LED light changes to **green**. This indicates that the inFlow valve has closed, blocking the flow of urine.

**If you move the Activator before the inFlow valve closes, you will leak.** If that happens, do this:

- a. Sit on the toilet again.
- b. Position the Activator so that its bottom section pushes into your body, as described in Step 4 above.
- c. Press the button for 10 seconds and then let go.
- d. Keep the Activator in position until you hear a loud beep and see the LED light change to **green**.

When you finish:

- Gently pat the area dry.
- If necessary, wipe the Activator dry with a paper towel or damp cloth. Periodically, use an alcohol wipe to clean its outside surfaces to reduce the chance of bacterial growth.
- Place the Activator back in its Base Station or its magnetic shield.

Some helpful hints:

- Urinate every 3-4 hours during waking hours or on the schedule set by your doctor. Follow this schedule even if you do not feel the need (that is, even if your bladder does not feel full).
- Try to drink at least 36 ounces of fluid daily. This should include three 8 oz. glasses of water.
- Avoid drinking three (3) hours before bedtime and always empty your bladder before sleeping.

## 9. What to Do If You Have Problems

Possible problem:	What to do:
The device falls out	Call your doctor. Use other means of urine drainage (such as intermittent catheters) until a new device can be inserted.
The device is pushed into your bladder	Call your doctor to remove the device from the bladder and to discuss what other means of urine drainage should be used until a new device can be inserted.
You leak a lot of urine or leak regularly	Check to see that the device valve is closed by: 1) sitting on the toilet, 2) using the Activator as normal for voiding and 3) <u>being sure to keep the Activator in place until it beeps</u> . If this does not stop the leaking, consult your doctor.
Signs or Symptoms of urinary tract infection (pain, irritation, burning, fever)	Call your doctor.
No urine flows when device is activated, even though your bladder is full	Call your doctor, remove the device, and use other means of urine drainage (such as intermittent catheters).
Blood in your urine or underclothes	Call your doctor.
You need to undergo MRI or radiation treatment	Consult your doctor about device removal.
You may be pregnant	Consult your doctor.
Activator does not work	Charge the Activator. If the Activator still does not work then call your doctor to get replacement Activator.
Activator is lost	Call your doctor. If the replacement Activator is not available in the next several hours, remove the inFlow device and use other means of bladder drainage (such as intermittent catheters) until the device and Activator can be replaced.

## 10. How to Clean, Maintain and Store the inFlow and Activator

- The inFlow device is inserted into the urethra and does not require maintenance or cleaning. After removal of the device, the Instructions for Use in section 7.B should be followed to insert a new device. The used device is disposed of by putting it in a plastic bag and into the garbage after it is removed.
- The Activator should be wiped dry on its outside surfaces with a tissue after every use. Periodically, about once a week, the outside surfaces of the Activator should be wiped down with an alcohol wipe to discourage bacterial growth.
- To maintain the Activator it is important to leave the Activator in its Base Station each night. See Section 11 for signs that the battery is running low.
- The Activator has a strong magnet. Always keep the magnetic cover on when you're not using it. Otherwise, the Activator will attract metal items and could damage magnetic strips (such as those on credit cards). Keep the uncovered Activator at least 1½ ft. from such items.

## 11. Recharging the Activator

The Activator contains a rechargeable lithium battery. If the battery is low, the Activator LED will flash red and you will hear a beep when its button is pushed. To recharge, follow this simple procedure:

1. Insert the Vesiflo-supplied Charger (Figure 14) into the jack in the back of the Base Station (Figure 15).
2. Plug the Charger into an AC outlet.
3. Place the Activator in its Base Station.

The LED light on the Activator will turn red and blink while it is being charged. When the Activator is fully charged, the LED light will change to a solid green.

- Leave the Activator in its Base Station each night so that it will always be fully charged to start the day.
- Always keep the Activator close at hand during the day.
- Remember that the Activator magnet can attract metal objects and damage credit cards when the Activator is not in its Base Station or its magnetic shield is not in place.

## 12. Travel Considerations

If you plan to travel by plane or through any security clearance process while you are using the inFlow device, follow the procedures below:

- Carry your medical alert card with you whenever you travel.
- Carry this **Instruction for Use** pamphlet so that security personnel can see what the device looks like and what the Activator looks like.
- You will not be able to show the inserted device but you will be able to show the Activator.
- Explain that the Activator is a magnetic remote control that operates the inserted device.
- Since the inFlow and the Activator have metal components, they could trigger an electronic security monitor.



Figure 14. Charger



Figure 15. Plug the Charger into the Back of the Base Station

### 13. How the inFlow was Studied

The inFlow device was evaluated in a U.S. clinical trial of 273 women to compare the use of the inFlow to intermittent catheters. Several different comparisons were made including how well the devices empty the bladder, the frequency of urinary tract infections with both methods, and a quality of life comparison using a standard questionnaire. About half of these women chose to leave the study early because the inFlow was uncomfortable or leaked urine. For those women who completed the trial, the inFlow performed as well or better on the bladder emptying and risk assessment measures. The inFlow provided a higher quality of life measurement compared to intermittent catheter use. In addition to the U.S. clinical trial, more than 200 women have used the device as part of other published studies. The device is also marketed in Europe where over 12 years of use have been collected with no serious bad events reported. Ask your doctor about the results from clinical studies using the inFlow.

### 14. To Learn More about Your Condition and the inFlow

- Ask your Doctor for more information, including a copy of *The Guide for New Patients*
- Visit [vesiflo.com/how\\_it\\_works.php](http://vesiflo.com/how_it_works.php) to find out more information
- Call Vesiflo at (425) 242-6373 to ask questions about the inFlow.



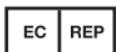
inFlow Device, Cat. No. 203511  
inFlow Activator, Cat. No. 403507



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MR unsafe

Single use only – do not reuse



**Caution:** Federal (U.S.) law restricts sale or use of this device to the order of a physician or other licensed practitioner.

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