ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Ciprofloxacin Aguettant 200 mg/100 mL, solution for infusion

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Ciprofloxacin..... 200 mg
in the form of ciprofloxacin hydrochloride
Per 100 mL bag.

For a full list of the excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for infusion.

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

Indications are based on the antibacterial activity and pharmacokinetic characteristics of ciprofloxacin. They take into account both the clinical studies that have been conducted on this medicinal product and its place in the range of currently available antibacterial products.
Indications are defined in the hospital setting.
In adults, the indications are limited to:
*severe infections with sensitive Gram negative bacilli and staphylococci in the following contexts:
- o respiratory,
- o E.N.T.,
- o renal and urogenital, including prostate,
- o pelvic and gynaecological,
- o bones and joints,
- o intestinal and hepatobiliary,
- o skin,

* septicaemia with Gram negative bacilli only,
* postoperative peritonitis with sensitive Gram negative microbes when anaerobic microbes do not appear to be involved.

Special situations
Curative treatment of anthrax.

In children, the indications are limited to:
In children with cystic fibrosis, in very rare cases, after having assessed the benefit-risk ratio, treatment of bronchial inflammation microbiologically documented as due to *Pseudomonas aeruginosa* (clinical trials have been conducted only in children aged 5 to 17 years).

Special situations
Curative treatment of anthrax.
Since streptococci and pneumococci are only moderately sensitive to ciprofloxacin, the product should not be prescribed as first-line treatment when these microbes are suspected.

During treatment of infections with *Pseudomonas aeruginosa* and *Staphylococcus aureus*, the emergence of resistant mutants has been described, which may warrant the concomitant use of another antibiotic. Microbiological monitoring to screen for such resistance should be considered, particularly in the event of treatment failure.
The official guidelines on the appropriate use of antibacterial agents should be taken into account.

4.2. Posology and method of administration

Posology

In adults with normal renal function:

The recommended dosage is 200 mg two to three times daily as IV infusion. It may be increased to 400 mg two to three times daily, depending on the severity of the infection, particularly in life-threatening infections (nosocomial pneumopathies, septicaemia, etc.), and on the sensitivity of the microbe involved (particularly *Pseudomonas* sp.), in combination with another antibiotic.

Special situations

Anthrax: curative treatment of persons with symptoms who are to receive parenteral treatment, with switch to oral route as soon as the patient's condition allows it: 400 mg twice daily by IV infusion followed by oral route with 500 mg twice daily.
The duration of treatment is eight weeks.

In patients with renal failure:

The dosage must be adjusted based on creatinine clearance or serum creatinine level:

		for indications requiring a dosage of 200 mg two to three times daily in a patient with normal renal function	for indications requiring a dosage of 400 mg two to three times daily in a patient with normal renal function
creatinine clearance (mL/min./1.73 m²)	Serum creatinine (µmol/L)	maximum daily dose by IV (mg/day)	maximum daily dose by IV (mg/day)
>60	<124	3 x 200	3 x 400
31 to 60	124 to 168	2 x 200	2 x 400
≤ 30 or in patients on haemodialysis or peritoneal dialysis	>169	1 x 200	1 x 400

In patients with severe hepatic failure with ascites:

The maximum dosage is 400 mg twice daily.

In children:

- In very rare cases of treatment of cystic fibrosis in children, the dosage regimen is the following: 10 mg/kg three times daily by IV infusion (maximum 1200 mg/day) which may be followed by oral route with 20 mg/kg twice daily (maximum 1500 mg/day). The duration of treatment usually does not exceed 14 days.

* In very rare cases of treatment of severe infections in children outside of cystic fibrosis after having assessed the benefit-risk ratio (see section 4.3), when no other treatment is possible or after failure of conventional treatment, the recommended dosage regimen is: 7.5 mg/kg two to three times daily by IV infusion (maximum 400 mg/dose, maximum 1200 mg/day)

depending on the severity of the infection, particularly in life-threatening infections (nosocomial pneumopathies, septicaemia, etc.) and on the sensitivity of the microbe involved (particularly *Pseudomonas* sp.) which may be followed by oral route with 10 to 15 mg/kg twice daily (maximum 1500 mg/day).
- Ciprofloxacin treatment must be initiated in hospital.

Special situations
Anthrax: curative treatment of persons with symptoms who are to receive parenteral treatment, with switch to oral route as soon as the patient's condition allows it: 7.5 mg/kg two to three times daily by IV infusion (maximum 400 mg/dose, not to exceed the adult dosage [800 mg/day]) followed by oral route with 10 to 15 mg/kg twice daily, not to exceed the adult dosage (1 g/day).
The duration of treatment is eight weeks.

Method of administration
Ciprofloxacin 200 mg/100 mL should only be administered by intravenous route:
- In adults, as a 30-minute infusion.
- In children, as a 60-minute infusion.

4.3. Contraindications

This medicinal product must never be used in the following situations:
- Previous history of tendonitis with a fluoroquinolone (see sections 4.4 and 4.8)
- Hypersensitivity to ciprofloxacin or to any product from the quinolone family.
- Administration of this medicinal product is a contraindication to breastfeeding

This medicinal product can generally not be used in children until the end of growth, due to its joint toxicity in children and adolescents: severe arthropathy preferentially affecting the large joints; nonetheless, very rarely, after microbiological documentation and after having assessed the benefit-risk ratio, prescription of ciprofloxacin is possible in children for treatment of certain severe infections, particularly in the event of failure of conventional treatment, for which microbiological data may warrant the use of ciprofloxacin.

4.4 Special warnings and precautions for use

Warnings
Due to the presence of glucose, this medicinal product is contraindicated in the case of glucose-galactose malabsorption syndrome.
- Avoid exposure to the sun and ultraviolet radiation during treatment, due to the risk of photosensitisation.
- Cases of tendonitis, which have been observed rarely, may sometimes lead to a rupture, particularly affecting the Achilles tendon, for which long-term corticosteroid treatment seems to be a promoting factor (see section 4.3, precautions for use and section 4.8).

The risk of occurrence of arthropathy should be monitored, particularly in children.
- The activity of ciprofloxacin on *Mycobacterium tuberculosis* could cause negative results on bacteriological tests.
- Risk of crystalluria in the presence of urine with neutral or alkaline pH.
- Emergence of resistance or selection of resistant strains is possible, particularly in long-term treatments and/or nosocomial infections, particularly among staphylococcus and *Pseudomonas* bacteria.
- Any persistent, severe diarrhoea during and/or after treatment should be reason to suspect potentially fatal pseudomembranous colitis, requiring immediate treatment and discontinuation of ciprofloxacin. Medicinal products that inhibit peristalsis are contraindicated in this situation (see section 4.8).

* In very rare cases, anaphylactic reactions/shock have been observed, which may be life-threatening, starting with the first dose. Ciprofloxacin treatment must be suspended immediately, and appropriate treatment must be initiated.
* Neurological reactions may occur from the first dose of treatment. In rare cases, psychosis and/or, more rarely, depressive syndrome may occur from the first dose of treatment, with behaviour that may be dangerous for the patient. In this case, ciprofloxacin must be discontinued and the doctor must be informed immediately.

Precautions for use
Tendonitis: the occurrence of symptoms of tendonitis requires the discontinuation of treatment, resting of the tendon involved, and more specifically of both Achilles tendons, using an appropriate restraint or heel straps and an opinion in a specialised setting (see section 4.3 Warnings and section 4.8).

With regard to children more specifically, if joint pain occurs during ciprofloxacin treatment, the treatment must be suspended and the joint rested; a specialist's opinion will be required.

Ciprofloxacin must be used with caution in patients with a previous history of seizures or factors predisposing them to the occurrence of seizures (see section 4.8)

Ciprofloxacin must be used with caution in patients with myasthenia (see section 4.8)

This medicinal product contains 5 g of glucose per 100 mL of solution for injection: this should be taken into account in the daily ration in the case of low-glucose diet or diabetes.

4.5. Interaction with other medicinal products and other forms of interaction

Combinations requiring precautions for use
+ Oral anticoagulants (described for warfarin)
Increase in the effect of the oral anticoagulant and in the risk of haemorrhage. More frequent monitoring of prothrombin levels and INR monitoring. Dosage adjustment of the oral anticoagulant during treatment with ciprofloxacin and after discontinuation of it.
+ Theophyllines (bases and salts) and aminophylline
Increase in serum theophylline level, with risk of theophylline overdose (reduction in metabolism of theophylline). Clinical monitoring, and possibly monitoring of serum theophylline level.
+ Ropinirole
Increase of plasma concentrations of ropinirole with risk of overdose (reduction in its hepatic metabolism). Clinical monitoring and reduction in the dosage of ropinirole during treatment with ciprofloxacin and after discontinuation of it.

Combinations to be taken into account
+ Caffeine
Increase in caffeine levels in the body (reduction in hepatic metabolism of caffeine).

Particular problems of INR imbalance
Multiple cases of increase in the activity of oral anticoagulants have been reported in patients receiving antibiotics. Marked infectious or inflammatory context, age and general condition of the patient appear to be risk factors. In these circumstances, it appears to be difficult to distinguish between the infectious disease and its treatment in the occurrence of INR imbalance. However, certain classes of antibiotics are implicated more than others: these include mainly fluoroquinolones, macrolides, cyclones, cotrimoxazole and certain cephalosporins.

4.6. Pregnancy and lactation

Pregnancy
As a precautionary measure, it is preferable not to use ciprofloxacin during pregnancy.
Indeed, although animal studies have not demonstrated any teratogenic effects, clinical data are still insufficient.
Cases of joint damage have been described in children treated with quinolones, but to date, no cases of arthropathy secondary to exposure *in utero* have been reported.
Lactation
Administration of this medicinal product is a contraindication for breastfeeding, due to the excretion of fluoroquinolones in the breast milk and the risk of joint damage in the nursing infant.

4.7. Effects on the ability to drive and use machines

As with any treatment that may cause neurological reactions, this potential risk should be indicated to drivers of vehicles and users of machines.

4.8. Adverse effects

– *Digestive disorders*
Gastric discomfort, abdominal pain, anorexia, nausea, vomiting, diarrhoea, tympanites.
Very rarely: acute pancreatitis and pseudomembranous colitis that may be life-threatening.
– *Skin reactions*
Rash, pruritis, maculopapular erythematosus rash;
Rarely: photosensitisation, vascular purpura;
Very rarely: petechia;
Extremely rarely: polyform erythema, Stevens-Johnson syndrome, Lyell syndrome, nodular erythema, fixed pigmented erythema;

Pain or irritation at the injection site, and more rarely phlebitis or thrombophlebitis.

– *Cardiovascular reactions*
Palpitations, syncope;
Very rarely: vasculitis.
– *Damage to locomotor system*
Muscle and/or joint pain, stiffness and/or swelling of the joints;
Rare cases of tendonitis and tendon rupture which may occur from the first 48 hours of treatment and become bilateral (see sections 4.3 and 4.4).
In addition, in children: arthropathy (see section 4.4).

– *Neuropsychological reactions*
Seizures (see section 4.4), confusion, hallucinations, headaches, dizziness, fatigue, insomnia, vision disorders, feeling of drunkenness, paresthesia, intracranial hypertension, trembling, psychosis, restlessness and anxiety;
Very rarely: hypoesthesia, walking disorders, hypoacousia, possible worsening of myasthenia (see section 4.4);
Extremely rarely: depressive syndrome, grand mal seizures, peripheral neuropathy.

– *Renal damage*
Crystalluria;
Cases of reversible acute renal failure by tubulointerstitial nephropathy have been reported, particularly in elderly patients.

– *Allergic reactions*

Urticaria, flushing, hot flashes, peripheral oedema and/or oedema of the face, arterial hypotension, fever, anaphylactic shock/reaction that may be life-threatening.
Extremely rarely: angioedema.

– *Haematological effects*
Rarely: leucopoenia, thrombocytopenia, hypereosinophilia, anaemia;
Very rarely: haemolytic anaemia, agranulocytosis;
Extremely rarely: pancytopenia and medullary aplasia that may be life-threatening.

– *Hepatic effects*
Rarely: increase in transaminases, alkaline phosphatases, serum bilirubin, cholestatic jaundice;
Extremely rarely: hepatitis and hepatic necrosis, which may develop into life-threatening hepatic failure.

4.9. Overdose

Cases of reversible acute renal failure have been reported in the event of massive voluntary ingestion (suicide attempt).
In addition to usual emergency measures, it is recommended to monitor renal function. A small percentage of ciprofloxacin (< 10%) is extracted by haemodialysis and peritoneal dialysis.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Pharmacotherapeutic group: SYSTEMIC ANTIBACTERIAL AGENTS,
ATC code: J01MA02
Ciprofloxacin is a synthetic antibiotic belonging to the quinolone family, in the fluoroquinolone group. Its activity is highly bactericidal by inhibition of bacterial DNA-gyrase preventing bacterial chromosomal DNA synthesis.

SPECTRUM OF ANTIBACTERIAL ACTIVITY
Critical concentrations separate sensitive strains from strains with intermediate sensitivity, and the latter from resistant strains:
$S \leq 1$ mg/l and $R > 2$ mg/l.
The prevalence of acquired resistance may vary based on geographical location and time for certain species. It is therefore useful to have information available on the prevalence of local resistance, particularly for treatment of severe infections. These data can only provide a general guideline on the probability of sensitivity of a bacterial strain to this antibiotic.
When the variability of prevalence of resistance in Europe is known for a bacterial species, it is indicated in the table below:

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Categories	Frequency of acquired resistance in Europe (> 10%) (extreme values)
SENSITIVE SPECIES	
Gram positive aerobic bacteria	
Bacillus anthracis**	
Meticillin-sensitive *Staphylococcus*	
Gram negative aerobic bacteria	
Acinetobacter baumanii	6–93%
Bordetella pertussis	
Campylobacter	0–80%
Citrobacter freundii	0–26%
Enterobacter cloacae	0–13%
Escherichia coli	0–10%
Haemophilus influenzae	
Klebsiella oxytoca	
Klebsiella pneumoniae	2–13%
Legionella	
Moraxella catarrhalis (Branhamella catarrhalis)	
Morganella morganii	
Neisseria	
Pasteurella	
Proteus mirabilis	0–10%
Proteus vulgaris	
Providencia	10–65%
Pseudomonas aeruginosa	1–45%
Salmonella	
Serratia	0–21%
Shigella	
Vibrio spp.	
Yersinia	
Anaerobic bacteria	
Mobiluncus	
Peptostreptococcus	25–30%
Propionibacterium acnes	5–10%
Other	
sma hominis	
MODERATELY SENSITIVE SPECIES (with intermediate sensitivity *in vitro*)	
Gram positive aerobic bacteria	
Corynebacteria	
Streptococcus	
Streptococcus pneumoniae	
Other	
a pneumoniae	

Categories
RESISTANT SPECIES
Gram positive aerobic bacteria
Enterococci
Listeria monocytogenes
Nocardia asteroides
Meticillin-resistant *Staphylococcus* *
Anaerobic bacteria
except for *Mobiluncus*, *Peptostreptococcus* and *Propionibacterium acnes*
Other
Ureaplasma urealyticum

* The frequency of resistance to meticillin is approximately 30 to 50% of all staphylococci, and is encountered mainly in the hospital setting.

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** *Bacillus anthracis*: a study conducted on an experimental anthrax infection model, performed by inhalation of *Bacillus anthracis* spores in rhesus monkeys, shows that antibiotic therapy initiated early following exposure prevents the occurrence of the disease if the treatment is continued until the number of spores remaining in the body falls below the infecting dose.

Atypical mycobacteria
ciprofloxacin has moderate activity *in vitro* on certain species of mycobacteria: *Mycobacterium tuberculosis, Mycobacterium fortuitum*, less on *Mycobacterium kansasii*, and less still on *Mycobacterium avium*.
Cross-resistance
In vitro cross-resistance exists between ciprofloxacin and other fluoroquinolones. Considering the mechanism of action, there is not generally cross-resistance between ciprofloxacin and other classes of antibacterial treatments.

5.2. Pharmacokinetic properties

Serum levels
The pharmacokinetics of ciprofloxacin is linear at doses of 200 to 400 mg administered intravenously, and at oral doses of 500 mg and 750 mg. With two daily administrations of ciprofloxacin, steady state is reached in two or three days.
The main pharmacokinetic parameters of ciprofloxacin at steady state are the following:
by intravenous route:
* Cmax values observed after the administration of doses of 200 mg x 2/day, 400 mg x 2/day and 400 mg x 3/day are 2 to 3 mg/L, 4 to 5 mg/L and 4 to 6 mg/L, respectively.
* Cmin values observed at the same doses are 0.11 mg/L, 0.25 mg/L and 0.55 to 0.70 mg/L, respectively.
* Cmax, Cmin and areas under the curve are proportional to the dose infused.

Cmin values and accumulation ratios are dependent on the rhythm of administration, 2 or 3 infusions per 24 hours.
by oral route:
* Cmax values observed after the administration of doses of 500 mg x 2/day and 750 mg x 2/day are 3 mg/L, and 4.3 mg/L, respectively.
* Cmin values observed at the same doses are 0.34 mg/L and 0.48 mg/L, respectively.

Comparison of plasma concentrations of ciprofloxacin at steady state after repeated administrations by intravenous and oral route shows that the dosage of 400 mg / 12 hr by 1-hr IV infusion and the dosage of 500 mg / 12 hr by oral route are bioequivalent, as are dosages of 400 mg / 8 hr by 1-hr IV infusion and 750 mg / 12 hr by oral route. These results are related to an absolute bioavailability of the oral route of 80%.

Distribution
Binding to plasma proteins is approximately 40%.
The distribution volume is approximately 2 to 3 L/kg.
After intravenous administration, high tissue concentrations are detected in several tissues.
Pulmonary parenchyma:
Tissue Cmax / serum Cmax ratios of the IV and oral forms of ciprofloxacin are 1.5 to 1.7 and 2 to 3.5, respectively.
Bronchial mucosa:
Mean concentrations observed at the peak after the oral administration of 500 mg / 12 hr and 750 mg / 12 hr are 4.5 µg/g and 6.5 µg/g, respectively. Tissue Cmax / serum Cmax ratios of the IV and oral forms of ciprofloxacin are 1 to 1.5, respectively.

ENT region:
In the mastoid cortex, concentrations are similar to serum concentrations, with a tissue peak of 2.1 µg/g for a dosage of 500 mg (oral) given every 12 hours. At the same dosage,

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concentrations in the mucosa of the middle ear reach 5.5 µg/g at the peak with a tissue Cmax / serum Cmax ratio of approximately 3.0.

Urinary tract:

Mean urinary concentrations observed 2 to 4 hours after a single dose of ciprofloxacin by oral route of 250 mg, 500 mg and 750 mg are 150 µg/ml, 300 µg/ml and 600 µg/ml, respectively.

In the 2 hours following administration of a single dose of 200 mg or 400 mg of ciprofloxacin by IV route, mean urinary concentrations observed are 200 to 400 µg/ml and 700 µg/ml, respectively.

Concentrations in the renal parenchyma and in the prostate gland are 7 to 10 times and 1.5 to 3 times greater than serum concentrations, respectively.

Lower concentrations are detected in the amygdala, the bones, the joint fluid, gynaecological tissues, muscular and skin tissues, fat and interstitial fluid (particularly ascites fluid).

Low concentrations are detected in the cerebrospinal fluid, the aqueous humour and the vitreous body.

Biotransformation

Hepatic biotransformation of ciprofloxacin produces approximately 14% metabolites.

Elimination

Elimination of ciprofloxacin is mixed: the most important route of elimination is the renal route.

In patients with normal renal function, the elimination half-life is approximately 4 to 6 hours, regardless of the dose, and total and renal clearances are 600–700 and 300–450 mL/min, respectively.

There is no accumulation of ciprofloxacin or its metabolites.

Concentrations of ciprofloxacin in the bile are high; the amount eliminated by this route is lower than or equal to 2% of the dose, in the form of unchanged product and metabolites.

Urinary elimination occurs by glomerular filtration and tubular secretion. Urinary concentrations of ciprofloxacin for a dosage of 400 mg/12 hours are high and double those associated with the 200 mg dosage.

Pharmacokinetics in at-risk patients:

In patients with renal failure:

a reduction in elimination is observed, related to reduction in creatinine clearance, warranting dosage adjustment (see section 4.2).

Ciprofloxacin is poorly eliminated by haemodialysis and peritoneal dialysis.

In patients with hepatic failure:

the pharmacokinetics of ciprofloxacin is only slightly modified in mild to moderate hepatic failure.

In patients with hepatic failure with ascites:

Ascites can constitute a third compartment in which Tmax is later than in the blood compartment and in which elimination is slower: therefore, a reduction in clearance is observed, with lengthening of the elimination half-life, requiring dosage adjustment in these patients (see Posology and method of administration).

In elderly patients:

plasma concentrations of ciprofloxacin at a dosage of 400 mg / 8 hr are higher in elderly patients than in young patients, but do not require dosage adjustment as long as renal function is normal.

In patients receiving feeding by gastric tube, the tablet form of ciprofloxacin can be administered by this route, after crushing, in fasting conditions or during enteric feeding, without change in bioavailability as compared to the intact tablet form.

5.3. Preclinical safety data

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Acute toxicity:
After intravenous administration, LD_{50} values are on the order of 250 to 300 mg/kg depending on the animal species. Data obtained after administration by oral route (LD_{50} on the order of 5000 mg/kg) have demonstrated that ciprofloxacin has very low acute toxicity.

Toxicity in repeated administration
Toxicity of repeated administrations by parenteral route has been studied in rats and monkeys up to doses of 80 mg/kg/day (rat) and 30 mg/kg/day (monkey) over 4 weeks; in rats and monkeys up to doses of 50 mg/kg/day (rat) and 18 mg/kg/day (monkey) over 13 weeks, and in monkeys up to doses of 20 mg/kg/day over 26 weeks.
In all of these studies, the kidney has been identified as the target organ. Typical modifications of certain renal tubules, caused by the presence of crystalline precipitates, have been observed in animal groups receiving the highest doses. This damage should not be interpreted as a direct toxic effect of ciprofloxacin, but rather as an inflammatory reaction secondary to the precipitation of crystalline complexes in the renal tubule system.

Genotoxicity and carcinogenesis
No genotoxic potential (genetic mutation tests and clastogenesis tests) has been detected. Studies of carcinogenesis up to 2 years, conducted in mice and rats, have produced negative results.

Studies on reproduction
No harmful effect on gestating females, nor any embryotoxicity or teratogenicity has been observed in studied species.

Specific safety studies
Renal safety
Ciprofloxacin is mostly insoluble in neutral or alkaline media. Unlike human urine, the urine of the animals used (rats, monkeys) creates alkaline pH conditions, which explains the presence of crystals. Therefore, the formation of crystals observed in animal trials occurs in maximum dosage conditions and specific pH conditions. Such occurrences in humans are not expected.
The degree of crystalluria is dependent on the dose of ciprofloxacin administered, the pH and the rate of infusion by IV route, with a slow infusion of ciprofloxacin reducing the risk of crystalluria as compared to fast injection.
Joint safety
Ciprofloxacin, like other gyrase inhibitors, may induce damage to the joint cartilage of young animals (rats, dogs).
In studies conducted on adult animals (rats, dogs), no degeneration of joint cartilage has been reported.
Ocular safety
No occurrence of cataracts has been reported in toxicology studies.

6. PHARMACEUTICAL PARTICULARS

6.1. List of the excipients

Glucose monohydrate, lactic acid, hydrochloric acid, water for injections.

6.2. Incompatibilities

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products, except for those mentioned in section 6.6.

6.3. Shelf life

Before opening the outer packaging: 3 years
After opening the outer packaging: the product must be used immediately.

Nonetheless, physical/chemical stability for 6 hours at a temperature of +25°C has been demonstrated in the following infusion fluids:

- solution of sodium chloride 0.9%
- Ringer's solution
- lactated Ringer's solution
- solution of glucose 5%
- solution of glucose 10%
- solution of fructose 5%
- solution of fructose 10%
- solution of glucose 5% + sodium chloride 0.225%
- solution of glucose 5% + sodium chloride 0.45%

6.4. Special precautions for storage

No special precautions for storage.

6.5. Nature and contents of the container

100 mL in bag (PVC) or (PP), wrapped with a film (polyamide/PP), cartons of 10, 16, 20 or 50.
100 mL in bag (PVC) with wrapped connection and injection unit, cartons of 10, 16, 20 or 50.

6.6 Special precautions for disposal and other handling

This medicinal product is compatible with the following infusion fluids at room temperature:
* solution of sodium chloride 0.9%
* Ringer's solution
* lactated Ringer's solution
* solution of glucose 5%
* solution of glucose 10%
* solution of fructose 5%
* solution of fructose 10%
* solution of glucose 5% + sodium chloride 0.225%
* solution of glucose 5% + sodium chloride 0.45%

7. MARKETING AUTHORISATION HOLDER

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8. PRESENTATIONS AND ADMINISTRATIVE IDENTIFICATION NUMBERS

* 568 527.3: 100 mL in bag (PVC); carton of 10.
* 568 529.6: 100 mL in bag (PVC); carton of 16.
* 568 530.4: 100 mL in bag (PVC); carton of 20.
* 568 531.0: 100 mL in bag (PVC); carton of 50.
* 568 532.7: 100 mL in bag (PP); carton of 10.
* 568 533.3: 100 mL in bag (PP); carton of 16.
* 568 535.6: 100 mL in bag (PP); carton of 20.
* 568 536.2: 100 mL in bag (PP); carton of 50.

* 571 302.9 or 34009 571 302 99: 100 mL in bag (PVC) with wrapped connection and injection unit, cartons of 10
* 571 303.5 or 34009 571 303 50: 100 mL in bag (PVC) with wrapped connection and injection unit, cartons of 16
* 571 304.1 or 34009 571 304 11: 100 mL in bag (PVC) with wrapped connection and injection unit, cartons of 20
* 571 305.8 or 34009 571 305 89: 100 mL in bag (PVC) with wrapped connection and injection unit, cartons of 50

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

20 March 2006

10. DATE OF REVISION OF THE TEXT

24 August 2007

CONDITIONS FOR PRESCRIPTION AND DISPENSING

List I
Medicinal product requiring hospital prescription.