SUMMARY OF PRODUCT CHAI	RACTERISTICS	

1. Name of the finished pharmaceutical product

Trihexyphenidyl hydrochloride tablet 5mg

2. Qualitative and quantitative composition for excipients

The composition of Trihexyphenidyl Hydrochloride tablet is shown as the table below:

Ingredients				
Trihexyphenidyl				
Hydrochloride				
Microcrystalline cellulose				
PH102				
sodium starch glycolate				
Magnesium stearate				

3. Pharmaceutical form

Tablet

4. Clinical particulars

4.1 Therapeutic indications

This drug is indicated as an adjunct in the treatment of all forms of parkinsonism (Postencephalitic, arteriosclerotic, and idiopathic). It is often useful as adjuvant therapy when treating these forms of parkinsonism with levodopa. Additionally, it is indicated for the control of extrapyramidal disorders caused by central nervous system drugs such as the dibenzoxazepines, phenothiazines, thioxanthenes, and butyrophenones.

4.2 Posology and method of administration

Dosage should be individualized. The initial dose should be low and then increased gradually, especially in patients over 60 years of age. Whether trihexyphenidyl HCl may best be give before or later meals should be determined by the way the patients reacts. Postencephalitic patients, who are usually more prone to excessive salivation, may prefer to take it after meals and may, in addition, require small amounts of atropine which under such circumstances, is sometimes an effective adjuvant. If trihexyphenidyl HCl tends to dry the mouth excessively, it may be better to take it before meal, unless it causes nausea. If taken after meals, the thirst sometimes induce can be allayed by mint candies, chewing gum or water.

Trihexyphenidyl hydrochloride in idiopathic parkinsonism

As initial therapy for parkinsonism, 1mg may be administered the first day. The dose may then be invreased by 2mg increments at intervals of three to five days, until a total of 6 to 10mg is given daily. The total daily dose will depend upon what is found to be the optimal level. Many patients derive maximum benefit from this daily total of 6 to 10mg, but some patients, chiefly those in the postencephalitic group, may require a total daily dose of 12 to 15mg.

Trihexyphenidyl hydrochloride in drug-induces parkinsonism

The size and frequency of dose of trihexyphenidyl hydrochloride needed to control extrapyramidal reactions to commonly employed tranquilizers, notably the phenothiazines, thioxanthenes, and butyrophenones, must ne determined empirically. The total daily dosage usually ranges between 5 and 15 mg. Although, in some cases, these reactions have been satisfactorily controlled on as little as 1mg daily. It may be advisable to commence therapy with a single 1 mg dose. If the extrapyramidal manifextations are not controlled in a few hours, the subsequent doses may be progressively increased until satisfactory control is

achieved. Satisfactory control may sometimes be more rapidly achieved by temporarily reducing the dosage of the tranquilizer on instituting trihexyphenidyl hydrochloride therapy and then adjusting dosage of both drugs until the desired ataractic effect is retained without onset of extrapyramidal reactions.

It is sometimes possible to maintain the patient on a reduced trihexyphenidyl hydrochloride dosage after the reactions have remined under control for several days. Instances have been reported in which these reactions have remained under control for several days. Instances have been reported in which these reactions have remained in remission for long periods after trihexyphenidyl hydrochloride therapy was discontinued.

Concomitant use of trihexyphenidyl hydrochloride with levodopa

When trihexyphenidyl hydrochloride is used concomitantly with levodopa, the usual dose of each may need to be reduced. Careful adjustment is necessary, depending on side effects and degree of symptom control. Trihexyphenidyl hydrochloride dosage of 3 to 6 mg daily, in divided doses, is usually adequate.

Concomitant use of trihexyphenidyl hydrochloride with other parasympathetic inhibitors Trihexyphenidyl hydrochloride may be substituted, in whole or in part, for other parasympathetic inhibitors. The usual technique is partial substitution initially, with progressive reduction in the other medication as the dose of trihexyphenidyl hydrochloride is increased.

Trihexyphenidyl hydrochloride tablets. The total daily intake of trihexyphenidyl hydrochloride tablets is tolerated best if divided into 3 doses and taken at mealtime. High doses(>10mg daily) maybe divided into 4 parts, with 3 doses administered at meal times and the fourth at bedtime.

4.3 Contraindications

Hypersensitivity to trihexyphenidyl or any of the other ingredients.

4.4 Special warnings and special precautions for use

Patients to be treated with trihexyphenidyl hydrochloride should have a gonioscope evaluation and close monitoring of intraocular pressure at regular periodic intervals. Although trihexyphenidyl hydrochloride is not contraindicated for patients with cardiac, liver, or kidney disorders, or with hypertension, such patients should be maintained under close observation.

Since the use of trihexyphenidyl hydrochloride may, in some cases, continue indefinitely and since it has atropine-like properties, patients should be subjected to constant and careful long-term observation to avoid allegic and other untoward reactions. In as much as trihexyphenidyl hydrochloride possesses some parasympatholytic activity, it should be used with caution in patients with glaucoma, obstructive disease of the gastrointestinal or genitourinary tracts, and in elderly males with possible prostatic hypertrophy geriatric patients particularly over the age of 60, frequently develop increased sensitivity to the actions of drugs of this type, and hence, require strict dosage regulation. Incipient glaucoma may be precipitated by parasympatholytic drugs such as trihexyphenidyl hydrochloride.

Tardive dyskinesia may appear in some patients on long term therapy with antipsychotic drugs or may occur after therapy when these drugs have been discontinued. Antiparkinson agents do not alleviate the symptoms of tardive dyskinesia and in some instances may aggravate them. However, parkinsonism and tardive dyskinesia often coexist in patients receiving chronic neuroleptic treatment, and anticholinergic therapy with trihexyphenidyl hydrochloride may relieve some of these parkinsonism symptoms.

4.5 Interaction with other FPPs and other forms of interaction

Extra care should be taken when trihexyphenidyl is given concomitantly with phenothiazines,

clozapine, antihistamines, disopyramide, nefopam and amantadine because of the possibility of increased antimuscarinic side-effects.

Synergy has been reported between trihexyphenidyl and tricyclic antidepressants, probably because of an additive effect at the receptor site. This can cause dry mouth, constipation and blurred vision. In the elderly, there is a danger of precipitating urinary retention, acute glaucoma or paralytic ileus.

Monoamine oxidase inhibitors can interact with concurrently administered anticholinergic agents including trihexyphenidyl. This can cause dry mouth, blurred vision, urinary hesitancy, urinary retention and constipation.

In general, anticholinergic agents should be used with caution in patients who are receiving tricyclic antidepressants or monoamine oxidase inhibitors. In patients who are already on antidepressant therapy the dose of trihexyphenidyl should be initially reduced and the patient reviewed regularly.

Trihexyphenidyl may be antagonistic with the actions of metoclopramide and domperidone on gastro-intestinal function.

The absorption of levodopa may possibly be reduced when used in conjunction with trihexyphenidyl.

Trihexyphenidyl may be antagonistic with the actions of parasympathomimetics.

4.6 Pregnancy and lactation

Pregnancy: There is inadequate information regarding the use of trihexyphenidyl in pregnancy. Animal studies are insufficient with regard to effects on pregnancy, embryonal/foetal development, parturition and postnatal development. The potential risk for humans is unknown. Trihexyphenidyl should not be used during pregnancy unless clearly necessary.

Lactation: It is unknown whether trihexyphenidyl is excreted in human breast milk. The excretion of trihexyphenidyl in milk has not been studies in animals. Infants may be very sensitive to the effects of antimuscarinic medications. Trihexyphenidyl should not be used during breast-feeding.

4.7 Effects on ability to drive and use machines

These tablets can cause some people to feel dizzy or drowsy. If you are affected do not drive or operate machinery.

4.8 Undesirable effects

Minor side effects, such as dryness of the mouth, blurring of vision, dizziness, mild nausea, or nervousness, will be experienced by 30 to 50 percent of all patients. These sensations, however, are much less troublesome with trihexyphenidyl hydrochloride than with belladonna alkaloids and are usually less disturbing than unalleviated parkinsonism. Such reactions tend to become less pronounced, and even to disappear, as treatment continues. Even before these reactions have remitted spontaneously, they may often be controlled by careful adjustment of the dosage form, amount of drug, or interval between doses.

Isolated instances of suppurative parotitis secondary to excessive dryness of the mouth, skin rashes, dilatation of the colon, paralytic ileus, and certain psychiatric manifestations such as delusions and hallucinations, plus one doubtful case of paranoia all of which may occur with any of the atropine-like drugs, have been rarely reported with trihexyphenidyl hydrochloride.

Patients with arteriosclerosis or with a history of idiosyncrasy to other drugs may exhibit reactions of mental confusion, agitation, disturbed behavior, or nausea and vomiting. Such patients should be allowed to develop a tolerance through the initial administration of a small

dose and gradual increase in dose until an effective level is reached. If a severe reaction should occur, administration of the drug should be discontinued for a few days and then resumed at a lower dosage. Psychiatric disturbances can result from indiscriminate use(leading to overdose) to sustain continued euphoria.

Potential side effects associated with the use of any atropine-like drugs include constipation, drowsiness, urinary hesitancy or retention, tachycardia, dilation of the pupil, increased intraocular tension, weakness, vomiting, and headache.

The occurrence of angle-closure glaucoma due to long-term treatment with trihexyphenidyl hydrochloride has been reported.

5. Pharmcological properties

5.1. Pharmacodynamics properties

Trihexyphenidyl hydrochloride is an anticholinergic agent. It is an antispasmodic drug which exerts a direct inhibitory effect on the parasympathetic nervous system. It diminishes salivation, increases the heart rate, dilates the pupils and reduces spasm of smooth muscle.

5.2. Pharmacokinetic properties

Trihexyphenidyl hydrochloride is well absorbed from the gastrointestinal tract. It disappears rapidly from the plasma and tissues and does not accumulate in the body during continued administration of conventional doses.

5.3. Preclinical safety data

None stated.

6. Pharmaceutical particulars

6.1 List of excipients

Excipients for Trihexyphenidyl hydrochloride tablet 5mg:

Excipients			
Microcrystalline cellulose PH102			
Sodium starch glycolate			
Magnesium stearate			

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 months from the date of manufacture.

6.4 Special precautions for storage

Do not store above 30°C. Protect from moisture and light. Keep out of the reach and sight of children.

6.5 Nature and contents of container

15 tablets in a blister, and such 10 or 2 blisters in a carton

6.6 Instructions for use and handling

Protect from light. Keep out of reach of children.

7. Marketing authorization holder

Name: Humanwell Pharmaceutical Ethiopia PLC.

Address: Tuleffa kebele, Hageremariam Kessem worda, Northern shoa zone Amara Region, Ethiopia

Tel: +251 903666222 or +251 908888860

E-mail: chengpeng@renfu.com.cn or renboshi@renfu.com.cn

8. Numbers in the national register of finished pharmaceutical products

Not applicable.

9.Date of first authorization/renewal of the authorization

Not applicable. 10. Date of revision the text Not applicable