



RESEARCH NEWSLETTER

ISSUE: 15



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MESSAGE FROM DIRECTOR OF RESEARCH



Dear Colleagues and Students,

I am delighted to share some of our recent achievements in this edition of our Newsletter. At Sumandeep Vidyapeeth Deemed to be University, we remain committed to advancing research and fostering innovation, and I am proud to highlight our significant progress in these areas. This year, our faculty and researchers have been working on 13 research projects funded by the Indian Council of Medical Research (ICMR) and State Health System Resource Centre, National Health Mission. This accomplishment underscores our dedication to addressing critical health challenges and contributing to the broader scientific community. These projects span various disciplines and reflect the diverse expertise within our institution.

At Sumandeep Vidyapeeth Deemed to be University, we remain committed to advancing research and fostering innovation, and I am proud to highlight our significant progress in these areas. These achievements are a testament to the collaborative spirit and relentless pursuit of excellence that defines Sumandeep Vidyapeeth, an institution deemed to be University. I extend my heartfelt gratitude to everyone involved for their dedication and hard work. Let us continue to push the boundaries of knowledge and innovation, and strive for excellence in all our endeavors.

Warm regards

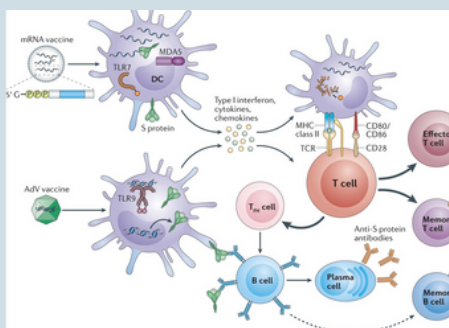
Dr. A.K. Seth

Director of Research, SVDU

Disease Registries: 1. International Severe Asthma Registry (ISAR)

2. Study of severity of air-flow limitation in treated post-TB COPD patients in India

➤➤➤ NEXT GENERATION OF M-RNA VACCINOLOGY



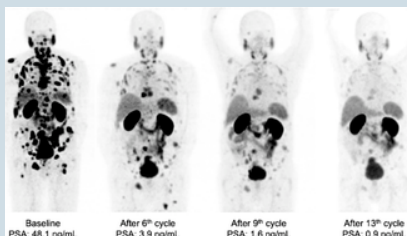
Advancements in the generation, purification and cellular delivery of RNA have enabled the development of mRNA vaccines across a broad array of applications, such as cancer and Zika virus infection. The technology is cost-effective, relatively simple to manufacture, and elicits immunity in a novel way. Furthermore, the emergence of the COVID-19 pandemic demonstrated that the world needed rapid development of a vaccine that was deployable around the globe. Because of previous research that laid the groundwork for this technology, an effective COVID-19 vaccine was developed, produced, approved and deployed in less than a year

➤➤➤ NEW TREATMENT FOR THE REDUCTION OF LDL- RNAI DRUGS



Inclisiran is an injectable small interfering RNA that targets the PCSK9 protein. Inclisiran was FDA approved in December 2021 and is widely considered a game-changer for heart disease patients. In contrast to statins, it requires infrequent dosing (twice per year) and provides effective and sustained LDL-C reduction in conjunction along with statins.

➤➤➤ PSMA-TARGETED THERAPY IN PROSTATE CANCER



In 2020, PSMA PET scans received FDA approval based on phase III clinical trials, which showed substantially increased accuracy for detecting prostate cancer metastasis compared to conventional imaging with bone and CT scans. When detected early by PSMA PET scans, recurrent prostate cancer can be treated through a targeted approach with stereotactic body radiation therapy, surgery and/or systemic therapy in a personalized manner.

➤➤➤ TARGETED MEDICATION FOR HYPERTROPHIC CARDIOMYOPATHY



A first-in-class medication specifically targets heart muscle to reduce abnormal contractions caused by genetic variants. By acting specifically on this mechanism in HCM patients, this novel treatment not only improves symptoms and quality of life, but potentially could slow progression of the disease.



AI FOR EARLY DETECTION OF SEPSIS

Artificial intelligence (AI) has surfaced as a new tool that can help rapidly detect sepsis. Using AI algorithms, the tool detects several key risk factors in real time by monitoring patients' electronic medical records as physicians input information. Flagging high-risk patients can help facilitate early intervention, which can improve outcomes, lower healthcare costs and save lives.

Clinical Trial News

Sl · N o.	Title	Name of the Principal Investigator	Name of the Institute
1.	A randomized, multiple-dose, double blind, placebo controlled, parallel group, multicentric study to evaluate Efficacy and safety of Beclomethasone Dipropionate Metered Dose Inhaler (Inhalation Aerosol) (0.04mg/ INH) in male and/ or female subjects with Asthma [Group I (Test): Beclomethasone Dipropionate 0.04 mg/ INH; Group II (Reference): QVAR® 40 mcg (Beclomethasone dipropionate HFA); and Group III: Placebo]	Dr Arti Shah	SBKSMIRC
2.	Randomized, double-blind, placebo-controlled, parallel-group, multi-Centre Phase II/III adaptive clinical trial to assess the safety and immunogenicity of Gam-COVID-Vac combined vector vaccine for SARS-Cov-2 infection in Indian healthy subjects	Dr Arti Shah	SBKSMIRC
3.	A prospective, multi-center, randomized, double-blind, parallel-group, comparative clinical endpoint bioequivalence study to compare the efficacy and safety of generic Fluticasone propionate inhalation aerosol (pMDI) (of Macleods Pharmaceuticals Ltd versus FLOVENT HFA (pMDI) inhalation aerosol and efficacy and safety of both test and RLD to a placebo-control in treatment of patients with bronchial asthma	Dr Arti Shah	SBKSMIRC

Extramural Projects Submitted

Serial no.	Title of the Project	Name of the Principal investigator	Funding Agency
1.	A prospective observational study to determine the role of Vitamin D3 in patients of Enthesopathy and to study outcome benefits after supplement in geriatric population	Dr. Archana Jignesh Gadhia	ICMR
2.	Factors Associated with sudden deaths among adults aged 18-45 Years, India : Multicentric matched case-control study	Dr. Arti Shah	ICMR
3.	Effect of COVID-19 Vaccine on thrombotic events among 18-45 year old population of India, 2022: Multicentric hospital-based matched case-control study	Dr. Arti Shah	ICMR
4.	Community behavior and its determinants in relation to Malaria prevention and control in Gujarat	Dr Niraj Pandit	ICMR
5.	Bacterial Contamination of Stethoscope used by health care professionals at a rural based tertiary care hospital and effective methods for its disinfection	Ms. Sara Arora Dr. Nidhi Bhalodia	ICMR
6.	Microbial Quality of Water Used as Drinking Sources in Urban and Rural Households of Gujarat, India – A Cross-sectional Study	Mr. Neil Shah Dr. Sucheta Lakhani	ICMR
7.	Epidemiological distribution and demographic characteristics of Acute Kidney Injury in patients admitted at tertiary health care centre in West India, Gujarat : A Prospective CrossSectional Study	Ms.Chhavi Garg Dr. Jitendra Lakhani	ICMR

Sl. No.	Title	Name of the Principal Investigator	Funding Agency
7	Need assessment for establishment of Human Breast Milk Bank at a tertiary care teaching hospital in western India – an interventional study	Ms. Pakhi Jain Dr. Lavlesh Kumar	ICMR
8	Reproductive and Child health issues among tribal women who are living in urban area of Gujarat. Observational Mixed Method Communiy Based Study	Dr. Arti Shah	ICMR
9	Epidemiological study Of Gestational Diabetes Mellitus (Gdm) and associated risk factors in tribal Population Of Chhota Udepur, District, Gujarat	Dr Niraj Pandit	ICMR
10	Evaluation of Postnatal care of mother including newborn in rural area of Chhotaudepur District, Gujarat: A Community-based mixed method study	Dr. Kinjal Gadhvi Dr. Arvind Chaudhury	ICMR
11.	Research collaboration Agreement with ICMR regarding National Clinical Registry for COVID-19 (NCRC)	Dr. Arti Shah	ICMR
12.	Evaluation of PVA and USG Gels used as mounting media compared to traditional modified Kaiserling-III solution in Pathology Museum, A Mixed Method Study	Dr Swapan Goswami	ICMR
13.	Quality of Neonatal Treatment in relation with morbidities and immediate outcome	Dr. Manish Rasania	State Health System Resource Centre, National Health Mission

Research Snippets



FACILITY OF SIMULATION BASED LABORATORY OF EXPERIMENTAL PHARMACOLOGY AND PHYSIOLOGY



FACILITY OF PRE CLINICAL CONSERVATIVE DENTISTRY AND ENDODONTICS

