Medical News

New Convenient Option for Glucose Monitoring Available in Pakistan Now

Abbott launches its Freestyle Libre continuous glucose monitoring system in Pakistan. When the FreeStyle Libre was approved by the FDA in 2017, it was considered the first ever non-blood calibration CGM system. This means you do not have to use a finger stick to provide a blood sample. Instead, the monitor works via a small sensor that is placed just below the surface of your skin. To get your glucose reading, you need to place the accompanying screen monitor above the system. Each sensor lasts up to 14 days. After this time, you will need to replace it with a new one. You must continue to purchase new sensors, but you only must buy the monitoring system once. The monitor itself runs on rechargeable batteries. The main unit costs approximately 10,000 but sensors which need to be replaced every 2 weeks cost approximately 11,000. It may be especially useful for patients with type-1 diabetes and those patients of type 2 diabetes who need to monitor their sugar very frequently. Here are some pros and cons of this system compared with traditional finger prick testing.

FreeStyle Libre Pros	FreeStyle Libre Cons
➢ No blood sample required. ➢ Does not need a finger stick. ➢ Painless sensor application process. ➢ Convenient for travel, work, and when you're on the go. ➢ Track glucose trends on your smartphone via an app. ➢ Waterproof sensor for short periods	➢ May cause irritation at the sensor insertion site. ➢ Results may not be as accurate as a traditional blood calibration system. ➢ The sensor does not actually measure glucose in the blood, but in the cellular fluids instead. ➢ Expensive

Pakistan to Receive 17.2m doses as Covax sets out

Vaccination Plans

Medical attendants prepare to vaccinate health workers with Chinese-made Sinopharm Covid-19 vaccine at a vaccination centre in Karachi on February 3.—AFP

The Covax programme for Covid-19 vaccines published its first distribution list on Wednesday, planning enough doses for dozens of countries to immunize more than three per cent of their populations by mid-year. The list comes with concerns over whether lower-income countries will be left out of the immunization race dominated by rich nations, a problem Covax was set up to resolve. It broke down for the first time how the programme's initial 337.2 million doses will be distributed, with first deliveries expected in late February. Some 145 countries are set to receive enough doses to immunize 3.3pc of their population by mid-2021. A statement said the initial distribution was in line with a target "to protect the most vulnerable groups such as health care workers" in the first half of the year. Countries will receive doses in proportion to population size, with the most going to India (97.2m), Pakistan (17.2m), Nigeria (16m), Indonesia (13.7m), Bangladesh (12.8m) and Brazil (10.6m). "This is fantastic. We can start vaccinating. It is coming in the next weeks," Ann Lindstrand, coordinator for a World Health Organization immunization programme, told a press conference. Covax is co-led by the WHO, the Gavi vaccine alliance, and the Coalition for Epidemic Preparedness Innovations (CEPI). Funding is covered through donations for the 92 lower- and lower-middle income economies involved, while for richer countries, buying in operates as a back-up insurance policy for their own vaccination programmes. The distribution list includes 240m doses of the AstraZeneca-Oxford vaccine, licensed to the Serum Institute of India (SII); 96m doses of Astra Zeneca-Oxford vaccine; and 1.2m doses of the Pfizer-BioNTech vaccine. The Pfizer-BioNTech vaccine is the only one so far to have received emergency use approval from the WHO. Evaluation is underway for the AstraZeneca-Oxford vaccine. Both require two injected doses.

Wealthy self-financing countries were on the list in addition to lower-income nations, including South Korea (2.6m doses), Canada (1.9m) and New Zealand (250,000).

The list is non-binding and may change, the statement stressed, but would allow countries to plan for how many doses they will receive in the first rounds.

Longer term, Covax aims to secure enough vaccines for at least the most vulnerable 20pc in participating countries by the end of 2021.

Oral Semaglutide for the Management of Type 2 Diabetes Mellitus

Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) have been widely used for the management of type 2 diabetes following the approval of exenatide by the FDA in 2005. These agents reduce glucose levels by increasing glucose-dependent insulin secretion, decreasing inappropriate glucagon secretion, and slowing gastric emptying. Other GLP1-RA available include liraglutide, lixisenatide, dulglutide and semaglutide. All must be injected subcutaneously but there is good news for those who have needle phobia. Novo Nordisk have developed an oral form of semaglutide that evades acid degradation using a novel technology. Oral form of semaglutide is not only convenient but has all the benefits of injectable form of the same drug.

In a series of trials (PIONEER 1-7) it has been shown to be more effective in HbA1-c lowering and weight reduction compared to empagliflozin, sitagliptin and liraglutide.

Available as 3 mg, 7 mg, and 14 mg tablets, oral semaglutide should be dosed at 3 mg once daily for 30 days, and then increased to 7 mg once daily for 30 days. Semaglutide can be further titrated to 14 mg once daily if warranted.

Semaglutide tablets should be swallowed whole (do not crush, cut, or chew) on an empty stomach at least 30 minutes prior to the first beverage, food, or oral medication of the day and should be taken with no more than 4 ounces of plain water. No dose adjustment is necessary in hepatic and/or renal impairment. Oral semaglutide is not yet available in Pakistan and the cost is equivalent to its injectable form.

Contrary to Popular Belief, Insulin Can Be Stored Outside Fridge

Insulin may be more heat-stable during 28 days of use than current labeling suggests, a new study indicates. Instructions on insulin vials or pens indicate that they be stored unopened at temperatures of 2° to 8° C (35.6° to 46.4° F). Once the seal is punctured and during 28 days of use, the label indicates that the insulin be stored at temperatures of 25° to 30° C (77° to 86° F).

But in many resource-poor settings, as well as in many parts of the developed world, ambient temperatures can be higher than that. The study was conducted under laboratory conditions mimicking those of a refugee camp in northern Kenya, where temperatures typically fluctuate between 25° C (77° F) at night and 37° C (98.6° F) during the day. During 28 days of exposure to the oscillating temperatures, as well as for up to 12 weeks, there were no differences in the physical structure (measured by liquid chromatography), bioactivity (via hepatocytes), or appearance of insulin in vials or cartridges compared to insulin stored at temperatures of 2° to 8° C (35.6° to 46.4° F). This was the case for both human insulin and analogue formulations.

The finding is important regarding low-resource settings, where patients who don't have refrigerators in their homes often have to travel to and from a hospital or clinic twice daily to receive their insulin doses. "This shows it's possible for the patient to treat themselves during the 4 weeks without having to put the insulin back in the fridge. If the temperature is oscillating, that's not a problem," senior author Leonardo Scapozza, PhD, professor of pharmaceutical biochemistry/chemistry at the University of Geneva, Geneva, Switzerland, told Medscape Medical News. The results of the study by Béatrice Kaufmann, also of the University of Geneva, and colleagues were published online February 3 in PLOS ONE.

PSIM News Corner

Symposium of Medicine by Psim Hyderabad Chapter

The first symposium of Internal Medicine and inaugu-

ration ceremony of PSIM Hyderabad Chapter accredited with Pakistan Society of Internal Medicine has been organized by Pakistan Society of Internal Medicine; the "Hyderabad Chapter", took place on February 21st 2021 from 9.00 am to 4.00 pm at the "Hotel Indus, Hyderabad" inaugurated with Recitation of Holy Quran and National Anthem. It was extensive program of technical presentations, dynamic discussions and state of art lectures focused on the wide range of medical ethics, epidemiology, diagnosis and recent advances in the management of common diseases in the field of medical sciences parallel to panel of experts. The symposium was held under the auspices of vice chancellor LUMHS and vice president PSIM Sindh Chapter Prof. Bikha Ram Devrajani and the Dean Department of Medicine & Allied and President PSIM Hyderabad Chapter Prof. Muzaffar Ali Shaikh while Prof. Javed Akram, president PSIM Pakistan was the chief guest of the symposium. The symposium sponsored by Getz pharmaceutical company and speakers came from all over Sindh province to deliver

and share their clinical experience while the online lectures were also delivered whereas the whole symposium was live through internet link. The delegates and the presenters had a mixed background that includes clinical and biochemical experts given the symposium a highly professional profile and significance, attracting local as well as international representatives. A number of new initiatives were introduced as part of this year's symposium, these includes memorandum of understanding (MOU) between Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro and University of Health Sciences, Lahore and the announcement of PSIM chapter president and representatives for different district of Sindh Province. The awards and souvenirs were also distributed among the chapter focal persons and delegates. The tea break, lunch and prayer break were the part of symposium. The symposium attracted 350 delegate registrations, a considerable increase attendance records. The delegates included indigenous and non-indigenous medical educators, indigenous health specialists, policy makers, health professionals, community members, medical students, general practitioners, residents / postgraduates, in-trainees, house physicians / surgeons as well as nursing and allied health professionals from all over Sindh province. The representative from each institute was present in the symposium with approximately 70% of delegates representing the university sector. The symposium also helped to support collaboration within and between medical institutions as well as encourage multi-disciplinary and multisectoral linkages. The media coverage was given while during the entire symposium the standard operating procedures (SOP) for COVID-19 were strictly followed.

Launch of JPSIM

Journal of Pakistan Society of Internal Medicine (JPSIM) launch ceremony was held at governor house on Tuesday, 19th January 2021.The chief guest was honorable governor of Punjab Mr. Chaudhry Muhammad Sarwar while minister for higher education commission Mr Raja Humayon Yasir & Secretary

Primary & Secondary Healthcare Capt. Retd. Muhammad Usman were the guest of honor. The ceremony started with the recitation of Holy Quran. Human connection video highlighting the empathy n relationship between doctor & patient produced by PSIM was also premiered at this ceremony & was greatly appreciated by the audience. General Secretary Dr Somia Iqtadar highlighted the journey of PSIM & apprised the audience about the activities of psim carried out in different regions of pakistan. The editor of the JPSIM & Senior Vice President PSIM, Prof Aziz-ur-Rehman gave an overview of the editorial board of JPSIM. He highlighted the importance of research & PSIM initiatives to promote research. The editor in chief & president PSIM Prof Javed Akram thanked the honorable chief guest & guests of honor for gracing the occasion & patronage of research & academic & social welfare activities of the society. Among the attendees were the office bearers of the society, dignitaries, eminent Vice Chancellors Prof Khalid Masud Gondal & Prof Aamer Zaman Khan, & Senior Physicians Prof Mehmood Ali Malik, Prof Saeed Khokhar, Prof Akbar Chaudhry, Prof Talat Naheed, Prof Sajid Abaidullah, Prof Aftab Mohsin, Prof Muhammad Arif Nadeem, Prof Bilqees Shabbir, Prof Asif Naqvi, Prof Bilal Mohyuddin, Prof Taj Jamshed, Prof Dr Saira Afzal, Dr Sohail Chughtai,Dr Shela Javed Akram, Prof Ali Madeeh Hashmi, Prof Ahsan Noman, Prof Khalid Mehmood Khan ,Dr Rizwan Iqbal, Prof Dr Zafar Hayat & Prof Zaheer Akhter. Cake cutting ceremony of the journal was also done & journal was also distributed among the audience. Associate editor & senior Vice president PSIM Prof Tariq Waseem thanked the audience for participating in research initiative of the society. A research award PSIMRA was also announced at this occasion for the young resident researchers of medicine & allied specialties'. The ceremony was well attended & appreciated by all medical professionals.

Psim, Faisalabad Chapter

As the COVID-19 Pandemic affected the city of Faisalabad in March 2020, the Department of Medicine under the supervision of Professor Dr Aamir Shaukat (Incharge COVID-19 Management Team Faisalabad Medical University) was at the frontline in dealing with:

1) The Administrative, Human Resource aspects of establishing a state of the art Isolation facility for management of COVID-19 patients.
2) Developing and implementing treatment protocols for management of COVID-19 patients.
3) Training medical and Para-Medical staff for the management of patients with COVID-19.
4) Provision of medicines, meals for the patients with COVID-19 as well as provision of adequate Personal Protective Equipment for Medical and Para-Medical staff.
5) Documentation of all the Administrative, Human Resource and Management aspects as well as conducting Research work in this rapidly evolving situation.

Keeping in view these huge tasks and limited amount of time, Professor Dr Aamir Shaukat, Dean Post Graduate Medical Science Faisalabad Medical University, In charge COVID-19 Management Team FMU and President PSIM Faisalabad Chapter developed a dedicated team of Consultants and Post Graduate Residents of various Specialities; who were responsible for providing round the clock Medical Management of patients with COVID-19. With the help of district Administration, Faisalabad Division and guidance of Vice Chancellor Faisalabad Medical University, Professor Dr Aamir Shaukat and his team developed a state of the art dedicated Isolation facility at Govern-ment General Hospital, Ghulam Muhammad A bad for the management of patients with COVID-19. This facility is fully equipped with Isolation Rooms, Isola-tion Wards, High Dependency Units and Intensive Care Unit with facilities for Invasive and Non-Invasive Ventilation. Isolation Wards, High Dependency Units, Intensive Care Units fully equipped with Invasive and Non-Invasive Ventilators were established at Allied and DHQ Hospitals also.

03 International Publications regarding various aspects of management of COVID-19 have been published under the supervision of Professor Dr Aamir Shaukat on behalf of Faisalabad University and almost 30 research projects are already going on under his supervision. PSIM Faisalabad Chapter has also been actively involved in organising and supporting various Webinars, Seminars regarding Diabetes Mellitus, Hyper-