Annex III

Summary of product characteristics, labelling and package leaflets

Note:

These SmPCs, labelling and packages leaflets are the version valid at the time of Commission decision. After the Commission decision the Member State competent authorities, in liaison with the reference Member State, will update the product information as required. Therefore, these SmPCs, labelling and package leaflets may not necessarily represent the current text.
SUMMARY OF PRODUCT CHARACTERISTICS
1 NAME OF THE MEDICINAL PRODUCT

Tavanic 250 mg film-coated tablets
Tavanic 500 mg film-coated tablets

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet of Tavanic 250 mg contains 250 mg of levofloxacin as levofloxacin hemihydrate.

Each film-coated tablet of Tavanic 500 mg contains 500 mg of levofloxacin as levofloxacin hemihydrate.

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Film-coated tablet.

Score line pale yellowish-white to reddish-white film-coated tablets.
The tablet can be divided into equal halves.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Tavanic is indicated in adults for the treatment of the following infections (see sections 4.4 and 5.1):

- Acute bacterial sinusitis
- Acute exacerbations of chronic bronchitis
- Community-acquired pneumonia
- Complicated skin and soft tissue infections

For the above-mentioned infections Tavanic should be used only when it is considered inappropriate to use antibacterial agents that are commonly recommended for the initial treatment of these infections.

- Pyelonephritis and complicated urinary tract infections (see section 4.4)
- Chronic bacterial prostatitis
- Uncomplicated cystitis (see section 4.4)
- Inhalation Anthrax: postexposure prophylaxis and curative treatment (see section 4.4)

Tavanic may also be used to complete a course of therapy in patients who have shown improvement during initial treatment with intravenous levofloxacin.

Consideration should be given to official guidance on the appropriate use of antibacterial agents.
4.2 Posology and method of administration

Tavanic tablets are administered once or twice daily. The dosage depends on the type and severity of the infection and the susceptibility of the presumed causative pathogen.

Tavanic tablets may also be used to complete a course of therapy in patients who have shown improvement during initial treatment with intravenous levofloxacin; given the bioequivalence of the parenteral and oral forms, the same dosage can be used.

Posology

The following dose recommendations can be given for Tavanic:

Dosage in patients with normal renal function (creatinine clearance >50 ml/min)

<table>
<thead>
<tr>
<th>Indication</th>
<th>Daily dose regimen (according to severity)</th>
<th>Duration of treatment (according to severity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute bacterial sinusitis</td>
<td>500 mg once daily</td>
<td>10 - 14 days</td>
</tr>
<tr>
<td>Acute bacterial exacerbations of chronic bronchitis</td>
<td>500 mg once daily</td>
<td>7 - 10 days</td>
</tr>
<tr>
<td>Community-acquired pneumonia</td>
<td>500 mg once or twice daily</td>
<td>7 - 14 days</td>
</tr>
<tr>
<td>Pyelonephritis</td>
<td>500 mg once daily</td>
<td>7 - 10 days</td>
</tr>
<tr>
<td>Complicated urinary tract infections</td>
<td>500 mg once daily</td>
<td>7 - 14 days</td>
</tr>
<tr>
<td>Uncomplicated cystitis</td>
<td>250 mg once daily</td>
<td>3 days</td>
</tr>
<tr>
<td>Chronic bacterial prostatitis</td>
<td>500 mg once daily</td>
<td>28 days</td>
</tr>
<tr>
<td>Complicated skin and soft tissue infections</td>
<td>500 mg once or twice daily</td>
<td>7 - 14 days</td>
</tr>
<tr>
<td>Inhalation Anthrax</td>
<td>500 mg once daily</td>
<td>8 weeks</td>
</tr>
</tbody>
</table>

Special populations

Impaired renal function (creatinine clearance ≤50 ml/min)

<table>
<thead>
<tr>
<th>Creatinine clearance</th>
<th>Dose regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 mg/24 h</td>
<td>first dose: 250 mg</td>
</tr>
<tr>
<td>50-20 ml/min</td>
<td>then: 125 mg/24 h</td>
</tr>
<tr>
<td>19-10 ml/min</td>
<td>then: 125 mg/48 h</td>
</tr>
<tr>
<td>&lt;10 ml/min (including haemodialysis and CAPD)</td>
<td>then: 125 mg/48 h</td>
</tr>
</tbody>
</table>

1No additional doses are required after haemodialysis or continuous ambulatory peritoneal dialysis (CAPD).

Impaired liver function

No adjustment of dose is required since levofloxacin is not metabolised to any relevant extent by the liver and is mainly excreted by the kidneys.

Elderly population

54
No adjustment of dose is required in the elderly, other than that imposed by consideration of renal function (see section 4.4 “Tendinitis and tendon rupture” and “QT interval prolongation”).

**Paediatric population**

Tavanic is contraindicated in children and growing adolescents (see section 4.3).

**Method of administration**

Tavanic tablets should be swallowed without crushing and with sufficient amount of liquid. They may be divided at the score line to adapt the dose. The tablets may be taken during meals or between meals. Tavanic tablets should be taken at least two hours before or after iron salts, zinc salts, magnesium- or aluminium-containing antacids, or didanosine (only didanosine formulations with aluminium or magnesium containing buffering agents), and sucralfate administration, since reduction of absorption can occur (see section 4.5).

### 4.3 Contraindications

Levofloxacin tablets must not be used:

- in patients hypersensitive to levofloxacin or other quinolones or any of the excipients listed in section 6.1,
- in patients with epilepsy,
- in patients with history of tendon disorders related to fluoroquinolone administration,
- in children or growing adolescents,
- during pregnancy,
- in breast-feeding women.

### 4.4 Special warnings and precautions for use

Methicillin-resistant *S. aureus* are very likely to possess co-resistance to fluoroquinolones, including levofloxacin. Therefore levofloxacin is not recommended for the treatment of known or suspected MRSA infections unless laboratory results have confirmed susceptibility of the organism to levofloxacin (and commonly recommended antibacterial agents for the treatment of MRSA-infections are considered inappropriate).

Levofloxacin may be used in the treatment of Acute Bacterial Sinusitis and Acute Exacerbation of Chronic Bronchitis when these infections have been adequately diagnosed.

Resistance to fluoroquinolones of *E. coli* – the most common pathogen involved in urinary tract infections – varies across the European Union. Prescribers are advised to take into account the local prevalence of resistance in *E. coli* to fluoroquinolones.

Inhalation Anthrax: Use in humans is based on *in vitro* *Bacillus anthracis* susceptibility data and on animal experimental data together with limited human data. Treating physicians should refer to national and/or international consensus documents regarding the treatment of anthrax.

**Tendinitis and tendon rupture**

Tendinitis may rarely occur. It most frequently involves the Achilles tendon and may lead to tendon rupture. Tendinitis and tendon rupture, sometimes bilateral, may occur within 48 hours of starting treatment with levofloxacin and have been reported up to several months after discontinuation of treatment. The risk of tendinitis and tendon rupture is increased in patients aged over 60 years, in patients receiving daily doses of 1000 mg and in patients using corticosteroids. The daily dose should be adjusted in elderly
patients based on creatinine clearance (see section 4.2). Close monitoring of these patients is therefore necessary if they are prescribed levofloxacin. All patients should consult their physician if they experience symptoms of tendinitis. If tendinitis is suspected, treatment with levofloxacin must be halted immediately, and appropriate treatment (e.g. immobilisation) must be initiated for the affected tendon (see sections 4.3 and 4.8).

Clostridium difficile-associated disease

Diarrhoea, particularly if severe, persistent and/or bloody, during or after treatment with levofloxacin (including several weeks after treatment), may be symptomatic of Clostridium difficile-associated disease (CDAD). CDAD may range in severity from mild to life threatening, the most severe form of which is pseudomembranous colitis (see section 4.8). It is therefore important to consider this diagnosis in patients who develop serious diarrhoea during or after treatment with levofloxacin. If CDAD is suspected or confirmed, levofloxacin should be stopped immediately and appropriate treatment initiated without delay. Anti-peristaltic medicinal products are contraindicated in this clinical situation.

Patients predisposed to seizures

Quinolones may lower the seizure threshold and may trigger seizures. Levofloxacin is contraindicated in patients with a history of epilepsy (see section 4.3) and, as with other quinolones, should be used with extreme caution in patients predisposed to seizures or concomitant treatment with active substances that lower the cerebral seizure threshold, such as theophylline (see section 4.5). In case of convulsive seizures (see section 4.8), treatment with levofloxacin should be discontinued.

Patients with G-6-phosphate dehydrogenase deficiency

Patients with latent or actual defects in glucose-6-phosphate dehydrogenase activity may be prone to haemolytic reactions when treated with quinolone antibacterial agents. Therefore, if levofloxacin has to be used in these patients, potential occurrence of haemolysis should be monitored.

Patients with renal impairment

Since levofloxacin is excreted mainly by the kidneys, the dose of Tavanic should be adjusted in patients with renal impairment (see section 4.2).

Hypersensitivity reactions

Levofloxacin can cause serious, potentially fatal hypersensitivity reactions (e.g. angioedema up to anaphylactic shock), occasionally following the initial dose (see section 4.8). Patients should discontinue treatment immediately and contact their physician or an emergency physician, who will initiate appropriate emergency measures.

Severe bullous reactions

Cases of severe bullous skin reactions such as Stevens-Johnson syndrome or toxic epidermal necrolysis have been reported with levofloxacin (see section 4.8). Patients should be advised to contact their doctor immediately prior to continuing treatment if skin and/or mucosal reactions occur.

Dysglycaemia
As with all quinolones, disturbances in blood glucose, including both hypoglycaemia and hyperglycaemia have been reported, usually in diabetic patients receiving concomitant treatment with an oral hypoglycaemic agent (e.g., glibenclamide) or with insulin. Cases of hypoglycaemic coma have been reported. In diabetic patients, careful monitoring of blood glucose is recommended (see section 4.8).

Prevention of photosensitisation

Photosensitisation has been reported with levofloxacin (see section 4.8). It is recommended that patients should not expose themselves unnecessarily to strong sunlight or to artificial UV rays (e.g. sunray lamp, solarium), during treatment and for 48 hours following treatment discontinuation in order to prevent photosensitisation.

Patients treated with Vitamin K antagonists

Due to possible increase in coagulation tests (PT/INR) and/or bleeding in patients treated with levofloxacin in combination with a vitamin K antagonist (e.g. warfarin), coagulation tests should be monitored when these drugs are given concomitantly (see section 4.5).

Psychotic reactions

Psychotic reactions have been reported in patients receiving quinolones, including levofloxacin. In very rare cases these have progressed to suicidal thoughts and self-endangering behaviour- sometimes after only a single dose of levofloxacin (see section 4.8). In the event that the patient develops these reactions, levofloxacin should be discontinued and appropriate measures instituted. Caution is recommended if levofloxacin is to be used in psychotic patients or in patients with history of psychiatric disease.

QT interval prolongation

Caution should be taken when using fluoroquinolones, including levofloxacin, in patients with known risk factors for prolongation of the QT interval such as, for example:
- congenital long QT syndrome
- concomitant use of drugs that are known to prolong the QT interval (e.g. Class IA and III antiarrhythmics, tricyclic antidepressants, macrolides, antipsychotics)
- uncorrected electrolyte imbalance (e.g. hypokalemia, hypomagnesemia)
- cardiac disease (e.g. heart failure, myocardial infarction, bradycardia).
Elderly patients and women may be more sensitive to QTc-prolonging medications. Therefore, caution should be taken when using fluoroquinolones, including levofloxacin, in these populations. (See sections 4.2 Elderly, 4.5, 4.8, and 4.9).

Peripheral neuropathy

Peripheral sensory neuropathy and peripheral sensory motor neuropathy have been reported in patients receiving fluoroquinolones, including levofloxacin, which can be rapid in its onset (see section 4.8). Levofloxacin should be discontinued if the patient experiences symptoms of neuropathy in order to prevent the development of an irreversible condition.

Hepatobiliary disorders
Cases of hepatic necrosis up to fatal hepatic failure have been reported with levofloxacin, primarily in patients with severe underlying diseases, e.g. sepsis (see section 4.8). Patients should be advised to stop treatment and contact their doctor if signs and symptoms of hepatic disease develop such as anorexia, jaundice, dark urine, pruritus or tender abdomen.

Exacerbation of myasthenia gravis

Fluoroquinolones, including levofloxacin, have neuromuscular blocking activity and may exacerbate muscle weakness in patients with myasthenia gravis. Postmarketing serious adverse reactions, including deaths and the requirement for respiratory support, have been associated with fluoroquinolone use in patients with myasthenia gravis. Levofloxacin is not recommended in patients with a known history of myasthenia gravis.

Vision disorders

If vision becomes impaired or any effects on the eyes are experienced, an eye specialist should be consulted immediately (see sections 4.7 and 4.8).

Superinfection

The use of levofloxacin, especially if prolonged, may result in overgrowth of non-susceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

Interference with laboratory tests

In patients treated with levofloxacin, determination of opiates in urine may give false-positive results. It may be necessary to confirm positive opiate screens by more specific method.

Levofloxacin may inhibit the growth of Mycobacterium tuberculosis and, therefore, may give false-negative results in the bacteriological diagnosis of tuberculosis.

4.5 Interactions with other medicinal products and other forms of interaction

Effect of other medicinal products on Tavanic

Iron salts, zinc salts, magnesium- or aluminium-containing antacids, didanosine

Levofloxacin absorption is significantly reduced when iron salts, or magnesium- or aluminium-containing antacids, or didanosine (only didanosine formulations with aluminium or magnesium containing buffering agents) are administered concomitantly with Tavanic tablets. Concurrent administration of fluoroquinolones with multi-vitamins containing zinc appears to reduce their oral absorption. It is recommended that preparations containing divalent or trivalent cations such as iron salts, zinc salts or magnesium- or aluminium-containing antacids, or didanosine (only didanosine formulations with aluminium or magnesium containing buffering agents) should not be taken 2 hours before or after Tavanic tablet administration (see section 4.2). Calcium salts have a minimal effect on the oral absorption of levofloxacin.

Sucralfate

The bioavailability of Tavanic tablets is significantly reduced when administered together with sucralfate. If the patient is to receive both sucralfate and Tavanic, it is best to administer sucralfate 2 hours after the Tavanic tablet administration (see section 4.2).

Theophylline, fenbufen or similar non-steroidal anti-inflammatory drugs
No pharmacokinetic interactions of levofloxacin were found with theophylline in a clinical study. However a pronounced lowering of the cerebral seizure threshold may occur when quinolones are given concurrently with theophylline, non-steroidal anti-inflammatory drugs, or other agents which lower the seizure threshold. Levofloxacin concentrations were about 13% higher in the presence of fenbufen than when administered alone.

Probenecid and cimetidine

Probenecid and cimetidine had a statistically significant effect on the elimination of levofloxacin. The renal clearance of levofloxacin was reduced by cimetidine (24%) and probenecid (34%). This is because both drugs are capable of blocking the renal tubular secretion of levofloxacin. However, at the tested doses in the study, the statistically significant kinetic differences are unlikely to be of clinical relevance. Caution should be exercised when levofloxacin is coadministered with drugs that affect the tubular renal secretion such as probenecid and cimetidine, especially in renally impaired patients.

Other relevant information

Clinical pharmacology studies have shown that the pharmacokinetics of levofloxacin were not affected to any clinically relevant extent when levofloxacin was administered together with the following drugs: calcium carbonate, digoxin, glibenclamide, ranitidine.

Effect of Tavanic on other medicinal products

Ciclosporin

The half-life of ciclosporin was increased by 33% when coadministered with levofloxacin.

Vitamin K antagonists

Increased coagulation tests (PT/INR) and/or bleeding, which may be severe, have been reported in patients treated with levofloxacin in combination with a vitamin K antagonist (e.g. warfarin). Coagulation tests, therefore, should be monitored in patients treated with vitamin K antagonists (see section 4.4).

Drugs known to prolong QT interval

Levofloxacin, like other fluoroquinolones, should be used with caution in patients receiving drugs known to prolong the QT interval (e.g. Class IA and III antiarrhythmics, tricyclic antidepressants, macrolides, antipsychotics) (see section 4.4 QT interval prolongation).

Other relevant information

In a pharmacokinetic interaction study, levofloxacin did not affect the pharmacokinetics of theophylline (which is a probe substrate for CYP1A2), indicating that levofloxacin is not a CYP1A2 inhibitor.
Other forms of interactions

Food

There is no clinically relevant interaction with food. Tavanic tablets may therefore be administered regardless of food intake.

4.6  Fertility, pregnancy and lactation

Pregnancy

There are limited amount of data from the use of levofloxacin in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3). However in the absence of human data and due to that experimental data suggest a risk of damage by fluoroquinolones to the weight-bearing cartilage of the growing organism, levofloxacin must not be used in pregnant women (see sections 4.3 and 5.3).

Breast-feeding

Tavanic is contraindicated in breast-feeding women. There is insufficient information on the excretion of levofloxacin in human milk; however other fluoroquinolones are excreted in breast milk. In the absence of human data and due to that experimental data suggest a risk of damage by fluoroquinolones to the weight-bearing cartilage of the growing organism, levofloxacin must not be used in breast-feeding women (see sections 4.3 and 5.3).

Fertility

Levofloxacin caused no impairment of fertility or reproductive performance in rats.

4.7  Effects on ability to drive and use machines

Some undesirable effects (e.g. dizziness/vertigo, drowsiness, visual disturbances) may impair the patient’s ability to concentrate and react, and therefore may constitute a risk in situations where these abilities are of special importance (e.g. driving a car or operating machinery).

4.8  Undesirable effects

The information given below is based on data from clinical studies in more than 8300 patients and on extensive post marketing experience.

Frequencies are defined using the following convention: very common (≥1/10), common (≥1/100, <1/10), uncommon (≥1/1000, <1/100), rare (≥1/10000, <1/1000), very rare (<1/10000), not known (cannot be estimated from the available data).

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

<table>
<thead>
<tr>
<th>System organ class</th>
<th>Common (≥1/100 to &lt;1/10)</th>
<th>Uncommon (≥1/1000 to &lt;1/100)</th>
<th>Rare (≥1/10,000 to &lt;1/1000)</th>
<th>Not known (cannot be estimated from available data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>System organ class</td>
<td>Common (≥1/100 to &lt;1/10)</td>
<td>Uncommon (≥1/1,000 to &lt;1/100)</td>
<td>Rare (≥1/10,000 to &lt;1/1,000)</td>
<td>Not known (cannot be estimated from available data)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Infections and infestations</td>
<td>Fungal infection including Candida infection</td>
<td>Pathogen resistance</td>
<td>Thrombocytopenia</td>
<td>Neutropenia</td>
</tr>
<tr>
<td>Blood and lymphatic system disorders</td>
<td>Leukopenia</td>
<td>Eosinophilia</td>
<td>Thrombocytopenia</td>
<td>Neutropenia</td>
</tr>
<tr>
<td>Immune system disorders</td>
<td>Angioedema</td>
<td>Hypersensitivity (see section 4.4)</td>
<td>Anaphylactic shock&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Anaphylactoid shock&lt;sup&gt;a&lt;/sup&gt; (see section 4.4)</td>
</tr>
<tr>
<td>Metabolism and nutrition disorders</td>
<td>Anorexia</td>
<td>Hypoglycaemia particularly in diabetic patients (see section 4.4)</td>
<td>Hyperglycaemia</td>
<td>Hypoglycaemic coma (see section 4.4)</td>
</tr>
<tr>
<td>Psychiatric disorders</td>
<td>Insomnia</td>
<td>Anxiety</td>
<td>Confusional state</td>
<td>Nervousness</td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>Headache</td>
<td>Dizziness</td>
<td>Somnolence</td>
<td>Tremor</td>
</tr>
<tr>
<td>Eye disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear and Labyrinth disorders</td>
<td>Vertigo</td>
<td>Tinnitus</td>
<td>Hearing loss</td>
<td>Hearing impaired</td>
</tr>
<tr>
<td>System organ class</td>
<td>Common (≥1/100 to &lt;1/10)</td>
<td>Uncommon (≥1/1,000 to &lt;1/100)</td>
<td>Rare (≥1/10,000 to &lt;1/1,000)</td>
<td>Not known (cannot be estimated from available data)</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Cardiac disorders</td>
<td>Tachycardia, Palpitation</td>
<td></td>
<td></td>
<td>Ventricular tachycardia, which may result in cardiac arrest&lt;br&gt;Ventricular arrhythmia and torsade de pointes (reported predominantly in patients with risk factors of QT prolongation), electrocardiogram QT prolonged (see sections 4.4 and 4.9)</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td>Applies to iv form only: Phlebitis</td>
<td>Hypotension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory, thoracic and mediastinal disorders</td>
<td>Dyspnoea</td>
<td></td>
<td></td>
<td>Bronchospasm&lt;br&gt;Pneumonitis allergic</td>
</tr>
<tr>
<td>Gastro-intestinal disorders</td>
<td>Diarrhoea&lt;br&gt;Vomiting&lt;br&gt;Nausea</td>
<td>Abdominal pain&lt;br&gt;Dyspepsia&lt;br&gt;Flatulence&lt;br&gt;Constipation</td>
<td></td>
<td>Diarrhoea – haemorrhagic which in very rare cases may be indicative of enterocolitis, including pseudomembranous colitis (see section 4.4)&lt;br&gt;Pancreatitis</td>
</tr>
<tr>
<td>Hepatobiliary disorders</td>
<td>Hepatic enzyme increased (ALT/AST, alkaline phosphatase, GGT)</td>
<td>Blood bilirubin increased</td>
<td></td>
<td>Jaundice and severe liver injury, including cases with fatal acute liver failure, primarily in patients with severe underlying diseases (see section 4.4)&lt;br&gt;Hepatitis</td>
</tr>
<tr>
<td>Skin and subcutaneous tissue disorders b</td>
<td>Rash&lt;br&gt;Pruritus&lt;br&gt;Urticaria&lt;br&gt;Hyperhidrosis</td>
<td></td>
<td></td>
<td>Toxic epidermal necrolysis&lt;br&gt;Stevens-Johnson syndrome&lt;br&gt;Erythema multiforme&lt;br&gt;Photosensitivity reaction (see section 4.4)&lt;br&gt;Leukocytoclastic vasculitis&lt;br&gt;Stomatitis</td>
</tr>
<tr>
<td>System organ class</td>
<td>Common (≥1/100 to &lt;1/10)</td>
<td>Uncommon (≥1/1,000 to &lt;1/100)</td>
<td>Rare (≥1/10,000 to &lt;1/1,000)</td>
<td>Not known (cannot be estimated from available data)</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Arthralgia</td>
<td>Myalgia</td>
<td>Tendon disorders (see sections 4.3 and 4.4) including tendinitis (e.g. Achilles tendon)</td>
<td>Muscular weakness which may be of special importance in patients with myasthenia gravis (see section 4.4)</td>
</tr>
<tr>
<td>Renal and Urinary disorders</td>
<td>Blood creatinine increased</td>
<td>Renal failure acute (e.g. due to interstitial nephritis)</td>
<td>Rhabdomyolysis</td>
<td>Tendon rupture (e.g. Achilles tendon) (see sections 4.3 and 4.4)</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Applies to iv form only: Infusion site reaction (pain, reddening)</td>
<td>Asthenia</td>
<td>Pyrexia</td>
<td>Pain (including pain in back, chest, and extremities)</td>
</tr>
</tbody>
</table>

a Anaphylactic and anaphylactoid reactions may sometimes occur even after the first dose

b Mucocutaneous reactions may sometimes occur even after the first dose

Other undesirable effects which have been associated with fluoroquinolone administration include:
- attacks of porphyria in patients with porphyria

4.9 Overdose

According to toxicity studies in animals or clinical pharmacology studies performed with supra-therapeutic doses, the most important signs to be expected following acute overdose of Tavanic tablets are central nervous system symptoms such as confusion, dizziness, impairment of consciousness, and convulsive seizures, increases in QT interval as well as gastro-intestinal reactions such as nausea and mucosal erosions.

CNS effects including confusional state, convulsion, hallucination, and tremor have been observed in post marketing experience.

In the event of overdose, symptomatic treatment should be implemented. ECG monitoring should be undertaken, because of the possibility of QT interval prolongation. Antacids may be used for protection of gastric mucosa. Haemodialysis, including peritoneal dialysis and CAPD, are not effective in removing levofloxacin from the body. No specific antidote exists.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: quinolone antibacterials, fluoroquinolones, ATC code: J01MA12
Levofloxacin is a synthetic antibacterial agent of the fluoroquinolone class and is the S (-) enantiomer of the racemic active substance ofloxacin.

**Mechanism of action**

As a fluoroquinolone antibacterial agent, levofloxacin acts on the DNA-DNA-gyrase complex and topoisomerase IV.

**PK/PD relationship**

The degree of the bactericidal activity of levofloxacin depends on the ratio of the maximum concentration in serum (Cmax) or the area under the curve (AUC) and the minimal inhibitory concentration (MIC).

**Mechanism of resistance**

Resistance to levofloxacin is acquired through a stepwise process by target site mutations in both type II topoisomerases, DNA gyrase and topoisomerase IV. Other resistance mechanisms such as permeation barriers (common in *Pseudomonas aeruginosa*) and efflux mechanisms may also affect susceptibility to levofloxacin.

Cross-resistance between levofloxacin and other fluoroquinolones is observed. Due to the mechanism of action, there is generally no cross-resistance between levofloxacin and other classes of antibacterial agents.

**Breakpoints**

The EUCAST recommended MIC breakpoints for levofloxacin, separating susceptible from intermediately susceptible organisms and intermediately susceptible from resistant organisms are presented in the below table for MIC testing (mg/l).

**EUCAST clinical MIC breakpoints for levofloxacin (version 2.0, 2012-01-01):**

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Susceptible</th>
<th>Resistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterobacteriaceae</td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>Pseudomonas spp.</em></td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>Acinetobacter spp.</em></td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>Staphylococcus spp.</em></td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>S. pneumoniae</em></td>
<td>≤2 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>Streptococcus A, B, C, G</em></td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
<tr>
<td><em>H. influenzae</em></td>
<td>≤1 mg/l</td>
<td>&gt;1 mg/l</td>
</tr>
<tr>
<td><em>M. catarrhalis</em></td>
<td>≤1 mg/l</td>
<td>&gt;1 mg/l</td>
</tr>
<tr>
<td>Non-species related breakpoints</td>
<td>≤1 mg/l</td>
<td>&gt;2 mg/l</td>
</tr>
</tbody>
</table>

1. The breakpoints for levofloxacin relate to high dose therapy.
2. Low-level fluoroquinolone resistance (ciprofloxacin MICs of 0.12-0.5 mg/l) may occur but there is no evidence that this resistance is of clinical importance in respiratory tract infections with *H. influenzae*.
3. Strains with MIC values above the susceptible breakpoint are very rare or not yet reported. The identification and antimicrobial susceptibility tests on any such isolate must be repeated and if the result is confirmed the isolate must be sent to a reference laboratory. Until there is evidence regarding clinical response for confirmed isolates with MIC above the current resistant breakpoint they should be reported resistant.
4. Breakpoints apply to an oral dose of 500 mg x 1 to 500 mg x 2 and an intravenous dose of 500 mg x 1 to 500 mg x 2.
The prevalence of resistance may vary geographically and with time for selected species and local information on resistance is desirable, particularly when treating severe infections. As necessary, expert advice should be sought when the local prevalence of resistance is such that the utility of the agent in at least some types of infections is questionable.

**Commonly susceptible species**

### Aerobic Gram-positive bacteria

- *Bacillus anthracis*
- *Staphylococcus aureus methicillin-susceptible*
- *Staphylococcus saprophyticus*
- *Streptococci, group C and G*
- *Streptococcus agalactiae*
- *Streptococcus pneumoniae*
- *Streptococcus pyogenes*

### Aerobic Gram-negative bacteria

- *Eikenella corrodens*
- *Haemophilus influenzae*
- *Haemophilus para-influenzae*
- *Klebsiella oxytoca*
- *Moraxella catarrhalis*
- *Pasteurella multocida*
- *Proteus vulgaris*
- *Providencia rettgeri*

### Anaerobic bacteria

- *Peptostreptococcus*

### Other

- *Chlamyophila pneumoniae*
- *Chlamyophila psittaci*
- *Chlamydia trachomatis*

**LEGIONELLA PNEUMOPHILA**

- *Mycoplasma pneumoniae*
- *Mycoplasma hominis*
- *Ureaplasma urealyticum*
Species for which acquired resistance may be a problem

**Aerobic Gram-positive bacteria**

Enterococcus faecalis
Staphylococcus aureus methicillin-resistant*  
Coagulase negative Staphylococcus spp

**Aerobic Gram-negative bacteria**

Acinetobacter baumannii  
Citrobacter freundii  
Enterobacter aerogenes  
Enterobacter cloacae  
Escherichia coli  
Klebsiella pneumoniae  
Morganella morganii  
Proteus mirabilis  
Providencia stuartii  
Pseudomonas aeruginosa  
Serratia marcescens

**Anaerobic bacteria**

Bacteroides fragilis

**Inherently Resistant Strains**

**Aerobic Gram-positive bacteria**

Enterococcus faecium

* Methicillin-resistant S. aureus are very likely to possess co-resistance to fluoroquinolones, including levofloxacin.

5.2 Pharmacokinetic properties

Absorption

Orally administered levofloxacin is rapidly and almost completely absorbed with peak plasma concentrations being obtained within 1 - 2 h. The absolute bioavailability is 99 - 100%.

Food has little effect on the absorption of levofloxacin.

Steady state conditions are reached within 48 hours following a 500 mg once or twice daily dosage regimen.
Distribution

Approximately 30 - 40% of levofloxacin is bound to serum protein.

The mean volume of distribution of levofloxacin is approximately 100 l after single and repeated 500 mg doses, indicating widespread distribution into body tissues.

Penetration into tissues and body fluids

Levofloxacin has been shown to penetrate into bronchial mucosa, epithelial lining fluid, alveolar macrophages, lung tissue, skin (blister fluid), prostatic tissue and urine. However, levofloxacin has poor penetration into cerebro-spinal fluid.

Biotransformation

Levofloxacin is metabolised to a very small extent, the metabolites being desmethyl-levofloxacin and levofloxacin N-oxide. These metabolites account for <5% of the dose and are excreted in urine. Levofloxacin is stereochemically stable and does not undergo chiral inversion.

Elimination

Following oral and intravenous administration of levofloxacin, it is eliminated relatively slowly from the plasma (t\(_{1/2}\) : 6 - 8 h). Excretion is primarily by the renal route (>85% of the administered dose).

The mean apparent total body clearance of levofloxacin following a 500 mg single dose was 175 +/-29.2 ml/min.

There are no major differences in the pharmacokinetics of levofloxacin following intravenous and oral administration, suggesting that the oral and intravenous routes are interchangeable.

Linearity

Levofloxacin obeys linear pharmacokinetics over a range of 50 to 1000 mg.

Special populations

Subjects with renal insufficiency

The pharmacokinetics of levofloxacin are affected by renal impairment. With decreasing renal function renal elimination and clearance are decreased, and elimination half-lives increased as shown in the table below:

<table>
<thead>
<tr>
<th>Cl(_{cr}) [ml/min]</th>
<th>&lt;20</th>
<th>20 - 49</th>
<th>50 – 80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cl(_{R}) [ml/min]</td>
<td>13</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>t(_{1/2}) [h]</td>
<td>35</td>
<td>27</td>
<td>9</td>
</tr>
</tbody>
</table>

Elderly subjects
There are no significant differences in levofloxacin pharmacokinetics between young and elderly subjects, except those associated with differences in creatinine clearance.

**Gender differences**

Separate analysis for male and female subjects showed small to marginal gender differences in levofloxacin pharmacokinetics. There is no evidence that these gender differences are of clinical relevance.

### 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of single dose toxicity, repeated dose toxicity, carcinogenic potential and toxicity to reproduction and development.

Levofloxacin caused no impairment of fertility or reproductive performance in rats and its only effect on fetuses was delayed maturation as a result of maternal toxicity.

Levofloxacin did not induce gene mutations in bacterial or mammalian cells but did induce chromosome aberrations in Chinese hamster lung cells in vitro. These effects can be attributed to inhibition of topoisomerase II. In vivo tests (micronucleus, sister chromatid exchange, unscheduled DNA synthesis, dominant lethal tests) did not show any genotoxic potential. Studies in the mouse showed levofloxacin to have phototoxic activity only at very high doses. Levofloxacin did not show any genotoxic potential in a photomutagenicity assay, and it reduced tumour development in a photocarcinogenity study.

In common with other fluoroquinolones, levofloxacin showed effects on cartilage (blistering and cavities) in rats and dogs. These findings were more marked in young animals.

### 6 PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

- **Tavanic 250 mg film-coated tablets** contain the following excipients for a weight of 315 mg:
  - Tablet core:
    - Crospovidone
    - Hypromellose
    - Microcrystalline cellulose
    - Sodium stearyl fumarate.
  - Tablet coating:
    - Hypromellose
    - Titanium dioxide E 171
    - Talc
    - Macrogol
    - Yellow ferric oxide E 172
    - Red ferric oxide E 172

- **Tavanic 500 mg film-coated tablets** contain the following excipients for a weight of 630 mg:
  - Tablet core:
    - Crospovidone
    - Hypromellose
    - Microcrystalline cellulose
    - Sodium stearyl fumarate.
  - Tablet coating:
    - Hypromellose
    - Titanium dioxide E 171
    - Talc
    - Macrogol
    - Yellow ferric oxide E 172
    - Red ferric oxide E 172

#### 6.2 Incompatibilities

Not applicable.

#### 6.3 Shelf life
5 years.

6.4  Special Precautions for Storage

This medicinal product does not require any special storage conditions.

6.5  Nature and Contents of Container

PVC/Aluminium blisters containing film-coated tablets.

Pack sizes for 250 mg tablets: 1, 3, 5, 7, 10, 50 and 200 as commercially available.
Pack sizes for 500 mg tablets: 1, 5, 7, 10, 50, 200 and 500 as commercially available.

Not all pack sizes may be marketed.

6.6  Special precautions for disposal

A score line allows adaptation of the dose in patients with impaired renal function.
As for all medicines, any unused medicinal product should be disposed of accordingly and in compliance with local environmental regulations.

7  MARKETING AUTHORITYHOLDER

[To be completed nationally]

8  MARKETING AUTHORIZATION NUMBER(S)

[To be completed nationally]

9  DATE OF FIRST AUTHORIZATION/RENEWAL OF THE AUTHORIZATION

Date of first authorisation: [To be completed nationally]
Date of last renewal: [To be completed nationally]

10  DATE OF REVISION OF THE TEXT

[To be completed nationally]
LABELLING
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

CARDBOARD / BOX

10. NAME OF THE MEDICINAL PRODUCT

Tavanic 250 mg film-coated tablets
Tavanic 500 mg film-coated tablets
levofloxacin

11. STATEMENT OF ACTIVE SUBSTANCE(S)

Each film-coated tablet contains 250 mg of levofloxacin as levofloxacin hemihydrate
Each film-coated tablet contains 500 mg of levofloxacin as levofloxacin hemihydrate

12. LIST OF EXCIPIENTS

13. PHARMACEUTICAL FORM AND CONTENTS

For 250 mg tablet:
1 film-coated tablet
3 film-coated tablets
5 film-coated tablets
7 film-coated tablets
10 film-coated tablets
50 film-coated tablets
200 film-coated tablets

For 500 mg tablet:
1 film-coated tablet
5 film-coated tablets
7 film-coated tablets
10 film-coated tablets
50 film-coated tablets
200 film-coated tablets
500 film-coated tablets

14. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use
Oral use

15. 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
### 16. OTHER SPECIAL WARNING(S), IF NECESSARY

Take as directed by your doctor

### 17. EXPIRY DATE

EXP

### 18. SPECIAL STORAGE CONDITIONS

### 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 AUTHORIZATION HOLDER

[To be completed nationally]

### 12. MARKETING AUTHORIZATION NUMBER(S)

[To be completed nationally]

### 13. BATCH NUMBER

Batch

### 16. GENERAL CLASSIFICATION FOR SUPPLY

[To be completed nationally]

### 17. INSTRUCTIONS ON USE

[To be completed nationally]

### 16. INFORMATION IN BRAILLE

[To be completed nationally]
<table>
<thead>
<tr>
<th>MINIMUM PARTICULARS TO APPEAR ON BLISTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC/ALUMINIUM FOIL / BLISTER</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1. NAME OF THE MEDICINAL PRODUCT</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Tavanic 250 mg film-coated tablets</td>
</tr>
<tr>
<td>Tavanic 500 mg film-coated tablets</td>
</tr>
<tr>
<td>levofloxacin</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2. NAME OF THE MARKETING AUTHORITY HOLDER</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>[To be completed nationally]</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>3. EXPIRY DATE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>EXP</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4. BATCH NUMBER</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Batch</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>5. OTHER</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
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.

What is in this leaflet
1. What Tavanic tablets are and what they are used for
2. What you need to know before you take Tavanic tablets
3. How to take Tavanic tablets
4. Possible side effects
5. How to store Tavanic tablets
6. Contents of the pack and other information

1. What Tavanic tablets are and what they are used for

The name of your medicine is Tavanic tablets. Tavanic tablets contain a medicine called levofloxacin. This belongs to a group of medicines called antibiotics. Levofloxacin is a ‘quinolone’ antibiotic. It works by killing the bacteria that cause infections in your body.

Tavanic tablets can be used to treat infections of the:

- Sinuses
- Lungs, in people with long-term breathing problems or pneumonia
- Urinary tract, including your kidneys or bladder
- Prostate gland, where you have a long lasting infection
- Skin and underneath the skin, including muscles. This is sometimes called ‘soft tissue’

In some special situations, Tavanic tablets may be used to lessen the chances of getting a pulmonary disease named anthrax or worsening of the disease after you are exposed to the bacteria causing anthrax.

2. What you need to know before you take Tavanic tablets

Do not take this medicine and tell your doctor if:

- You are allergic to levofloxacin, any other quinolone antibiotic such as moxifloxacin, ciprofloxacin or ofloxacin or any of the other ingredients of this medicine (listed in section 6)
Signs of an allergic reaction include: a rash, swallowing or breathing problems, swelling of your lips, face, throat or tongue
- You have ever had epilepsy
- You have ever had a problem with your tendons such as tendonitis that was related to treatment with a ‘quinolone antibiotic’. A tendon is the cord that joins your muscle to your skeleton
- You are a child or a growing teenager
- You are pregnant, might become pregnant or think you may be pregnant
- You are breast-feeding

Do not take this medicine if any of the above applies to you. If you are not sure, talk to your doctor or pharmacist before taking Tavanic.

**Warnings and precautions**

**Talk to your doctor or pharmacist before taking your medicine if:**
- You are 60 years of age or older
- You are using corticosteroids, sometimes called steroids (see section “Other medicines and Tavanic”)
- You have ever had a fit (seizure)
- You have had damage to your brain due to a stroke or other brain injury
- You have kidney problems
- You have something known as ‘glucose – 6 – phosphate dehydrogenase deficiency’. You are more likely to have serious problems with your blood when taking this medicine
- You have ever had mental health problems
- You have ever had heart problems: caution should be taken when using this kind of medicine, if you were born with or have family history of prolonged QT interval (seen on ECG, electrical recording of the heart), have salt imbalance in the blood (especially low level of potassium or magnesium in the blood), have a very slow heart rhythm (called ‘bradycardia’), have a weak heart (heart failure), have a history of heart attack (myocardial infarction), you are female or elderly or you are taking other medicines that result in abnormal ECG changes (see section “Taking other medicines”).
- You are diabetic
- You have ever had liver problems
- You have myasthenia gravis.

If you are not sure if any of the above applies to you, talk to your doctor or pharmacist before taking Tavanic.

**Other medicines and Tavanic**

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. This is because Tavanic can affect the way some other medicines work. Also some medicines can affect the way Tavanic work.

**In particular, tell your doctor if you are taking any of the following medicines. This is because it can increase the chance of you getting side effects, when taken with Tavanic:**
- Corticosteroids, sometimes called steroids – used for inflammation. You may be more likely to have inflammation and/or rupture of your tendons.
- Warfarin - used to thin the blood. You may be more likely to have a bleed. Your doctor may need to take regular blood tests to check how well your blood can clot.
- Theophylline - used for breathing problems. You are more likely to have a fit (seizure) if taken with Tavanic
- Non-steroidal anti-inflammatory drugs (NSAIDS) - used for pain and inflammation such as aspirin, ibuprofen, fenbufen, ketoprofen and indomethacin. You are more likely to have a fit (seizure) if taken with Tavanic
- Ciclosporin - used after organ transplants. You may be more likely to get the side effects of ciclosporin
Medicines known to affect the way your heart beats. This includes medicines used for abnormal heart rhythm (antiarrhythmics such as quinidine, hydroquinidine, disopyramide, sotalol, dofetilide, ibutilide and amiodarone), for depression (tricyclic antidepressants such as amitriptyline and imipramine), for psychiatric disorders (antipsychotics), and for bacterial infections (‘macrolide’ antibiotics such as erythromycin, azithromycin and clarithromycin).

- Probencid – used for gout and cimetidine – used for ulcers and heartburn. Special care should be taken when taking either of these medicines with Tavanic. If you have kidney problems, your doctor may want to give you a lower dose.

Do not take Tavanic tablets at the same time as the following medicines. This is because it can affect the way Tavanic tablets work:

- Iron tablets (for anemia), zinc supplements, magnesium or aluminum-containing antacids (for acid or heartburn), didanosine, or sucralfate (for stomach ulcers). See section 3 “If you are already taking iron tablets, zinc supplements, antacids, didanosine or sucralfate” below.

Urine tests for opiates
Urine tests may show ‘false-positive’ results for strong painkillers called ‘opiates’ in people taking Tavanic. If your doctor has prescribed a urine test, tell your doctor you are taking Tavanic.

Tuberculosis tests
This medicine may cause “false negative” results for some tests used in laboratory to search for the bacteria causing tuberculosis.

Pregnancy and breast-feeding
Do not take this medicine if:
- You are pregnant, might become pregnant or think you may be pregnant
- You are breast-feeding or planning to breast-feed

DRIVING AND USING MACHINES
You may get side effects after taking this medicine, including feeling dizzy, sleepy, a spinning feeling (vertigo) or changes to your eyesight. Some of these side effects can affect you being able to concentrate and your reaction speed. If this happens, do not drive or carry out any work that requires a high level of attention.

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

Taking this medicine
- Take this medicine by mouth
- Swallow the tablets whole with a drink of water
- The tablets may be taken during meals or at any time between meals

Protect your skin from sunlight
Keep out of direct sunlight while taking this medicine and for 2 days after you stop taking it. This is because your skin will become much more sensitive to the sun and may burn, tingle or severely blister if you do not take the following precautions:
- Make sure you use high factor sun cream
- Always wear a hat and clothes which cover your arms and legs
- Avoid sun beds
If you are already taking iron tablets, zinc supplements, antacids, didanosine or sucralfate
- Do not take these medicines at the same time as Tavanic. Take your dose of these medicines at least 2 hours before or after Tavanic tablets.

How much to take
- Your doctor will decide on how many Tavanic tablets you should take
- The dose will depend on the type of infection you have and where the infection is in your body.
- The length of your treatment will depend on how serious your infection is.
- If you feel the effect of your medicine is too weak or strong, do not change the dose yourself, but ask your doctor.

Adults and the elderly

Sinuses infection
- Two tablets of Tavanic 250 mg, once each day
- Or, one tablet of Tavanic 500 mg, once each day

Lungs infection, in people with long-term breathing problems
- Two tablets of Tavanic 250 mg, once each day
- Or, one tablet of Tavanic 500 mg, once each day

Pneumonia
- Two tablets of Tavanic 250 mg, once or twice each day
- Or, one tablet of Tavanic 500 mg, once or twice each day

Infection of urinary tract, including your kidneys or bladder
- One or two tablets of Tavanic 250 mg, each day
- Or, 1/2 or one tablet of Tavanic 500 mg, each day

Prostate gland infection
- Two tablets of Tavanic 250 mg, once each day
- Or, one tablet of Tavanic 500 mg, once each day

Infection of skin and underneath the skin, including muscles
- Two tablets of Tavanic 250 mg, once or twice each day
- Or, one tablet of Tavanic 500 mg, once or twice each day

Adults and the elderly with kidney problems
Your doctor may need to give you a lower dose.

Children and adolescents
This medicine must not be given to children or teenagers.

If you take more Tavanic tablets than you should
If you accidentally take more tablets than you should, tell a doctor or get other medical advice straight away. Take the medicine pack with you. This is so the doctor knows what you have taken. The following effects may happen: convulsive fits (seizures), feeling confused, dizzy, less conscious, having tremor and heart problems - leading to uneven heart beats as well as feeling sick (nausea) or having stomach burning.

If you forget to take Tavanic tablets
If you forgot to take a dose, take it as soon as you remember unless it is nearly time for your next dose. Do not double-up the next dose to make up for the missed dose.

If you stop taking Tavanic tablets
Do not stop taking Tavanic just because you feel better. It is important that you complete the course of tablets that your doctor has prescribed for you. If you stop taking the tablets too soon, the infection may return, your condition may get worse or the bacteria may become resistant to the medicine.

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. These effects are normally mild or moderate and often disappear after a short time.

**Stop taking Tavanic and see a doctor or go to a hospital straight away if you notice the following side effect:**

**Very rare** (may affect up to 1 in 10,000 people)
- You have an allergic reaction. The signs may include: a rash, swallowing or breathing problems, swelling of your lips, face, throat, or tongue

**Stop taking Tavanic and see a doctor straight away if you notice any of the following serious side effects - you may need urgent medical treatment:**

**Rare** (may affect up to 1 in 1,000 people)
- Watery diarrhoea which may have blood in it, possibly with stomach cramps and a high temperature. These could be signs of a severe bowel problem
- Pain and inflammation in your tendons or ligaments, which could lead to rupture. The Achilles tendon is affected most often
- Fits (convulsions)

**Very rare** (may affect up to 1 in 10,000 people)
- Burning, tingling, pain or numbness. These may be signs of something called ‘neuropathy’

**Other:**
- Severe skin rashes which may include blistering or peeling of the skin around your lips, eyes, mouth, nose and genitals
- Loss of appetite, skin and eyes becoming yellow in colour, dark-coloured urine, itching, or tender stomach (abdomen). These may be signs of liver problems which may include a fatal failure of the liver

If your eyesight becomes impaired or if you have any other eye disturbances whilst taking Tavanic, consult an eye specialist immediately.

**Tell your doctor if any of the following side effects gets serious or lasts longer than a few days:**

**Common** (may affect up to 1 in 10 people)
- Sleeping problems
- Headache, feeling dizzy
- Feeling sick (nausea, vomiting) and diarrhoea
- Increase in the level of some liver enzymes in your blood

**Uncommon** (may affect up to 1 in 100 people)
- Changes in the number of other bacteria or fungi, infection by fungi named Candida, which may need to be treated
- Changes in the number of white blood cells shown up in the results of some blood tests (leukopenia, eosinophilia)
- Feeling stressed (anxiety), feeling confused, feeling nervous, feeling sleepy, trembling, a spinning feeling (vertigo)
- Shortness of breath (dyspnoea)
- Changes in the way things taste, loss of appetite, stomach upset or indigestion (dyspepsia), pain in your stomach area, feeling bloated (flatulence) or constipation
- Itching and skin rash, severe itching or hives (urticaria), sweating too much (hyperhidrosis)
- Joint pain or muscle pain
- Blood tests may show unusual results due to liver (bilirubin increased) or kidney (creatinine increased) problems
- General weakness

**Rare** (may affect up to 1 in 1,000 people)
- Bruising and bleeding easily due to a lowering in the number of blood platelets (thrombocytopenia)
- Low number of white blood cells (neutropenia)
- Exaggerated immune response (hypersensitivity)
- Lowering of your blood sugar levels (hypoglycaemia). This is important for people that have diabetes.
- Seeing or hearing things that are not there (hallucinations, paranoia), change in your opinion and thoughts (psychotic reactions) with a risk of having suicidal thoughts or actions
- Feeling depressed, mental problems, feeling restless (agitation), abnormal dreams or nightmares
- Tingly feeling in your hands and feet (paraesthesia)
- Problems with your hearing (tinnitus) or eyesight (blurred vision)
- Unusual fast beating of your heart (tachycardia) or low blood pressure (hypotension)
- Muscle weakness. This is important in people with myasthenia gravis (a rare disease of the nervous system).
- Changes in the way your kidney works and occasional kidney failure which may be due to an allergic kidney reaction called interstitial nephritis.
- Fever

**Other side effects include:**
- Lowering in red blood cells (anemia): this can make the skin pale or yellow due to damage of the red blood cells; lowering in the number of all types of blood cells (pancytopenia)
- Fever, sore throat and a general feeling of being unwell that does not go away. This may be due to a lowering in the number of white blood cells (agranulocytosis).
- Loss of circulation (anaphylactic like shock)
- Increase of your blood sugar levels (hyperglycaemia) or lowering of your blood sugar levels leading to coma (hypoglycaemic coma). This is important for people that have diabetes.
- Changes in the way things smell, loss of smell or taste (parosmia, anosmia, ageusia)
- Problems moving and walking (dyskinesia, extrapyramidal disorders)
- Temporary loss of consciousness or posture (syncope)
- Temporary loss of vision
- Impairment or loss of hearing
- Abnormal fast heart rhythm, life-threatening irregular heart rhythm including cardiac arrest, alteration of the heart rhythm (called ‘prolongation of QT interval’, seen on ECG, electrical activity of the heart)
- Difficulty breathing or wheezing (bronchospasm)
- Allergic lung reactions
- Pancreatitis
- Inflammation of the liver (hepatitis)
- Increased sensitivity of your skin to sun and ultraviolet light (photosensitivity)
- Inflammation of the vessels that carry blood around your body due to an allergic reaction (vasculitis)
- Inflammation of the tissue inside the mouth (stomatitis)
- Muscle rupture and muscle destruction (rhabdomyolysis)
- Joint redness and swelling (arthritis)
- Pain, including pain in the back, chest and extremities
• Attacks of porphyria in people who already have porphyria (a very rare metabolic disease)
• Persistent headache with or without blurred vision (benign intracranial hypertension)

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet.

5. How to store Tavanic tablets

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

This medicine does not require any special storage conditions but it is best to keep Tavanic tablets in the original strips and box in a dry place.

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

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

6. Contents of the pack and other information

What Tavanic tablets contain
The active ingredient is levofloxacin. Each tablet of Tavanic 250 mg tablets contains 250 mg of levofloxacin and each tablet of Tavanic 500 mg tablets contains 500 mg of levofloxacin.

The other ingredients are:
• For the tablet core: crospovidone, hypromellose, microcrystalline cellulose and sodium stearyl fumarate
• For the tablet coating: hypromellose, titanium dioxide (E 171), talc, macrogol, yellow ferric oxide (E 172) and red ferric oxide (E 172)

What Tavanic tablets look like and contents of the pack
Tavanic tablets are film-coated tablets for oral use. The tablets are oblong and scored with a pale yellowish-white to reddish-white colour.
For Tavanic 250 mg, the tablets are provided in pack sizes of 1, 3, 5, 7, 10, 50 and 200 tablets.
For Tavanic 500 mg, the tablets are provided in pack sizes of 1, 5, 7, 10, 50, 200 and 500 tablets. Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer

Marketing Authorisation Holder
[To be completed nationally]

Manufacturer
[To be completed nationally]

This medicine is authorised in the Member States of the EEA under the following names:
Tavanic

This leaflet does not contain all the information about your medicine. If you have any questions or are not sure about anything, ask your doctor or pharmacist.
This leaflet was last revised in MM/YYYY
[To be completed nationally]