JSS ACADEMY OF HIGHER EDUCATION & RESEARCH
(DEEMED TO BE UNIVERSITY) MYSURU

CLINICAL PHARMACY NEWSLETTER

A Newsletter of Drug and Prescribing Information

Published by
Clinical Pharmacy Services Department, Govt. Medical College & Hospital, Ooty
(A Unit of Department of Pharmacy Practice, JSS College of Pharmacy, Ooty)

Volume XXX Issue 02 | **April - June 2025**

INSIDE THIS ISSUE

The role and mechanism of mesenchymal stem cells in immuno-modulation of type 1 diabetes mellitus and its complications: Recent research progress and challenges: a review

Type 1 Diabetes Mellitus (T1DM) is a chronic autoimmune condition characterized by the immune-mediated destruction of insulin-producing beta (Î²) cells in the pancreas. As a result, affected individuals experience absolute insulin deficiency, leading to chronic hyperglycemia and lifelong dependency on exogenous insulin. This autoimmune attack primarily involves CD4+ and CD8+ T cells, B cells, dendritic cells, and macrophages, which together contribute to the inflammatory destruction of pancreatic islets. Despite advances in insulin therapy and glucose monitoring, patients remain at risk for long-term complications affecting the eyes, kidneys, nerves, muscles, and cardiovascular system.

Mesenchymal stem cells (MSCs) have emerged as a novel therapeutic option for T1DM due to their unique properties, including immunomodulatory capacity, low immunogenicity, multipotency, and the ability to secrete regenerative and anti-inflammatory factors. This review explores their sources, mechanisms of action, therapeutic potential in complications, and future directions in clinical applications.

Key Functions and Mechanisms of MSCs in T1DM
Sources of MSCs
MSCs are multipotent stromal cells that can be derived from various tissues:

- Bone Marrow (BM-MSCs): Known for their strong immunosuppressive capabilities and support of hematopoiesis.
- Adipose Tissue (AD-MSCs): Easily accessible and effective in angiogenesis and metabolic regulation.
- Umbilical Cord (hUC-MSCs): Exhibit the highest immunomodulatory profile and lowest immunogenicity, making them suitable for allogeneic transplantation.

Immunomodulation
MSCs interact with immune cells to suppress the autoimmune response in T1DM:

- *T Cells:* MSCs inhibit effector T cells and enhance regulatory T cells (Tregs), crucial for restoring immune balance. Cytokines such as IL-10 and TGF-Î², as well as extracellular vesicles (EVs), mediate these effects.
- *Dendritic Cells (DCs):* MSCs reduce antigen-presenting capacity of DCs, thereby minimizing T-cell activation.
- *Macrophages:* MSCs promote the shift from pro-inflammatory M1 to anti-inflammatory M2 phenotype, aiding in inflammation resolution.

Signaling Pathways Involved MSCs exert their effects through several critical signaling pathways:

- *TGF-Î²/Smad:* Induces Tregs and M2 macrophages.
- *JAK/STAT3:* Suppresses pro-inflammatory gene expression.
- *PI3K/Akt:* Enhances survival, proliferation, and anti-apoptotic functions.
- *PD-1/PD-L1 Axis:* Promotes immune tolerance by suppressing T-cell receptor signaling.
- *MAPK/NF-ÎºB:* Inhibits inflammatory cytokine production.

Therapeutic Benefits in T1DM Complications

Diabetic Retinopathy (DR):
MSCs reduce inflammation in the retina and promote vascular repair by modulating the MAPK/ERK and PTEN/AKT/NRF2 pathways. MSC-derived EVs inhibit inflammasome activation and reduce oxidative stress.

Peripheral Neuropathy:
MSCs enhance neural repair through activation of the Wnt/DVL1 and GSK-3β/β-catenin pathways. Schwann cell regeneration is improved, contributing to remyelination and nerve function restoration.

Diabetic Myopathy:
MSCs mitigate muscle atrophy by suppressing inflammatory cytokines (TNF-α±, IL-6) and regulating muscle proteolysis via Atrogin-1 and MuRF1 downregulation.

Cardiovascular Disease:
MSCs improve cardiac tissue function by secreting angiogenic factors such as VEGF and basic fibroblast growth factor (bFGF). They also alleviate oxidative stress and inflammation.

Foot Ulcers:
Through PI3K/Akt signaling, MSCs promote endothelial cell proliferation and tissue regeneration, accelerating wound healing and improving outcomes in chronic diabetic ulcers.

Preclinical and Clinical Research

Animal Studies:

• NOD Mouse Model: MSCs accumulate in pancreatic lymph nodes, inhibit T-cell activity, and preserve Î²-cell mass via PD-1/PD-L1.

• STZ-Induced Model: MSCs differentiate into insulin-producing cells (IPCs), expand M2 macrophages, and restore glucose homeostasis.

Clinical Trials:

Multiple early-phase clinical trials have shown:

• Improved HbA1c levels

• Increased endogenous insulin production (C-peptide)

• Expansion of Tregs and reduction in autoimmune attacks

• Minimal adverse events reported

Combination Therapies and Enhancements

• *MSC + Islet Transplantation:*

MSCs enhance survival and function of transplanted islets, reduce immune rejection, and improve insulin secretion.

• *MSC + Drugs/Gels:*

Using MSCs in hydrogels (e.g., PF-127) prolongs therapeutic action in wound healing. Preconditioning with drugs like oxytocin or grape seed extract improves MSC viability and efficacy.

MSC + Nanotechnology:

Combining MSCs with nanoparticles (e.g., selenium, Fe3O4) enables targeted delivery, reduces Î²-cell apoptosis, and enhances therapeutic precision.

• *MSC + Gene Therapy:*

Genetically engineered MSCs (e.g., expressing PDX1, Exendin-4, or gastrin) improve insulin secretion, Î²-cell regeneration, and immune modulation.

Challenges in Clinical Application

• Heterogeneity: Variability in MSC source, donor characteristics, and culture conditions affects outcomes.

• Immune Recognition: Although low, allogeneic MSCs can still elicit immune responses.

• Safety Concerns: Long-term risks include potential for fibrosis, tumorigenesis, and ectopic differentiation.

• Manufacturing: Scalable and standardized production remains a barrier for widespread clinical use.

Future Directions

• Development of personalized MSC libraries for patient-specific therapy.

• Application of AI technologies to guide individualized MSC treatment plans

Use of MSC-derived exosomes (EVs) as a cell-free therapy with reduced immunogenicity

• Advancement of CRISPR/Cas9-based engineering to enhance MSC function, target delivery, and safety

Conclusion

Mesenchymal stem cells represent a transformative approach in the management of T1DM by targeting not just symptoms, but the root autoimmune and inflammatory processes. Their ability to modulate immune responses, regenerate pancreatic tissue, and improve complications positions them as a superior alternative to conventional insulin therapy. As clinical evidence accumulates, it is vital to address the remaining safety, standardization, and efficacy challenges to fully realize the therapeutic potential of MSCs in diabetes care.

Reference

Wang C, Wu Y, Jiang J. The role and mechanism of mesenchymal stem cells in immunomodulation of type 1 diabetes mellitus and its complications: recent research progress and challenges: a review. Stem Cell Res Ther. 2025;16(1):308.

Aural Myiasis in a Pediatric Patient: A Case Report and Literature Review

Introduction

Aural myiasis is a rare infestation of the external auditory canal by fly larvae, typically occurring in individuals with poor hygiene, chronic ear infections, or immunocompromised conditions. It is more commonly reported in tropical and subtropical regions, where flies are abundant, and is often associated with exposure to unhygienic environments.. Although myiasis is well-documented in various body parts, cases affecting the ear are uncommon, particularly in pediatric patients. The presence of larvae in the ear canal can lead to significant tissue damage, secondary infections, and, in severe cases, complications such as tympanic membrane perforation or deeper invasion into the middle ear and mastoid. Early diagnosis and intervention are crucial to prevent complications and ensure optimal patient outcomes. Here, we report a rare case of pediatric aural myiasis in a previously healthy child with a history of frequent swimming and recurrent ear discharge. This case highlights the importance of recognizing risk factors and implementing prompt management strategies to prevent further complications.

Case Report

A 10-year-old boy presented to the clinic with continuous bleeding from his left ear for two consecutive days. The patient also reported ear pain, hearing impairment, and otorrhea. His parents noted a history of frequent swimming, after which he occasionally experienced foul-smelling ear discharge, suggesting a possible underlying ear infection. There was no history of trauma, immunosuppressive conditions, or previous similar episodes. On otoscopic examination, two live larvae were observed in the external auditory canal, surrounded by inflamed tissue (Figure 1). The tympanic membrane was intact, with no signs of perforation. Due to the primary care setting, no imaging or microbiological analysis was performed.

Case Presentation

A 34-year-old individual with a significant medical background of type 1 diabetes mellitus, initially diagnosed at the age of 9 and managed with insulin therapy, presented with progressive stiffness and flexion deformity of the fingers. This condition, described as camptodactyly, was most pronounced in the proximal interphalangeal joints and had progressively worsened over five years, impairing daily functions and work-related tasks. The deformity was accompanied by chronic intermittent paraesthesia in the extremities, an additional source of discomfort for the patient. The patient's medical history was notable for bilateral cataracts, which had developed by the age of 16 and were subsequently resolved with surgical intervention. Despite ongoing treatment, dyslipidemia remained a challenge, with target lipid profiles being inconsistently achieved. The family history revealed a genetic predisposition to diabetes and potentially related musculoskeletal disorders, with similar conditions noted in close relatives. Genetic evaluations uncovered markers suggestive of Fabry disease; however, there were no reported phenotypic manifestations. Psychosocially, the patient conveyed significant distress due to the functional limitations imposed by the hand deformities.

The larvae were manually removed using forceps, followed by ear canal irrigation with normal saline (Figure 2). The patient was prescribed oral antibiotics, analgesics, and hemostatic agents for home use in case of recurrent bleeding. Following larval extraction, the child reported immediate relief from pain and discomfort. On follow-up three days later, the patient was asymptomatic, with no further bleeding or pain.

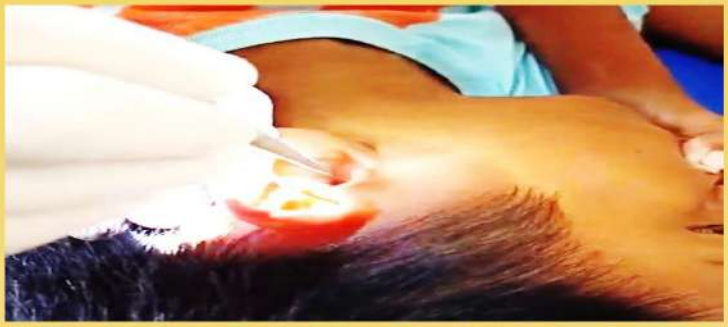


Figure 1. Live larvae were observed in the patient's left external auditory canal on initial otoscopic examination

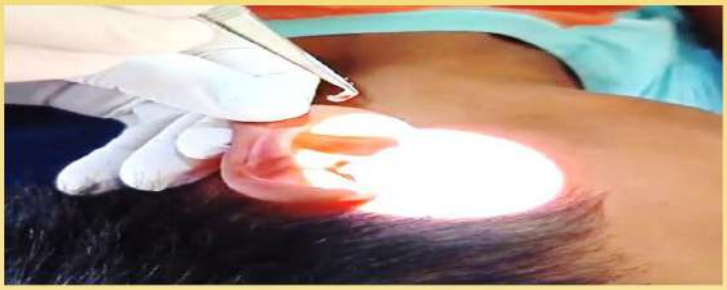


Figure 2. Mechanical removal of larvae using forceps, followed by irrigation with normal saline.

Although aural myiasis is a rare condition, especially in developed healthcare systems, its occurrence is more frequently documented in tropical and low-resource settings. Most literature on aural myiasis centers on adult or geriatric populations, with significantly fewer reports detailing pediatric cases. This underrepresentation points to a notable research gap, especially considering that children may be more vulnerable due to behaviors such as frequent swimming, inadequate ear hygiene, or limited awareness of early symptoms. The lack of emphasis on pediatric presentations can delay diagnosis and increase the risk of complications such as tympanic membrane damage or secondary infections. Therefore, this case report aims to contribute to the limited body of literature by highlighting the clinical presentation, management, and outcomes of aural myiasis in a child. The objective is to raise clinical awareness among primary care and ENT practitioners to ensure timely identification and intervention. The benefits of this research lie in promoting early, non-invasive management strategies and reinforcing the importance of prevention education for parents and caregivers, particularly in endemic or underserved regions.

Research Method

This research employed a descriptive case study design to document a pediatric patient's clinical presentation, treatment, and outcomes of aural myiasis. Data was collected at the Ketanggungan Medical Center Clinic, including the patient's medical history, clinical symptoms, otoscopic findings, and therapeutic interventions. Otoscopic examination revealed live larvae in the external auditory canal, which were removed manually using forceps, followed by irrigation with sterile saline. Post-procedure, the patient received oral antibiotics, analgesics, and hemostatic agents, with a single follow-up conducted three days later to assess symptom resolution. Complementary to the case documentation, a focused literature review was conducted using Google Scholar to identify previous reports of pediatric aural myiasis. This review aimed to compare risk factors, treatment protocols, and outcomes to understand better the implications of early detection and management in pediatric populations. However, this study has several limitations. The absence of statistical analysis and laboratory confirmation limits the precision of the findings. Additionally, the follow up period was short, restricting insight into long-term outcomes. This is a single case report, so the results cannot be generalized to wider populations. Nevertheless, the report contributes valuable insight into an underreported condition in children and serves as a foundation for further research and improved clinical vigilance in endemic regions.

Result and Discussion

Aural myiasis is an uncommon condition caused by fly larvae infesting the external auditory canal. If not managed promptly, the presence of live larvae in the ear canal can lead to tissue destruction, secondary infections, and severe complications. Several species of flies, particularly from the Calliphoridae and Sarcophagidae families, are known to cause aural myiasis. These dipteran larvae feed on necrotic or inflamed tissues within the auditory canal, which can aggravate inflammation and lead to serious complications such as tympanic membrane perforation, conductive hearing loss, or even invasion into deeper structures like the middle ear or mastoid cavity. In the present case, timely identification and intervention likely prevented these sequelae, emphasizing the role of early clinical vigilance. The standard approach to managing aural myiasis involves mechanically extracting the larvae using forceps, followed by irrigation with saline or antiseptic solutions to remove residual eggs or necrotic debris. Additional treatment may include systemic or topical antibiotics to prevent secondary bacterial infections. In some reports, occlusive substances such as mineral oil, chloroform, or turpentine have been used to immobilize the larvae prior to removal.

Compared with previous pediatric case reports, such as those documented by Prasanna et al. (2020) and Khan et al. (2017), the clinical presentation is generally consistent, manifesting with ear discharge, otalgia, and occasionally bleeding. However, our case uniquely benefited from early diagnosis without imaging or sedation, relying solely on primary care tools. Some published cases have required multiple extraction sessions or hospital admission, especially in cases complicated by secondary infections or tissue necrosis. The current findings align with other regional case studies that stress the importance of recognizing environmental and behavioral risk factors, such as poor hygiene, swimming in contaminated water, or pre-existing otitis externa, in increasing susceptibility to myiasis. Thus, heightened clinical suspicion is warranted in pediatric patients with such histories, especially in tropical or subtropical regions. This case further illustrates healthcare providers' and communities' need for education regarding early signs of myiasis, appropriate referral pathways, and hygienic practices to minimize risk. Continued documentation of such cases is essential for building clinical awareness and guiding public health interventions, particularly in resource-limited or rural areas where the condition may be underdiagnosed or mismanaged.

Conclusion

Aural myiasis, though rare, presents a significant clinical concern, especially in pediatric populations with risk factors such as recurrent otitis externa and poor ear hygiene. This case underlines the critical importance of early detection and intervention to prevent serious complications, including tympanic membrane perforation and deeper extension into the middle ear or mastoid. Mechanical extraction of larvae combined with ear irrigation and targeted antibiotic therapy remains the cornerstone of effective treatment. From a clinical practice standpoint, it is essential to heighten provider vigilance for symptoms suggestive of myiasis in children, particularly those in endemic regions or with frequent water exposure, such as swimming. Healthcare facilities should be equipped with proper diagnostic tools, treatment protocols, and referral mechanisms for suspected myiasis cases, especially at the primary care level. In terms of policy, we recommend integrating ear and hygiene screening into routine school health programs in high-risk areas, alongside public health campaigns focusing on ear care and infection prevention. Educational efforts should also target parents and caregivers to recognize early signs of ear infections and seek timely care. Further research and case documentation are essential to establish evidence-based protocols and guide resource allocation for neglected tropical conditions such as aural myiasis.

Reference

Baruna Eka Atmaja. Aural Myiasis in a Pediatric Patient: A Case Report and Literature Review. Asian Journal of Health & Science. 2025;4(5):211-217.

Drug Profile
Tryptyr (Acoltremon)

Pharmacological Class
TRPM8 Receptor agonist

Indications
Acoltremon is indicated for the treatment of the signs and symptoms of dry eye disease.

Dosage Forms And Strengths
Instill one drop in each eye twice daily (approximately 12 hours apart)

Contraindications
None

Warning and Precautions

Potential for Eye Injury and Contamination: To avoid the potential for eye injury and contamination, do not touch the vial tip to the eye or other surfaces.

Use with Contact Lenses: Acoltremon should not be administered while wearing contact lenses. If contact lenses are worn, they should be removed prior to administration of the solution. Lenses may be reinserted 15 minutes following administration of Acoltremon.

Mechanism of Action
Studies in animals suggest that Acoltremon, the active substance in Tryptyr, is an agonist of transient receptor potential melastatin 8 (TRPM8) thermoreceptors. TRPM8 thermoreceptor stimulation has been shown to activate trigeminal nerve signaling leading to increased basal tear production. The exact mechanism of action for Acoltremon in dry eye disease is unknown.

Adverse Reactions

Clinical Trials Experience

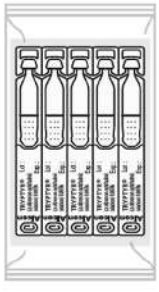
• Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

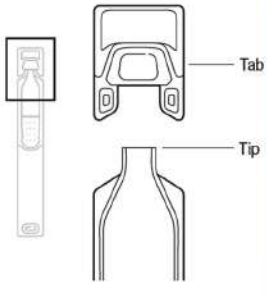
• In patients with dry eye disease, 766 patients received at least one dose of Acoltremon in four randomized controlled clinical trials across 71 sites in the United States.

• The most common ocular adverse reaction observed in controlled clinical studies with Acoltremon was instillation site pain (50%).

• Less than 1% of patients discontinued therapy due to burning or stinging sensation in the eyes.

Front view of foil pouch


5 single-dose vials inside foil pouch



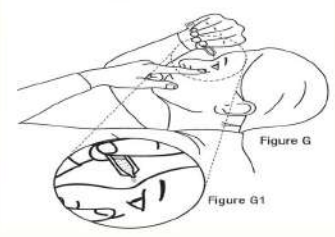
Single-dose vial

Ingredients
Active: Acoltremon 0.003%
Inactive ingredients: polyoxyl 35 castor oil, sodium dihydrogen phosphate dihydrate, sodium chloride, hypromellose, and purified water (inactive ingredients).
Sodium hydroxide adjusts pH. No antimicrobial preservative is included. Supplied as a sterile, clear to slightly opalescent, and colorless solution in a low-density polyethylene (LDPE), single-dose vial with a 0.4 mL fill.
• One strip of 5 single-dose vials is packaged in a foil pouch with twelve (12) pouches in a carton.

Important Information to Know Before Using Acoltremon:
• Use Acoltremon exactly as the healthcare provider instructed.
• Acoltremon is for use in the eye. Each single-dose vial of Acoltremon will give you enough medicine to treat both of your eyes. There is extra Acoltremon in each single-dose vial in
case you miss getting a drop into your eye.
• Keep the unopened single-dose vials in the original foil package until ready to use.
• Wash your hands before each use to make sure you do not infect your eyes.
• If you use Acoltremon with other eye medicines, wait at least 5 minutes between using
Acoltremon and the other medicines.
• If you wear contact lenses, remove them before using TRYPTYR. Wait 15 minutes after
dosing before putting contact lenses back in your eyes.
• If 1 dose is missed, treatment should continue at the next scheduled time.
• Use 1 drop of Acoltremon in each eye 2 times each day. Use 1 single-dose vial in the morning and another single-dose vial in the evening, approximately 12 hours apart.
• Do not let the tip of the single-dose vial touch your eye or any other surface to avoid eye injury or infection.
• Do not use the single-dose vial or the medicine inside it if the tip touches your eye or another surface. Throw it away.
• Acoltremon vial is for 1-time use only. Use right away after opening and do not reuse.
• Call the healthcare provider right away if you get an allergic reaction or other eye problems such as eye injury, eye infection, or eye pain. For additional safety information, see the Full Prescribing Information and talk with your healthcare provider.

Pharmacokinetics
• PK was assessed in 25 patients with dry eye disease receiving Acoltremon administration (1 drop twice daily) on Days 1, 14, and 90. A total of three (3) (12.0%) had plasma concentrations above 20 pg/mL (the lower limit of quantification), with the highest plasma concentration of 213 pg/mL.

Storage and Handling
• Store Acoltremon in the unopened carton.
• After opening the carton, Acoltremon may be kept refrigerated or at room temperature at 36°F to 77°F (2°C to 25°C).
• If stored at room temperature, use Acoltremon within 30 days. Throw away (dispose of) unused Acoltremon after 30 days if stored at room temperature.
• Throw away (dispose of) unused single-dose vials 7 days after opening the foil pouch.
• Always check the expiration date on the vial before use. Do not store after the expiration date. Throw away (dispose of) Acoltremon after the expiration date on the carton and pouch.
• Do not leave Acoltremon in a car, outdoors, in the sunlight, or in any other place where temperatures can go above room temperature [greater than 77°F (25°C)].
• Keep out of reach of children.



Reference
https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/217370s000lbl.pdf

भारतीय भेषज संहिता आयोग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार
सेक्टर - २३, राज नगर,
गाजियाबाद - २०१ ००२, उत्तर प्रदेश, भारत

INDIAN PHARMACOPOEIA COMMISSION
Ministry of Health & Family Welfare, Government of India
Sector - 23, Raj Nagar
Ghaziabad- 201 002 (U.P.), INDIA

File No. P.17019/03/2025-DSA **Dated: May 13, 2025**

Drug Safety Alert

The analysis of Adverse Drug Reactions (ADRs) from the PvPI database revealed the following;

S. No.	Suspected Drug	Indication(s)	Adverse Drug Reaction
1	Sulfamethoxazole + Trimethoprim	For the treatment of Urinary Tract infection; Respiratory-tract infection including Bronchitis, Pneumonia, infections in Cystic Fibrosis, Melioidosis, Listeriosis, Brucellosis, Granuloma Inguinale, Otitis Media, Skin infection, Pneumocystis Carinii Pneumonia.	Leukopenia

Healthcare Professionals, Patients/Consumers are advised to closely monitor the possibility of the above ADR associated with the use of above suspected drug. If, such reaction is encountered, please report to the NCC-PvPI, IPC by filling of Suspected Adverse Drug Reactions Reporting Form/Medicines Side Effect Reporting Form for Consumer (download from **http://www.ipc.gov.in)** or through **PvPI Helpline No. 1800-180-3024.**

Reference
https://www.ipc.gov.in/images/Drug_Safety_Alert_May_13_2025.pdf

EVENT CORNER
World Immunization Week – 2025

Coordinator
Dr. Deepalakshmi M
Assistant Professor
JSS College of Pharmacy, Ooty
Date: 26.04.2025

Organized by
Dept. of Pharmacy Practice, JSSCOP, JSSAHER; IPA - Nilgiris Local Branch and Rotaract Club, Ooty.
Venue: Government Rose Garden, Ooty

To commemorate this occasion, an outreach program was conducted, with Dr Deepalakshmi M and Dr Arun KP leading the event. Dr Arun addressed the gathering with a short but inspiring talk, emphasizing the importance of collective responsibility in promoting vaccination. Mr. Faisal also shared a few words on the occasion, highlighting how public spaces like gardens and parks can also serve as platforms for spreading health messages. The event continued with an engaging and insightful talk by Mr. Raja Mohammed, who highlighted the importance of immunization in building a healthier community. Dr Deepalakshmi M further enriched the program by delivering a session focused on general health awareness, emphasizing preventive healthcare. She stressed the need for timely vaccinations, not just for children but across all stages of life. Later, Dr Arun KP and Mr. Faisal inaugurated the World Immunization Week pamphlet, which was distributed to the public. The pamphlet provided valuable information on vaccine schedules, the benefits of immunization, and dispelled common myths and misconceptions about vaccines. Health-related activities were also incorporated into the event to ensure a comprehensive approach to wellness. Ms. Keerthana performed blood pressure (BP) screenings for all attendees, helping to identify individuals who might be at risk for hypertension or other related conditions. Similarly, the height and weight of the participants were also checked. In total, 35 people actively participated in the event, with each individual benefiting from the BP check-up and health counseling offered. The event successfully combined education, awareness, and basic health screening, making it a meaningful and impactful observance of World Immunization Week.

SOAP- 2025 (Summer School of Ooty on Applied Pharmacokinetics) – Edition 7

Coordinator
Dr Arun KP
Associate Professor cum Vice-Principal
JSS College of Pharmacy, Ooty

Organized by
Department of Pharmacy Practice , JSS College of Pharmacy, Ooty.
Date: 25.05.2025 - 30.05.2025

The Department of Pharmacy Practice, JSS College of Pharmacy, Ooty, under the aegis of JSS Academy of Higher Education & Research, Mysuru, successfully organized the 7th edition of the Summer School of Ooty on Applied Pharmacokinetics (SOAP – 2025) from 25th to 30th May 2025. This intensive week-long training aimed to provide foundational and advanced knowledge in applied pharmacokinetics, therapeutic drug monitoring, and pharmacometrics with hands-on demonstrations, discussions, and software applications. The successful organization of SOAP – 2025 was made possible by the vision and leadership of Dr. Arun KP. SOAP – 2025 attracted an impressive 87 applications from across 11 Indian states, representing academic institutions (n=29), hospitals (n=2), and pharmaceutical industry (n=1). The selection committee followed a competitive and inclusive approach, shortlisting 36 participants based on academic credentials, institutional background, motivation to attend, and regional representation. A total of 34 participants attended the event, making it both vibrant and diverse in its academic and geographical representation.SOAP – 2025 emerged as a highly impactful academic initiative that significantly enhanced participant knowledge and practical skills in pharmacokinetics and pharmacometric modeling. The use of accessible tools like Excel and R Studio, combined with exposure to advanced platforms like Pumas.ai and NONMEM, ensured a comprehensive learning trajectory. The format encouraged active participation, critical thinking, and networking among peers and mentors. The recurring project discussion sessions provided valuable mentoring opportunities and stimulated early-stage research planning. Participant feedback praised the hands-on, application-driven approach of the sessions and the approachable nature of the facilitators. In conclusion, SOAP – 2025 was a highly successful academic initiative that combined foundational learning with advanced pharmacometric tools in a collaborative and engaging environment. The program empowered participants with practical skills and conceptual clarity in applied pharmacokinetics. With diverse participation and expert facilitation, it set a benchmark for experiential learning in clinical pharmacokinetics and pharmacometrics.

International Yoga Day Celebration

Organized by: TIFAC CORE in Herbal Drugs, the Department of Pharmacognosy, Department of Pharmacy Practice, and the JSS NSS Unit, JSS College of Pharmacy, Ooty in association with the Indian Medicine & Homeopathy Department, the State Drug Licensing Authority, Government of Tamil Nadu, and the Nilgiris District Siddha Medicine Department.
Date: 21.06.2025

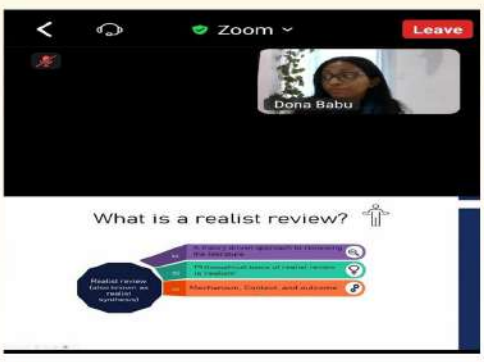
TIFAC CORE in Herbal Drugs, the Department of Pharmacognosy, Department of Pharmacy Practice, and the JSS NSS Unit, JSS College of Pharmacy, Ooty successfully organized the International Yoga Day celebration on 21st June 2025 at 10:00 AM. The event was held in association with the Indian Medicine & Homeopathy Department, the State Drug Licensing Authority, Government of Tamil Nadu, and the Nilgiris District Siddha Medicine Department.The program witnessed an overwhelming participation of around 700 students from various colleges and schools, along with 50 police delegates. The training and activities were conducted by 26 Siddha and Yoga doctors and a team of 15 members from the Brahma Kumaris organization. The event commenced with a warm Welcome Address by Dr. S.P. Dhanabal, Principal, JSS College of Pharmacy, Ooty. This was followed by an inspiring Chief Guest Address delivered by Mr. Nisha, Superintendent of Police, Nilgiris District and valedictory address by Dr.K.Balasubramaniyan, District Siddha Medical officer, The Nilgiris. The celebration included a variety of enriching sessions such as Yoga demonstrations, Meditation practices, Laugh therapy, Mind relaxation stories, and a Mime show, aimed at promoting mental and physical well-being. The sessions were well-received and appreciated by all attendees, leaving a lasting impact on the audience and reinforcing the significance of Yoga in daily life. The college extends its sincere gratitude to all partnering organizations, resource persons, and participants for making the event a grand success.

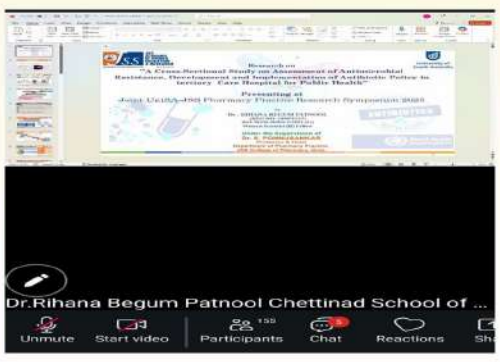


Joint UniSA - JSS Pharmacy Practice Research Symposium 2025

Date: 24.06.2025
Time: 9:00 AM – 12:30 PM (Indian Standard Time)
Organized by: University of South Australia (UniSA) in collaboration with JSS College of Pharmacy, Ooty & Mysuru – constituent colleges of JSS Academy of Higher Education & Research (JSS AHER)
Hosts:
Dr. Vijay Suppiah (UniSA)
Prof. Debra Rowett (UniSA)
Prof. Ponnusankar Sivasankaran (JSS College of Pharmacy, Ooty)
Dr. Sri Harsha Chalasani (JSS College of Pharmacy, Mysuru)

The Joint UniSA–JSS Pharmacy Practice Research Symposium was successfully conducted on 24th June 2025, jointly hosted by the University of South Australia and JSS College of Pharmacy, Ooty & Mysuru (constituent colleges of JSS AHER). The symposium was coordinated by Dr. Vijay Suppiah and Prof. Debra Rowett from UniSA, along with Prof. Ponnusankar S. and Dr. Sri Harsha Chalasani from JSS AHER. The primary objective of the symposium was to promote cross-border research collaboration, exchange innovative ideas, and foster constructive academic discussions among research scholars, Pharm.D students and faculty members. It served as a platform for showcasing research undertaken by doctoral scholars and early-career researchers from both institutions, thereby facilitating future collaborative endeavors. The symposium featured seven research presentations, each allocated 20 minutes, followed by an interactive Q&A session. Participants had the opportunity to engage directly with presenters, clarify doubts, and provide constructive feedback. The symposium was a resounding success, fostering a spirit of academic exchange and strengthening the partnership between the University of South Australia and JSS Academy of Higher Education & Research. It opened avenues for future collaborative research and underscored the shared commitment of both institutions to advancing pharmaceutical education and practice globally.





Publication from Department of Pharmacy Practice (April - June 2025)

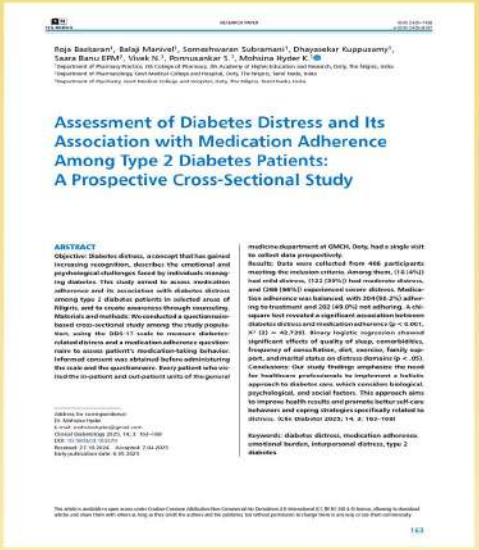
- Arunkumar Subramanian, **Rajamohamed Haitharali*,** Nirenjen S, Tamilanban T*, Sivaraman Dhanasekaran, et al. Carbamazepine-induced Stevens-Johnson Syndrome: A Case Report with Review of the Literature. Current Drug Safety. 2025; 20(3):382-387.

- **Ponnusankar S***, Preethi R, Lithish Kumar MK, Vishal Kesav TR, Harshini VS, Rajeshkumar R, Balasubramaniam V. Molecular docking and in silico predictive analysis of potential herb-drug interactions between Momordica charantia and Miglitol. Cureus, 2025; 17(5): e84852.

- Roja Baskaran, Balaji Manivel, Someshwaran Subramani, Dhayasekar Kuppusamy, Saara Banu EPM, Vivek N, Ponnusankar S, **Mohsina Hyder K*** Assessment of Diabetes Distress and Its Association with Medication Adherence Among Type 2 Diabetes Patients: A Prospective Cross-Sectional Study. Clinical Diabetology. 2025.

- Ravinandan AP, Eswaran Maheswari, **Hunsur Nagendra Vishwas.** Rethinking prescriptions: designing a clinical process map to mitigate dapagliflozin-induced prescribing cascades. Asian J Pharm Clin Res. 2025;18(5):1-4.

- Chavan Rahul B, Ray Shavik, Kundu Pritam, Dupakuntly Sai Adiseshu, Giri Sanjeev, **Ponnusankar S,** et al. Preparation, chacracterization and evaluation of the co-amorphous systems of Dasatinib to improve its pharmaceutical attributes. CrystEngComm. 2025; 27(18): 2848-2857.



For clarifications/ feedback, write to:

The Chief Editor
Clinical Pharmacy Newsletter,
Department of Pharmacy Practice

Prepared & Circulated by:

Department of Pharmacy Practice
JSS College of Pharmacy,
Rocklands, Udhagamandalam- 643001
The Nilgiris Tamilnadu, India
E-mail ID: pharmacypracticeooty@gmail.com
/drsponnusankar@jssuni.edu.in
Phone: (+91)-423-2443393
Fax: (+91)-423-2442937