

**ANNEX I**  
**SUMMARY OF PRODUCT CHARACTERISTICS**

## **1. NAME OF THE MEDICINAL PRODUCT**

elmiron 100 mg capsules, hard

## **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each capsule contains 100 mg of pentosan polysulfate sodium.

For the full list of excipients, see section 6.1.

## **3. PHARMACEUTICAL FORM**

Capsule, hard.

White opaque capsules size 2.

## **4. CLINICAL PARTICULARS**

### **4.1 Therapeutic indications**

elmiron is indicated for the treatment of bladder pain syndrome characterized by either glomerulations or Hunner's lesions in adults with moderate to severe pain, urgency and frequency of micturition (see section 4.4).

### **4.2 Posology and method of administration**

#### Posology

##### *Adults*

The recommended dose of pentosan polysulfate sodium is 300 mg/day taken as one 100 mg capsule orally three times daily.

Response to treatment with pentosan polysulfate sodium should be reassessed every 6 months. In case no improvement is reached 6 months after treatment initiation, treatment with pentosan polysulfate sodium should be stopped. In responders pentosan polysulfate sodium treatment should be continued chronically as long as the response is maintained.

##### *Special populations*

Pentosan polysulfate sodium has not been specifically studied in special patient populations like elderly or patients with renal or hepatic impairment (see section 4.4). No dose adjustment is recommended for these patients.

##### *Paediatric population*

The safety and efficacy of pentosan polysulfate sodium in children and adolescent below 18 years has not been established.

No data are available.

#### Method of administration

The capsules should be taken with water at least 1 hour before meals or 2 hours after meals.

### **4.3 Contraindications**

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

Due to the weak anticoagulant effect of pentosan polysulfate sodium, elmiron must not be used in patients who actively bleed. Menstruation is no contraindication.

#### **4.4 Special warnings and precautions for use**

Bladder pain syndrome is a diagnosis of exclusion and other urologic disorders should be eliminated by the prescriber, such as urinary tract infection or bladder cancer.

Pentosan polysulfate sodium is a weak anticoagulant. Patients undergoing invasive procedures or having signs/symptoms of underlying coagulopathy or other increased risk of bleeding (due to treatment with other medicinal products influencing coagulation such as anticoagulants, heparin derivatives, thrombolytic or antiplatelet agents including acetylsalicylic acid, or nonsteroidal anti-inflammatory medicinal products (see section 4.5)) should be evaluated for haemorrhagic events. Patients who have a history of heparin or pentosan polysulfate sodium induced thrombocytopenia should be carefully monitored when treated with pentosan polysulfate sodium.

##### Hepatic or renal insufficiency

elmiron has not been studied in patients with hepatic or renal insufficiency. Because there is evidence of hepatic and renal contribution to the elimination of pentosan polysulfate sodium, hepatic or renal impairment may have an impact on the pharmacokinetics of pentosan polysulfate sodium. Patients with relevant hepatic or renal insufficiency should be carefully monitored when treated with pentosan polysulfate sodium.

Rare cases of pigmentary maculopathy have been reported with use of pentosan polysulfate sodium (PPS), especially after long term use. Visual symptoms might include complaints of difficulty when reading, visual distortions, altered colour vision and/or slow adjustment to low or reduced light environments.

All patients should have an ophthalmologic examination after 6 months of use of PPS for early detection of pigmentary maculopathy, and, if there are no pathologic findings, regularly after 5 years of use (or earlier, in case of visual complaints). However, in case of relevant ophthalmologic findings, a yearly examination should be conducted. In such situations, treatment cessation should be considered.

This medicinal product contains less than 1 mmol sodium (23 mg) per capsule, that is to say essentially 'sodium-free'.

#### **4.5 Interaction with other medicinal products and other forms of interaction**

A study in healthy subjects revealed no pharmacokinetic or pharmacodynamic interactions between therapeutic doses of warfarin and pentosan polysulfate sodium. No further interaction studies have been performed.

Due to the weak anticoagulant effect of pentosan polysulfate sodium, patients, who are concomitantly treated with anticoagulants, heparin derivatives, thrombolytic or antiplatelet agents including acetylsalicylic acid, or nonsteroidal anti-inflammatory medicinal products should be evaluated for any haemorrhagic event in order to adapt the dose if needed (see section 4.4).

#### **4.6 Fertility, pregnancy and lactation**

##### Pregnancy

There are no data from the use of pentosan polysulfate sodium in pregnant women. Animal studies with respect to reproductive toxicity were not conducted.

elmiron is not recommended during pregnancy.

## Breast-feeding

It is unknown whether pentosan polysulfate sodium or metabolites are excreted in human milk.

A risk to the newborns/infants cannot be excluded.

Therefore, pentosan polysulfate sodium should not be used during breast-feeding.

## Fertility

No information on a potential impact of pentosan polysulfate sodium on fertility is available.

### **4.7 Effects on ability to drive and use machines**

Pentosan polysulfate sodium has no or negligible influence on the ability to drive and use machines.

### **4.8 Undesirable effects**

#### Summary of the safety profile

The following section lists adverse events reported in the literature from clinical studies with pentosan polysulfate sodium. The potential relatedness between these adverse events and the treatment with pentosan polysulfate sodium was not discussed in the respective publications.

The most common adverse events reported from the clinical studies are headache, dizziness and gastro-intestinal events like diarrhoea, nausea, abdominal pain and rectal bleeding.

The adverse events reported under treatment with pentosan polysulfate sodium were comparable to those reported under treatment with placebo in regards to quality and quantity.

#### Tabulated summary of adverse events

Adverse events are listed below by MedDRA body system organ class and by frequency. Very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ); uncommon ( $\geq 1/1,000$  to  $< 1/100$ ); rare ( $\geq 1/10,000$  to  $< 1/1,000$ ); very rare ( $< 1/10,000$ ); not known (cannot be estimated from available data).

<i>Infections and infestations</i>	Common	Infections, influenza
<i>Blood and lymphatic system disorders</i>	Uncommon	Anaemia, ecchymosis, haemorrhage, leukopenia, thrombocytopenia
	Not known	Coagulation disorders
<i>Immune system disorder</i>	Uncommon	Photosensitivity
	Not known	Allergic reactions
<i>Metabolism and nutrition disorders</i>	Uncommon	Anorexia, weight gain, weight loss
<i>Psychiatric disorders</i>	Uncommon	Severe Emotional Lability/Depression
<i>Nervous system disorders</i>	Common	Headache, dizziness
	Uncommon	Increased sweating, insomnia, hyperkinesia, paraesthesia
<i>Eye disorders</i>	Uncommon	Lacrimation, amblyopia
<i>Ear disorders</i>	Uncommon	Tinnitus
<i>Respiratory, thoracic and mediastinal disorders</i>	Uncommon	Dyspnoea
<i>Gastrointestinal disorders</i>	Common	Nausea, diarrhoea, dyspepsia, abdominal

		pain, abdomen enlarged, rectal haemorrhage
	Uncommon	Indigestion, vomiting, mouth ulcer, flatulence, constipation
<i>Skin and subcutaneous tissue disorders</i>	Common	Peripheral oedema, alopecia
	Uncommon	Rash, increased mole size
<i>Musculoskeletal and connective tissue disorders</i>	Common	Back pain
	Uncommon	Myalgia, Arthralgia
<i>Renal and urinary disorders</i>	Common	Urinary frequency
<i>General disorders and administration site conditions</i>	Common	Asthenia, pelvic pain
<i>Investigation</i>	Not known	Liver function abnormalities

#### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in [Appendix V](#).

#### **4.9 Overdose**

In the case of an accidental overdose, patients should be evaluated for potential adverse effects of pentosan polysulfate sodium like gastrointestinal symptoms or bleeding. In case of adverse reactions, treatment might be paused until the symptoms abate and treatment should be continued at the recommended dose after a critical balancing of the risks thereafter.

### **5. PHARMACOLOGICAL PROPERTIES**

#### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: Urologicals, other urologicals, ATC code: G04BX15.

#### Mechanism of action

The hypothetic mechanism of action of pentosan polysulfate sodium includes a local effect in the bladder after systemic administration and excretion into the urine by binding of glycosaminoglycans to the deficient mucous of the bladder. This binding of glycosaminoglycans to the bladder mucous reduces bacterial adherence to the inner surface of the bladder and in consequence the incidence of infections is reduced as well. It is hypothesized, that a potential barrier function of pentosan polysulfate sodium instead of the damaged urothelial mucus might play a role as well the anti-inflammatory activity of pentosan polysulfate sodium.

#### Clinical efficacy and safety

A total of four randomised placebo-controlled, double-blind clinical studies prospectively enrolling patients with bladder pain syndrome diagnosed via cystoscopic examination with or without bladder hydrodistension evaluating the efficacy of oral treatment with pentosan polysulfate sodium were published in scientific literature. In all of these studies, patients reported a better subjective improvement of bladder pain syndrome under treatment with pentosan polysulfate sodium compared to placebo. In three studies, the observed difference was clearly statistically significant.

The first study was a double-blind, randomized, placebo-controlled study with a planned cross-over design evaluating pentosan polysulfate sodium versus placebo. Depending on which institution the patients attended they were treated with either 3x100 mg or 2x200 mg PPS per day. 75 patients were randomised into the study and 62 of those completed the study. Efficacy of treatment was evaluated

based on the patient reported improvement on four typical symptoms of bladder pain syndrome: pain, urgency, frequency, and nocturia, no primary endpoint was defined. A patient was counted as a responder to treatment in case a 50 % improvement compared to baseline was reported for a specific symptom after 3 months of treatment. An evaluation of all data generated in the study showed that for all four symptoms statistically significant more patients responded to pentosan polysulfate sodium treatment compared to placebo:

	<b>PPS</b>	<b>Placebo</b>	<b>P-value</b>
<b>Pain</b>			
No. responders / total (%)	19/42 (45)	7/38 (18)	0.02
Av. % improvement*	33.0 ± 35	15.8 ± 26	0.01
<b>Urgency</b>			
No. responders / total (%)	21/42 (50)	9/48 (19)	0.03
Av. % improvement*	27.6 ± 31	14.0 ± 24	0.01
<b>Frequency</b>			
No. responders / total (%)	33/52 (63)	16/41 (39)	0.005
Av. improvement	-5.1	-0.4	0.002
<b>Nocturia</b>			
Av. improvement*	-1.5 ± 2.9	-0.5 ± 0.5	0.04

(\*Mean ± SD)

The following two studies were conducted following very comparable double-blind, randomized, placebo-controlled multicentre study designs. The patients in both studies were treated for three months with either 3x100 mg pentosan polysulfate sodium or placebo. The primary efficacy endpoint of the study was the overall improvement as self-reported by the patient after three months of treatment. The patients were asked whether they felt improved overall since the start of treatment, and if so, whether the improvement was “slight” 25 %, “moderate” 50 %, “great” 75 % or “complete cure” 100 %. Patients who reported at least moderate (50 %) improvement were counted as responders. The secondary efficacy endpoints included the investigators’ evaluation of improvement. The used scale for the investigators’ assessment included the categories “worse”, “no change”, “fair”, “good”, “very good”, and “excellent”. A responder was defined as a patient assessed to be at least “good” compared to baseline. Furthermore, volume voiding profiles over three days and the impact of treatment on pain and urgency were evaluated as secondary endpoints. The impact on pain and urgency was evaluated via the same questionnaire as the primary endpoint with a responder defined as a patient experiencing an at least moderate (50 %) improvement compared to baseline. In addition, the impact on pain and urgency was evaluated via a 5-score scale, where a responder was defined as a patient experiencing at least a 1-point improvement compared to baseline.

110 patients were enrolled and treated for three months in the first of the two very comparable studies. A statistically significant benefit of pentosan polysulfate sodium over placebo was demonstrated over the primary endpoint, the patients overall-assessment of improvement as well as on the investigators’ overall assessment. Furthermore, a trend for better efficacy of pentosan polysulfate sodium was observed for the patients self-assessment of an improvement of pain and urgency, despite a deviating effect observed for the evaluation of urgency via the scale. In addition, positive effects were observed on the voiding profile, although the observed differences were not statistically significant:

	<b>PPS</b>	<b>Placebo</b>	<b>P-value</b>
Responders based on patients’ self-evaluation of overall improvement	28 %	13 %	0.04
Responders based on investigators’ evaluation of overall improvement	26 %	11 %	0.03
Responders regarding pain and urgency			
Pain (moderate/50 % improvement)	27 %	14 %	0.08
Pain scale (1-point improvement)	46 %	29 %	0.07
Pressure to urinate (moderate/50 % improvement)	22 %	11 %	0.08
Urgency scale (1-point improvement)	39 %	46 %	ns
Mean reduction in pain score from baseline	0.5	0.2	ns
Changes from baseline voiding characteristics			
Mean volume per void (cc)	9.8	7.6	ns
Increase of ≥ 20 cc (% pts)	30	20	ns

Total daily urine volume (cc)	+60	-20	ns
Voids per day	-1	-1	ns
3 voids less per day (% pts)	32	24	ns
Nocturia	-0.8	-0.5	ns

The second of the two very comparable studies enrolled 148 patients and demonstrated a statistically significant benefit pentosan polysulfate sodium over placebo was demonstrated on the patient reported overall improvement evaluated as primary endpoint and the investigator-assessed overall improvement, all evaluations on pain and urgency. A trend for better efficacy under pentosan polysulfate sodium was observed for improved sexual intercourse:

	PPS	Placebo	P-value
Responders based on patients' self-evaluation of overall improvement	32 %	16 %	0.01
Responders based on investigators' evaluation of overall improvement	36 %	15 %	0.002
Responders regarding pain and urgency			
Pain (moderate/50 % improvement)	38 %	18 %	0.005
Pain scale (1-point improvement)	66 %	51 %	0.04
Pressure to urinate (moderate/50 % improvement)	30 %	18 %	0.04
Responders regarding pain and urgency	61 %	43 %	0.01
Improved sexual intercourse	31 %	18 %	0.06
Changes from baseline voided volume			
Mean volume per void (cc)	+20.4	-2.1	ns
Increase of $\geq 20$ cc (% pts)	40	24	0.02
Total daily urine volume (cc)	+3	-42	ns

The fourth study was following a double-blind, double-dummy, multifactorial design and evaluated the effects of pentosan polysulfate sodium and hydroxyzine in one study. Patients were randomized to four treatment group and were treated for six months with 3x100 mg pentosan polysulfate sodium, 1x50 mg hydroxyzine, both active treatments, or placebo. A responder analysis based on a patient-reported Global Response Assessment (GRA) after 24 weeks of treatment was defined as primary endpoint. The GRA assessment was evaluated via a 7-point centred scale, in which the patients can assess their global response compared to baseline as markedly worse, moderately worse, slightly worse, no change, slightly improved, moderately improved or markedly improved. Participants who reported either of the latter two categories were defined as treatment responders. Secondary outcome measures included the O'Leary-Sant IC Symptom and Problem Index, the University of Wisconsin Symptom score, patient reported symptoms of pain/discomfort and urgency, and results of a 24-hour voiding diary. Comparison of those patients receiving pentosan polysulfate sodium with those not receiving pentosan polysulfate sodium (irrespective of treatment with oral hydroxyzine) revealed no statistically significant difference between the two group, but a trend for better efficacy was observed for the primary endpoint in those patients treated with pentosan polysulfate sodium (either alone or in combination with hydroxyzine) (20 of 59, 34 %) compared to the those patients not receiving pentosan polysulfate sodium, but who might receive hydroxyzine (11 of 62, 18 %, p 0.064):

	PPS	Placebo
No. randomized	59	62
No. responders (%)	20 (34)	11 (18)
No. complete secondary end point data (%)	49 (83)	47 (76)
Mean pain score $\pm$ SD (0-9)	-1.2 $\pm$ 1.9	-0.7 $\pm$ 1.8
Mean urgency score $\pm$ SD (0-9)	-1.2 $\pm$ 1.6	-0.9 $\pm$ 1.6
Mean 24-hr frequency $\pm$ SD	-0.7 $\pm$ 4.8	-0.9 $\pm$ 6.3
Mean IC symptom index $\pm$ SD (0-20)	-2.6 $\pm$ 3.4	-1.7 $\pm$ 3.5
Mean IC problem index $\pm$ SD (0-16)	-2.6 $\pm$ 3.5	-1.9 $\pm$ 2.8
Mean Wisconsin IC score $\pm$ SD (0-42)	-6.2 $\pm$ 8.9	-6.7 $\pm$ 8.2

A pooled analysis of the data described above from placebo-controlled clinical studies was conducted to evaluate, whether patients taking oral pentosan polysulfate sodium have clear benefit from the

treatment. This pooled analysis showed that the percentage of patients responding to treatment with pentosan polysulfate sodium with a clinically relevant improvement in their overall assessment, pain and urgency was approximately 2-fold higher than the respective responder rates under placebo:

	<b>PPS</b>	<b>Placebo</b>
GRA (95 % CI)	33.0 % (27.1 % - 39.4 %)	15.8 % (11.6 % - 21.2 %)
Pain (95 % CI)	32.7 % (26.0 % - 40.3 %)	14.2 % (9.6 % - 20.6 %)
Urgency (95 % CI)	27.4 % (21.1 % - 34.8 %)	14.2 % (9.6 % - 20.6 %)

## 5.2 Pharmacokinetic properties

### Absorption

Less than 10 % of orally administered pentosan polysulfate sodium are slowly absorbed from the gastrointestinal tract and are available in systemic circulation in the form of unchanged pentosan polysulfate sodium or its metabolites. All studies describe very low systemic availability of unchanged pentosan polysulfate sodium after oral administration. Overall, the reported systemic bioavailability after oral administration of pentosan polysulfate sodium is below 1 %.

### Distribution

In healthy volunteers, a single parenteral administration of radioactively labelled pentosan polysulfate sodium leads to a progressive up-take of total radioactivity by the liver, spleen, and kidney (50 min after 1 mg/kg i.v.: 60 % of the dose in the liver, 7.7 % in the spleen; 3 h post dosing: 60 % in the liver plus spleen, and 13 % in the bladder).

### Biotransformation

Pentosan polysulfate sodium is metabolised extensively by desulfation in liver and spleen and depolymerisation in the kidney.

### Elimination

The apparent plasma half-life of pentosan polysulfate sodium depends on the route of administration. While pentosan polysulfate sodium is rapidly cleared from circulation of i.v. administration, the apparent plasma half-life after oral administration is in the range of 24-34 hours. Accordingly, oral administration of pentosan polysulfate sodium 3-times daily is expected to lead to accumulation of pentosan polysulfate sodium over the first 7 days of administration (accumulation factor 5-6.7). After oral administration unabsorbed pentosan polysulfate sodium is excreted predominantly unchanged in the faeces. About 6 % of the administered dose of pentosan polysulfate sodium were excreted via urine after desulfation and depolymerisation.

## 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional repeated dose toxicity, genotoxicity and long-term carcinogenicity studies.

The effect of pentosan polysulfate sodium on reproductive and developmental toxicity has not been investigated.

## 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

#### Capsule content

Microcrystalline cellulose  
Magnesium stearate

#### Capsule shell

Gelatin  
Titanium dioxide (E171)

### **6.2 Incompatibilities**

Not applicable.

### **6.3 Shelf life**

Bottle:  
3 years.  
After first opening: use within 45 days.

Blister:  
21 months.

### **6.4 Special precautions for storage**

Bottle:  
Keep the bottle tightly closed in order to protect from moisture.  
For storage conditions after first opening of the bottle, see section 6.3.

Blister:  
Do not store above 30 °C.

### **6.5 Nature and contents of container**

HDPE bottle with a tamper-evident child resistant closure of PP with 90 capsules.  
HDPE bottle with a tamper-evident child resistant closure of PP with 100 capsules.

PVC/Aclar-Aluminium blister with 90 (9x10) capsules.

Bottle:  
Pack size of 90 capsules or 300 (3 bottles x 100) capsules.

Blister:  
Pack size of 90 capsules.

Not all pack sizes may be marketed.

### **6.6 Special precautions for disposal**

No special requirements.

## **7. MARKETING AUTHORISATION HOLDER**

bene-Arzneimittel GmbH  
Herterichstrasse 1-3  
D-81479 Munich  
tel: ++49 (0) 89 / 7 49 87-0  
fax: ++49 (0) 89 / 7 49 87-142  
e-mail: [contact@bene-arzneimittel.de](mailto:contact@bene-arzneimittel.de)

**8. MARKETING AUTHORISATION NUMBER(S)**

EU/1/17/1189/001

EU/1/17/1189/002

EU/1/17/1189/003

**9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation: 02 June 2017

Date of latest renewal: 11 January 2022

**10. DATE OF REVISION OF THE TEXT**

Detailed information on this medicinal product is available on the website of the European Medicines Agency <http://www.ema.europa.eu>

## **ANNEX II**

- A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE**
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE**
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION**
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT**

## **A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE**

Name and address of the manufacturer(s) responsible for batch release

bene-Arzneimittel GmbH  
Herterichstr. 1 - 3  
81479 Munich  
GERMANY

## **B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE**

Medicinal product subject to medical prescription.

## **C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION**

- **Periodic safety update reports (PSURs)**

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

## **D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT**

- **Risk management plan (RMP)**

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the Marketing Authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

**ANNEX III**  
**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING**

**CARTON FOR BOTTLE**

**1. NAME OF THE MEDICINAL PRODUCT**

elmiron 100 mg capsules, hard  
pentosan polysulfate sodium

**2. STATEMENT OF ACTIVE SUBSTANCE(S)**

Each capsule contains 100 mg of pentosan polysulfate sodium.

**3. LIST OF EXCIPIENTS**

**4. PHARMACEUTICAL FORM AND CONTENTS**

Capsule, hard

90 capsules  
300 (3x100) capsules

**5. METHOD AND ROUTE(S) OF ADMINISTRATION**

Read the package leaflet before use.  
Oral use

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

**7. OTHER SPECIAL WARNING(S), IF NECESSARY**

**8. EXPIRY DATE**

EXP  
After first opening: use within 45 days.

**9. SPECIAL STORAGE CONDITIONS**

Keep the bottle tightly closed in order to protect from moisture.

**10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE**

**11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

bene-Arzneimittel GmbH, PO Box 710269, 81452 Munich, Germany

**12. MARKETING AUTHORISATION NUMBER(S)**

EU/1/17/1189/001 90 capsules

EU/1/17/1189/003 300 (3 bottles x 100) capsules

**13. BATCH NUMBER**

Lot

**14. GENERAL CLASSIFICATION FOR SUPPLY**

**15. INSTRUCTIONS ON USE**

**16. INFORMATION IN BRAILLE**

elmiron

**17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included.

**18. UNIQUE IDENTIFIER - HUMAN READABLE DATA**

PC  
SN  
NN

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING**

**CARTON FOR BLISTERS**

**1. NAME OF THE MEDICINAL PRODUCT**

elmiron 100 mg capsules, hard  
pentosan polysulfate sodium

**2. STATEMENT OF ACTIVE SUBSTANCE(S)**

Each capsule contains 100 mg of pentosan polysulfate sodium.

**3. LIST OF EXCIPIENTS**

**4. PHARMACEUTICAL FORM AND CONTENTS**

Capsule, hard

90 capsules

**5. METHOD AND ROUTE(S) OF ADMINISTRATION**

Read the package leaflet before use.  
Oral use

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

**7. OTHER SPECIAL WARNING(S), IF NECESSARY**

**8. EXPIRY DATE**

EXP

**9. SPECIAL STORAGE CONDITIONS**

Do not store above 30 °C.

**10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE**

**11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

bene-Arzneimittel GmbH, PO Box 710269, 81452 Munich, Germany

**12. MARKETING AUTHORISATION NUMBER(S)**

EU/1/17/1189/002

**13. BATCH NUMBER**

Lot

**14. GENERAL CLASSIFICATION FOR SUPPLY**

**15. INSTRUCTIONS ON USE**

**16. INFORMATION IN BRAILLE**

elmiron

**17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included.

**18. UNIQUE IDENTIFIER - HUMAN READABLE DATA**

PC  
SN  
NN

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING**

**BOTTLE LABEL**

**1. NAME OF THE MEDICINAL PRODUCT**

elmiron 100 mg capsules, hard  
pentosan polysulfate sodium

**2. STATEMENT OF ACTIVE SUBSTANCE(S)**

Each capsule contains 100 mg of pentosan polysulfate sodium.

**3. LIST OF EXCIPIENTS**

**4. PHARMACEUTICAL FORM AND CONTENTS**

Capsule, hard

90 capsules  
100 capsules

**5. METHOD AND ROUTE(S) OF ADMINISTRATION**

Read the package leaflet before use.  
Oral use.

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

**7. OTHER SPECIAL WARNING(S), IF NECESSARY**

**8. EXPIRY DATE**

EXP

After first opening: use within 45 days.  
Open date: .....

**9. SPECIAL STORAGE CONDITIONS**

Keep the bottle tightly closed in order to protect from moisture.

**10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE**

**11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

bene-Arzneimittel GmbH, PO Box 710269, 81452 Munich, Germany

**12. MARKETING AUTHORISATION NUMBER(S)**

EU/1/17/1189/001 90 capsules

EU/1/17/1189/003 300 (3 bottles x 100) capsules

**13. BATCH NUMBER<, DONATION AND PRODUCT CODES>**

Lot

**14. GENERAL CLASSIFICATION FOR SUPPLY**

**15. INSTRUCTIONS ON USE**

**16. INFORMATION IN BRAILLE**

**MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS**

**BLISTER**

**1. NAME OF THE MEDICINAL PRODUCT**

elmiron 100 mg capsules, hard  
pentosan polysulfate sodium

**2. NAME OF THE MARKETING AUTHORISATION HOLDER**

bene-Arzneimittel GmbH

**3. EXPIRY DATE**

EXP

**4. BATCH NUMBER<, DONATION AND PRODUCT CODES>**

Lot

**5. OTHER**

## **B. PACKAGE LEAFLET**

## Package leaflet: Information for the patient

### elmiron 100 mg capsules, hard pentosan polysulfate sodium

**Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

1. What elmiron is and what it is used for
2. What you need to know before you take elmiron
3. How to take elmiron
4. Possible side effects
5. How to store elmiron
6. Contents of the pack and other information

#### 1. What elmiron is and what it is used for

elmiron is a medicine that contains the active substance pentosan polysulfate sodium. After taking the medicine, it passes into the urine and attaches to the lining of the bladder, helping to form a protective layer.

elmiron is used in adults to treat **bladder pain syndrome** characterised by many tiny bleeds or distinctive lesions on the bladder wall and moderate to severe pain and a frequent urge to urinate.

#### 2. What you need to know before you take elmiron

##### Do not take elmiron if you are

- **allergic** to pentosan polysulfate sodium or any of the other ingredients of this medicine (listed in section 6)
- **bleeding** (other than menstrual bleeding)

##### Warnings and precautions

Talk to your doctor or pharmacist before taking elmiron if you have:

- to undergo surgery
- a blood clotting disorder or increased risks of bleeding, such as using a medicine that inhibits blood clotting
- ever had a reduced number of blood platelets caused by the medicine called heparin
- reduced liver or kidney function

Rare cases of retinal disorders (pigmentary maculopathy) have been reported with use of elmiron (especially after long term use). Tell your doctor immediately if you experience visual changes such as difficulty when reading, visual distortions, altered colour vision and/or slower adjustment to low or reduced light. Your doctor will discuss with you whether the treatment should be continued. For early detection of retinal disorders, eye examination will be performed regularly.

#### Children and adolescents

elmiron **is not recommended** in children under 18 years as safety and efficacy have not been established in this group.

#### **Other medicines and elmiron**

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

Inform your doctor or pharmacist, particularly if you use medicines that prevent blood clotting, or painkillers that reduce blood clotting.

#### **Pregnancy and breast-feeding**

elmiron **is not recommended** during pregnancy or breast-feeding.

#### **Driving and using machines**

elmiron has no or negligible influence on the ability to drive and use machines.

#### **elmiron contains sodium.**

This medicine contains less than 1 mmol sodium (23 mg) per capsule, that is to say essentially 'sodium-free'.

### **3. How to take elmiron**

Always take this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

#### **The recommended dose is:**

1 capsule, 3 times daily

Your doctor will assess your response to elmiron every 6 months.

#### **Method of use**

Take the capsules whole with one glass of water, at least 1 hour before or 2 hours after meals.

#### **If you take more elmiron than you should**

Inform your doctor in case of overdose. Stop taking elmiron if side effects occur until they disappear.

#### **If you forget to take elmiron**

Do not take a double dose to make up for a forgotten capsule.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

### **4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Side effects have been observed with the following frequencies:

**Common:** may affect up to 1 in 10 people

- infections, flu
- headache, back pain
- dizziness
- nausea, indigestion, diarrhoea, abdominal pain, abdomen enlarged
- rectal bleeding
- accumulation of fluid in arms or legs
- hair loss
- weakness, pelvic (lower abdomen) pain

- need to urinate more frequently than usual
- abnormal liver function

**Uncommon:** may affect up to 1 in 100 people

- lack of blood platelets, red or white blood cells
- bleeding, including small bleeding beneath the skin
- allergic reactions, increased sensitivity to light
- loss of appetite, weight gain or loss
- severe mood swings or depression
- increased sweating, sleeplessness
- restlessness
- abnormal sensation such as prickling, tingling and itchiness
- flow of tears, lazy eye
- ringing or buzzing in the ears
- breathing difficulties
- indigestion, vomiting, wind, difficulty passing stools
- mouth ulcer
- skin rash, increased mole size
- joint or muscle pain

**Not known:** frequency cannot be estimated from the available data

- blood clotting disorders
- allergic reactions
- abnormal liver function

### **Reporting of side effects**

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via [the national reporting system listed in Appendix V](#). By reporting side effects, you can help provide more information on the safety of this medicine.

## **5. How to store elmiron**

Keep this medicine out of the sight and reach of children.

- **bottle**

Do not use this medicine after the expiry date which is stated on the label and carton after EXP. The expiry date refers to the last day of that month.

Keep the bottle tightly closed in order to protect from moisture.

After first opening: use within 45 days. Dispose any remaining capsules after this period.

- **blister**

Do not use this medicine after the expiry date which is stated on the carton and blister after EXP. The expiry date refers to the last day of that month.

Do not store above 30 °C.

Do not throw away any medicines via wastewater. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## **6. Contents of the pack and other information**

### **What elmiron contains**

- The active substance is pentosan polysulfate sodium.  
One capsule contains 100 mg pentosan polysulfate sodium.
- The other ingredients are:  
Capsule content: microcrystalline cellulose, magnesium stearate  
Capsule shell: gelatin, titanium dioxide (E171)

### **What elmiron looks like and contents of the pack**

The capsules are white and non-transparent, provided in a plastic bottle with child resistant closure or plastic/aluminium blisters, packed in a carton.

- **bottle**

Each carton contains 90 capsules or 300 (3 bottles x 100) capsules.

- **blister**

Each carton contains 90 capsules.

Not all pack sizes may be marketed.

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**XI**

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Detailed information on this medicine is available on the European Medicines Agency website  
<http://www.ema.europa.eu>.