





Shaukat Khanum Memorial Trust (SKMT) **Pharmacy Newsletter**

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Special Edition – JCI Updates

Issued By:

Drug Information Centre, SKMT

P&TC Updates:

Pharmacy & Therapeutics Committee (P&TC) has approved the following drugs during 2024 at SKMCH&RC:

- Vonoprazan Tab 20mg: (Only for esophagitis)
- Imatinib Cap: For pediatric patients
 - GIST 2 patients per year
 - ALL 5 patients per year
 - Maximum treatment duration 3 years
- Pancrelipase Cap 10,000 U (150mg) For total pancreatectomy on
 - Four patients per year (Lahore & Peshawar) with a maximum treatment duration of 3 years
- **Ibrutinib Caps 140mg** with fluconazole, 2 patients/year for maximum 3 years of therapy.
- Amiloride + Hydrochlorothiazide (5/5mg) Tab: approved as a regular formulary item restricted by service (Endocrinology & Nephrology only)
- Imatinib Cap 100mg: Approved for GIST (2 Patients per month for indigent patients)



Advances in Immunotherapy: Tumour Infiltrating Lymphocyte

This year has been marked by advances in cell-based immunotherapies and immune checkpoint inhibitors (ICIs). The most notable was the first ever regulatory approval for TIL therapy.

Engineering T cells to locate and destroy cancer cells has been successful in several types of blood cancers but has struggled to gain traction in solid tumors. Researchers have tried to demonstrate for several years that leveraging the immune system's own expertise—by isolating and expanding the T-cell populations that have already made it to the tumor—may provide a stronger and more durable benefit.

In TIL therapy, T cells are isolated from a tumor sample taken as a biopsy or during tumor excision. They are expanded in the laboratory and, after depleting the patient's existing T cells to make room for new ones, infused back into the patient. The patient is then given several infusions of interleukin-2, a cytokine that promotes continued expansion and activity of T cells.

Lifileucel (Amtagvi), the first TIL therapy to reach the market, has been granted accelerated approval by the FDA in February for the treatment of **unresectable** or **metastatic melanoma**. In the clinical trial that led to this approval, patients who received the recommended dose of lifileucel had an objective response rate of 31.5%, a four-year overall survival rate of 47.3%.

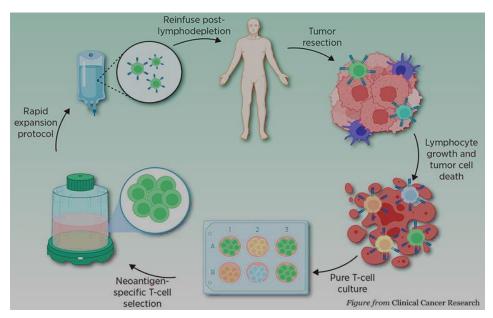
Clinical considerations: A treatment course consists of multiple phases:

- 1) lymphodepleting chemotherapy (with cyclophosphamide and fludarabine) for 7 days
- 2) lifileucel administration
- 3) aldesleukin (IL-2) administration, it is started 3 to 24 hours after lifileucel administration to support in vivo cell expansion for up to a maximum of 6 doses.

Prophylactic antimicrobials are administered according to institutional guidelines. Lifileucel is not administered to patients with clinically significant systemic infections.

References:

FDA Approvals in Oncology: January-March 2024 \mid AACR, Lifileucel: Drug information - UpToDate



FDA Approves New Indication - Blinatumomab

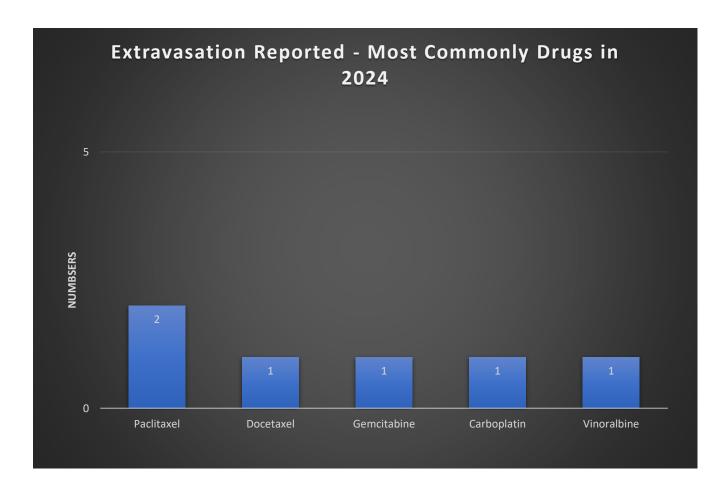
FDA has granted approval for blinatumomab to be used in the consolidation phase for CD19-positive Philadelphia chromosome-negative B-cell precursor acute lymphoblastic leukaemia. Previously blinatumomab which is a bispecific CD19-directed CD3 T-cell engager was indicated for the treatment of adults and children with:

Blinatumomab B-cell precursor acute lymphoblastic leukaemia (ALL) in first or



second complete remission with minimal residual disease (MRD) greater than or equal to 0.1%. Relapsed or refractory B-cell precursor acute lymphoblastic leukaemia

Chemotherapy Extravasation - Reported Drugs for 2024



International Pharmacists Day-25th September 2024 – SKMT

Theme: "Pharmacists: Meeting global health needs"

Pharmacists are integral to our health-care systems, often being the first point of contact for health advice and primary health care, as well as addressing the health needs of our populations in many varied ways, including:

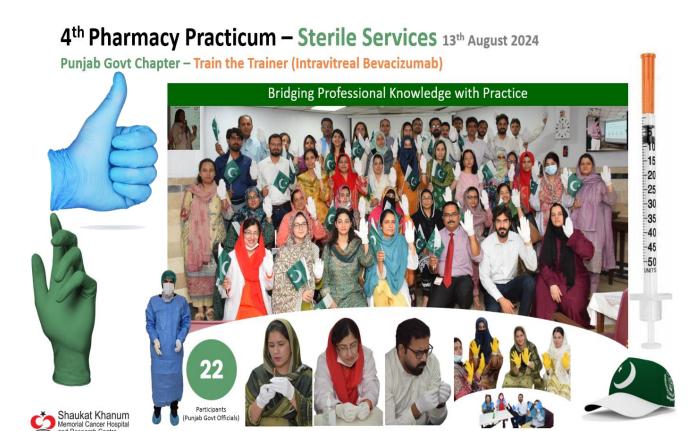
- Ensuring access to and providing guidance on essential medicines and medical devices, including diagnostic tests and assistive products.
- providing expertise for patient care and public health.
- promoting disease prevention, such as by administering vaccines, conducting health screening, educating patients, and helping to improve health literacy.
- participating in the research and development of new medicines.
- Leading in pharmacovigilance, for instance, ensuring the safety and efficacy of antibiotics and other medicines.

As demonstrated during the COVID-19 pandemic, pharmacists are at the forefront of addressing regional and global health crises.

World Pharmacist Day is celebrated each year, on September 25, as a dedicated occasion to recognize and honor pharmacists for their significant contributions to improving global health. This special day emphasizes the vital role that pharmacists play in enhancing patient safety.



SHARING IS CARING



5th Annual Conference on Innovation in Pharmacy at Punjab University, Lahore

The 5th Annual Innovation in Pharmacy Conference, held at the historic Old Campus of the University of Punjab in Lahore, was a significant event that brought together leading professionals in the field of pharmacy. Organized by GBPTT, a top nonprofit organization dedicated to advancing pharmacy

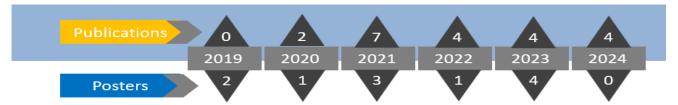


practices in Pakistan, the conference aimed to share knowledge, best practices, and innovative solutions to enhance the field.

The conference commenced with a workshop on the first day, led by Mr. Shoaib Shammas, Manager Pharmacy at SKMCH & RC, Lahore. His workshop, titled "Accuracy, Precision, and Learning from Errors (RCA International Protocol)," emphasized the importance of accuracy and precision in pharmacy practice. Mr. Shammas introduced the RCA International Protocol, highlighting how learning from errors can significantly improve patient safety and outcomes. On the second day, the conference featured several insightful sessions. Mr. Adeel Siddiqui, Assistant Manager Pharmacy at SKMCH&RC,

Lahore, presented the session, "Market Readiness for Current and Future Pharmacy Graduates: Precepting the Next Generation of Learners." He discussed strategies for preparing pharmacy graduates for the market, emphasizing the role of preceptorship in shaping the next generation of pharmacists to meet industry demands. Another notable session was conducted by Mr. Muhammad Rehan Khan, Deputy Manager Pharmacy at SKMCH&RC, Lahore. His presentation, "Expanding Horizons: Specialties and Leadership Opportunities for Next Generation Pharmacists," explored various specialties and leadership opportunities available to emerging pharmacists. He encouraged attendees to consider diverse career paths and leadership roles within the field. Following this, Mr. Irfan Sarwar, Senior Clinical Pharmacist at SKMCH&RC, Lahore, led a session on "The Pharmacist's Role in Enhancing Patient Adherence and Compliance." Mr. Sarwar focused on the critical role pharmacists play in improving patient adherence and compliance, sharing practical approaches and interventions that can significantly enhance patient outcomes. Mr. Hamza Khalid, Staff Pharmacist at SKMCH&RC, Lahore, presented an engaging session on "Latest Advances in Anticoagulation and Reversal Therapies." He discussed the newest developments in anticoagulation therapies and their reversal, providing attendees with up-to-date knowledge on managing anticoagulant medications and addressing complications. The final session of the day was again led by Mr. Shoaib Shammas, who discussed "Barcoding, Electronic Health Records, CPOE in Resource-Limited Countries." He provided valuable insights into the implementation of barcoding, electronic health records, and computerized physician order entry (CPOE) systems in resource-limited settings, highlighting the challenges and potential solutions to improve healthcare delivery.

Publications



Recently, research publications authored, acknowledged, and collaborated on by pharmacists from SKMT have been accepted and published in reputable international journals, marking significant contributions to the field:









Amjad Anwar,
Nirmal Malik, Adeel
Siddiqui, Sunil
Shrestha, Omar



Akhlaq Bhutta, Saba Mazhar, Muhammad Rehan Khan, Hafiz Muhammad Usman. Examining clinical pharmacist interventions and identifying opioid medication-related issues in patients with cancer.

J Oncol Pharm Pract. 2024 Aug 28:10781552241279027. doi: 10.1177/10781552241279027. Epub ahead of print. PMID: 39196917.



Wardah Masood, Omar Akhlaq Bhutta, Muhammad Ahsan Rasheed, Adeel Siddiqui. Enhancing access to expensive oncology medications in Pakistan: The critical role of



pharmaceutical patient assistance programs in oncology care. J Oncol Pharm Pract. 2024 Sep 2:10781552241280664. doi: 10.1177/10781552241280664. Epub ahea

ACHIEVEMENTS

Adeel Siddiqui Achieves Prestigious AI Certifications

We are pleased to announce that Mr. Adeel Siddiqui, Assistant Manager Pharmacy, has recently completed a series of certifications in the field of Artificial Intelligence (AI). These certifications underscore his commitment to professional development and his dedication to integrating cutting-edge technologies into our pharmacy operations.

Adeel Siddiqui has successfully completed the 'Fundamentals of Generative Al' certification from Lahore University of Management Sciences, Pakistan. This program provided him with a comprehensive understanding of the principles and applications of generative AI, equipping him with the skills to innovate and enhance pharmacy services.

In addition, Mr. Siddiqui has earned the 'AI for Grant Writing' certification from Kennesaw State University, USA. This specialized course has honed his

ability to leverage AI tools for efficient and effective grant writing, a critical skill that will support our pharmacy's research and funding initiatives.

Furthermore, Mr. Siddiqui has achieved the 'Generative AI: Enhance your Data Analytics Career' certification from

IBM, USA. This certification, accompanied by digital credentials authorized by IBM, signifies his expertise in utilizing generative AI to advance data analytics. His enhanced analytical capabilities will contribute significantly to our data-driven decision-making processes.

These certifications reflect Mr. Siddiqui's



Adeel Siddiqui
Assistant Manager Pharmacy

CERTIFICATE OF COMPLETION
is brethy swarded to
Adecl Siddiqui
for completing the course
in
Fundamentals of Generative A1
from
September 2, 2024 - September 27, 2024

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proactive approach to staying at the forefront of technological advancements. His expertise in AI will undoubtedly bring innovative solutions to our pharmacy, improving operational efficiency and enhancing patient care.