

The image features a teal background with a black jagged shape at the bottom. The text "Products/Technologies" is written in white, bold, serif font on the black background.

# Products/Technologies

# PDT Laser System for cancer treatment



**Indigenous and low cost Photo Dynamic Laser (PDT) laser system for cancer treatment**

**Vinvish Technologies Pvt. Ltd.**



# Maxio for Tumor Ablation



**The device for execution procedure for tumour ablation**

**Perfint Healthcare Pvt. Ltd.**



# Kit for detection of autoimmune diseases



**Immunodiagnostic Kit developed for detection of autoimmune diseases**

**Amar Immunodiagnostics Pvt. Ltd.**



# Face Mask For Cosmeceutical Application



Face mask developed for cosmeceutical application using sericin and other natural bio-active agent on non-woven silk sheet

Healthline Pvt. Ltd.



# Malaria detection kit



**The kit is developed for qualitative detection of Malaria Parasite (Pf & Pv) Antigens in Human Whole Blood. Already in use**

**Genomix Molecular Diagnostics Pvt. Ltd.**



# MALERISCAN For Malaria Detection



**A rapid test for the qualitative detection of HRP-II and pLDH of Malaria parasite in human whole blood**

**Bhat Biotech India Pvt. Ltd.**



# Fluorescence reader to detect multiple infections

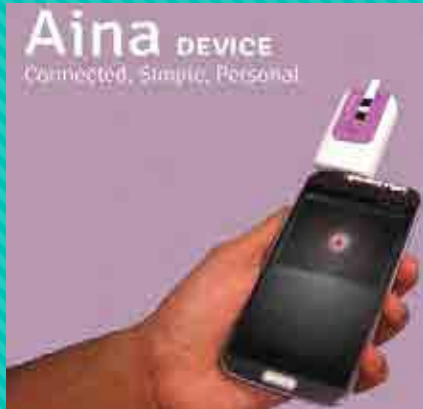


The technology will help to detect multiple infections simultaneously in remote settings and ensures less medical waste in blood banks and can be adopted for inexpensive tests for detection of HIV, HCV, HBV, Syphilis and Tuberculosis infections

Design Innova with ICGEB/DBT/Univ. of Turku



# ***AINA device to measure blood glucose, HbA1C, lipids (HDL, LDL, TrG), Creatinine and Haemoglobin***



**'AINA' device developed & commercialized to clinically validate and measure blood glucose, HbA1C, lipids (HDL, LDL, TrG), Creatinine and Haemoglobin. The device can be used in hospitals for in-patient management, for self-monitoring in patients and for screening by health workers.**

# ONCOSCAN – Digital Oncopathology slide Scanner



**ONCOSCAN offers complete digital pathology solution with ease of operations, scalability, security and integration with software for image viewing and management at affordable costs.**

**Optra Systems Pvt. Ltd.**



# Low cost clinical chemistry analyser



**Autochem Ingenious' helps early diagnosis, reduces overall expenditure on healthcare and Robust design to withstand large power fluctuations**

**Span Diagnostics Ltd.**



# POC diagnostic for Malaria, Dengue & Typhoid



**A rapid PoC diagnostic with micro PCR- Diagnoses multiple diseases e.g. Malaria, Dengue & Typhoid**

**Bigtec Pvt. Ltd.**



# Rasburicase to control Hyperuricemia



Rasburicase under trade name TULY is a recombinant uricase to control hyperuricemia in cancer patients undergoing chemotherapy. Developed utilizing an innovative and economical production process.

Virchow Biotech Ltd.



# Foligraf for Reproductive Technology



**Foligraf contains urofollitropin that is a purified form of follicle stimulating hormone (FSH) and is important in the development of follicles produced by the ovaris. First recombinant FSH product developed, manufactured and sold by an Indian company.**

**Bharat Serum & Vaccines Ltd.**





# H1N1 Pandemic influenza vaccine



**Pandyflu is an inactivated split version H1N1 vaccine using egg-based technology.**

**Panacea Biotech Ltd.**



# **A Multicentric, Parallel Randomised (2:1) Open Label Phase III Clinical study**

**A Multicentric, Parallel Randomised (2:1) Open Label Phase III Clinical study to evaluate the immunogenicity and safety of BE's inactivated JE, Vaccine in health >1 to <3 year old Indian subjects in comparison with purified inactivated JE vaccine (IXIARO(R)) of Intercell - A non-inferiority study**

**Biological E. Ltd.**



# Indigenous Production of Dextranase using SSF technique

First indigenous production of dextranase in the country using solid state fermentation with an activity of 30000 du/gm. The dextranase so produced has achieved 51% average reduction of dextran in cane sugar production process.

Varuna Biocell Pvt. Ltd.



# **Nitrifying bioreactor**

**Indigenous technology to help aquaculture industry in attaining stability and sustainability by establishing re-circulating aquaculture systems especially for seed production and maturation**

**Oriental Aquamarine Biotech India Pvt. Ltd.**



# Anaerobic membrane bioreactor

**Anaerobic membrane bioreactor. Expected to create a major impact in developing countries by providing sustainable solutions towards energy demand and waste water management issues**

**Thermax Ltd.**



# Transformational Technology Platform For Development of Biological Hydrogen



Biological hydrogen production is the vehicle to embark upon hydrogen economy and may also play a role for chemical industries in replacing their petroleum feedstock

Nagarjuna Fertilizers & Chemicals Ltd.



# Enzymatic Maceration of Mango Pulp to Produce Quality Wine

**A technology to produce clarified juice and clear wine from viscous mango pulp. The resulting wine has low sugar content and characteristic flavour.**

**Codon Biotech Pvt. Ltd.**



# PCR kit for Aquaculture industry

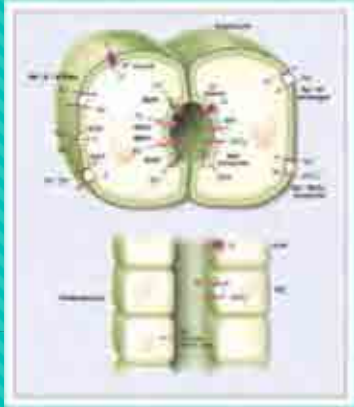
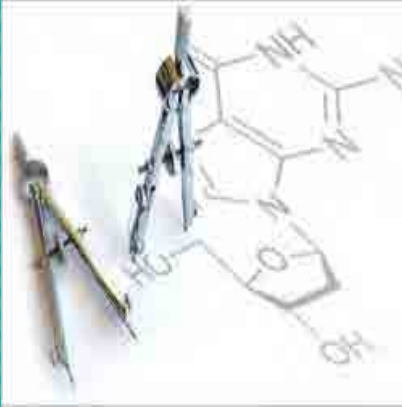


**Robust & Economical Indigenous single tube nested PCR kit for WSSV, IHNV & YHV**

**Aristogene Biosciences Pvt. Ltd.**

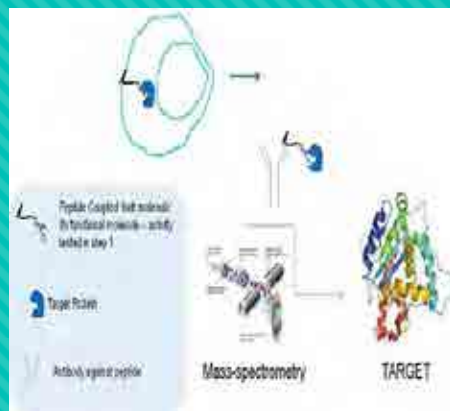


# Hepatotoxicity Prediction Platform



The technology is capable of providing insights into drug induced liver injury and will help in replacing/reducing the use of animals and increase efficiency of drug development by predicting hepatotoxicity

# Target Identification Technology



**Shantani's sub-cellular location specific target capture technology utilizes a chemical biology coupled mass spectrometry based approach and identifies targets of bioactive small molecules.**

**Shantani Proteome Analytics Pvt. Ltd.**



# Hi-fidelity affordable mannequin for effective CPR Training



**A full-body, interactive, in adult clothing, affordable mannequin and allows both training and periodic retraining to retain CPR skills.**

**Merkel Haptic Systems Pvt. Ltd.**



# Development & building indigenous capability for Balloon Catheter Manufacturing



Manufacturing facility for PTCA balloon catheter, Non-compliant dilation catheter, semi compliant dilation catheter and PTA balloon catheter

Sahjanand Medical Technologies Pvt. Ltd.



# Technology for the production of R-Phenyl Acetyl Carbinol



Technology for the production of R-Phenyl Acetyl Carbinol at 4KL by replacing existing whole cell biotransformation process with a genetically modified yeast based biotransformation process

# Fluorescence-based detection of ultra-low concentrations of analytes in human sera at POC



**A novel, low-cost electrophoretic preconcentration-enhanced immunoassay sensor for rapid, high-sensitivity and multiplexed detection of three thyroid hormones (TSH, Free-T3, and Free-T4) in human serum**

# Retinal Imaging Device for the diagnosis of Retinopathy of Prematurity (ROP) in premature infants



**Low cost Portable Smartphone enabled Retinal Imaging System, with validated Sensitivity of 94% and Specificity of 98% compared to Desktop Retinal Cameras. Useful to detect diabetic retinopathy early**

**Remidio Innovative Solutions Pvt. Ltd.**



# A comprehensive Next Generation Sequence (NGS) data analysis solution



Designed to perform primary, secondary, and tertiary analysis of the Next Generation Sequencing (NGS) data. Automates all the multi-step processes involved in data analysis and delivers end results in an affordable and user-friendly format.

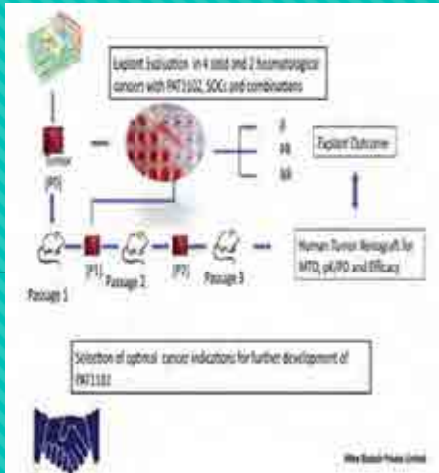
SanGeniX





# Early Stage Technologies

# HDAC Inhibitor for cancer treatment using Onco Print®



HDAC inhibitor is expected to offer safe and affordable therapy to cancer patients in India. OncoPrint® has been demonstrated to have very high correlation to clinical outcome for chemotherapeutics as well as biologics in multiple solid and hematological cancers.

Mitra Biotech Pvt. Ltd. with Anthem Biosciences



# Pharmacological evaluation of N-oxide metabolite of antipsychotic drug for Type 2 diabetes

**N-oxide of antipsychotic drugs as first in class therapy for Type 2 diabetes is expected to allow conditional and selective activation of B-cells**

**Crystalin Research Pvt. Ltd.**



# Preclinical Development of First-in-class Glucose management of type-2-diabetes and related complications

First-in-class Glucose management program for type-2-diabetes and related complications

Shantani Proteome Analytics Pvt. Ltd.



# Clinical trials of novel anticancer drug co-crystal

**A hydrolytically stable formulation of Temozolomide that is relevant to tropical zone IV region countries e.g. India, South America**

**Crystalin Research Pvt. Ltd.**



# Rapid Detection of Acute Myocardial Infarction



Rapid Detection of Acute Myocardial Infarction by sensing Cardiac Markers with high sensitivity and selectivity in less than 10 minutes. It can be used in a rural primary healthcare center or in a small ambulance.

Nanosniff Technologies Pvt. Ltd.



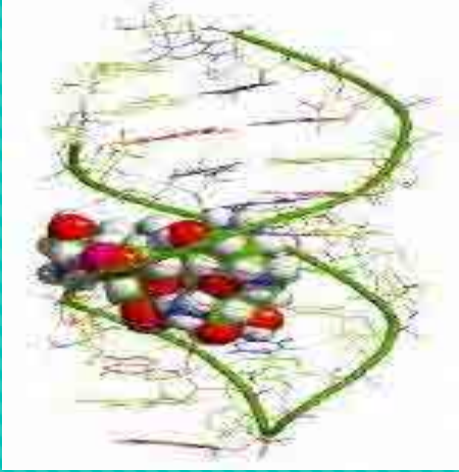
# Modular Resilin-mimetic Elastomeric Platform

**Novel class of biocompatible scaffold material that can form hydrogel material and encapsulate complex loads with different applications in tissue engineering and regeneration, useful in the field of advanced wound management**

**Pandorum Technologies Pvt. Ltd.**



# Tuberculosis marker detection technology



**An aptamer based platform, with unique characteristics e.g. Low sample volume, quick turnaround time, automated fluid movement control, low reagent consumption and sensitive fluorescent readings, to detect novel tuberculosis markers in human serum**

# Indigenous drug delivery technology for implant of Goserelin

Development of indigenous drug delivery technology for implant of Goserelin, used for the treatment of breast and prostate cancer, to release the drug over an extended period

**Bharat Serums and Vaccines Ltd.**



# Stem Cell Implant Bio – complexes for Periodontal Tissue Regeneration

Cell-implant bio-complex (Mesenchymal stem cells trans differentiation on treated Titanium surface-An implant-cell biocomplex) as a biological bridge with role in Osseointegration and Proprioception.

Tran-Scell Biologics



# Cancer treatment through autologous activated dendritic cells

Autologous activated dendritic cells as a therapy to treat cancer by initiating a potent immune response against cancer cells, resulting in delayed time to progression of cancer and prolonged survival.

# Generation of an *E. coli* K12 strain for extracellular production of Industrial Enzyme (Phase I)

An *E. coli* K12 strain that can be used for highly efficient secretion of a wide variety of recombinant proteins of industrial and therapeutic importance into the culture medium was developed . The technology facilitates easier purification and reducing costs of process and product.

# Indigenous production of dextranase using SSF technique (PoC)

**First indigenous production of dextranase in the country using solid state fermentation with an activity of 30000 du/gm. The dextranase so produced has achieved 51% average reduction of dextran in cane sugar production process.**

**Varuna Biocell Pvt. Ltd.**



# Fermentation technology for entomopathogenic nematode (EPN) production

**Solid state production of entomopathogenic nematode (EPN) i.e. NEMA POWER which has application in the management of root grubs in areca nut.**

# **Viabale Enzymes production using Agro waste**

**Viabale Enzymes production using Agro waste/produce as raw material of Industrial/Feed and health care use with large viable Market/demand**

**Rossari Biotech Ltd.**



# Setting up of 10 ton lignocellulosic biomass/day processing plant to produce about 3000 L ethanol/day



Setting up of decentralized commercial lignocellulosic ethanol plant is a requirement considering the need for ethanol free from vagaries of sugarcane production and with the availability of more than 250 million tonnes of surplus agricultural residue available in the country.

**India Glycols Ltd., with DBT-ICT Centre for Energy Biosciences/ICT,  
Mumbai**



# Cloning and expression of recombinant lipase enzyme (Phase 1)

Technology for *Thermomyces lanuginosus* (TL) Lipase production up to 100 L scale. The enzyme has applications in food industry, biodiesel production and fine chemicals

**Aumgene Biosciences Pvt. Ltd.**



# Development of technology platform for rare sugar production Phase I

Rare sugars have been produced using immobilized recombinant enzymes expressed and purified from *E.coli*. The platform can use wide range of raw materials including cellulosic sugars

Nagarjuna Fertilizers & Chemicals Ltd.



# **Inorganic and polymer nano-composites for micronutrient & pesticide delivery: Boosting crop health and yield**

**Nanotechnology based delivery vehicles to supply micro-nutrients & pesticides to crops to boost crop health, quality and yield.**

**Tata Chemicals Ltd., with Amrita Institute of Nanosciences/Rallis**



# Development of platform technology for nitrilase catalyzed biotransformation processes (Phase I)

Platform technology for nitrilase catalysed biotransformation processes. Nitrilase production was improved by five fold in optimized batch fermentations in shake flasks.

Hi Tech Biosciences India Ltd.



# Development of HPV Vaccine



A tetravalent HPV vaccine that includes L1 VLPs of serotypes 6,11,16,18, and is expected to give a coverage of approximately 90% against Human papilloma virus prevalent in the developing world.

Serum Institute of India Ltd.



# **Sustainable and versatile microbial polymers: a bio-based prospect for India**

**Early stage technology for microbial production of Hyaluronic acid at 7 L scale**

**Kumar Organic Products Ltd.**



# Development of Abiotic stress resilient Maize

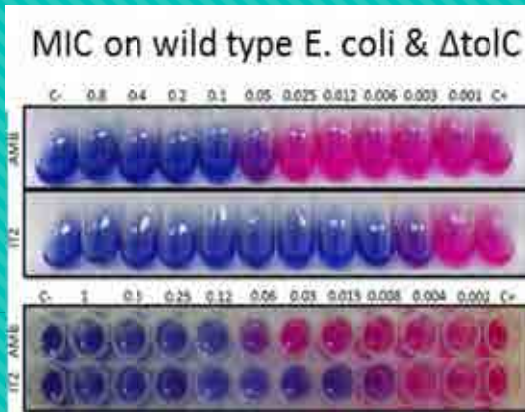


**Association mapping and whole Genome marker assisted recurrent selection for Development of Abiotic stress resilient Maize**

**Geo Biotechnologies India Pvt. Ltd.**



# Novel antibiotics for Gram negative bacteria



Novel anti-bacterial leads that are not effluxed from Gram negative bacteria and having potency against wild type *E. coli* with an extended anti-bacterial spectrum

Bug works Research India Pvt. Ltd.



# Commercial Scale Production of Nano-pesticides and Nano-fungicides



**Nano pesticide activity was tested for stored grain pests and the results show that the nanoparticles are active when they are on the seed surface & the hydrophilic nanoparticles are superior in treating the insects**

# Galnobax® gel formulation for the treatment of Diabetic Foot Ulcer

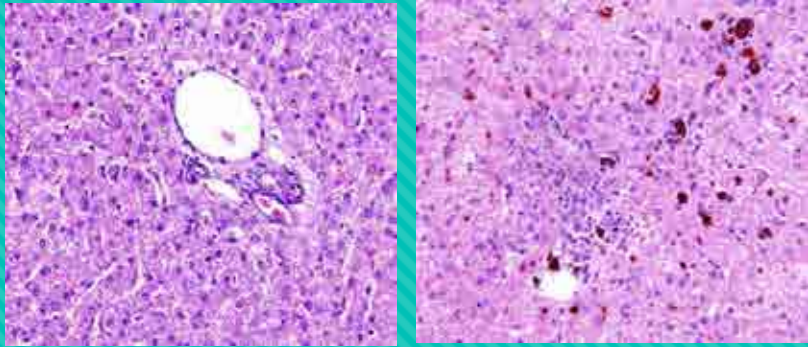


Galnobax® is a gel formulation of Esmolol hydrochloride for the treatment of Diabetic Foot Ulcer (DFU). Completed Phase I & II clinical trial and ready for next phase

Novalead Pharma Private Ltd.



# Clinical development of novel CCK receptor antagonists for the treatment of inflammatory pain



**PNB-001 is a cholecystokinin (CCK) specific receptor antagonist with binding to both isoforms of CCK, CCKA & CCKB**

**PNB Vespa Life Sciences Pvt. Ltd.**



# Development of Novel Cocktail of cellulolytic enzymes for Deconstruction of Lignocellulosic Feedstocks

Platform for expression of mono-component cellulolytic enzymes and fungal host vector system for overexpression of genes of interest

Praj Industries Ltd. & ICGEB

