



ashp Accredited



Shaukat Khanum Memorial Cancer Hospital & Research Centre

Pharmacy Newsletter

Volume XIV, Issue # 4, 2024

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
 - 4 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)



Pharmacy & Interprofessional Collaboration: Enhancing Patient Care Through Teamwork

In modern healthcare, **interprofessional collaboration (IPC)** is essential for improving patient outcomes, optimizing medication use, and enhancing overall healthcare efficiency. Pharmacists play a pivotal role in interdisciplinary teams, working alongside physicians, nurses, and other healthcare professionals to ensure safe and effective medication management.

1. The Role of Pharmacists in Interprofessional Teams

Pharmacists contribute significantly to healthcare teams by:

- **Medication Management:** Ensuring appropriate drug selection, dosing, and monitoring to prevent adverse effects.
- **Antimicrobial Stewardship:** Collaborating with infectious disease physicians to optimize antibiotic use and combat resistance.
- **Patient Education & Counseling:** Helping patients understand their medications, adherence, and potential interactions.
- **Clinical Decision Support:** Providing evidence-based recommendations for complex medication regimens.

2. Benefits of Interprofessional Collaboration in Pharmacy

- **Improved Patient Safety:** Reducing medication errors, adverse drug reactions, and hospital readmissions.
- **Enhanced Communication:** Strengthening coordination between pharmacists, physicians, and nurses, leading to better clinical decisions.
- **Optimized Resource Utilization:** Streamlining workflows and reducing redundant prescriptions or unnecessary treatments.
- **Better Patient Outcomes:** Studies show that collaborative care models lead to improved disease management and quality of life.

3. Examples of Successful Pharmacy-IPE Initiatives

- **Hospital-Based Rounds:** Pharmacists participating in ward rounds alongside physicians and nurses to review patient cases.
- **Interprofessional Education (IPE) Programs:** Training healthcare students in multidisciplinary teamwork to foster early collaboration.
- **Collaborative Drug Therapy Management (CDTM):** Pharmacists working under protocols to adjust medications based on clinical guidelines.
- **Telemedicine & Virtual Consultations:** Pharmacists engaging in remote consultations with physicians to manage complex cases efficiently.

4. Challenges & Barriers to Effective Collaboration

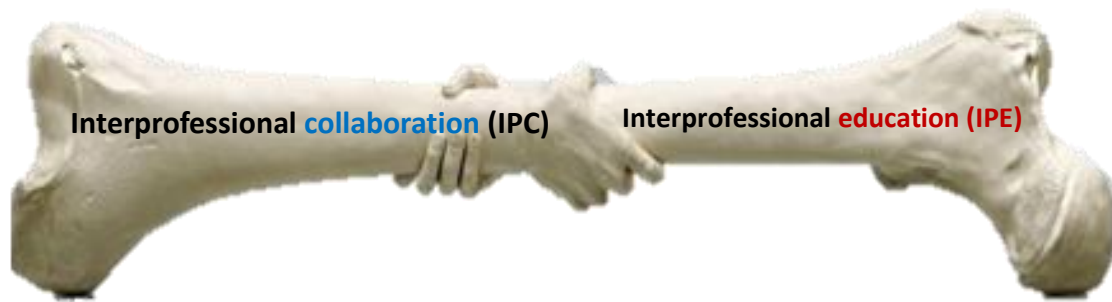
Despite its benefits, IPC in pharmacy faces certain challenges, including:

- **Lack of Defined Roles:** Some healthcare settings lack clear frameworks for pharmacist involvement in clinical decision-making.
- **Communication Gaps:** Inefficient communication channels between pharmacy and other departments can hinder collaboration.
- **Regulatory & Institutional Barriers:** Some policies limit pharmacists' authority in patient management.

5. The Way Forward: Strengthening Pharmacy-Interprofessional Collaboration

To enhance collaboration, healthcare institutions should:

- **Encourage Interprofessional Training:** Implement structured IPE programs to improve teamwork skills.
- **Leverage Technology:** Use digital tools like electronic health records (EHRs) to facilitate real-time communication.
- **Advocate for Policy Changes:** Support regulations that expand pharmacists' clinical roles and prescribing authority.
- **Standardize Communication Protocols:** Establish clear communication frameworks, such as structured handoff tools, to ensure seamless information exchange between pharmacists and other healthcare professionals.
- **Integrate Pharmacists in Leadership Roles:** Involve pharmacists in hospital committees, decision-making bodies, and policy development to strengthen their contribution to patient care.
- **Interprofessional Collaboration (IPC) and Interprofessional Education (IPE):** Both should be strengthened up and collective workup should be made on the curriculum in the region.

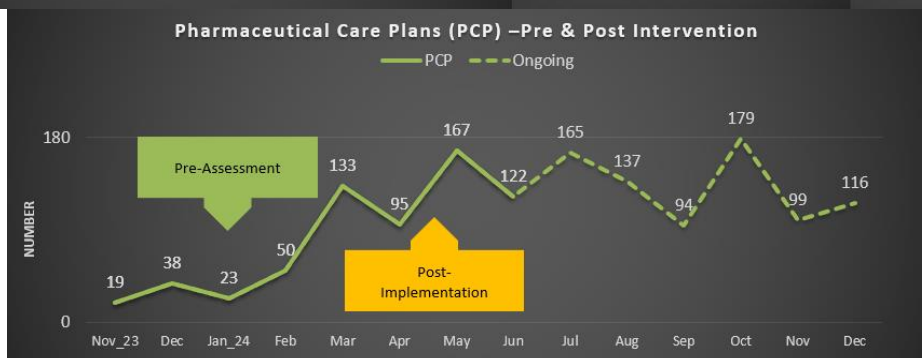
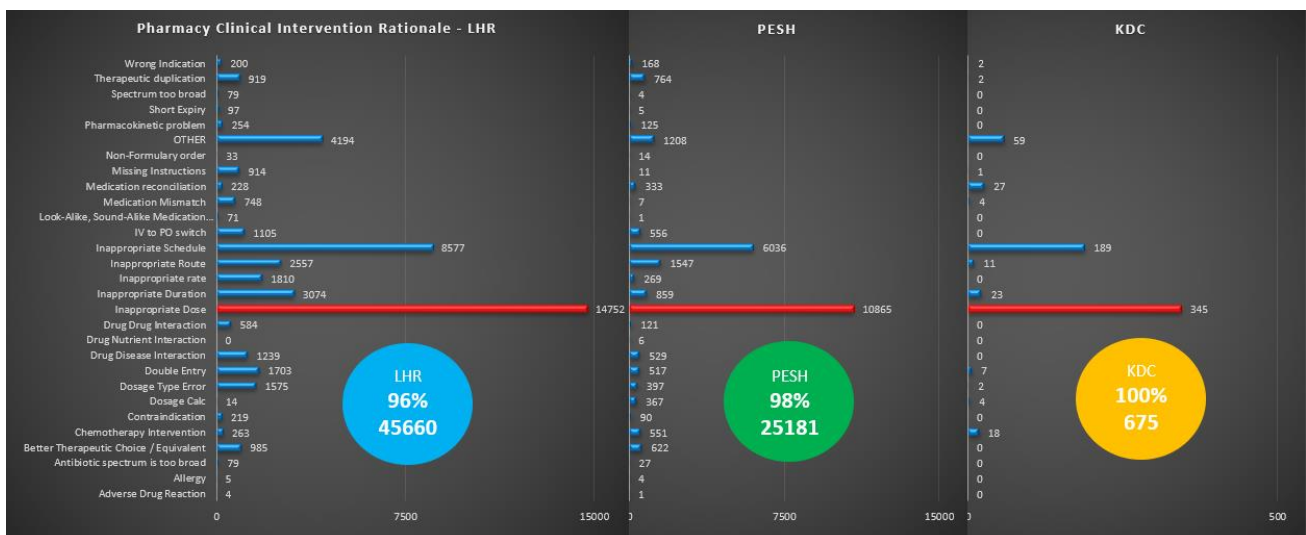
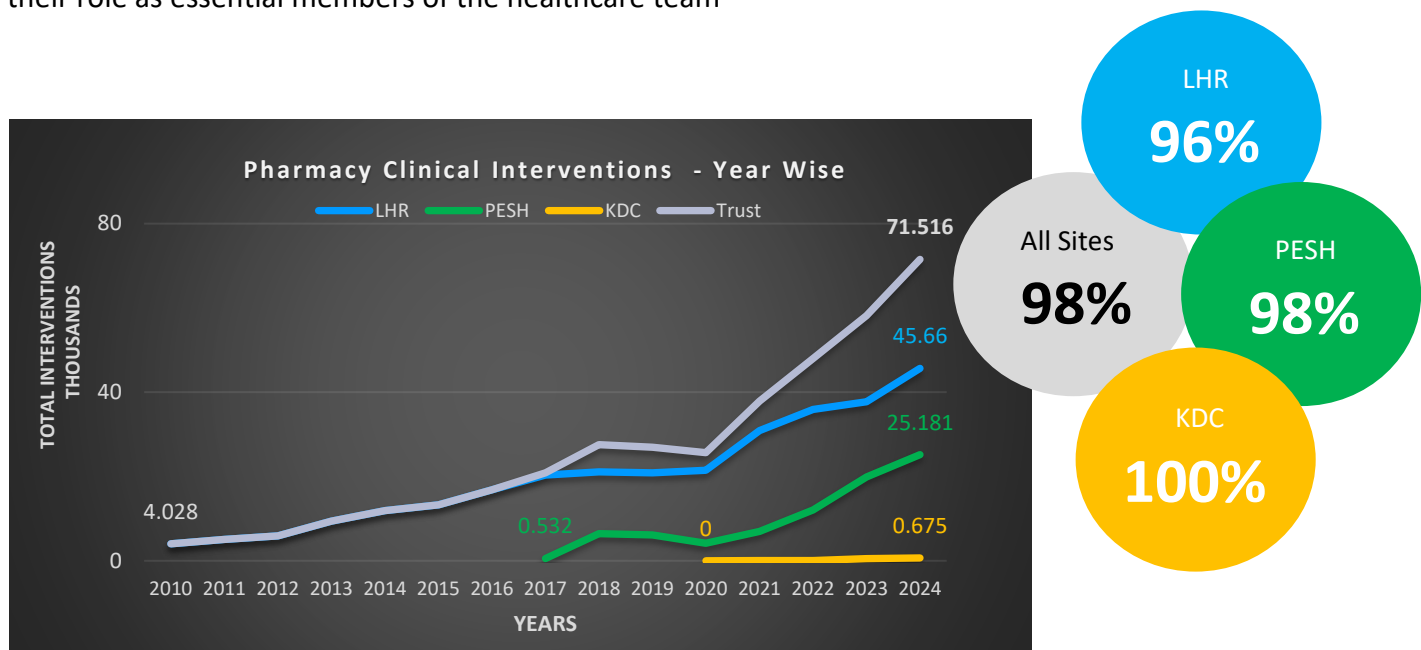


Conclusion

Interprofessional collaboration in pharmacy is a critical component of patient-centred care. By fostering teamwork and communication among healthcare professionals, we can improve medication safety, enhance patient outcomes, and create a more efficient healthcare system. As the role of pharmacists continues to evolve, embracing collaboration will be key to advancing the profession and ensuring high-quality care.

Pharmacy Clinical Interventions

Pharmacy clinical interventions play a crucial role in improving patient safety, optimizing therapy, and reducing medication-related errors. These interventions include **medication reconciliation**, where pharmacists review patient histories to prevent duplications or interactions, and **dose adjustments** based on renal or hepatic function. Pharmacists also provide **antimicrobial stewardship interventions**, ensuring appropriate antibiotic use to combat resistance. Additionally, they manage **adverse drug reactions (ADRs)**, recommend **IV-to-oral conversions**, and educate healthcare teams on **evidence-based prescribing**. By actively participating in clinical rounds, pharmacists enhance medication management, reduce hospital stays, and improve overall patient outcomes, reinforcing their role as essential members of the healthcare team



Antimicrobial Stewardship

Antimicrobial resistance (AMR) is a growing global health concern, requiring a structured Antimicrobial Stewardship Program (ASP) within healthcare organizations. A well-implemented ASP ensures the judicious use of antibiotics, enhances patient safety, and mitigates resistance development.

1. Key Components of an Organizational ASP

- **Multidisciplinary Stewardship Team:** A dedicated committee comprising infectious disease physicians, clinical pharmacists, microbiologists, and infection control specialists to oversee antimicrobial policies.
- **Evidence-Based Antibiotic Prescribing:** Implementing **clinical decision support systems (CDSS)** and **electronic prescribing protocols** to optimize antibiotic selection, dosing, and duration.
- **Rapid Diagnostics Integration:** Utilizing molecular diagnostics and pathogen susceptibility testing for targeted antimicrobial therapy.
- **Surveillance & Data Analytics:** Regular monitoring of antimicrobial use, resistance patterns, and patient outcomes to guide stewardship interventions.
- **Education & Training:** Conducting continuous workshops, case-based discussions, and competency assessments to enhance prescriber awareness.

2. Strategies for Strengthening ASP at an Organizational Level

- **Formulary Restrictions & Pre-Authorization:** Limiting the use of broad-spectrum antibiotics to prevent unnecessary exposure.
- **Prospective Audit & Feedback:** Reviewing prescriptions and providing real-time recommendations to prescribers for optimizing therapy.
- **De-escalation & IV-to-PO Conversion:** Ensuring timely step-down therapy and transitioning from intravenous to oral antibiotics when appropriate.
- **Policy & Compliance Enforcement:** Aligning antimicrobial policies with national and international guidelines, such as WHO and CDC recommendations.

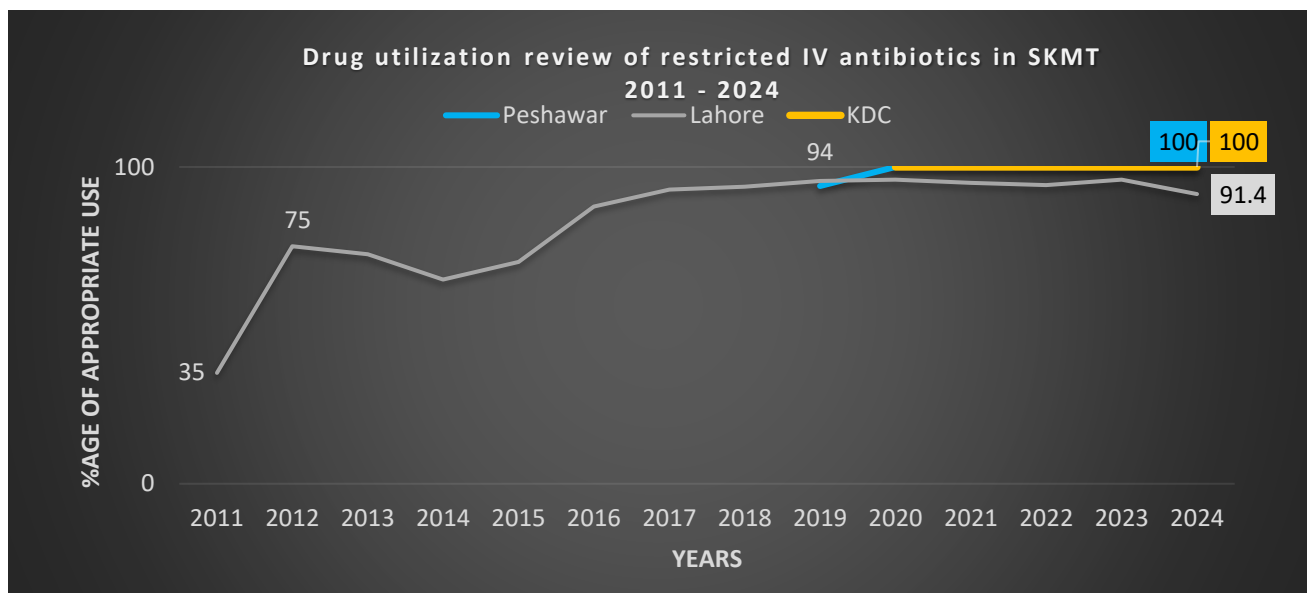
3. Measuring ASP Success

- **Key Performance Indicators (KPIs):** Tracking antibiotic consumption rates, resistance trends, and adherence to guidelines.
- **Clinical Outcomes Assessment:** Evaluating infection cure rates, hospital stay duration, and readmission due to antimicrobial failure.
- **Cost Impact Analysis:** Assessing cost savings achieved through reduced antibiotic overuse and improved patient outcomes.

Conclusion

A robust **Antimicrobial Stewardship Program (ASP)** within an organization is vital for combating AMR and ensuring effective infection management. By integrating technology, policy enforcement,

and continuous education, healthcare institutions can achieve **sustainable antibiotic use** while enhancing patient care.

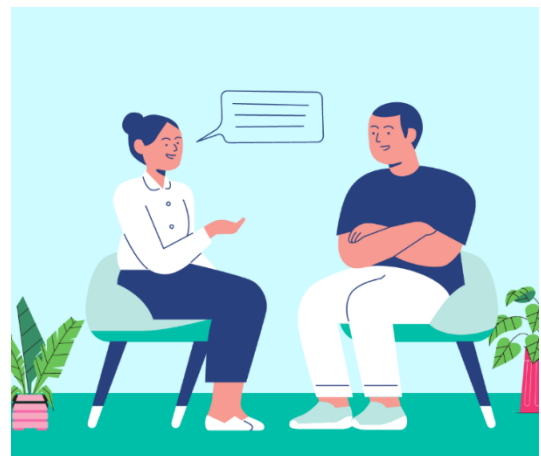


Infection Prevention and Control (IPC) – Updates

Antimicrobial Medication Information for Patients

Taking a step forward in leading the way the antimicrobial stewardship. New multi-lingual patient information will be introduced to improve rational use of antibiotics, reduce antimicrobial resistance and enhance adherence. The patient information for antimicrobial medication emphasizes the importance of proper usage to ensure effectiveness and safety. Always complete the full course as prescribed, even if symptoms improve, to prevent resistance. To take antibiotics at the correct intervals, as instructed by your doctor or pharmacist. Swallow with water unless directed otherwise, and follow any special instructions provided.

If a dose is missed, consult your healthcare provider for guidance, but never double the dose. Pay attention to possible side effects, and report any unusual reactions promptly. Avoid self-medication and never share antibiotics with others. Store antibiotics in a cool, dry place and discard expired medications. Lastly, misuse or overuse can lead to antibiotic resistance, making future infections harder to treat, so always use antibiotics responsibly. Hence, revamping the education of patients has been taken to a new horizon.



Pharmacy Practice Innovations

Barcode based medicine administration (BCMA)



The barcode based medicine administration has been started this year. Within the process, the events start from medicine release then section acknowledgement, then nursing receiving and finally administration to the patient. These events will be interdependent, forming a sequential process. The system will enable the performance of section acknowledgment only after the medicine is released by the pharmacy. Medicine receiving will be allowed once the medicine is released by the pharmacy and section acknowledgment has been completed. Similarly, a nurse can verify and administer medicine only after the previous events—releasing, section acknowledgment, and receiving—are completed. The section acknowledgment event will occur after the releasing event by the pharmacy. This event can be performed by any of the following transporting staff: Porter, Pharmacy Assistant, or Nurse. Once section acknowledgment is completed, nursing staff on the relevant floor or area will acknowledge the section. After scanning the required medicines, the transporting staff will scan their employee card to automatically acknowledge the section acknowledgment event, with the option to manually enter their employee code if necessary. Finally, after medicine receiving, the nursing staff will administer the medicine.

International and Local Pharmacy News

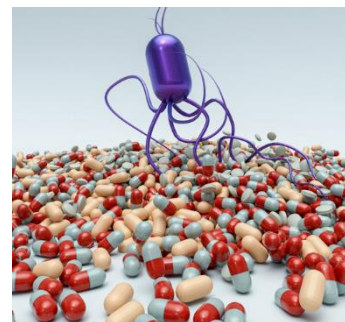
UK facing one of the worst drug shortages in recent past

According to the Department of Health and Social Care, United Kingdom is facing severe disruptions in medication supply in comparison to last few decades. The class of medication strongly hit are anti-epileptic drugs and treatments for cystic fibrosis. Although drug shortage is a global challenge but it's worse than in Europe. This is attributed to drop in imports for up to 20% since 2015. All 500 of the pharmacies it surveyed said they could not dispense a prescription at least once a day because drugs were unavailable. To mitigate the problem the government plans to strengthen its domestic resilience with investment of £520 million to manufacture drugs within United Kingdom.



Frequent use of antibiotics causing antimicrobial resistance: DRAP

In 2024, six of Pakistan's top 11 best-selling medicines are antibiotics, collectively valued at over Rs 41.86 billion, raising concerns over the country's excessive reliance on these drugs and the risk of antimicrobial resistance (AMR). The leading antibiotics include Augmentin, Oxidil, and Flagyl, highlighting the widespread use of antibiotics in Pakistan. Experts point to self-medication, over-the-counter sales, and inadequate regulation as key factors contributing to AMR. The Drug Regulatory Authority of Pakistan (DRAP) is urging stricter controls, including prescription-only sales of antibiotics, to combat the crisis. The growing sales of painkillers like Panadol, driven by climate-related illnesses, further underscore Pakistan's healthcare challenges, exacerbating the threat of AMR to public health.



Pharmacist Spotlights & Case Studies

Good Catch!

Recently, an intervention by our clinical pharmacist, which underscores the importance of diligence and patient safety in our practice.

A physician had entered an order for amlodipine 5 mg once daily for a patient scheduled for surgery. During the appropriateness review, Clinical Pharmacist noted that the patient had no history of hypertension and had never been on antihypertensive medication. Recognizing a potential error, he interviewed the order and promptly contacted the physician for clarification.

It was subsequently confirmed that the medication had been mistakenly ordered, validating Clinical Pharmacist intervention and attention to detail. His proactive approach successfully prevented a serious medication error and safeguarded patient safety.



International Conference Poster Presentation

Ms. Tasbiha Ali's abstract for poster presentation has been accepted for the ISOPP CAPhO 2025 Symposium to be held in Victoria, Canada. This is a great achievement for the International Pharmacy Practice Residency program at SKMCH&RC, which is accredited by American Society of Health-System Pharmacy. The research project titled, 'Strengthening of Clinical Pharmacist Services in Oncology Care Setting Through Pharmaceutical Care Plans with Pre-Assessment and Post-Intervention Data Analysis', was part of her IPPR year 1 residency.



Oncology related Drugs and Biologicals That Have Already or May Receive FDA-Approved Labelling in 2024 and 2025^a

Drug or biological	Manufacturer	Indication(s)	Route(s)	Type of Application	PDUFA date ^b
Linvoseltamab	Regeneron	Multiple myeloma	IV	BLA	3Q 2024
Vorasidenib	Servier Laboratories	Glioma	Oral	NDA	3Q 2024
Axatilimab	Incyte; Syndax	Graft versus host disease	IV	BLA	3Q 2024
Atezolizumab; Hyaluronidase	Roche; Genentech; Halozyme Therapeutics	Soft tissue sarcoma; Liver cancer; Small cell lung cancer; BRAF-mutant melanoma; Non-small cell lung cancer; Urothelial cancer	SC	BLA	3Q 2024
Garadacimab	CSL Behring	Hereditary angioedema	SC	BLA	3Q 2024
Hyaluronidase; Ocrelizumab	Roche; Genentech; Halozyme Therapeutics	Multiple sclerosis	SC	BLA	3Q 2024
Nemolizumab	Galderma	Prurigo nodularis	SC	BLA	3Q 2024
Afamitresgene Autoleuce ^c *	Adaptimmune	Synovial sarcoma	IV	BLA	3Q 2024
Denileukin Diftitox-cxdl	Eisai; Citius Pharma	Cutaneous T-cell lymphoma	IV	BLA	3Q 2024
Crinicerfont	Neurocrine Biosciences	Congenital adrenal hyperplasia	Oral	NDA	4Q 2024
Revakinagene Taroret ^c *	Neurotech	Macular telangiectasia	Implant	BLA	4Q 2024
Treosulfan	Medac; Medexus Pharmaceuticals	Conditioning for allogeneic hematopoietic stem cell transplantation	IV	NDA	4Q 2024
Zanidatamab	Jazz Pharmaceuticals	Biliary tract cancer	IV	BLA	4Q 2024
Zolbetuximab	Astellas	Gastric and gastroesophageal junction cancers	IV	BLA	4Q 2024
Datopotamab Deruxtecan	AstraZeneca; Daiichi Sankyo	Non-small cell lung cancer	IV	BLA	4Q 2024
SH-105	Shorla	Chronic myeloid leukemia; Acute lymphoblastic leukemia	Oral	NDA	4Q 2024
Lazertinib	Johnson & Johnson	Non-small cell lung cancer	Oral	NDA	4Q 2024
Inavolisib	Roche; Genentech	Breast cancer	Oral	NDA	4Q 2024
Nivolumab; Hyaluronidase	Bristol-Myers Squibb; Ono Pharmaceutical; Halozyme Therapeutics	Kidney cancer; Non-small cell lung cancer; Squamous cell carcinoma; Colorectal cancer; Liver cancer; Esophageal cancer; Gastric cancer; Gastroesophageal junction cancer; Urothelial cancer; Melanoma	SC	BLA	4Q 2024
Zenocutuzumab	Merus	Non-small cell lung cancer ; Pancreatic cancer	IV	BLA	4Q 2024
Ensertinib	Xcovery; Betta Pharmaceuticals	Non-small cell lung cancer	Oral	NDA	4Q 2024
Obecabtagene Autoleuce ^c *	Autolus Therapeutics	Acute lymphocytic leukemia	IV	BLA	4Q 2024
Revumenib	Syndax	Acute leukemias	Oral	NDA	4Q 2024
Tabelecleuce ^c *	Atara Biotherapeutics	Post-transplant lymphoproliferative disorder	IV	BLA	1Q 2025
Sebetralstat	KalVista Pharmaceuticals	Hereditary angioedema	Oral	NDA	1Q 2025
Amivantamab; Hyaluronidase	Johnson & Johnson (Janssen); Genmab; Halozyme Therapeutics	Non-small cell lung cancer	SC	BLA	2Q 2025

Footnotes

Abbreviations: FDA = Food and Drug Administration, PDUFA = prescription drug user fee act, IV = intravenous, SC = subcutaneous, IM = intramuscular, BLA = biologic license application, NDA = new drug application, Q = quarter.

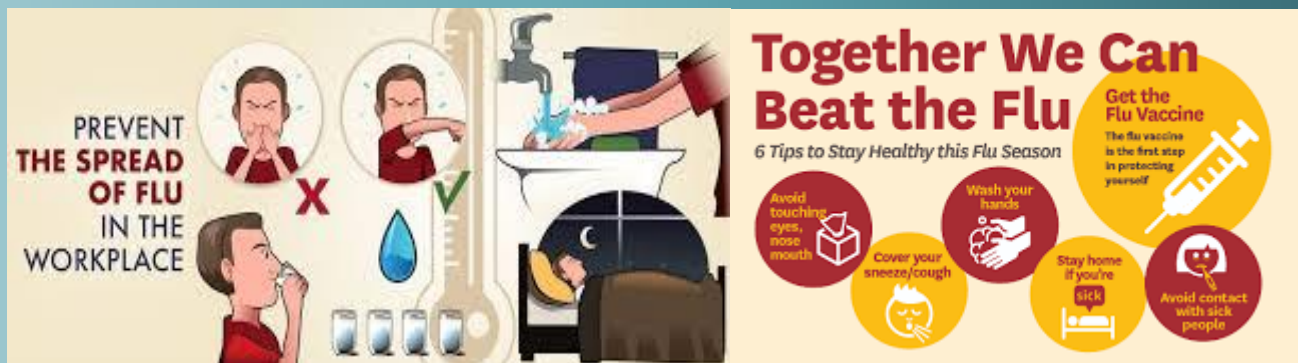
^a Information for this table extracted from the IPD Analytics Brand and Biosimilar Pipeline database as of July 1st, 2024.

^b Extrapolated on basis of new drug application submission date and review status (i.e., 10 months for standard review and 6 months for priority review). Some agents listed may have been approved by the time of publication.

* Cell and gene therapies

Ref: Rim MH, Dean C, Aliaj E, Karas BL, Barada F, Levitsky AM. Recent and anticipated novel drug approvals (3Q 2024 through 2Q 2025). American Journal of Health-System Pharmacy. 2024 Nov 15;81(22):1103-8.

Winter, Influenza, and Vaccination for Immunocompromised Cancer Patients



As influenza season approaches, it's important to remember that while the flu is often self-limiting for most people, it can be severe for those with weakened immune systems, such as cancer patients undergoing chemotherapy or immunotherapy. These individuals are more susceptible to infections, including the flu, due to a compromised immune response.

Winter and Influenza Risks

Winter weather and indoor gatherings heighten the spread of viruses like the flu. Flu symptoms, such as fever, cough, body aches, and fatigue, can lead to severe complications, including pneumonia, especially in those with weakened immune systems. The CDC estimates that around 90% of flu-related deaths occur in adults aged 65 and older, with residents of nursing homes and long-term care facilities being at increased risk. Children under 5, particularly those under 2, are also more vulnerable to flu complications.

Vaccination Recommendations

The World Health Organization recommends seasonal flu vaccination for high-risk groups, such as pregnant women, young children, the elderly, and those with chronic conditions. For cancer patients, the flu vaccine is essential to lower the risk of severe illness and hospitalization. However, the timing of vaccination should be discussed with the patient's oncologist to avoid interfering with cancer treatments. In Pakistan, the available flu vaccines are Inluvac and Vaxigrip. Patients should ensure they receive the vaccine at reputable vaccination centers..

Precautions

In addition to vaccination, cancer patients should take extra precautions during flu season, such as avoiding crowded places, maintaining good hygiene, and considering antiviral medications if flu symptoms develop. Family members and caregivers should also get vaccinated to help protect the patient. Other preventive measures include frequent handwashing, avoiding contact with sick individuals, wearing masks, and practicing proper cough etiquette.

Flu Vaccine Side Effects

Most side effects from the flu vaccine are mild and resolve within a couple of days, including soreness at the injection site, mild fever, and body aches. If you're allergic to eggs, inform your pharmacist or doctor before receiving the vaccine, as some flu vaccines contain egg proteins.

Ultimately, timely vaccination and proper precautions are vital to reduce the risk of influenza and other infections for cancer patients during the winter months.

Ref: <https://www.nhs.uk/conditions/vaccinations/flu-influenza-vaccine>

Nafithromycin: the New Addition in Macrolide Family in pipeline!

Community-acquired bacterial pneumonia (CABP) is a common, acute, severe infection of the lung parenchyma, which disproportionately affects vulnerable populations such as children, the elderly, and those with compromised immune systems. It is a major cause of mortality in adults in Asia. Nafithromycin had successfully accomplished phase 1 and phase 2 clinical studies in United States, Europe and India. Currently, nafithromycin has acquired the status as phase 3 drug candidate having potential to fulfill the unmet medical needs for treatment of CABP infections. Wockhardt's Nafithromycin, trademarked as MIQNAF, a three-day oral treatment for community-acquired bacterial pneumonia with a 97% success rate. Existing treatments to the disease have resistance as high as 60%. Its trials are set to conclude next year and once it's approved, the company says it could be launched commercially by late next year. Compared to azithromycin, the medicine has eight times the lung exposure and is ten times as powerful. Nafithromycin was developed by Wockhardt with support from the Biotechnology Industry Research Assistance Council (BIRAC). It has been tested in clinical trials in the United States, Europe, and India over 14 years, with a total investment of Rs 500 crore. The drug is currently awaiting final manufacturing approval from the Central Drugs Standard Control Organization (CDSCO). Nafithromycin is designed to treat both typical and atypical drug-resistant bacteria, making it a crucial tool in addressing the global health crisis of AMR (Anti-microbial Resistance). It boasts superior safety, minimal side effects, and no significant drug interactions.



Manufacturer’s dexmedetomidine premixed IV bags may be packaged within an overwrap labeled as acetaminophen



A Hikma product labeled as acetaminophen injection 1,000 mg/100 mL (NDC 0143-9386-01, lot 24070381, expiration 09/2025) may contain a dexmedetomidine 400 mcg/100 mL infusion bag (lot 24070461, expiration 03/2026), which has Canadian labeling, a different font, and follows ISMP

Canada’s tall man lettering (dexmedetomidine) instead of the US recommended tall man lettering (dexmedetomidine). This discrepancy is shown in Figures 1 and 2. A reported incident involved a nurse who



Figure 2 An infusion bag (left) found inside the acetaminophen injection overwrap by Hikma, was labeled dexmedetomidine 400 mcg/100 mL with Canadian labeling and a different font compared to the US product labeling (right).

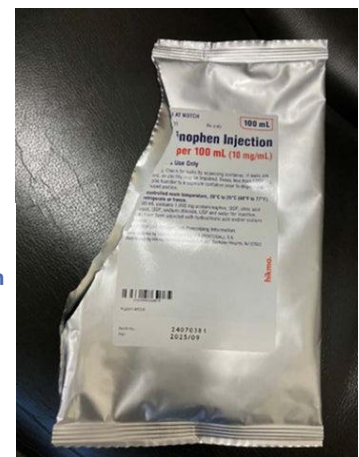


Figure 1 Hikma’s overwrap labeled acetaminophen injection 1,000 mg/100 mL may contain an infusion bag labeled dexmedetomidine 400 mcg/100 mL.

mistakenly administered dexmedetomidine, believing it was acetaminophen, resulting in bradycardia and bradypnea in the patient. The error was discovered after the infusion, and the patient recovered with intervention. Staff should also be trained to carefully read infusion bag labels and verify them prior to use. This incident emphasizes the importance of verifying labels and being cautious with similar-looking drug packaging. Errors should be reported to ISMP, FDA, and the manufacturer. Though, given products are no present at SKMT hospitals.

A visit from pharmacy students of University of Agriculture Faisalabad



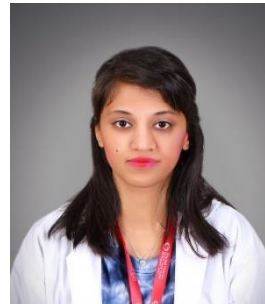
Polio Awareness Activity by ASHP Residents

A polio awareness activity was organized by an ASHP resident Mr. Haider Hikman and Miss Mahnoor Naveed to educate both the healthcare team and the patient attendants on the significance of polio vaccine. The residents delivered insightful sessions to the healthcare team, highlighting the vaccine's role in preventing polio and its implication in public health. Additionally, the resident provided counseling to patient attendants and distributed informative pamphlets to further raise awareness. Dr. Bakht Jamal, a pediatrician in medical oncology, and Dr. Fattah Ullah Khan actively participated in the event, offering their support and appreciating the



resident’s efforts in promoting polio vaccination and awareness. The day was not only educational but also a strong reminder of our collective commitment to protecting children from polio and ensuring a healthier future for all.

Board of Pharmacy Specialities – Board Certified Infectious Diseases Pharmacy Specialist



Aleeshba Usman
Clinical Pharmacist



Ms. Aleeshba Usman, Clinical Pharmacist, at Shaukat Khanum Memorial Cancer Hospital & Research Centre, Lahore, has passed the Board of Pharmacy Specialities (BPS) exam for Infectious Diseases Pharmacy Specialty Certification (BCIDP). Previously, she had passed BPS exam for Pharmacotherapy, Board-Certified Pharmacotherapy Specialists (BCPS) pharmacist.

Link to BPS page for further guidance is available online:

- Pharmacotherapy. Board of Pharmacy Specialities. BPS. 2022. Information available from: <https://www.bpsweb.org/bps-specialties/pharmacotherapy/>
- Infectious Diseases Pharmacy. Board of Pharmacy Specialities. BPS. 2024. Information available from: <https://bpsweb.org/infectious-diseases-pharmacy/>

Completion of CHQP course – Mahnoor Naveed

Ms. Mahoor Naveed, has successfully completed the **Certified Healthcare Quality Professional (CHQP)** certification and got 3rd Position. This certification has provided her with valuable insights into healthcare quality management, patient safety, and quality improvement processes, all of which she is eager to apply in her work.



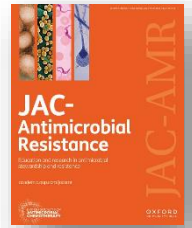
Sharing is Caring- Presentations, Webinars, Conferences & Publications

The pharmacy department, as per tradition, has participated in various events and continued this trajectory, in the fourth quarter of 2024.

Publication



Akbar Z, Aamir M, Saleem Z, Khan MR, Bhutta OA. Clinical pharmacist-led antifungal drug utilization reviews in cancer care hospital: a prospective audit and feedback. JAC-Antimicrobial Resistance. 2024 Dec;6(6):dlae184.



Shaukat Khanum Cancer Symposium 2024

Department of Pharmacy organised the Oncological Pharmacy session provided valuable insights into the role of pharmacists. Topics covered included elements of drug shortage challenges in chemotherapy management, personalized treatment plans, and supportive care strategies. Attendees gained practical knowledge on strategies to manage drug storages, ensuring patient safety, and improving outcomes for oncology patients.



Seminar held on Antimicrobial Stewardship at SKMCH&RC, Lahore

A seminar on Antimicrobial Stewardship was held at SKMCH&RC, Lahore, focusing on optimizing the use of antimicrobials to combat resistance. Experts shared best practices in prescribing, monitoring, and educating healthcare professionals on appropriate antibiotic use. The session emphasized the importance of stewardship programs in improving patient outcomes and curbing antimicrobial



Panelist of discussion at Salim Habib University Karachi (SHU)

Ms. Samina Badar, Manager Pharmacy, was panelist for a discussion on the career pathways for pharmacy students, organized by Salim Habib University Karachi (SHU).

