INSTYLAN

hyaluronic acid-based sterile solution for intravesical application
Hyaluronic acid-based sterile solution for intravesical application

- Colourless clear viscous gel of hyaluronic acid of non-animal origin/sterile, apyrogenic, with physiological values of pH/
- Viscoelastic protector of intercellular matrix of vesical and urethral urothelium

**PROPERTIES**

- Mechanical action: barrier/lubrication
- Humidifying: high extent of water binding
- Healing properties: normalisation of cellular migration and proliferation
- Filling the spatial defects
**INDICATIONS**

- Temporary protection and regeneration of urinary bladder mucosa in different procedures (cystoscopy, radiation therapy, etc.)
- Chronic/recurring cystitis
- Interstitial cystitis
- Hyperactive urinary bladder
- Cystitis-mediated urinary retention or tumours
- Radiation cystitis

**MODE OF APPLICATION**

- Empty the urinary bladder prior to administration of INSTYLAN
- The procedure should be performed by a specially trained physician in a properly equipped room and in strict adherence to all aseptic precautions
- INSTYLAN is administered intravesically once a week
- The treatment course includes 4-12 instillations
- The temperature of INSTYLAN solution should be not less than 20°C
- Retain INSTYLAN in the urinary bladder for at least 30 min
SAFETY
Clinical studies have demonstrated a high incidence of objective responses in intravesical application of hyaluronic acid /HA/.

EFFICACY
Clinical studies have demonstrated high rates of objective response in intravesical application of /HA/.

REGENERATION OF THE MUCOUS MEMBRANE OF THE URINARY BLADDER
Hyaluronic acid plays a key role in restoring the GAG layer and produces its effect in the submucosa, exactly where the process of epithelial regeneration initiates.
# CLINICAL STUDIES

## Painful bladder syndrome /PBS/ interstitial cystitis /IC/

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>The number of patients</th>
<th>The number of patients with objective responses</th>
<th>The percentage of patients with objective responses</th>
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</thead>
<tbody>
<tr>
<td>Morales, et al.</td>
<td>1996</td>
<td>25</td>
<td>17</td>
<td>71</td>
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<tr>
<td>Kallestrup, et al.</td>
<td>2005</td>
<td>20</td>
<td>13</td>
<td>65</td>
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<tr>
<td>Leppilahti, et al.</td>
<td>2002</td>
<td>11</td>
<td>7</td>
<td>64</td>
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<tr>
<td>Daha, et al.</td>
<td>2005</td>
<td>48</td>
<td>43</td>
<td>89</td>
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<td>Gupta, et al.</td>
<td>2005</td>
<td>36</td>
<td>20</td>
<td>55</td>
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<tr>
<td>Sánchez macías, et al.</td>
<td>2005</td>
<td>21</td>
<td>15</td>
<td>70</td>
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<tr>
<td>Ahmad, et al.</td>
<td>2008</td>
<td>23</td>
<td>17</td>
<td>74</td>
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<tr>
<td>Riedl, et al.</td>
<td>2008</td>
<td>121</td>
<td>103</td>
<td>84</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>305</strong></td>
<td><strong>220</strong></td>
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## Recurrent bacterial cystitis

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<tr>
<td>Constantinides, et al.</td>
<td>2004</td>
<td>40</td>
<td>nd</td>
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<tr>
<td>Lianos, et al.</td>
<td>2005</td>
<td>20</td>
<td>70</td>
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<tr>
<td>Lipovac, et al.</td>
<td>2007</td>
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<td>nd</td>
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## Radiation cystitis /RC/

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<th>The percentage of patients with objective responses</th>
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<tr>
<td>Delgado et al.</td>
<td>2003</td>
<td>45</td>
<td>nd</td>
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<tr>
<td>Diamantopoulos et al.</td>
<td>2004</td>
<td>20</td>
<td>80</td>
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<tr>
<td>Gonzalez Patiño et al.</td>
<td>2008</td>
<td>14</td>
<td>nd</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>78</strong></td>
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* The below list includes the names of clinical studies that were published and/or presented at scientific congresses/meetings.

nd = no data
INSTYLAN

QUALITATIVE COMPOSITION.
Sodium hyaluronate. Excipients: water for injection, sodium chloride, phosphate buffer.
Classification of the product. Medical device – sterilized and pyrogen-free – Class Ia.

PACKAGE. 50 ml pre-filled disposable plastic bag which contains 0.16% (80 mg/50 ml) of hyaluronic acid solution.
Each package contains: 1 plastic bag containing INSTYLAN sterile solution. The medical device has been sterilized by steam sterilization.

INDICATIONS. INSTYLAN is intended for irrigation into the bladder cavity that provides the formation of a viscous elastic film on the surface of mucous layer to:
• protecting it from external effects during various surgeries (ureteroscopy, cystoscopy, transurethral resection of adenoma and radiation therapy of lesser pelvis organs, etc.),
• protect it from the harmful impact of bladder content (urina) in case of injury or from inflammation of the mucous layer of the bladder, like cystitis.

INSTYLAN is intended for irrigation of the bladder when using a urological catheter. The irrigation provides temporary protection and restoration of bladder mucous layer during various surgeries (urethra cystoscopy, radiation therapy, etc.).

WARNINGS AND SPECIAL PRECAUTIONS FOR USE
• Do not use the solution if the patient is pregnant.
• Do not use the solution if the patient is lactating.
• Do not use the solution if the patient has known hypersensitivity to hyaluronic acid, or those with a history of allergic reactions to any component of the solution.
• Irrigation into the bladder should be provided by a trained medical specialist in specialized premise with appropriate equipment and aseptic conditions.
• Do not inject the solution into blood vessels.
• Do not use the product with pregnant or lactating women, or children.

ADVERSE REACTIONS AND SIDE EFFECTS. None.

HOW TO USE
• Check package integrity before use.
• Check the expiration date indicated on the bag. Do not use after the expiry date.
• Take one of the plastic bags containing INSTYLAN Solution.
• Make sure that the bladder of the patient has been previously emptied
• Remove the cap
• Irrigate the patient’s bladder using an urological catheter.

For cystitis treatments: it is suggest that the sterile solution INSTYLAN is used weekly for the first month and with less frequency in the following months. The frequency of use of sterile solution INSTYLAN must be determined by the doctor who established the treatment.

SHELF LIFE. 2 years in an intact package.

HOW TO STORE. Store at temperatures between 5°C to 30°C (inclusive), away from direct light and heat, in the adequately sealed packaging. The expiry date is applied to the products which are correctly stored in an intact package.

DISPOSAL. The product must be disposed of in accordance with the applicable laws on medical waste.

Special Warning:
• Do not use the solution in patients with known hypersensitivity to hyaluronic acid, or those with a history of allergic reactions to any component of the product.

REFERENCES.
8. Daha et al. Is a Maximal Bladder Capacity of >400 cc an Automatic Exclusion Criteria for Interstitial Cystitis? 2002 SIU.