वर्ष : ७, अंक : १, २०८१ भाद्र - २०८१ माघ

पानस प्रवाह

PANAS PHARMACEUTICALS

THE LAMP OF LIFE

पानस प्रवाह

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Highlights

Message From The Executive Chairman

The pharmaceutical industry in Nepal is now dealing with a variety of issues. Because of imported medications, their market is crowded. The medications are both imported and produced in Nepal. As a result, overseas pharmaceutical companies are competing with Nepalese manufacturers. Nepalese pharmaceutical companies are unable to grow their product line and market due to the government's confusing policies regarding the import of medications. By monitoring these claims, the Nepali government should play a crucial part in preserving the country's pharmaceutical sector. Importing medications from foreign companies requires specific regulations and guidelines. Only medications that cannot be manufactured or formulated in Nepal should be allowed to be imported by the government. The government ought to levy more taxes on the goods produced by international pharmaceutical firms.

Dr. Ramesh Kumar Shrestha

पानस अठार वर्षमा प्रवेश

फोटो : पानस प्रवाह

पानस प्रवाह

मध्य तथा सुदुरपश्चिम क्षेत्रकै पहिलो औषधि उत्पादक कम्पनीको रुपमा चिनिने पानस फर्मास्युटिकल्स प्रा.लि. १८ वर्षमा प्रवेश गरेको छ।

भाद्र २५ गते मंगलबार प्रा.लि.ले आफ्नो १८ औं स्थापना दिवश (कम्पनी डे) नेपालगन्जस्थित सुनाखरी रेष्टुरेन्टको शभाकक्षमा भव्यताका साथ मनाएको प्रा.लि.का प्रवन्ध निर्देशक माधव प्रसाद अधिकारीले जानकारी दिनुभयो।

प्रवन्ध निर्देशक अधिकारीका अनुसार सो अवसरमा प्रा.लिका कर्मचारीहरुले विविध खेल खेल्नुका साथै थारु सांस्कृतिक नृत्य, गायन तथा कविता वाचन गरेका थिए।

कार्यक्रममा आर्थिक वर्ष २०८०/८१ को कार्य सम्पादन मूल्याकंनको आधारमा उत्कृष्ट हुने कर्मचारीहरुलाई पुरस्कार तथा प्रमाण-पत्र वितरण गरिएको थियो।

प्रा.लि.का कार्यकारी अध्यक्ष डा. रमेश कुमार श्रेष्ठको अध्यक्षतामा आयोजित उक्त कार्यक्रममा वित्त निर्देशक श्याम कुमार शर्मा, बजार निर्देशक हरिगोपाल पौडेल, बोर्ड अफ डाइरेक्टर डा. सन्तोष कुमार शर्मा, बोर्डका सल्लाहकार डा. सुरेश कनोडिया, प्रभात घिमिरे, पुरन प्रधान लगायतको उपस्थिति रहेको थियो।

Continued on Page No. : 10

CARLOS H50

(Losartan Potassium & Hydrochlorothiazide Tablets IP

Mr. Atif Hussain Halwai
Asst. Manager-R & D

DESCRIPTION:

Losartan potassium/Hydrochlorothiazide is a combination of an angiotensin II receptor antagonist (losartan) and a diuretic (hydrochlorothiazide). Angiotensin II is a substance produced in the body which binds to receptors in blood vessels, causing them to tighten. This results in an increase in blood pressure. Losartan prevents the binding of angiotensin II to these receptors, causing the blood vessels to relax which in turn lowers the blood pressure. Hydrochlorothiazide is a "water pill" that causes you to make more urine, which helps your body get rid of extra salt and water. This also helps to reduce blood pressure

THERAPEUTIC INDICATION

Losartan Potassium / Hydrochlorothiazide is indicated for the treatment of essential hypertension in patients whose blood pressure is not adequately controlled on Losartan or hydrochlorothiazide alone.

DOSAGE AND METHOD OF ADMINISTRATION:

Recommended Dosing

Always take this medicine exactly as your doctor has told you. Your doctor will decide on the appropriate dose of Losartan potassium/Hydrochlorothiazide depending on your condition and whether you are taking other medicines. It is important to continue taking Losartan potassium/ Hydrochlorothiazide for as long as your doctor prescribes it in order to maintain smooth control of your blood pressure.

The recommended dose of Losartan potassium & Hydrochlorothiazide for most patients with high blood pressure is 1 tablet of Losartan potassium & Hydrochlorothiazide 50mg &12.5mg per day to control blood pressure over the 24-hour period. This can be increased to 2 tablets once daily of Losartan potassium & Hydrochlorothiazide 50mg &12.5mg or changed to 1 tablet daily of Losartan Potassium & Hydrochlorothiazide 100mg & 25mg (a stronger strength) per day. The maximum daily dose is 2 tablets per day of Losartan potassium & Hydrochlorothiazide 50mg & 12.5mg or 1 tablet daily of Losartan potassium & Hydrochlorothiazide 100mg & 25mg. The dosage strength of Losartan potassium & Hydrochlorothiazide 100mg & 12.5mg is available for those patients titrated to 100 mg of Losartan who required additional blood pressure control.

The Losartan Potassium and Hydrochlorothiazide tablets should be swallowed with a glass of water

PHARMACOLOGY

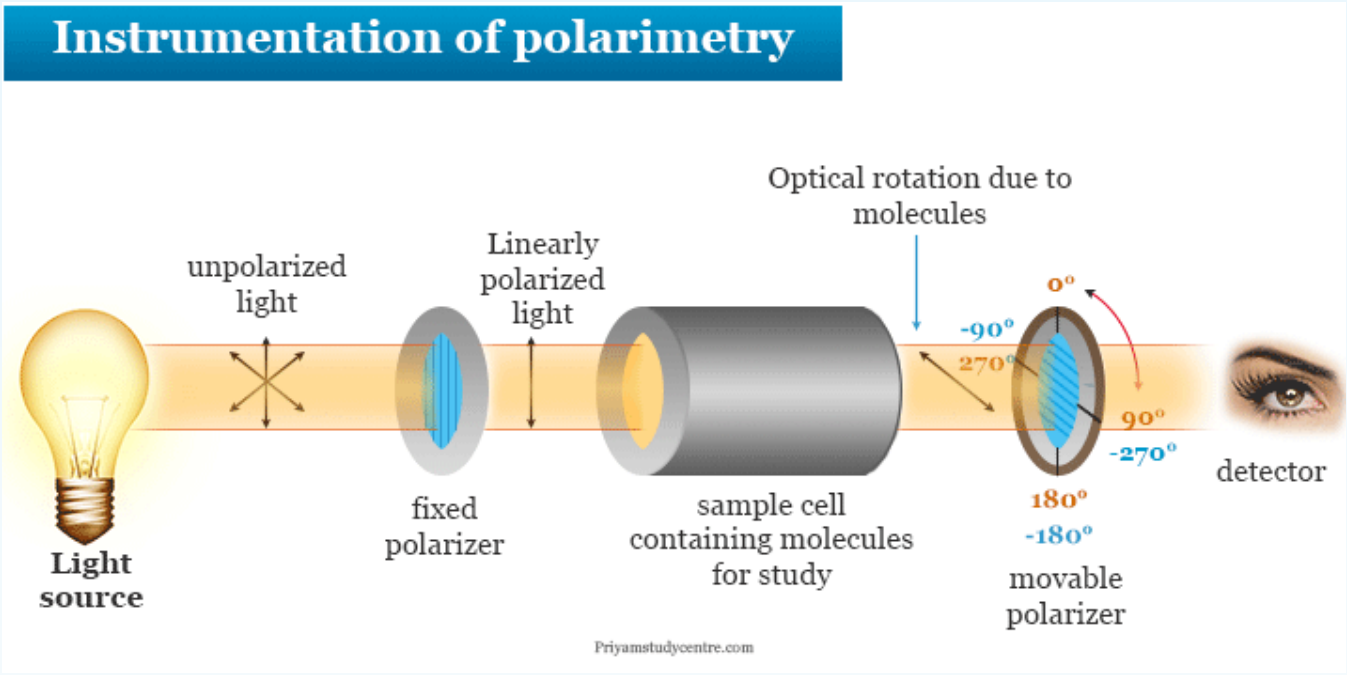
Angiotensin II [formed from angiotensin I in a reaction catalyzed by angiotensin converting enzyme (ACE, kininase II)], is a potent vasoconstrictor, the primary vasoactive hormone of the renin-angiotensin system and an important component in the pathophysiology of hypertension. It also stimulates aldosterone secretion by the adrenal cortex. Losartan and its principal active metabolite block the vasoconstrictor and aldosterone-secreting effects of angiotensin II by selectively blocking the binding of angiotensin II to the AT1 receptor found in many tissues (e.g., vascular smooth muscle, adrenal gland). There is also an AT2 receptor found in many tissues but it is not known to be associated with cardiovascular homeostasis. Both losartan and its principal active metabolite do not exhibit any partial agonist activity at the AT1 receptor and have much greater affinity (about 1000-fold) for the AT1 receptor than for the AT2 receptor. In vitro binding studies indicate that losartan is a reversible, competitive inhibitor of the AT1 receptor. The active metabolite is 10 to 40 times more potent by weight than losartan and appears to be a reversible, non-competitive inhibitor of the AT1 receptor. Neither losartan nor its active metabolite inhibits ACE (kininase II, the enzyme that converts angiotensin I to angiotensin II and degrades bradykinin); nor do they bind to or block other hormone receptors or ion channels known to be important in cardiovascular regulation. Hydrochlorothiazide is a thiazide diuretic. Thiazides affect the renal tubular mechanisms of electrolyte reabsorption, directly increasing excretion of sodium and chloride in approximately equivalent amounts. Indirectly, the diuretic action of hydrochlorothiazide reduces plasma volume, with consequent increases in plasma renin activity, increases in aldosterone secretion, increases in urinary potassium loss, and decreases in serum potassium. The renin-aldosterone link is mediated by

Continued on Page No. : 9

Optical Rotation Polarimeter

Narendra Kumar Verma
(Dy. Manager-QCD/Act. Incharge-FO)

A Polarimeter is an instrument which is used to measures the angle of rotation by passing polarized light through an optically active chiral substance. Optical activity is the ability of a substance to rotate the plane of polarization of a beam of light that passes through it. Optical activity is also called enantiomer, this property is caused by the interaction of polarized light's electromagnetic radiation with the unsymmetrical electric fields of electrons in a chiral molecule.
Optical activity is important in the development of solid state devices. It can be used to determine kinetic reactions, analyzed molecular structure and estimate concentrations. Some factors affects the optical activity like concentration of sample, temperature, length of sample tube and wave length of light.



Specific rotation formula and calculation
The specific rotation of a substance is calculated by the following formula.
$[\alpha]T\lambda = \alpha / l.c$

Where, α is the observed rotation of plane -polarized light.
l is the path length of the light or the length of the sample cell.
c is the concentration or the density of the sample.
T is the temperature &λ is the wavelength of the light, in order to get the value of specific rotation of a substance the temperature &the wavelength of incident light should be constant

Applications of Optical rotation
1) It is used to determine kinetic reactions
2) It is also used to plot optical rotatory dispersion curves for various range of wavelengths this helps in analyzing molecular structure.
3) The optical rotation is measured on a layer of suitable thickness at the wavelength specified in the monograph.
4) If the specific rotation of a sample is known its concentration in the solution can be estimated.
5) If the concentration of the material in the sample is known then its specific rotation can be determined.
6) The technique may be extended to the determination of optical substances in the presence of optically inactive species.

References: ***"Determination of optical rotation and specific rotation". The International Pharmacopoeia (11th ed.). World Health Organization. 2022.***

Difference Between Dynamic and Static Pass Box

Chandrakesh Verma
(Asst. Manager-Production)

In pharmaceutical manufacturing industries, pass boxes are normally used to transfer a particular material between two areas generally of different cleanliness levels. The boxes can be said to transfer the materials from a high level of cleanliness to a lower level of cleanliness or vice-versa. The pass boxes while transferring the material, help to prevent air from flowing from one area to another. Pass boxes are made of stainless steel which is powder coated.

There are two types of pass boxes used in pharmaceutical industries and these are-
1. Dynamic Pass Boxes
2. Static Pass Boxes

The pass boxes have similar features such as having a mechanical interlocking for the doors, UV lights, fluorescent lamps and are both made of the same material which is stainless steel. However, with all the similar features, there are several differences between the two types of pass boxes as they are described below:-

1.The static pass boxes which are known to transfer materials between two clean environments which are equally clean and are designed to work with minimal personnel movement while dynamic pass boxes are used to pass through materials from an uncontrolled environment to a controlled environment. A static pass box should never be used to transfer materials between a clean room and a non-clean room.

2. A dynamic pass box is a cubicle box which has got interlocked doors located on both sides. This protects the controlled environment from being polluted while the transfer of materials is taking place inside. A static pass box, on the other hand, has got an electromagnetic interlocking arrangement which is located between the two doors. The arrangement is fitted with an LED indicator which helps to show whether any door is open.

3. A Dynamic pass box has got a system known as an interlock guard which helps to control both the outlet and the inlet so that there is no time that the two are opened. Due to this, dirt and other loose particles are removed from the materials being transferred to the manufacturing area and vice versa but a Static pass box does not have such a feature since it only transfer materials between two equally clean environments.

4. A dynamic Pass Box is fitted with a suction filter of around 0.3 microns that is a stainless steel product and a supply filter of about 10 microns that is made of aluminum. A Static Pass Box does not have the filters. The Dynamic Pass Box also has a pressure gauge ranging from 0 to 25 mmwc. It is also fitted with a motor blower of 1/5 hp for blowing out dust particles. The Static Pass Box is designed as an air-lock device to prevent ambient air from entering or clean air from disappearing from the clean room.

5. For a Dynamic Pass Box, the Ultraviolet light's specifications are 18 Watts while that of a Static Pass Box is 8 watts. The Ultraviolet light with hour meter is controlled by the interlocking arrangement and it goes off when ever any of the doors open.

6. The Fluorescent lamp in a Static Pass Box is about 40 Watts while that of a Dynamic Pass Box is about 20 Watts.

Reference: https://www.pharmaguideline.com/2017/10

Role of Industrial Pharmacist in Pharmaceutical industry

Mohd.Shahid Jargar
(Asst. Manager-QA)

The pharmaceutical industry plays a critical role in the development, production, and distribution of life-saving medications. At the heart of this complex process is the industrial pharmacist, a highly skilled professional who combines scientific expertise with manufacturing knowledge.

In this article, we dive into the responsibilities and key functions of an industrial pharmacist, shedding light on their crucial role in the pharmaceutical landscape.

Understanding the Role of an Industrial Pharmacist:

We all know the pharmacist who is providing your medicine in the pharmacy alongside the necessary information about how to use the drug. But, an industrial pharmacist is different; they are pharmaceutical professionals who work in manufacturing facilities, bridging the gap between research and production. They possess a unique skill set that combines pharmaceutical sciences, quality control, and regulatory compliance. Here are the key aspects of their role:

1. **Drug Formulation and Development:** Industrial pharmacists play a vital role in the formulation and development of new drugs. They collaborate with researchers, chemists, and other professionals to optimize the drug's chemical composition, dosage forms, and delivery systems. By ensuring stability, safety, and efficacy, they contribute to the creation of new and improved medications.

2. **Quality Assurance and Control:** Maintaining stringent quality standards is crucial in pharmaceutical manufacturing. Industrial pharmacists are responsible for implementing quality assurance protocols and ensuring compliance with regulatory requirements. They perform thorough inspections, audits, and tests to monitor product quality, identify deviations, and initiate corrective actions when necessary.

3. **Production Management:** Industrial pharmacists oversee the production process to ensure efficiency, accuracy, and adherence to established protocols. They develop and implement standard operating procedures (SOPs), optimize manufacturing workflows, and coordinate with different departments to meet production targets while maintaining quality standards.

4. **Regulatory Compliance:** Pharmaceutical manufacturing is subject to strict regulations and guidelines to ensure patient safety. Industrial pharmacists play a crucial role in ensuring compliance with regulations such as Current Good Manufacturing Practices (cGMP) and Good Laboratory Practices (GLP). They keep abreast of evolving regulatory requirements, conduct internal audits, and collaborate with regulatory authorities during inspections.

5. **Risk Assessment and Management:** Identifying and mitigating potential risks is essential in pharmaceutical manufacturing. Industrial pharmacists conduct risk assessments, analyze processes, and implement risk management strategies. They proactively address potential hazards, such as cross-contamination, equipment failures, and deviations from quality standards, to maintain product integrity.

Key Skills and Expertise:-

The role of an industrial pharmacist demands a diverse skill set and specialized knowledge. Here are some key skills and expertise required for success in this profession:

1. **Pharmaceutical Sciences:** Industrial pharmacists must have a strong foundation in pharmaceutical sciences, including pharmacology, medicinal chemistry, pharmaceutics, and pharmacokinetics. They should understand drug interactions, formulation principles, and the physiological impact of different dosage forms.

2. **Manufacturing Processes and Equipment:** Proficiency in pharmaceutical manufacturing processes, equipment, and technologies is vital. Industrial pharmacists should be familiar with unit operations like blending, granulation, tablet compression, and sterile processing. They should also stay updated with advancements in manufacturing automation and quality control instrumentation.

3. **Regulatory Knowledge:** Comprehensive knowledge of pharmaceutical regulations and guidelines is critical. Industrial pharmacists should be well-versed in cGMP, GLP, International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use (ICH) guidelines, and relevant local regulatory frameworks. This ensures compliance and upholds product quality and safety standards.

4. **Analytical Skills:** Industrial pharmacists must possess strong analytical skills to interpret complex data, conduct quality control tests, and analyze manufacturing processes. Proficiency in statistical analysis, validation methodologies and data interpretation is essential to monitor product quality and identify areas for improvement.

5. **Communication and Collaboration:** Effective communication and collaboration skills are necessary for industrial pharmacists to work across multidisciplinary teams. They must interact with researchers, engineers, quality control personnel, and regulatory authorities. Clear communication ensures alignment, fosters teamwork and facilitates efficient decision-making.

6. **Problem-solving Abilities:** Industrial pharmacists encounter challenges in manufacturing processes, quality deviations, and regulatory compliance. They should be adept at problem-solving, capable of identifying root causes and implementing corrective actions. Critical thinking skills enable them to troubleshoot issues and ensure smooth operations.

7. **Continuous Learning and Adaptability:** The pharmaceutical industry is dynamic and constantly evolving. Industrial pharmacists should have a thirst for knowledge staying updated with the latest advancements in drug development, manufacturing technologies, and regulatory requirements. Adaptability to changing industry trends and willingness to learn new skills are crucial for success.

Conclusion

Industrial pharmacists play a pivotal role in the pharmaceutical industry, merging scientific expertise with manufacturing know-how. Their contributions to drug formulation, quality control, regulatory compliance, and production management are integral to ensuring the availability of safe and effective medications.By harnessing their skills in pharmaceutical sciences, manufacturing processes, and regulatory knowledge, industrial pharmacists contribute significantly.

Panas marketing team welcoming delegate of Doctors

Visit of the Students of School of Health and Allied Science, Pokhara


Doctor's vistion to Panas

Community Pharmacy

Dan Bahar Verma
(Asst. Pharmacist)

A pharmacy that works directly with locals is known as a community pharmacy. Among its duties include compounding, counseling, and the careful, accurate, and lawful distribution of prescription medications to patients.

- Community pharmacy's role in prescription processing and clinical pharmacy Alternative medicine, impromptu preparation, and patient care
- Examining the signs of minor illnesses; consulting a healthcare provider; and the function and duties of a community pharmacy
- Prescription medication distribution to the general public and ensuring treatment compatibility
- Verifying dosage and making sure medications are prepared, supervised, and administered in a safe and appropriate manner.
- Maintaining a registry of restricted substances for legal and inventory management purposes.
- Selling over-the-counter medications and offering the general public advice and counseling on how to treat minor illnesses

The community pharmacy is addressing the issue of communicable diseases.

A communicable disease is one that is spread from one person to another or from a reservoir to a vulnerable host, for example. TB, etc.

Pharmacists can participate in health promotion campaigns on a variety of health-related topics, both locally and nationally. Of particular interest are drug-related topics, such as rational drug use, alcohol and tobacco abuse, the discouragement of drug use during pregnancy, organic solvent abuse, poison prevention, or topics related to other health issues, such as tuberculosis, leprosy, HIV infection, AIDS, and family planning.

angiotensin II, so coadministration of an angiotensin II receptor antagonist tends to reverse the potassium loss associated with these diuretics. The mechanism of the antihypertensive effect of thiazides is unknown.

PHARMACOKINETIC

Losartan is well absorbed but undergoes presystemic metanolism. Bioavailability of Losartan Potassium is about 33%. About 14% of administered drug is converted into active metabolite. T_{max} for the drug is about 1 hour and 3-4 hours for its metabolite. Terminal half-life of Losartan and its active metabolite is about 2 hours and 6-9 hours respectively. Both Losartan and its metabolite are ≥99% bound to plasma proteins, primarily albumin. Losartan Potassium is converted in the liver, to its metabolite E-3174, which is more potent antagonist of the AT_1 receptor.

Hydrochlorothiazide is not metabolized but is eliminated rapidly by the kidney. When plasma levels have been followed for at least 24 hours, the plasma half-life has been observed to vary between 5.6 and 14.8 hours. At least 61 percent of the oral dose is eliminated unchanged within 24 hours. Hydrochlorothiazide crosses the placental but not the blood-brain barrier and is excreted in breast milk.

SIDE EFFECTS

Like all medicines, this medicine can cause side effects, although not everybody gets them. Side effects are usually mild. Symptomatic hypotension including dizziness may occur, particularly in patients with intravascular volume depletion (e.g. those taking high-dose diuretics). Hyperkalaemia occurs occasionally; angioedema has also been reported with some angiotensin-II receptor antagonist. Also asthenia, fatigue, vertigo; less commonly gastro-intestinal disturbance, angina, palpitation, oedema, dyspnoea, headache, sleep disorders, urticaria, pruritus, rash; rarely hepatitis, atrial fibrillation, cerebrovascular accident, syncope, paraesthesia' also reported pancreatitis, anaphylaxis, cough, depression, erectile dysfunction, anaemia, thrombocytopenia, hyponatraemia, arthralgia, myalgia, rhabdomyolysis, tinnitus, photosensitivity and vasculitis

SPECIAL WARNING & PRECAUTIONS FOR USE

Hypotension-Volume-Depleted Patients: In patients who are intravascularly volume-depleted (e.g., those treated with diuretics), symptomatic hypotension may occur after initiation of therapy with Losartan potassium and Hydrochlorothiazide Tablets.

Angioedema, including swelling of the larynx and glottis, causing airway obstruction and/or swelling of the face, lips, pharynx, and/or tongue has been reported rarely in patients treated with losartan. Systemic Lupus Erythematosus: Thiazide diuretics have been reported to cause exacerbation or activation of systemic lupus erythematosus. Hypersensitivity Reaction: Hypersensitivity reactions to hydrochlorothiazide may occur in patients with or without a history of allergy or bronchial asthma, but are more likely in patients with such a history. Hepatic and renal impairment: Losartan potassium / Hydrochlorothiazide Tablets is not recommended for patients with hepatic impairment or moderate to severe renal impairment. Pregnancy: Category C (first trimester); Category D (second and third trimester). Losartan that act on the angiotensin system can cause injury and death to the developing fetus when used in the second and third trimesters. When pregnancy is detected, discontinue the therapy as soon as possible.

Lactation: It is not known whether losartan is excreted in human milk, but significant levels of losartan and its active metabolite were shown to be present in rat milk. Thiazides appear in human milk. Because of the potential for adverse effects on the nursing infant, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

OVERDOSAGE

Limited data are available in regard to overdosage in humans. The most likely manifestation of overdosage would be hypotension and tachycardia; bradycardia could occur from parasympathetic (vagal) stimulation. If symptomatic hypotension should occur, supportive treatment should be instituted. Neither losartan nor its active metabolite can be removed by hemodialysis.

The most common signs and symptoms observed are those caused by electrolyte depletion (hypokalemia, hypochloremia, hyponatremia) and dehydration resulting from excessive diuresis. If digitalis has also been administered, hypokalemia may accentuate cardiac arrhythmias. The degree to which hydrochlorothiazide is removed by hemodialysis has not been established.

कम्पनीका कर्मचारीहरु परम्परागत थारु नृत्य प्रस्तुत गर्दै

...cont. from page no.6

कार्यक्रमको सञ्चालन उप-प्रवन्धक तुलाधर विश्वकर्माले गर्नुभएको थियो । सोही अवसरमा । फ्याक्ट्री अपरेशन्स इन्चार्ज नरेन्द्र कुमार बर्माले अतिथिहरुलाई सम्मान स्वरुप मायाको चिनो प्रदान गर्नुभएको थियो।

Clips of CPHI, India 2024

Factory Visit of Vashistha Printing Solution

Stall visit of Arial Pharmaceuticals Pvt.ltd.

Visit of Stall of Vistar Pharmaceuticals Pvt.Ltd.

Shortly Coming Products ...

SEVEMER-400 & 800
Sevelamer Carbonate Tablets
(Phosphate Binder)

LERACE 250 & 500
Levetiracetam Prolonged Released Tablets IP
(Antiepileptic)

ATROZ 20 & 40
Atorvastatin Calcium Tablets IP
(HMG-CoA reductase inhibitors (statins)

CARLOS H50
Losartan Potassium & Hydrochlorthiazide Tablets IP
(Angiotensin II receptor antagonist and Diuretic)

SICRET 25, 50 & 100
Sitagliptin Phosphate Tablets IP
(Dipeptidyl peptidase-4 inhibitor, Antidiabetic)

TORLIS 10/20/100
Torsemide Tablets IP
(Loop Diuretic)

प्रवन्ध निर्देशक माधव प्रसाद अधिकारी र बोर्ड अफ डाइरेक्टर डा. सन्तोष कुमार शर्माद्वारा नयाँ सेक्सनको भवन निर्माणको पुजापाठ गरिदै।

Spandan Div

1. **ADOPIN 2.5/5/10**	Amlodipine Besilate Tablets IP
2. **CARLOS 25/50**	Losartan Potassium Tablets IP
3. **LIPIROSE 5/10/20**	Rosuvastatin Calcium Tablets IP
4. **METSAFE 500**	Metformin Hydrochloride Tablets IP
5. **METSAFE SR 850**	Metformin Hydrochloride SR Tablets IP
6. **METSAFE ER 1000**	Metformin Hydrochloride ER Tablets USP
7. **METSAFE GP 1 GP 2**	Metformin HCl PR & Glimepiride Tablets IP
8. **PROLEE 10 & 20**	Propranolol Hydrochloride Tablets IP
9. **CARTEL 20/40/80**	Telmisartan Tablets IP
10. **ADOPIN L & LH**	Amlodipine & Losartan Potassium Tablets IP
11. **CARTEL AM**	Telmisartan & Amlodipine Tablets IP
12. **ATROZ 5 & 10**	Atorvastatin Calcium Tablets IP
13. **EMPANID 10 & 25**	Empagliflozin Tablets
14. **SULFONIL 1/2**	Glimepiride Tablets IP
15. **LINAGE 5**	Linagliptin Tablets
16. **CILNIP 5 & 10**	Cilnidipine Tablets IP

Panas Division

1	ACNERIS GEL	Adapalen & Clindamycin Gel	19	MESPAS	Mefenamic Acid Tablets BP
2	AIRMONT 10	Montelukast Chewable Tablets USP	20	MUPICIN 5g/10g	Mupirocin Ointment USP
3	ATUNE 50 DT	Diclofenac Free Acid	21	MUPICIN BM 5g/10g	Mupirocin & Beclomethasone Ointment
4	ATUNE GEL	Compound Diclofenac Gel	22	NEUROCOBAL DT 500/1500	Methylcobalamine Dispersible Tablets
5	AZIPAN 500	Azithromycin Tablets IP	23	MELASTAR CREAM	Hydroquinone, Mometasone Furoate & Tretinoin cream
6	CETOZ	Cetirizine Tablets IP	24	OSSICAL	Calcium Carbonate with Vit. D3 Tablets IP
7	CETOZ-L	Levocetirizine Dihydrochloride Tablet IP	25	PANOXY	Antioxidants Capsules
8	DIROBIN	Compound Dithranol Ointment	26	PROFILAC	Pre. and Probiotic Capsules
9	DEEVIT 0.25	Calcitriol Capsules BP	27	REGAB 50/75	Pregabalin Capsules IP
10	DOXMA 400	Doxofyline Tablets IP	28	SKOPE 10/20	Hyoscine Butyl Bromide Tablets IP
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12	EMIDONE DT	Domperide Tablets IP	30	UNLID 500	Ornidazole Tablets IP
13	F-CON	Fluconazole Capsules IP	31	XTRADERM CREAM	Beclomethasone, Clotrimazole & Gentamycin
14	FLEMAC 100	Aceclofenac Tablets IP	32	ZENIM DT	Nimesulide Dispersible Tablets
15	IROMAX	Iron with folic Acid chewable Tablets	33	ALMINTH	Albendazole Tablets IP
16	LEVOQUIN 500	Levofloxacin Tablets IP	34	FAMVIR 125/250/500	Famciclovir Tablets IP
17	RASEC 20	Rabeprazole Tablets IP	35	BACTOGYL DS	Metronidazole and Diloxanide Tablets
18	ACTILUZ	Luliconazole Cream			

NuZen Division

1	BASEL 10/20	Ebastin Tablets IP
2	CLEOCIN 300	Clindamycin Capsules IP
3	DALAFIL 5/10	Tadalafil Tablets IP
4	DEEVIT OINTMENT	Calcitriol Ointment
5	DEEVIT PLUS	Calcium Carbonate & Calcitriol Tabs.
6	DIANA 0.025/0.5	Tretinoin Cream USP
7	DIANA-C 10/20	Isotretinoin Capsules USP
8	DIOSTEO	Diacerine Capsules IP
9	ESPRO 40	Esomeprazole Tablets IP
10	ETOLAC ER 400/600	Etodolac ER Tablets USP
11	ETOLAC 200	Etodolac Tablets USP
12	FLUSH	Flavoxate Tablets BP
13	HAYFEX 120/180	Fexofenadine Hcl Tablets IP
14	ITRAN-100	Itraconazole Caps. USP
15	KAARID 500	Clarithromycin Tablets BP
16	KOZY 50/100	Ubidecarenone Capsules USP
17	TINDER 500/1000	Tinidazole Tablets IP
18	MERINA	Mebeverine Tablets IP
19	MESORAL CREAM 10	Methoxsalen Cream
20	MESORAL 10	Methoxsalen Tablets
21	ORPAR	L-Ornithine L-Aspartate Capsules
22	RUTALGIN	Dexketoprofen Trometamol Gel
23	SPATIZ 2	Tizanidine Tablets IP
24	TACROMUS 0.03%/0.1%	Tacrolimus Ointment
25	AIRMONT L10	Montelukast Sodium and Levocetirizine Hcl Tablets IP
26	IMULEF-10/20	Leflunomide Tablets IP
27	LIVOPAN 300	Ursodeoxycholic Acid Tablets IP
28	SILOCAP-4/8	Silodosin Capsules

Kalash Division

1	ADETRIP 10/25/75	Amitriptyline HCL Tablets USP
2	DULIFE 20/30/40	Duloxetine GastroResistant Tablets IP
3	BENCLOB 5/10	Clobazam Tablets BP
4	CITICOL 500	Citicoline Tablets
5	CIZIRON 10	Flunarizine Tablets
6	DOLFIN 25/75	Dosulepin Tablets BP
7	ECIDEP 5/10/20	Escitalopram Tablets IP
8	EPISOD 25/50/100	Sertraline Tablets BP
9	OLPIN 2.5/5/10	Olanzapine Tablets IP
10	PSYQUIT 25/50	Quetiapine Tablets IP
11	REGAB M (50/750) (75/750) 75/1500	Pregabalin & Methylcobalamin Caps IP
12	DEPIVAL	Nortriptyline Tablets IP
13	ZECLO 0.25/0.5/1/2	Clonazepam Tablets IP
14	ZEPOX 5/10/25	Chlordiazepoxide Tablets IP
15	ZOLDEM 5/10	Zolpidem Tartrate Tablets IP
16	RIZTIRON 5/10	Rizatriptan Benzote Orally Disintegrating Tablets USP