Volume - 12- Issue No. - 10 October 2026

Microbioz India

www.microbiozindia.com

INSIDE THIS ISSUE

GD WALDNER:
Engineering Tomorrow's Labs with Integrated Excellence

STRENGTHENING PHARMACEUTICAL QUALITY CONTROL
with Customized Microbial Controls

PATENTED DEVICE REINVENTS
Solid Phase Extraction

THERMO FISHER SCIENTIFIC
Introduces Gibco CHO-K1 Catalog Panel to Boost Biologics Titer and Cell Density



ENGINEERING THE FUTURE OF PHARMACEUTICAL EXCELLENCES

Advancing Smart Manufacturing, Precision Science & Next-Generation Drug Development

RNI:UPENG/2017/3675

OCTOBER 2026 EDITION

Price:100/-

MODcol Spring Column

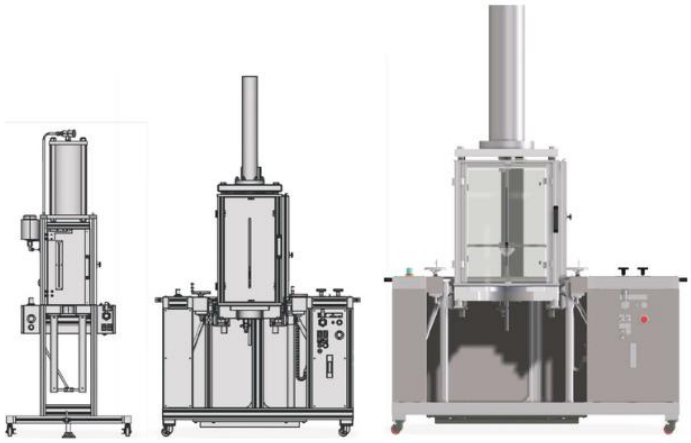
From 25 to 300 mm ID Easy Upscaling

Dr. Maisch
Any Column, Any Size, Any Media

MODcol Spring Columns

Dynamic Axial Compression (DAC) has been widely used in process chromatography to maintain column efficiency and peak symmetry.

MODcol Spring Columns are the preferred choice for chromatographers seeking high performance, durability, and long-lasting columns. This advanced DAC technology is housed in a compact and portable package, making it highly flexible for preparative and semi-preparative chromatography applications. Unlike other DAC systems, MODcol Spring Columns are the only mobile DAC columns available, capable of full DAC functionality without being mounted in the MODcol Multipacker Instrument.



Spring Columns are offered in various Inner Diameters (ID): 25 mm, 30 mm, 40 mm, 50 mm, 70 mm, 101 mm, 150 mm, 200 mm and 300 mm with two length options, allowing packed bed lengths from 5 mm to 500 mm.

MODcol Feature	Advantage
On-site packing instrument for DAC Spring Columns.	Self-packing instrument for ultimate flexibility and multiple column use that pays off quickly after packing 8 to 10 Spring Columns vs. re-pack service of Flanged Columns.
Self-contained, mobile unit.	Column can be packed anywhere (only a 6bar air supply is required).
Easy and safe use.	Requires very little training to operate and is virtually maintenance-free.
Adjustable packing pressure up to 2000 psi (138 bar), independent from packing speed.	Efficiently packs everything from hard spherical silica to soft polymer-based media.
Easy control of media quantity, packing pressure, and speed.	Outstanding packing reproducibility for consistently top-performing columns.
Identical technical features from 25 - 300 mm ID.	Completely scalable.

Key Features of MODcol Multipacker Instruments

- Easy and safe use.
- Versatile unit for packing various column IDs and unlimited columns.
- Extended lifetime of preparative columns.
- Reliable column packing made easy - no expert knowledge needed.
- Ideal for sensitive media like irregular silica, wide-pore materials, and polymers - thanks to precise control of pressure and speed.
- Low-maintenance design for maximum uptime.
- Small footprint compared to conventional DAC systems.

Available Media

- Silica or Polymer-Based Phases
- Ion Exchange Phases
- Silica-Based Scavengers
- Catalysts
- Other Media

APEX CHROMATOGRAPHY

HYDERABAD OFFICE
Plot No. 35, Street No. 3
Sagar Society, Banjara Hills
Hyderabad - 500034.
Telangana
Phone: +91-98481 77772
E-mail: sales@apexchrom.com

MUMBAI OFFICE
102, A-Wing, Mangalya Building
Off Marol Maroshi Road, Andheri
East, Mumbai - 400059. Maharashtra,
India Phone: +91-22-29209697 / 98
+91-96191 77772
E-mail: sales.mumbai@apexchrom.com

www.apexchromatography.com

Hyderabad / Mumbai / Delhi / Ahmedabad / Pune / Bengaluru / Vizag / Goa / Aurangabad

eppendorf



Floor-standing ovations

SpinPro® 8 R - High-Speed Centrifuge for Large-Volume Workflows

The Eppendorf SpinPro® 8 R combines high-speed performance **up to 58,700 × g and 22,000 rpm** with large-volume capacity in a refrigerated floor-standing centrifuge. It is designed for cell harvest, large-volume separation, and demanding workflows in biotech, pharma, and high-throughput academic research.

- Maximum volume up to 6 L with rotor options for **4 x 1.5 L or 6 x 1 L**
- More sustainable, future-proof **CO_2-based cooling** technology using **R744**, with a GWP of 1
- 7-inch touch display with intuitive VisioNize® user interface supports connectivity and monitoring
- Traceable operation and audit-safe mode support FDA 21 CFR part 11 compliance.



www.eppendorf.com

Read more: eppendorf.group/spinpro_8r

Eppendorf®, the Eppendorf Brand Design, and SpinPro® are registered trademarks of Eppendorf SE, Germany.
All rights reserved, including graphics and images. Copyright © 2026 by Eppendorf SE.

A Company of:

Surface Measurement Systems
World Leader in Sorption Science





PCL
Particle Characterisation Lab

Scientific Excellence
Quality Solutions
Delivered ✓



www.particlelaboratories.com

EXCLUSIVE NEW YEAR OFFER:

Readers of Microbioz can claim **50% off** on first pharmaceutical material analysis.

Contact us at **info@particlelaboratories.com** with this code:

MicroB-SPR26



Offer expires : 30/10/2026

avantor™

VWR®
SAS Super ISO Air Samplers

The Gold Standard in Microbial Air Monitoring



CFR 21 Part 11 compliance - Data and user management with full CFR 21 Part 11 compliance
Aerodynamic - Design avoids turbulence
Easy-to-handle - Portable and easily positioned with long life, rechargeable batteries (70 cycles per charge)
Connectivity - USB-C port or PC/Laptop connection
Data security - Data is downloaded in non-modifiable, and password protected PDF or LIMS-friendly XML format
Collection efficiency - Complies with USP Chapter 1116, ISO14698-1 and EN 17141
Flexibility - Option of Flow rate 100L/min or 180L/min

avantor™ VWR.COM

Avantor Performance Materials India Pvt. Ltd
19 th Floor, Building No. 5, Tower C, DLF Cyber City
Phase - III | Gurgaon - 122002, Haryana
t +91-1244-65-6700 product.info@avantorsciences.com

Avantor Performance Materials India Pvt. Ltd.
Tiffany, 5th Floor, Hiranandani Business Park
Thane (W), Mumbai - 400607 | t 022-41288100

Control nitrosamine impurities with confidence

Reference standards for trace-level nitrosamine testing

Nitrosamine analysis requires well characterised reference standards for a rapidly expanding range of compounds. Our portfolio supports trace-level detection of both small molecule nitrosamines and drug substance–related nitrosamine impurities (NDSRIs), helping laboratories generate robust, defensible data to support regulatory decision making from risk assessment through to QC testing and batch release.

Custom NDSRIs synthesised to specification



SCAN HERE

Browse nitrosamine and NDSRI standards

SCAN HERE

Request your bespoke customs order

Lipomed SERVICES TO HEALTH

LoGiCal®

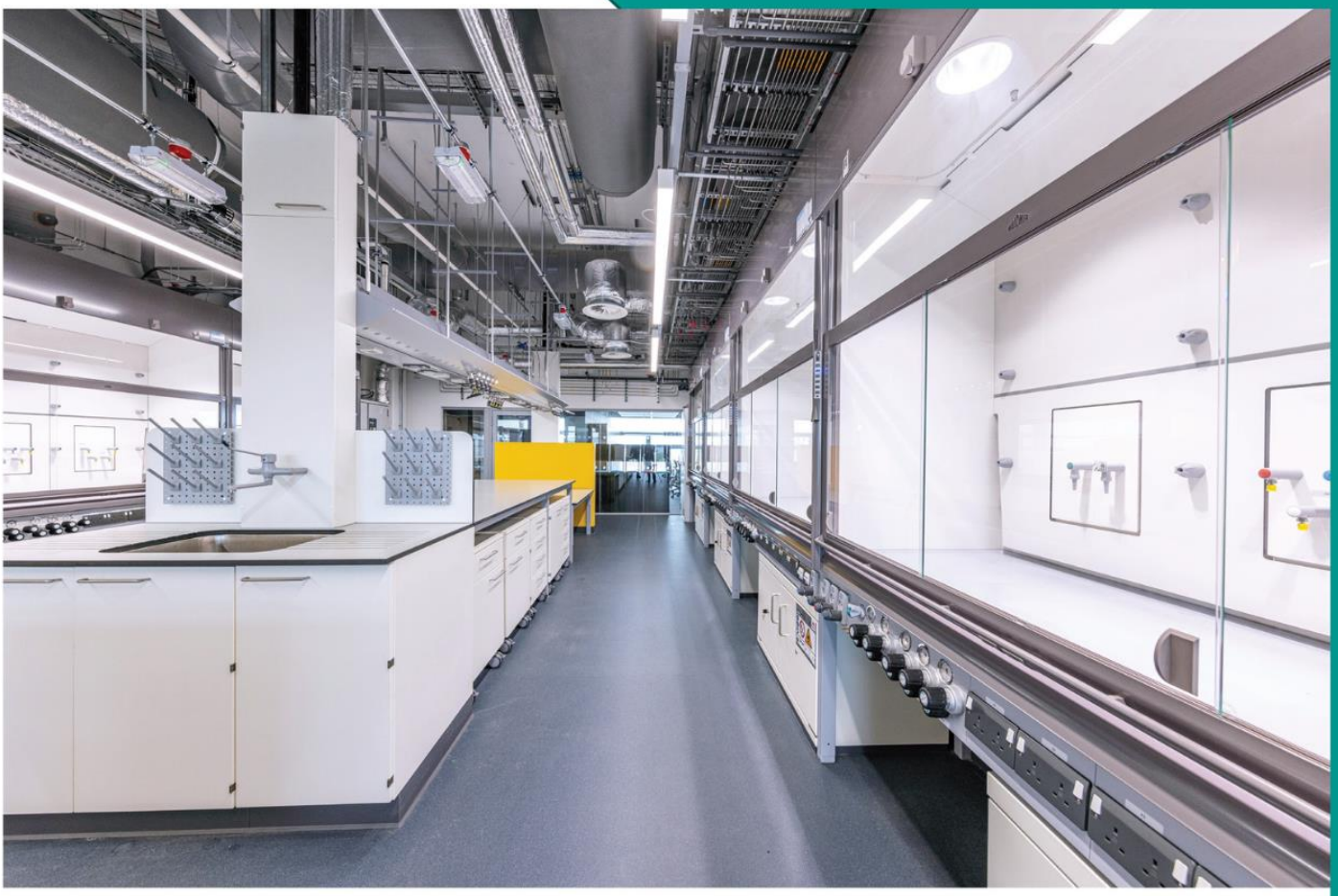
Mikromol™

trc

www.lgcstandards.com

GD Waldner

SMARTER SOLUTIONS FOR FUTURE-READY LABORATORIES



Laboratory Furniture

Our furniture solutions are highly adaptable, flexible and durable, thereby meeting the demands of modern laboratories.

- SEFA 8M compliant cabinets, benches, Lab tables, tall cabinets
- Load bearing capacity – Floor standing cabinets offer upto 900 kg load bearing capacity.
- Aesthetically appealing and attractive
- Superior powder coating
- Built to last – Certified SEFA compliant
- Stainless Steel Hinges
- Choice of Cabinets – Floor Mounted, C-Frame, H-Frame, Suspended, Mobile, Wall, Tall Cabinets, Fume hoods

Fume Hoods

- Manufactured in India with German technology,
- Aerodynamic-centric design with lower air foil and fume hood pillars for superior containment capacity through seamless air flow with minimal turbulence
- High-performance baffle system to rapidly exhaust fumes
- Double cage structure that serves as 'first line of defence' in case of small-scale accidents
- Complete integration with overall lab ventilation system and room controller
- Surpasses DIN EN 14175 and ASHRAE 110 requirements
- Fume Hood Controllers - Waldner smart controllers intelligently manage airflow in fume hoods
- Integrated with IOT Room Controllers and BMS via Modbus or BACnet
- VAV controllers offer up to 50% savings in operating expenses compared to conventional systems.

GD WALDNER India Private Limited
50/A Lamdapura Road, Village Lamdapura, Tal Savli, Vadodara - 391 775
Phone: +91 9974021700 / 650 • E-Mail: salessupport@gdwaldner.com
Regional Offices: Delhi | Bengaluru | Mumbai

A CENTURY OF DISCOVERY SINCE 1924

www.gdwaldner.com

We're pleased to inform you that we're
A Leading Supplier of the following
Spectroscopy & Chromatography Consumables:

Hiten Techno Products Corporation

1. **D2 Lamps**
   - Hamamatsu Photonics K.K., Japan
   - Mitorika Co., Ltd., Japan
   - Excelitas Noblelight GmbH, Germany
2. **HPLC Vials, Caps & Septa**
   - Cole-Parmer Instrument Company LLC, USA
3. **Spectroscopy Cuvettes**
   - Starna Scientific Ltd., UK
4. **Certified Reference Materials for Calibrating Spectrophotometers & Spectrofluorometers**
   - Starna Scientific Ltd., UK
5. **Polystyrene Films for Calibrating FTIRs**
   - Starna Scientific Ltd., UK
6. **FTIR Cells, Windows & Accessories**
   - Specac Ltd., UK
7. **Hollow Cathode Lamps**
   - Hamamatsu Photon
8. **NMR & EPR Sample Tubes**
   - Norell Inc., USA
9. **Jasco P-2000/4000 Polarimeters Lamps**
   - Osram GmbH, Germany
10. **Short-Arc Xenon Lamps**
    - Ushio Inc., Japan
11. **96-Well Quartz Microplate**
    - Starna Scientific Ltd., UK



912, The Capital, Adjoining Jio Garden, G Block, Bandra Kurla Complex, Mumbai - 400 051, India.Tel: +91-22-66268000 (100 lines)
Email: hemang.jhaveri@hitentechno.com | www.hitentechno.in

IND400 Weighing Indicator

Productivity through Intuitive Use

Make Data-Driven Decisions

Connectivity Delivers Visibility

Data is your business's most critical asset, as it is the foundation of Lean operations and innovative practices. IND400's rich communication interfaces facilitate data sharing from your manual processes into the overall enterprise system, forming a digital closed loop where your information is securely accessible where and when you need it.



Be Audit-Ready Any Time

Complete, Reliable Reporting

Simplify compliance with on-demand, verifiable documentation and reporting, supported by IND400's data integrity feature bundle. Audit trails track every action and change made within the indicator, attributing them to specific users to promote accountability and transparency, making it clear who performed each action and when.



IND400 provides visibility into your operation:

- Easy Integration with Cloud and ERP Systems
- Connectivity for Seamless Communication
- Designed and Tested for Cybersecurity
- Seamless IIoT Connectivity

IND400 supports data integrity per ALCOA++ principles:

- Attributable
- Legible
- Contemporaneous
- Original
- Accuracy and Traceability

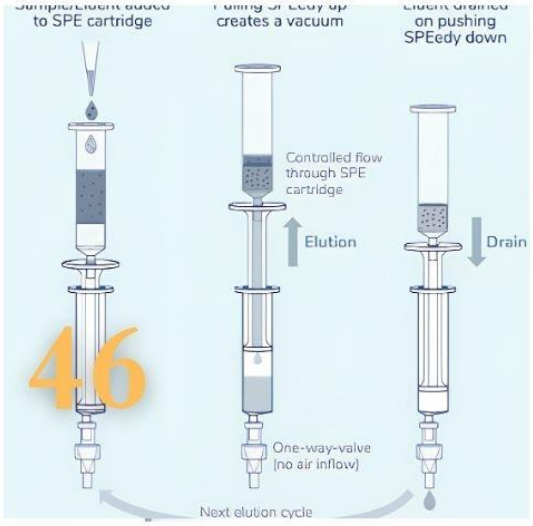
Write to us
at sales.sales@mt.com or
Call Toll Free at 1800 22 8884/
1800 10 28460
or Visit us at www.mt.com

www.mt.com/IND400

METTLER TOLEDO

TABLE OF CONTENTS











Cover Story 14

Engineering the future of Pharmaceutical Excellences: Advancing Smart Manufacturing, Precision Science and Next-Generation Drug Development

Featured Article 18

GD Waldner: Engineering Tomorrow's Labs with Integrated Excellence

Business News 30

Zydus Sunshine Lifesciences Commits More Than US$20 Million to Sri Lankan Pharmaceutical Manufacturing Facility

Product Launches 52

Patented device reinvents Solid Phase Extraction

Julabo
THE TEMPERATURE CONTROL COMPANY

srico
INNOVATIVE LABORATORY TECHNOLOGY

VALEGRO™

Recirculating Coolers

- Temp. range: -20 °C to + 85 °C
- Cooling power: 0.35 to 2.5 kW
- Pump Pressure: 0.1 to 3.1 bar
- Pump flow rate: 7 to 40 lpm
- Built in Timer function

Visit us at

PMEC India

Hall 7, Booth: 7D01

23rd-26th Nov, 2026

IEML, Greater Noida

Delhi NCR



Scientific Research Instruments Company Private Limited

#42-43, 2nd & 3rd Floor, 1st Cross, Gubbalala, Bengaluru - 560061

www.srico-labworld.com | +91 9900674407 | info@srico-labworld.com

Bengaluru | Mumbai | Hyderabad | Bhubaneswar | Vadodara | Delhi

Chennai | Goa | Thiruvananthapuram | Pune | Visakhapatnam | Kolkata | Guwahati | Ahmedabad | Chandigarh | Lucknow

Visit our Website

Our Staff.

Editor in Chief: Jeetendra Kumar Shukla

Head Business Development	Shubh Shrivastava
Technical Advisor	S.T.Ram
Digital Designing	Jeetendra Kumar
Interview & Meetings	Nimi Vashistha
International Sales	Devashish
Chief International Representative	Rebbeca Scolastica Bello
Nigeria Outreach	Sivashankari Ramamoorthi
Malaysia Outreach & Author	Rodel Estadillo Alo
Philippines Outreach	Dr.Moslim
Iraq outreach	Taylor Francis

Corporate Office:
Microbioz India
H1/204, Vikramaditya Tower, Alaknanda Market | Kalka Ji,
New Delhi - 110019, India
Mob:- +91-9670704431 | Tel:- +91-11-44459687
Email ID : support@microbiozindia.com

Registered with Registrar of News Paper for India with RNI No: UPENG/2017/73675

Owned, Printed, Published and Edited by Jitendra Kumar Shukla, printed at Ganapathi Overseas 1/63 Bahar-e -Sahara State Janki Puram Lucknow-226021, and Published from 631/63, Surendra Nagar, Mulayam Nagar, Chinhat - Lucknow-226016, Editor, Jitendra Kumar Shukla

Disclaimer:
Neither the **Microbioz India** nor its publishers nor anyone else involved in creating, producing or delivering the Microbioz India (in printed, web or CD format) or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the Microbioz India Magazine (in printed, web or CD format), nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of the Microbioz India magazine.

Editor's Word

ear Readers,

Welcome to the latest issue of Microbioz India. As we delve into the pages of this edition, we are excited to bring you a collection of engaging stories, insightful features, and thought-provoking content that we believe will capture your imagination and enrich your knowledge.

In a world constantly in motion, Microbioz India remains steadfast in its commitment to delivering high-quality content that informs, inspires, and entertains. We take pride in curating content that reflects the diverse interests of our readers, and in this issue, you will find a wide range of topics to explore.

In our cover story, we shine a spotlight on "**Engineering the future of Pharmaceutical Excellences: Advancing Smart Manufacturing, Precision Science and Next-Generation Drug Development**" delving deep into its intricacies and uncovering the stories and people that make it an intriguing subject. Additionally, you'll find articles **GD Waldner: Engineering Tomorrow's Labs with Integrated Excellence**" contributed by GD Waldner, that we hope will pique your curiosity.

As we embrace the digital age, Microbioz India continues to evolve to provide you with fresh, interactive experiences. Be sure to check out our website for additional content, multimedia features, and ways to connect with us through social media.

We value your feedback and insights, which drive us to continually improve and innovate. Your voices shape the direction of Microbioz India, and we appreciate the trust you place in us to be your source for Pharma, Bio-Pharma, Laboratory and Analytical Industry news and product launches.

Thank you for your continued support and loyalty. We look forward to embarking on this journey with you, exploring the worlds within the pages of Microbioz India, and sharing the stories that make our world so captivating.

Enjoy the read!

Kumar Jeetendra

Microbioz India.

Magazine Publishing Company

Ami Polymer

Enabling Healthcare

BRONZE | Top 35% ecovadis Sustainability Rating MAR 2026

Great Place To Work. Certified INDIA

PROTECTING PROCESS INTEGRITY

Why Film Selection Matters in Biopharmaceutical Manufacturing

In biopharmaceutical manufacturing, the materials that come into contact with process fluids deserve as much attention as the equipment that handles them. Films used in single-use bags and fluid-handling systems must do more than hold a liquid. They need to support the requirements of the process, maintain physical integrity during handling and provide appropriate barrier performance for the intended application.

This is where multilayer films can play an important role. Imaflexell™ B01 is an aseptic processing film developed with a five-layer structure. Its ULDPE product-contact layer is designed to offer chemical resistance and mechanical strength, while the EVOH barrier layer helps limit oxygen transmission. The outer LDPE layer provides resistance to abrasion, puncture and tearing. The film is intended for biopharmaceutical applications such as liquid storage and transfer, media storage, mixing systems and bioreactor sampling.

What matters when selecting a process film?

- **Know the process fluid:**
  Understand the material in contact with the process fluid and confirm its suitability for the application.
- **Barrier performance:**
  Evaluate oxygen transmission and other relevant barrier requirements according to product sensitivity.
- **Mechanical integrity:**
  Consider puncture resistance, flexibility, abrasion and the handling conditions expected during use.
- **Sealing compatibility:**
  Confirm that the film can be sealed using the required process and validated settings.
- **Extractables and leachables:**
  Review available study data and assess its relevance to the specific process and fluid.
- **Testing and documentation:**
  Check the applicable test reports, material specifications and quality documentation before implementation.



The right material helps manufacturers build confidence in the fluid-handling system from storage through transfer and processing.

www.amipolymer.com
media@amipolymer.com

Engineering the Future of Pharmaceutical Excellences

Advancing Smart Manufacturing, Precision Science and Next-Generation Drug Development



The pharmaceutical industry is currently experiencing a period of change in which new ways of discovering, developing, making and delivering medicines are being inspired by breakthroughs in science, engineering and digital innovations. New ways of thinking are being applied to drug development, from continuous pharmaceutical manufacturing to new and improved ways of developing, transporting and delivering medicines.

The incorporation of engineering principles into the research and manufacturing of medicines is at the core of the current revolution in the pharmaceutical industry. Increasing global health care needs, together with continuously expanding and more stringent regulatory requirements, are forcing the pharmaceutical industry to invest in smarter, more integrated processes and advanced analytics to enhance the speed and quality of research and decrease the time it takes to get new medicines from the laboratory to the patient.

Smart Manufacturing: Building the Next Generation of Pharmaceutical Production

Manufacturing processes in the pharmaceutical industry are changing to become more flexible and data-driven. One way this is being achieved is through increased automation and monitoring of processes. This leads to fewer inconsistencies, mistakes, and better control over variations in pharmaceutical manufacturing.

Continuous manufacturing is another important development. Compared to batch manufacturing, which relies on many sequential steps and intermediary storage and transport processes, continuous processes can lead to more streamlined production, improved process monitoring and more efficient use of resources. In combination with PAT, Continuous manufacturing allows pharmaceutical companies to monitor Quality Attributes (QAs) during the manufacturing process instead of relying on labor intensive end-product testing.

Industry 4.0 is contributing further equipment connections and automation of manufacturing and quality systems. New technologies are enabling real time process monitoring and optimization, as well as earlier detection of process deviations.

However, successful deployment of these technologies is dependent on many other factors. Data integrity, workforce training, cybersecurity and change control are some of the other critical elements needed to apply technology in the manufacturing of pharmaceuticals.

Artificial Intelligence and Digital Innovation in Drug Development

Artificial Intelligence and Machine Learning are redefining pharmaceutical research. These technologies help process, analyze and even predict molecular interactions and facilitate the identification of drug candidates and the design of experiments. In addition, these technologies can transform and optimize many activities related to the pharmaceutical industry.

Some of these technologies can facilitate and optimize different steps of the development and production of pharmaceuticals. Predictive algorithms in production can be used to eliminate process variability. AI and other data science techniques can be used to integrate and process numerous data sets in order to optimize and coordinate the production of pharmaceuticals.

Digital laboratory platforms can facilitate and speed up scientific work. The use of AI to generate data is a good start, but these data should always be validated by traditional scientific methods.

The role of analytical sciences in the manufacturing, development, and quality assurance functions of the pharmaceutical industry is going to increase, given the expansion of therapeutic areas and the complexity of molecules.

The identity, purity and potency of drug substances and drug products, as well as their impurities and stability, can now be measured with greater precision using a variety of modern analytical techniques such as high-performance and ultra-high-performance liquid chromatography, liquid chromatography-mass spectrometry, spectroscopy and particle characterization techniques.

Some analytical laboratories have traditionally relied on the development and validation of test methods. Recently, the automation of sample preparation, and the use of advanced analytical instruments and computer software, as well as the integration of laboratory information management systems, have positively impacted the integrity and reproducibility of laboratory work.

Quality by Design (QbD) calls for the understanding of relationships among drug substance materials, process parameters and product attributes. Risk management, design of experiments and critical quality attributes are helpful in process development. The use of a qualitative risk management approach in combination with the validation of pharmaceutical products can be effective in transitioning from a predominantly reactive to a more proactive quality system.

Biopharmaceuticals and Advanced Therapeutic Platforms

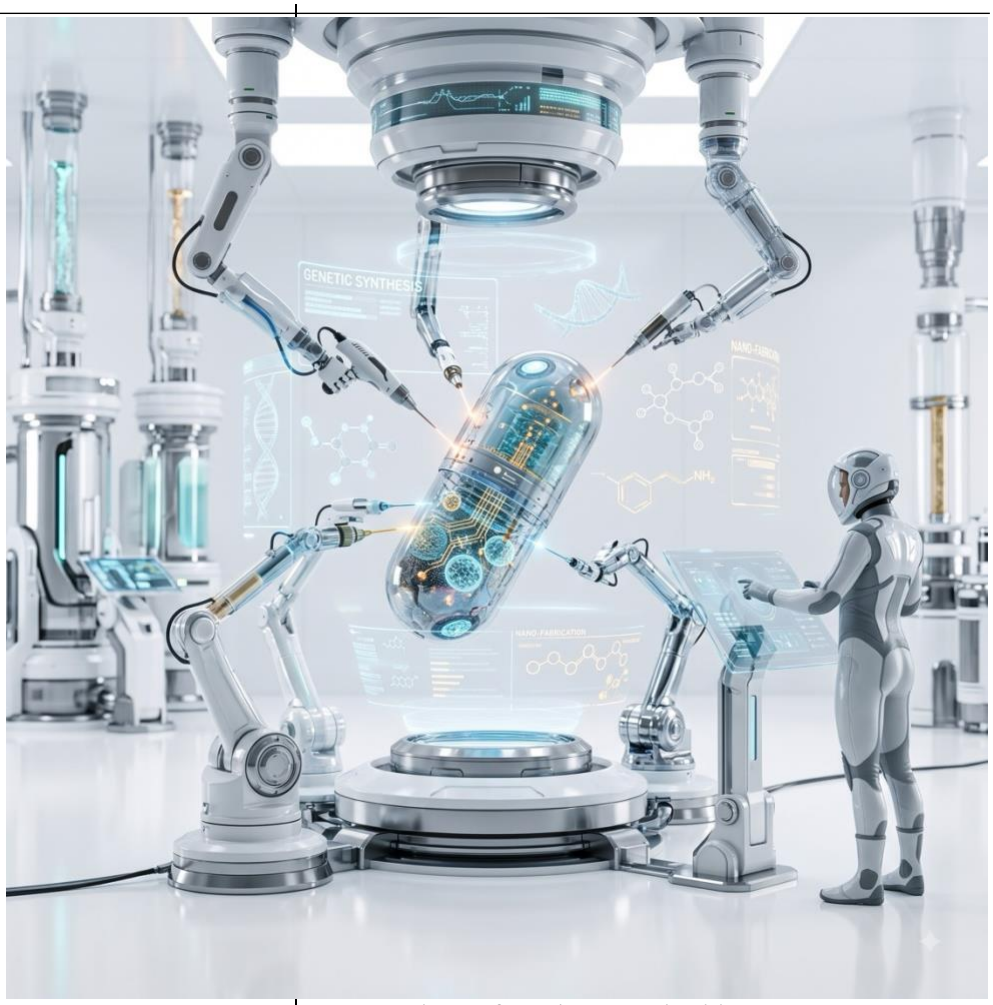
The new wave of advanced therapeutic modalities presents both new challenges and opportunities for engineering and science. These modalities often require complex and sophisticated manufacturing, analysis and storage/transportation.

The use of single-use systems has improved the speed and efficiency of manufacturing biopharmaceuticals, especially with the use of advanced automation in fluid transfer and process control.

Moreover, recent innovations in cell culture and fermentation have decreased the time needed to develop biologics. Challenges remain in purification and characterization of biologics.

Risks of contamination are present at various steps of the biopharmaceutical manufacturing process and throughout the supply chain. Until recently, assurance of product consistency during advanced process development required the integration of process engineers and microbiologists. Recently, there has been a shift towards process continuity and integration of process engineers with microbiologists.

Flexibility in assuring the balance of rigor and control in managing risks will be vital for the future of the biopharmaceutical industry.



Regulatory Excellence, Data Integrity and Patient Safety

The integration of automation in modern pharmaceutical manufacturing, coupled with a robust quality management system, should enable the pharma industry to gain flexibility while improving outcomes for patients. GMPs and GLPs are key to any pharmaceutical business. Validated computerized systems and sound documentation are necessary.

Data integrity is important as laboratories and pharmaceutical manufacturing facilities become digital. A system should be validated to ensure the reliability, reproducibility and integrity of records.

Risk-based validation, together with electronic audit trails, provision and management of controls, and sound governance of records, enables the oversight of increasingly interconnected systems.

Expectations of regulatory authorities encourage manufacturers to have robust systems to manage deviations and investigation of the root cause and implement corrective and preventative actions.

Continuous improvement and compliance should be integrated throughout the strategic and operational planning of an organization to ensure these elements become embedded in the quality culture of the organization. This positively impacts operational resilience and instills confidence in the medicines available to patients.

Sustainability and the Future of Pharmaceutical Engineering

A design that is considerate of the environment is becoming more important for design of pharmaceutical facilities and processes. There are multiple pieces of equipment that can be integrated within a pharmaceutical facility to minimize the overall environmental impact of the operation. Other areas, including green chemistry and process intensification, help in improving the sustainability of processes.

For process sustainability, there are a variety of design considerations that help operational staff meet the requirements of quality and safety of a product. Compatibility of various sustainability initiatives with the rigorous requirements of pharmaceutical manufacturing must be ensured.

Collaboration: The Foundation of Pharmaceutical Progress

No single technology can entirely address the needs of the next generation of pharmaceutical excellence on its own. It will require collaboration amongst drug developers, equipment manufacturers, analytical technology providers, contract development and manufacturing organizations, research institutions, and regulatory specialists.

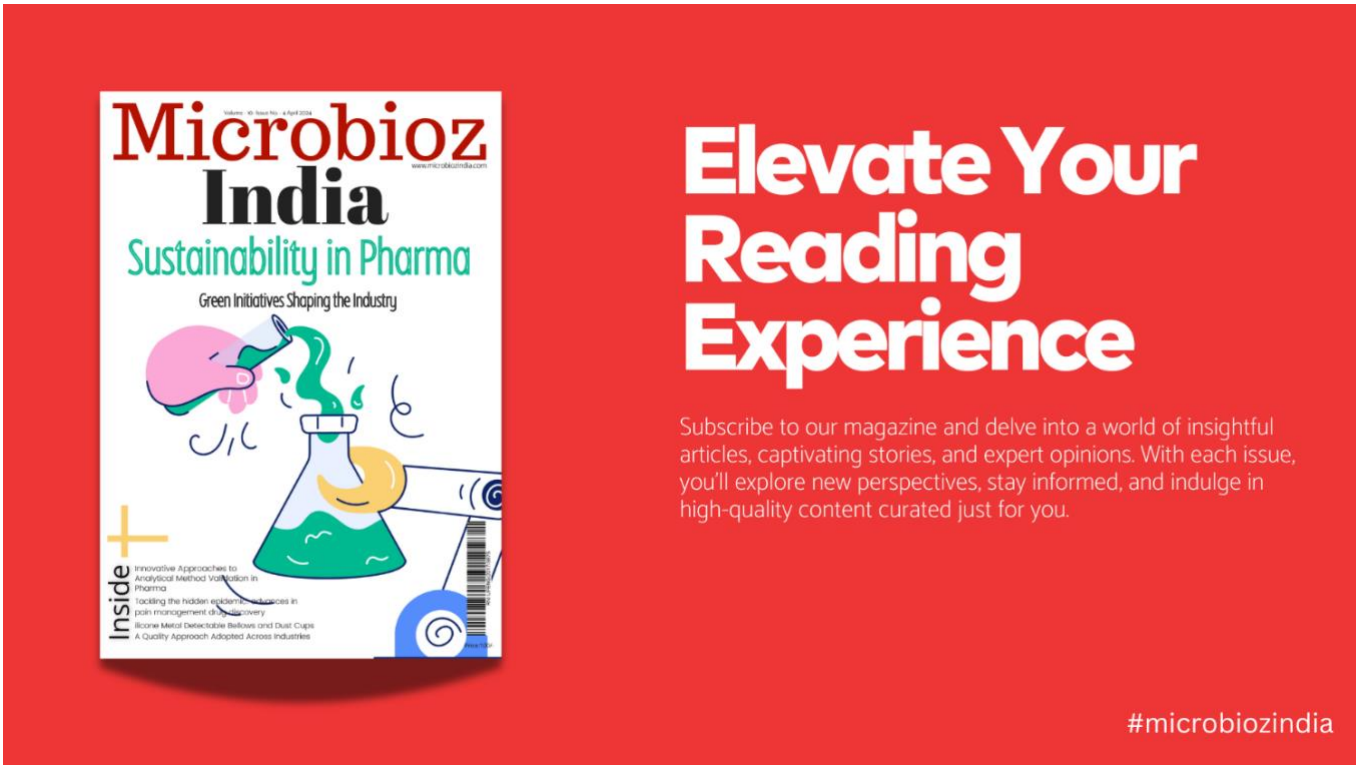
Integrated engineering teams have the potential to close the gap that exists between scientific discovery and commercial manufacturing. Early partnerships with equipment and technology providers may allow for better facility design, facilitate technology transfer and enhance the overall alignment of the process requirements and the capabilities of manufacturing.

Likewise, significant investment in workforce development is essential to train the workforce to acquire the skills necessary to synthesize pharmaceutical knowledge with other allied and interrelated fields such as automation, data science and engineering, process engineering and advanced analytics. The continued pace of changes in technologies and the pharmaceutical regulatory environment dictate that lifelong learning become the new standard for all professionals.

Looking Ahead: Engineering Better Medicines for Tomorrow

The future of pharmaceutical excellence is to integrate the science and the engineering of manufacturing with an emphasis on digital intelligence and patient safety.

Smarter manufacturing and new engineering advances along with the adoption of continuous and sustainable processes, coupled with the new frontiers of data science and artificial intelligence can create a renewed era of quality and productivity in the pharmaceutical industry. The true long-term value of these opportunities, however, will be determined by the strategic integration of data, and processes and a commitment to patient safety and centrality. While pharmaceutical science and engineering will always be intertwined, it is equally important to view the true scope and focus of the field well beyond the four walls of a pharmaceutical manufacturing plant and develop safe and effective therapies that help patients around the world.





GD Waldner: Engineering **Tomorrow's Labs with Integrated Excellence**

Combining global engineering expertise with local execution to create safe, efficient and future-ready laboratory environments.

As scientific research moves forward, laboratory infrastructure becomes increasingly important. developments in pharmaceuticals, biotechnology and life sciences involve more advanced equipment, different methodologies and more stringent safety requirements. Labs must be designed to address all of the above as well as improve speed and efficiency in a number of areas. This goes beyond creating a well-designed workspace. It requires an integrated approach to planning, engineering and execution that incorporates technology and other relevant services.

Engineering the Laboratories of Tomorrow: GD Waldner's Legacy of Excellence in Integrated Laboratory Solutions

This is where **GD Waldner India Pvt. Ltd.** applies its knowledge of the Indian sub-continent laboratory market. With German engineering and international experience, we integrate our understanding and expertise of the Indian industry to create laboratory environments that facilitate and encourage the advancement of science.

Our offerings are geared toward enhancing safety and energy efficiency of labs, while keeping an eye on the future, flexibility, and potential adaptability of the systems.

The idea is to design and build turnkey, fully integrated laboratory environments that have utility and service infrastructure as well as equipment integrated into the environment to facilitate and support modern research and industry.

From Laboratory Planning to Integrated Execution

A laboratory is a complex ecosystem that includes the interplay of architectural design, building services, utilities, safety , special services and specialized and often-bespoke equipment. Decisions made during the planning phase can affect operational efficiency, long term maintenance, safety of users and the ability to introduce new and emerging technologies.

Depending on the phase of the project, challenges may arise from the fact that building services, lab equipment and operational needs are not adequately integrated.

An integrated project delivery approach helps resolve these challenges by integrating various disciplines within a project.

GD Waldner adopts integrated design and build approach to provide laboratory environments that are functional, safe and aligned with the intended scientific application.

Engineering Safety, Efficiency, and Adaptability

Pharmaceutical, chemical, biotech and specialised research facilities deal with unique design issues.

The need for special considerations in design of these facilities is a result of numerous risks associated with use of hazardous materials and the processes involved. These include adequate control of utilities, ventilation and effective containment.

A safe laboratory operation requires numerous integrating systems including a reliable fume hood, ventilation system and gas distribution system. Adequate workstations and appropriate storage and service connections speed up workflow and reduce bottlenecks

Because priorities change with time, e.g. change in research interests and the introduction of new equipment and technologies, it is important to design laboratories in such a way that they can readily be adapted to incorporate the new research interests and equipment.

The introduction of new and strict regulation concerning the use of energy and other resources demands incorporation of same in the design of laboratories to reduce the overall cost of operation. It is important to take a complete lifecycle approach in the design and construction of research laboratories.

Supporting India's Expanding Research and Life Sciences Sector

The Indian pharmaceutical, biotech, healthcare and scientific research industries are progressing rapidly. With this development, the infrastructure used by these industries must also be developed to support more complex applications. There are many specialised requirements for equipment, services and safety in design and layout of laboratory and research facilities for drug discovery and analysis, research and quality control.

Each facility has specific requirements and a standardized design may not adequately address these requirements. Various types of research facilities from testing labs to specialised animal research require designs based on specific functions, operating conditions and risk groups.

GD Waldner brings in combined expertise of offering German Engineering and local execution capabilities to address the requirements for these various facilities.

The company is able to design laboratories taking into account regulations and other considerations relevant to the local market and prioritise these based on the client's needs.

The company is able to integrate various technical disciplines to accomplish the architectural, mechanical and electrical services and safety systems in the design of laboratories.

For clients embarking on a new research or development project, partnering with a company that has a strong understanding of these interdisciplinary fields can be a good business decision.

Global Experience, Local Understanding

International experience allows for the understanding of varying requirements for laboratory planning, engineering coordination and the development of research environments to meet the needs of scientific disciplines. Having a global mindset allows for established engineering principles and best laboratory practices to be adapted to the specific requirements of the project.

Waldner as a group has delivered world's class laboratory spaces some of which has won the global lab of the year award. One such international project of the Group is **CJ Blossom Park located in Suwon**, South Korea. This project involved the design of a research and development center for the pharmaceutical, biotechnology and food research.

The project incorporated a higher degree of flexibility in planning laboratory spaces and allowed for the combination of several techniques to support scientific interdisciplinary cooperation. An important element of the project was the incorporation of open-plan laboratory spaces and reconfigurable service modules in supporting spaces to achieve flexibility in research spaces. The Project incorporated principles that could support efficient use of laboratory space.

The approach of GD Waldner India, a member of The Waldner Group, is to integrate local knowledge with international know-how to develop laboratory spaces in a way that meets client requirements and ensures safety and long-term value.

Building Laboratories for the Next Generation of Science

The future of laboratory infrastructure will be influenced by many factors including scientific instruments, automation and digital technologies, sustainability and the increasing interconnection of research workflows.

As specialization increases in research domains, labs and the services they use will also have to adapt to evolving expectations for the operational models of equipment, infrastructure and resources. Taking a lifecycle approach to planning for these trends gives a laboratory facility the ability to perform its core function for its intended lifespan. Just as important is consideration for changes in the functionality and use of the facility as well as future adaptability.

It can be beneficial for an organization to consider all of the above requirements for a laboratory during a major project rather than addressing them as different, independent decisions. This interconnectedness further supports the integration of workflows and services during a project. Reliable, adequate and properly planned maintenance helps fulfill shifting requirements and enables the continuous operational adaptation that is essential to the core function of a lab.

At GD Waldner India, this lifecycle perspective for lab services complements our turnkey solutions for lab infrastructure and helps us achieve our core purpose of enabling reliable and adaptable scientific environments.

Engineering Infrastructure That Enables Discovery

The true worth of a lab is determined by how well it serves the scientists and the tasks they perform. Of course, architecture, equipment and technical aspects of a lab are critical, but in the end it is people and the processes they perform that really drives science.

The Indian pharmaceutical, biotechnology and research sectors are evolving and with that, the demand for advanced laboratory infrastructure is expected to remain high for organizations investing in science and technology capabilities.

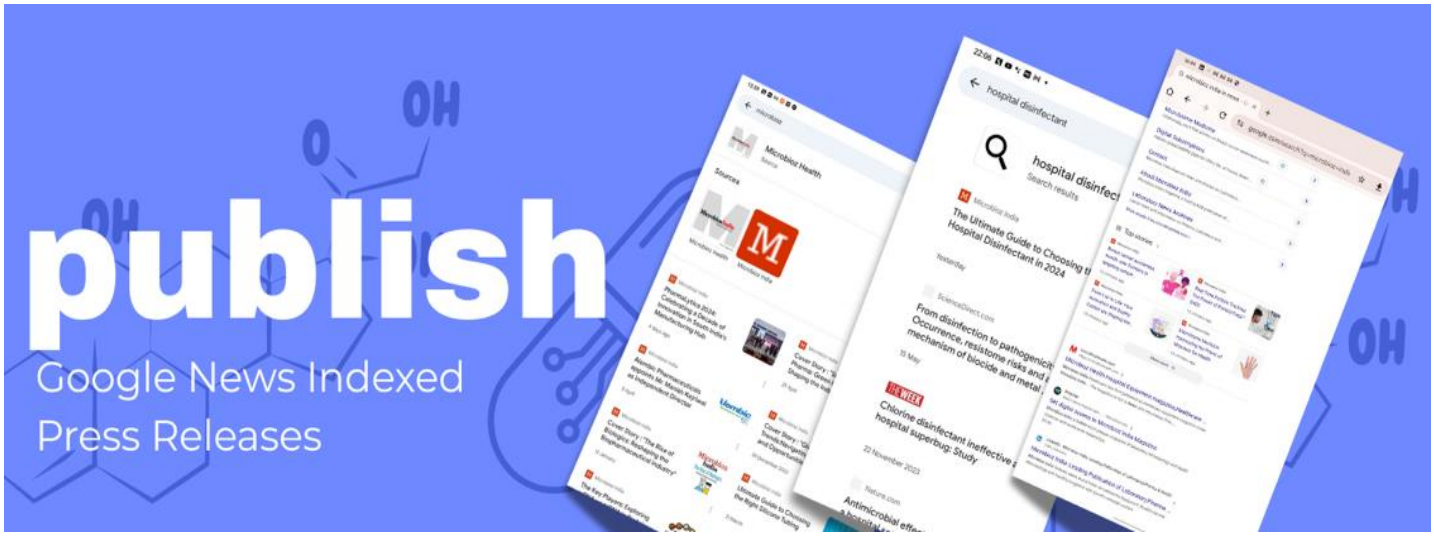
GD Waldner India combines international designs and engineering with local execution to provide turnkey laboratory solutions. Through this, we aim to satisfy the challenges of research and industry.

For the engineering of future laboratories, the focus must be on creating spaces that integrate safety, efficiency technology and flexibility to adapt to the future.

For more information:

GD Waldner | 100 A CENTURY OF DISCOVERY SINCE 1924

GD WALDNER India Private Limited
50/A Lamdapura Road,
Village Lamdapura, Tal Savli,
Vadodara - 391775
phone: +91 7208033099
www.gdwaldner.com
Email : sales@gdwaldner.com



PrimeDx™

High-purity raw materials for Diagnostic Innovation

As diagnostic technologies evolve, manufacturers need dependable access to critical raw materials that support consistent formulation and production. **PrimeDx™** by **SRL** is a specialized raw material portfolio created to support the evolving needs of the **diagnostic kit manufacturers and molecular biology industries**. With a broad selection of high-purity components across multiple categories, PrimeDx™ helps manufacturers build a reliable foundation for **diagnostic reagent development, manufacturing and scale-up**.



The Right Chemistry for Reliable Diagnostic Kits

- High Purity
- Low Endotoxin & Low Metal Content
- Lot-to-Lot Consistency
- Contamination-Free Packaging

Critical raw materials for Diagnostic Kit Formulation

62560	Albumin Bovine (BSA) (pH 7) fraction V PrimeDx, 98%
19575	Casein acc. to Hammarsten, PrimeDx, 95% Protein
11077	Sodium Azide PrimeDx, 99%
56489	Tris Buffer PrimeDx, 99.9%
64762	EDTA Disodium Salt Dihydrate PrimeDx, 98%
86561	ß-Nicotinamide Adenine Dinucleotide (Oxidized) (ß-NAD, DPN) PrimeDx, 98%

... and many more

Applications

Clinical Chemistry | Immunoassay | Hematology | Coagulation
Microbiology | Molecular Diagnostics | Serology | Rapid Testing

Explore the PrimeDx™ range
for your critical reagent requirements

Sisco Research Laboratories
marketing@srlchem.com
+91 22-42685800

Form+ by METTLER TOLEDO: Smarter, More **Reliable Formulation** for Every Batch



Consistency, traceability, and efficiency are essential in the manufacturing industries. Whether producing pharmaceuticals, chemicals, food products or other formulated goods, even a small weighing or documentation error can affect an entire batch. Traditional paper-based processes can make it difficult to maintain complete control, particularly when operators must record measurements manually while managing multiple production steps.

Form+ provides a practical way to modernize your formulation and weighing operations. By combining guided workflows, automatic data capture and flexible recipe management, it improves batch quality while making everyday tasks easier for operators.

Reduce the Risk of Human Error
Repetitive manual work can lead to errors such as incorrect data entry, missed steps or unreadable handwriting. Form+ reduces these risks by automatically logging the measurements and then guiding the operators through the formulation process step by step.

The system supports smart actions such as automatic scale selection, autotare, and automatic acceptance when results fall within defined tolerance limits. This means the operator can concentrate on producing good batches rather than constantly having to check the paperwork and entering the data themselves.

Improve data Management and Traceability
Reliable production data is critical for quality control, audits, and investigations. With paper-based systems, records can be misplaced, damaged, or difficult to interpret.

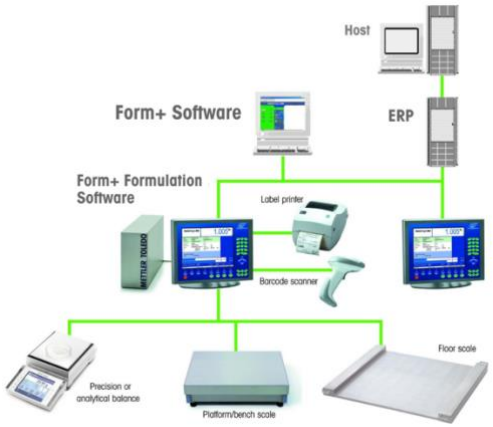
Reviewing documents after a deviation, bad batch or product recall can also be time-consuming.
Form+ automatically collects and stores weighing and production information, creating a dependable digital record of each batch.

Manufacturers can quickly access the information they need; review operator comments and trace materials used in production.

In the event of a recall, specific batches containing a particular raw material can be identified more efficiently. Advanced audit trail filtering also supports compliance activities by making it easier to review relevant records and process history.

Make Formulation Easier for Operators
Form+ is designed to support operators without adding unnecessary complexity. It provides clear, step-by-step instructions and helps manage recipes, production orders, and weighing activities in a structured way.

Manufacturers can define standard operating steps and allocate materials, production orders, or recipes to specific work groups or weighing stations. The system supports horizontal, vertical, and chaotic weighing modes, helping organizations maintain recipe consistency while adapting to different production methods.



Safety features can provide visual alerts for hazardous materials and food allergens to assist the operator in identifying the relevant hazards during the weighing process.

Adapt to Existing Operations

Introducing new software doesn't necessarily mean you have to change the way your facility works. Form+ is designed to fit into existing manufacturing and IT environments. It offers flexible recipe management, Active Directory support, and a REST API framework for integration with external systems.

Materials, recipes, and production orders can be imported into the weighing system. Form+ can also provide connectivity to METTLER TOLEDO IND900 Series indicators and other SICS-capable indicators through PC Workstation functionality. With a one-time installation, the software can be accessed across the entire facility network and is therefore suitable for operations that require centralized control and visibility.

Control Costs and reduce Waste

Accurate formulation helps reduce material waste and the risk of batch rejection. Form+ has the capability to perform automatic mid-process batch resizing and can optionally apply linear correction. It can also help manage inventory through lot-number control and FEFO (First Expired, First Out) principles.

For preweighed materials supplied in bags or other containers, operators can use the materials without weighing them again when appropriate. The system can also automatically work out the amount of active substance required to be used which will assist with accuracy in the formulation when the concentration of the active is a factor.

Production order scheduling, validity periods, and automatic cancellation functions provide additional control over how and when orders are processed.

Build Confidence in Every Batch

A consistent formulation process depends on accurate measurements, clear instructions, and trustworthy records. Form+ brings these elements together in a user-friendly solution that helps manufacturers improve productivity and maintain better control over their operations.

As part of the broader portfolio of weighing and process solutions from METTLER TOLEDO, Form+ helps organizations move away from paper-based formulation and toward a more connected, traceable, and efficient production environment.

With the right digital tools in place, operators can work with greater confidence, quality teams can access reliable production data, and manufacturers can achieve more consistent results; batch after batch.

More information can **be found here:**
www.mt.com/FormPlus

About METTLER TOLEDO –

METTLER TOLEDO is a global leader in precision instruments and services. We are renowned for innovation and quality across laboratory, process analytics, industrial, product inspection, and retailing applications. Our sales and service network is one of the most extensive in the industry. Our products are sold in more than 140 countries, and we have a direct presence in approximately 40 countries. For more information, please visit www.mt.com.

Email us at – sales.sales@mt.com

Call us toll-free at – 1800 22 8884 and 1800 1028 460





Strengthening Pharmaceutical Quality Control with Customized Microbial Controls

How June Enterprises and Microbiologics are transforming environmental isolates into readily usable QC solutions for the pharmaceutical laboratory.

The Growing Importance of Environmental Monitoring in Pharmaceutical Manufacturing

It is incumbent on pharmaceutical and biopharmaceutical manufacturers to maintain microbiological quality. With the expanding scope of regulations, interest in contamination control is on the rise, and laboratories will have to find reliable ways of identifying, monitoring and controlling the microorganisms present in their manufacturing environments.

Environmental monitoring programs enable evaluation of microorganisms present in cleanrooms and production facilities as well as in water systems used in pharmaceutical manufacturing. Identification of microorganisms is only one of the several components of an effective monitoring program. Knowledge about microorganisms of concern and proper evaluation of microbiological testing methods are some of the other components of a successful program.

Custom microbial controls based on environmental isolates help fill this gap. Traditional reference microorganisms will always be essential in pharmaceutical microbiology. However, the microorganisms recovered from a specific manufacturing environment provide site-specific challenges for evaluating the microbiological testing methods.

June Enterprises Pvt. Ltd. in collaboration with Microbiologics USA recognize this need and offer customized environmental control microorganisms to the pharmaceutical industry.

The Custom Solutions program from Microbiologics offers a high degree of flexibility to the customer.

Microbial controls can be created in a variety of formats and population ranges based on the requirements of the laboratory. June Enterprises describes a customized range from approximately 10 to 100 CFU per 0.1mL to higher microbial concentrations up to 10^8 CFU.

The program also supports the phenotypic and genotypic identification of environmental isolates, allowing the laboratories to better define the characteristics of the microorganisms recovered from their sites.

Other features include:

1. Customized ready-to-use formats of microbial controls.
2. Preservation and storage of customer isolates for future use.
3. Confidentiality of customer's proprietary information.
4. Quality control of the shipment.
5. Training on the selection and usage of appropriate controls.
6. Various formats that simplify laboratory operations.
7. Reduction of the time need to prepare in-house working controls.

These features can facilitate the operation of laboratories and ensure microbiological test are conducted in a consistent manner.

Meeting Critical Pharmaceutical Microbiology Requirements

Environmental isolates can support the following activities related to microbiological quality assurance:

1. **Growth Promotion Testing** determines the microbial growth promoting capability of a culture media.

2.**Disinfectant Qualification** evaluates the efficiency of disinfectant against the microorganisms present in the pharmaceutical manufacturing environment.

3.Antimicrobial Effectiveness Testing: Support assessment of the effectiveness of antimicrobial preservation systems.

4.**Aseptic Processing Environmental Monitoring:** providing pertinent microbial controls for laboratory activities associated with a contamination control program

5. **Method Suitability Testing:** Microbiological Test Method verification with respect to the sample and microorganisms.

6.**Neutralization Method Validation:** Determination of the efficacy of a procedure to neutralize the antimicrobial activity.

7. **Pharmaceutical Water Testing:** Incorporating relevant microbiological quality control activities with respect to the water system isolates.

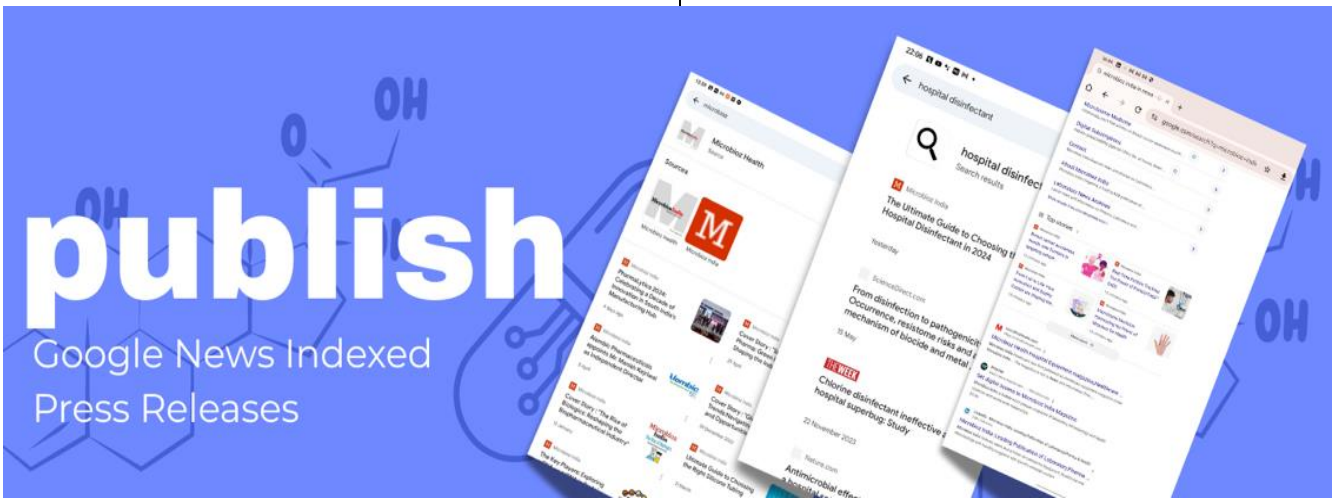
These applications can provide a means for a more comprehensive, scientifically justifiable approach to microbiological quality assurance.

From Isolate to Controls, Ready to Use

The Microbiologics Custom Solutions program simplifies the development of customized microbial controls.

Following an evaluation of the laboratory's requirements, the customer provides information regarding the microorganisms and the intended test applications. The request and the quotation are approved, and an agreement is reached for laboratory to send in its isolate.

Microbiologics, Purify, Identify, preserves, and produces the microorganism in the most appropriate test-ready form.



The average time for the production of a control is 10-12 weeks from the time the isolate was received, depending on the project requirements.

Conveying Global Microbiological Know-How to Local Indian Labs

As the distributor of Microbiologics in India, June Enterprises can now bring globally recognized microbial reference materials and quality control solutions to the Indian pharma, bio, and life science labs.

June Enterprises provides a complete microbiological control solution to its customers qualitative and quantitative microbial controls, growth promotion testing and other ready-to-use products. Additionally, it provides customized environmental isolate controls and solutions.

The team at June Enterprises is striving to bring locally the expertise and experience of Microbiologics for building microbial control in the Indian labs.

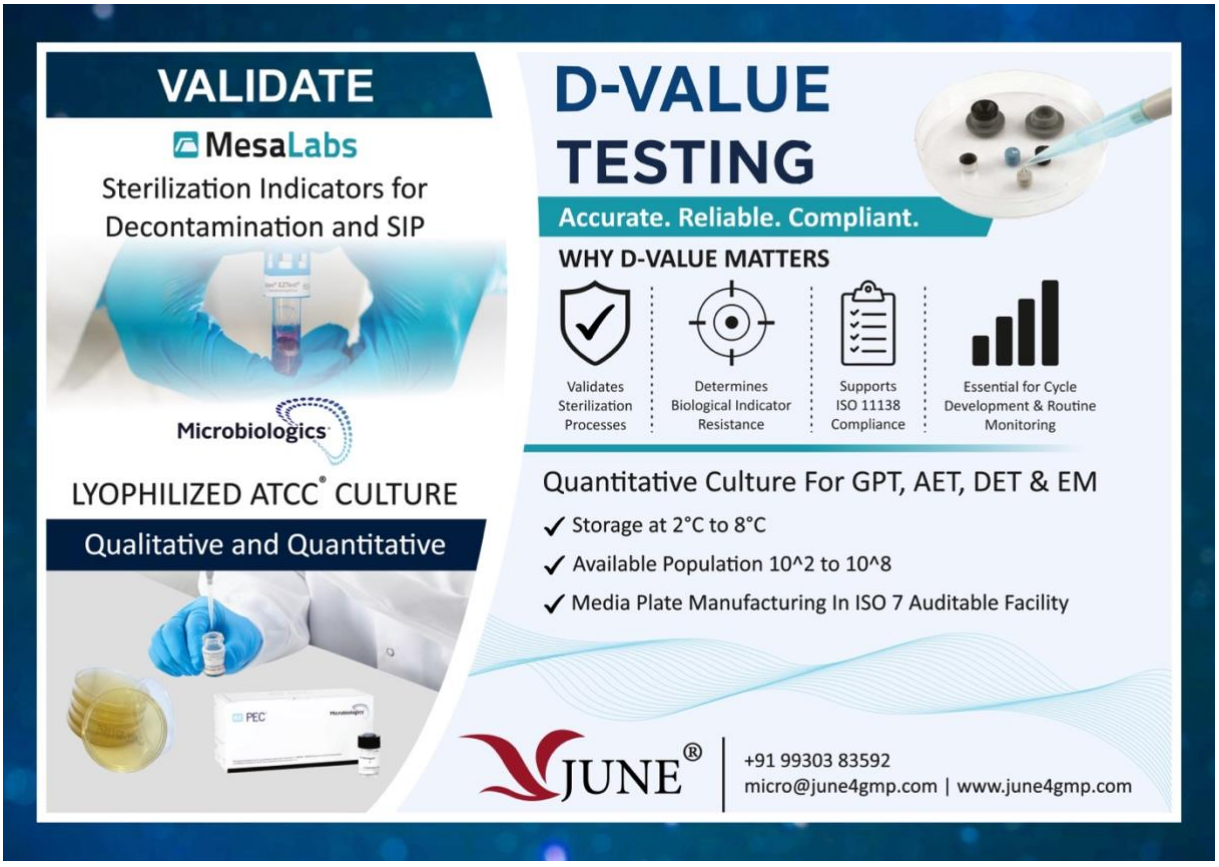
Microbial Control as a Cornerstone of Quality in Pharmaceutical Industry

With an ever increasing focus of the pharma industry on contamination control, reliability of data and scientifically justified testing, demand for environmental controls is increasing. This provides a good opportunity to strengthen and integrate microbiological quality assurance in Pharma industry.

With its customized environmental isolate solutions, June Enterprises is helping bridge the gap between site-specific microbiological challenges and reliable laboratory quality control practices.

For more information:

June Enterprises Pvt. Ltd.
Website: www.juneenterprises.com
Email: Mbl@june4gmp.com / micro2@june4gmp.com
Phone: +91 99303 83592/+91 8779707338





Selecting Barrier Film for Sensitive Bioprocess Fluids

A more sophisticated view of the mechanisms for oxygen and moisture protection, integrity and qualification of single-use bioprocess containers

Single-use systems (SUS) play an essential role in the biopharmaceutical industry for the storage, transport, mixing and processing of buffers, media and other process intermediates. The films used in SUS play a critical role in the protection of process fluids, the integrity of the containers and the quality of the final product. The selection of the right film requires an integrated assessment of the transmission of water vapor and oxygen, mechanical strength, chemical compatibility, resistance to steam and sterilization, and E&L. The objective of this article is to propose a methodology for the selection of films and to demonstrate the need for a collaborative approach between film manufacturers and SUS system manufacturers.

Introduction: Beyond a Flexible Container

Single-use bioprocess containers are engineered systems, not simple systems like flexible containers. The life cycle performance of the container depends on the integral components of the system, including films, welds, ports, tubing, connectors, and other subsystems. A film can be stressed for a number of competing reasons. It must provide the required level of barrier properties, be tough enough to withstand the stresses of material handling, support welding and fabrication, among other things. For example, an increased level of barrier properties may make a film thinner and more susceptible to failure during handling. The film with the lowest transmission of oxygen, or the highest tensile strength may not be the best film for the application.

The right film is the one which best satisfies the requirements of the complete application.

Science behind Oxygen and Moisture Barriers

The Oxygen Transmission Rate (OTR) is the measurement of the rate, in cm3/m2/day, that oxygen passes through a film. High levels of oxygen permeation can effect sensitive formulations and biologics. How much oxygen is required depends on the application. In cell culture, oxygen is essential for aerobic growth, and in some applications, minimizing the oxygen permeation of the container may not be beneficial.

The permeation rates of polymers are affected by many things including, chemical functional groups, the mobility of the chains, the thickness of the film, and its crystallinity. Temperature and other environmental conditions also play a role in the permeation of gases. Low density polyethylene (LDPE) and linear low density polyethylene (LLDPE) films are used for applications that require a high level of flexibility, and toughness, however, they are not suited for applications that require very low oxygen barrier films. EVOH can be used in conjunction with other polymer films to provide an improved oxygen barrier, however, other factors including humidity can also affect EVOH's performance. The rate of water vapour transmission (WVTR) is defined as the rate at which water vapour passes through a film, usually expressed in terms of mass of water vapour passing through a film of unit area in a given time.

Moisture loss can adversely affect the formulation stability and the performance of moisture sensitive products and therefore it is important to reduce WVTR of pharmaceutical packaging films.

The International Standards ASTM D3985 and ASTM F1249 describe methods for measurement of oxygen and water vapour transmission respectively. Results of these tests should only be compared when the relevant test conditions are the same. The sensitivity of a fluid to oxygen and moisture is dependent on a number of factors including how long the fluid is stored, the temperature at which it is stored, and the ratio of the surface area to volume of the container.

In addition, the seals and ports of the container as well as other pathways for ingress may affect the sensitivity of a fluid to oxygen and moisture.

There are a number of reasons to prefer a multilayer film over a monolayer film. One of the reasons is that there is not a single polymer which is ideal for all the functions which may include optical, fluid and moisture barrier, oxygen barrier, low temperature flexibility, sealant layer and adhesive.

Each of these functions may be performed by different layers in a multilayer film.

A conceptual multilayer structure may include:

Functional layer	Principal purpose	Key considerations
Product-contact layer	Compatibility with the process fluid and suitable contact surface	Chemical composition, E&L profile, cleanability where relevant, and sealability
Structural or tie layers	Provide mechanical support or bond dissimilar polymers	Interlayer adhesion, flexibility and resistance to delamination
Barrier layer	Reduce transmission of oxygen or other gases	Barrier performance under actual temperature and humidity conditions
Outer protective layer	Support handling and protect the structure	Abrasion resistance, puncture resistance and processing compatibility

There are certain risks introduced by a barrier layer which must be measured against acceptable limits.

For example a multilayer film must be assessed for delamination, chemical and processing stability as well as performance after the required sterilization cycle.

If EVOH or other barrier material is considered, assessment must be made on the effects of exposure to moisture on the barrier performance in the multilayer construct and its consequences on the system.

If a barrier film has a very low OTR, it may not be of good use if it cannot withstand the welding process or its chemical and characterisation profile doesn't meet the requirements of the process. Therefore the idea is to achieve an optimal balance.

How Ami Polymer Can Help Support Application Specific Film Development

Ami Polymer has unique positioning with its film manufacturing unit, and understanding of barrier performance, to engineer bioprocess films aligned with the requirements of single-use system bag manufacturers.

With its advanced manufacturing capabilities and understanding of polymer performance, barrier performance, and process requirements, Ami Polymer is positioned to manufacture high performance films for the biopharma industry to meet the demands of single-use system bags.

Conclusion

When considering barrier film for processing fluids, different aspects must be taken into account including mechanical properties of the film, chemical aspects, moisture and oxygen transmission, and effects of sterilisation. OTR and WVTR values are helpful indicators but in themselves do not determine the suitability of a film for single use containers.

References

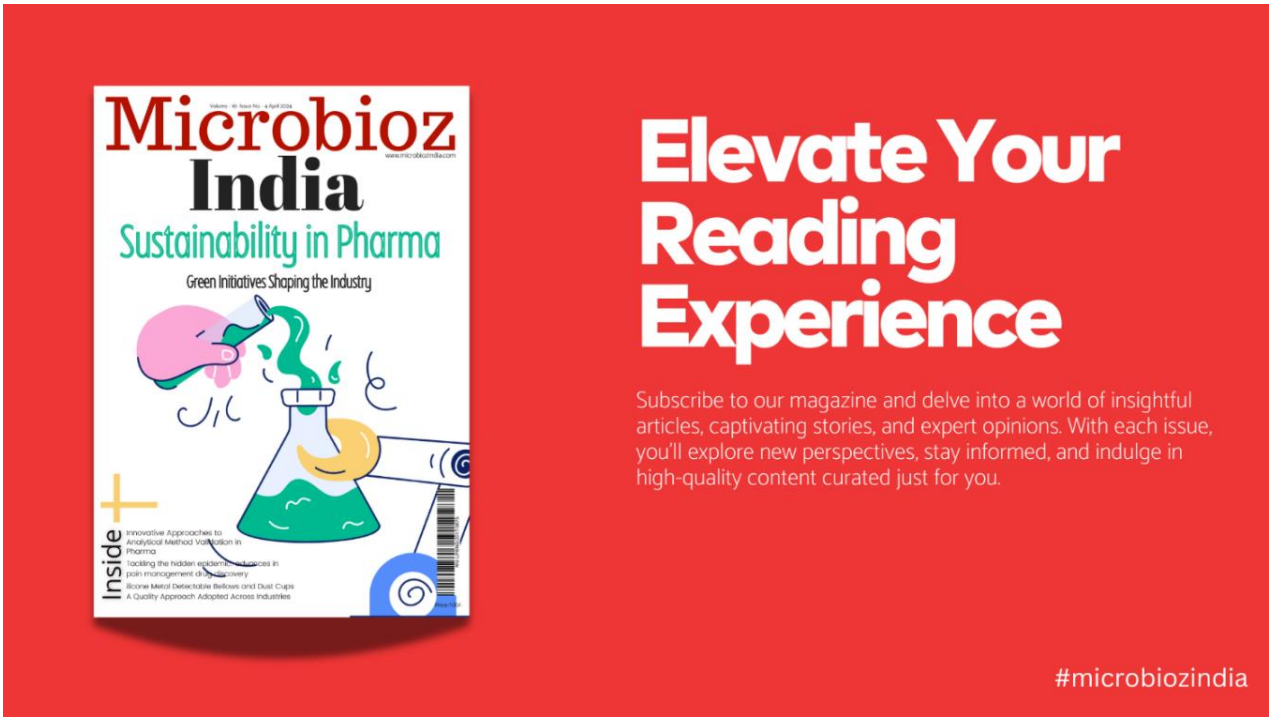
1. ASTM International. (2022). ASTM D3985 - Standard Test Method for Oxygen Gas Transmission Rate through Plastic Film and Sheeting using a Coulometric Sensor.

2. ASTM International. (2015). ASTM F1249 - Standard Test Method for Water Vapor Transmission Rate through Plastic Film and Sheeting using a Modulated Infrared Sensor.

3. ASTM International. (2021). ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

4. Jenke, D. et al. (2022). Research Literature on Extractables and Leachables from Polymeric Materials used in Single-use Bioprocess Systems including Publications in Analytical Chemistry. Specific study details should be verified before publication.

Authored by:
Chandan Sah
General manager SUS production department





Zydus, MSN Launch First Generic Adempas® in the U.S.

Zydus Lifesciences Limited (Zydus), in partnership with MSN Laboratories Private Limited (MSN), today announced the launch of Riociguat Tablets, 0.5 mg, 1 mg, 1.5 mg, 2 mg and 2.5 mg, in the United States.
Zydus and MSN are the first companies to launch a generic version of Adempas® (riociguat) in the U.S. market.

The product was developed and is manufactured by MSN. Riociguat Tablets are approved by the United States Food and Drug Administration (USFDA) as a generic equivalent of Adempas® Tablets in all five strengths.

Riociguat is a soluble guanylate cyclase (sGC) stimulator indicated for the treatment of adults with persistent or recurrent chronic thromboembolic pulmonary hypertension (CTEPH, WHO Group 4) after surgical treatment, or inoperable CTEPH, to improve exercise capacity and WHO functional class; and for adults with pulmonary arterial hypertension (PAH, WHO Group 1), to improve exercise capacity, improve WHO functional class and to delay clinical worsening.

Commenting on the development, Dr. Sharvil Patel, Managing Director, Zydus Lifesciences Limited, said,

"Being first to market with generic riociguat is a milestone for our U.S. business and for patients with pulmonary hypertension. It reflects the strength of our complex-generics pipeline, our ability to execute day-one launches in specialty categories, and the strength of our partnerships that complement our commercial reach in the United States. We are pleased to enable access to the drug across all five strengths, allowing physicians and pharmacies to transition patients with confidence." Dr. MSN Reddy, Founder & CMD, MSN Laboratories, said**,** "Riociguat is a technically demanding molecule, and bringing the first generic to the U.S. demonstrates the depth of MSN's integrated API and formulation R&D and the scale of our manufacturing. Together with Zydus' established U.S. commercial platform, we are confident of delivering consistent, high-quality supply of this important therapy." PAH and CTEPH are rare, progressive and life-threatening conditions in which patients typically remain on therapy for life. So far, riociguat was available in the United States only as the branded product. Sales of riociguat are not reported by IQVIA.

ADVENT



Pharmacopeia Grade Excipients

- Labelled USP, EP, BP, IP, JP & multicompendial solvents and solids in customized packs.
- FDA approved and GMP compliant manufacturing plant.
- ISO 9001:2015, ISO 14001:2015, GLP certified & ISO/IEC 17025:2017 accredited testing lab.
- Modern Technology and Innovation Processes to achieve quality through continual improvement.
- Robust Standard operating procedures at every stage of production.
- In-House Testing facility.
- Qualified & Trained personnel at every step of Operations.
- All Time Ready auditable facility.
- Dossier (All documentary support & declarations) on customer's request.



Advent Chembio Pvt. Ltd.®
(ISO 9001:2015, ISO 14001:2015 Certified)
W-279, TTC Industrial Area, MIDC, Rabale, Navi Mumbai-400 701, Maharashtra, INDIA.
+91 7777084837 sales@adventchembio.com www.adventchembio.com

According to Bayer's Annual Report 2025, the global sales of Adempas® were approximately EUR 745 million (approximately USD 850 million) in 2025 (source:https://www.bayer.com/sites/default/files/2026-03/bayer-annual-report-2025.pdf

Mankind Pharma Enters CAR-T Therapy with Armed Cell Acquisition



As a part of its long term strategy to build a global innovation-led pharmaceutical business, Mankind Pharma (BSE: 543904 | NSE: MANKIND) through its subsidiary Mankind Pharma (Netherlands) B.V., has entered into a definitive agreement under which Mankind Pharma will acquire a majority stake in **Armed Cell Therapeutics B.V.**, a Belgium-incorporated biotechnology company developing next-generation CAR-T (chimeric antigen receptor T-cell) therapies for cancer.

Mankind Pharma to Acquire Majority Stake in Armed Cell Therapeutics, Marking Strategic Entry into Next-Generation CAR-T Therapies

Armed Cell Therapeutics is a Belgium-based biotechnology company developing next-generation armed CAR-T therapies for cancer.

Transaction Summary:

1. Mankind to invest EUR 48 million for 70% stake in Armed Cell Therapeutics
2. **Armed Cell Therapeutics (ACTx)** has a pipeline of next-generation **CAR-T assets**, with lead programs in non-Hodgkin lymphoma and small cell lung cancer
3. ACTx will pursue innovative means of CAR- T cell therapy including in vivo CAR-T cell generation
4. ACTx's R&D activities are led by highly experienced teams located in US and EU

Armed Cell Therapeutics was founded by a team with experience in drug development, cell therapy and building companies.
Its founders, include Paul Stoffels, MD, Chair of the Board, former Chief Executive Officer of Galapagos and former Chief Scientific Officer of Johnson & Johnson; John Mellors, MD, Chief Scientific Officer, Distinguished Professor of Medicine at the University of Pittsburgh and former SVP Discovery and Early Development at Galapagos; and Peter Verhaeghe, former Chair of argenx.

CAR-T therapies have transformed the treatment of some blood cancers. Yet many patients relapse from lack of CAR-T cell persistence, CAR-T exhaustion or emergence of resistant cancer cells. Solid cancers are especially hard for CAR-T cells to penetrate and function in hostile tumor microenvironments.

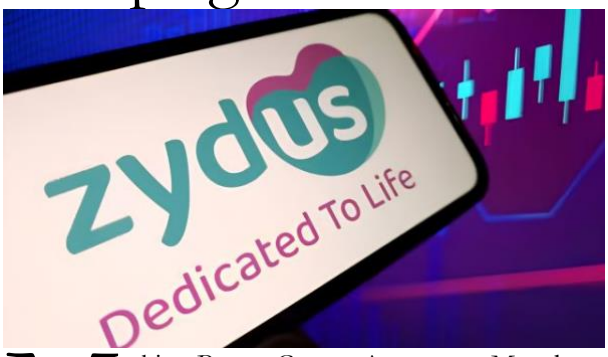
Armed CAR-T cells are engineered with additional payloads to strengthen and sustain their anti-tumor activity, with the goal of deeper and more durable responses. Targeting more than one cancer antigen is designed to make it harder for cancer cells to escape. Research and development activities by highly-experienced teams are located in the US and Europe.

This partnership propels Mankind's vision of being an innovative, research-focused healthcare company and strengthens its ability to deliver advanced, innovation-led therapies globally, while remaining committed to quality, affordability and accessibility.

Mr. Arjun Juneja, Chief Operating Officer, Mankind Pharma Ltd., shared, *"Innovation will be one of the defining growth engines for Mankind over the coming decades. This investment is the first step in building a global pipeline of breakthrough therapies. As the company scales its presence across complex and chronic therapy areas, Mankind, with this venture, is getting access to cutting-edge & differentiated scientific platforms, experienced leadership team and potential to generate multiple next-generation CAR-T candidates. Our long-term ambition is not only to participate in scientific innovation globally, but ultimately to make these transformative therapies more accessible to patients in India and around the world."*

Dr. Paul Stoffels, Chair of the Board, Armed Cell Therapeutics, shared, *"Next-generation CAR-T therapies can reach many more patients if we make them more powerful and durable. Armed Cell Therapeutics has the assets, the team and now the backing of Mankind to do exactly that. I am pleased to chair the Board and support the team."*

Zydus Launches Season 3 of 'Easiest Exam' Breast Cancer Campaign



Marking Breast Cancer Awareness Month, Zydus has launched Season 3 of its nationwide '**Easiest Exam**' campaign, encouraging women to spend just three minutes every month checking their breasts for unusual changes.

Breast cancer continues to be a growing health concern in India. A recent study found that the country's breast cancer incidence rate increased from 13 per 100,000 women in 1990 to 29.4 in 2023. During the same period, the mortality rate rose by 74%, from 8.9 to 15.5 per 100,000 women.
[1] Late diagnosis remains another concern, with studies suggesting that nearly 60% of patients are diagnosed at advanced stages (III or IV).[2]

This year's campaign carries the message '***Do Haath, Teen Minute Aur Ek Aasaan Sa Exam***', encouraging women to become more aware of their breast health. The campaign video features people from different wAalks of life across India, with a song sung by playback singer Bhoomi Trivedi.

The campaign will also feature oncologists sharing insights on early detection, timely screening and treatment, while highlighting the important role of caregivers.
Through this initiative, Zydus aims to encourage conversations around breast health and the importance of recognising changes early and seeking timely medical advice.
[1] https://pubmed.ncbi.nlm.nih.gov/41785894/
[2] https://pmc.ncbi.nlm.nih.gov/articles/PMC12357454/

Cipla Partners with Qilu Pharma for Keytruda® Biosimilar in the US

Invagen Pharmaceuticals Inc, a wholly owned subsidiary of Cipla Limited (BSE: 500087; NSE: CIPLA) today announced that it has entered into a strategic partnership with **Qilu Pharmaceutical Co., Ltd.** (hereinafter referred to as Qilu), for the exclusive licensing and supply of **QL2107**, a biosimilar to Keytruda® (pembrolizumab), for the United States.

As part of the agreement, Qilu will be responsible for development, regulatory registration, and supply of the product while Cipla USA Inc. will be responsible for the commercialization of the asset by leveraging its strong commercial presence in the defined territory.
The collaboration reflects both companies' shared commitment to addressing the growing burden of cancer and improving access to advanced biologic therapies.

Commenting on the partnership, ***Achin Gupta, Managing Director & Global Chief Executive Officer, Cipla****, said, "This partnership reflects Cipla's confidence in the long-term potential of biosimilars and supports our strategy to build a strong oncology-focused portfolio. By combining Qilu's development strengths with Cipla's commercial presence and patient-centric legacy, we aim to expand access to high-quality biologics for patients across our focus markets."*

Marc Falkin, Chief Executive Officer, Cipla North America, said, *"This collaboration is aligned with our strategy to expand our biosimilar portfolio in the coming fiscal years, and we are excited to add QL2107 with Qilu who have been great partners. With our established commercial capabilities, we are well-positioned to successfully launch QL2107, subject to regulatory approval, and help ensure it reaches patients in need while lowering the cost of treatment."*

Hanchang Zhang, General Manager of Qilu Pharmaceutical, said, *"We are pleased to establish this partnership with Cipla for QL2107. Qilu boasts a robust and growing biosimilar product pipeline. By combining our R&D and manufacturing strengths with Cipla's U.S. commercial expertise, we aim to bring a high-quality, affordable pembrolizumab biosimilar to U.S. patients."*

Cipla USA Launches Pomalidomide Capsules

Cipla Limited (BSE: 500087; NSE: CIPLA EQ; and hereafter referred to as "Cipla") and its wholly owned subsidiary Cipla USA Inc., (hereafter referred to as "Cipla"), today announced the launch of Pomalidomide Capsules, a generic equivalent of Pomalyst® by Celgene Corporation, a Bristol-Myers Squibb company.

Cipla USA Launches Pomalidomide Capsules in

All Strengths

Pomalidomide capsules are a prescription medicine indicated for the treatment of adult patients with multiple myeloma, when taken in combination with dexamethasone, in patients who have received at least two prior therapies, including a type of medicine known as a proteasome inhibitor and lenalidomide, and whose disease has progressed during treatment or within 60 days of completion of the last therapy.

Pomalidomide capsules are also indicated for the treatment of adult patients with AIDS-related Kaposi sarcoma (KS) after failure of highly active antiretroviral therapy (HAART), and for adult patients with HIV-negative KS.

Pomalidomide capsules are available in 1mg, 2mg, 3mg, and 4mg strengths.

***Marc Falkin, Chief Executive Officer, Cipla North America**, added: "This launch reinforces Cipla's long-standing commitment to expanding access to high-quality, affordable oncology therapies. As we continue to build a comprehensive portfolio across the treatment continuum, our focus remains on improving patient outcomes, addressing barriers to care, and supporting continuity of treatment, including through co-pay assistance programs for eligible patients."*

The drug will be manufactured at Cipla's approved site offering strong assurance of uninterrupted supply. According to IQVIA, Pomalidomide Capsules had estimated sales of USD 2.69 billion*.

Cipla is part of the PS-Pomalidomide REMS (Risk Evaluation & Mitigation Strategy) Program, the same program followed by the innovator. This helps ensure patient safety and compliance with FDA requirements.

Acrotech Launches ADQUEY™ and Enters U.S. Dermatology Market

Acrotech Biopharma Inc., a biopharmaceutical company focused on developing and commercializing innovative **proprietary medicines**, today announced the U.S. launch of **ADQUEY™** (difamilast 1%) ointment, a non-steroidal topical treatment for mild-to-moderate atopic dermatitis in adults and pediatric patients 2 years of age and older. Difamilast was originally discovered by Otsuka Pharmaceutical and licensed to Acrotech Biopharma for U.S. commercialization.

Acrotech Biopharma Launches ADQUEY™ and Enters U.S. Dermatology

The launch marks Acrotech's entry into the U.S. dermatology market and expands the company's commercial presence into a new strategic therapeutic area.

To support the launch of **ADQUEY** and its long-term ambitions in dermatology, Acrotech has established a dedicated dermatology business unit with specialized commercial capabilities across marketing, sales and field-based engagement.
The product will compete in a market estimated to be around US$ 1.3 billion for the twelve months ending July 2026, according to **IQVIA MAT.**

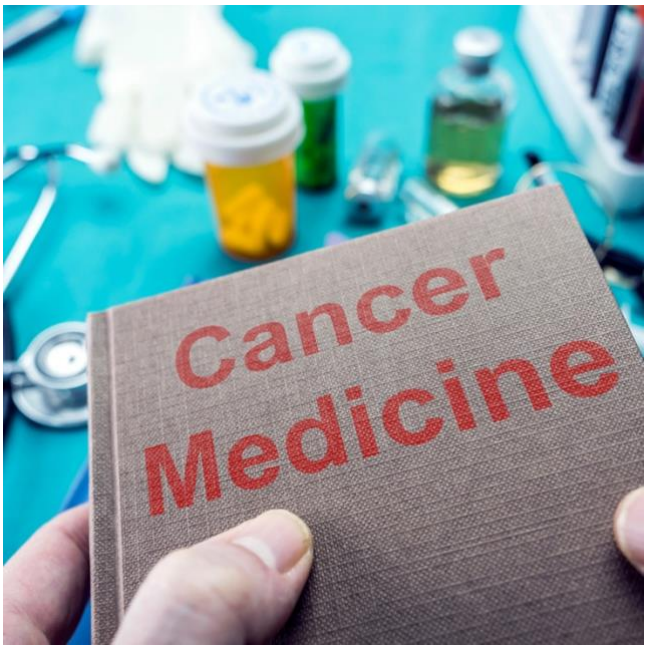
"The launch of **ADQUEY** is an important milestone for Acrotech and marks our entry into the U.S. dermatology market with a differentiated treatment option for patients living with atopic dermatitis," said Ashish Anvekar, President of Acrotech Biopharma. "We are building more than a commercial organization around a single product. We are establishing a dedicated dermatology platform designed to support ADQUEY today while creating the capabilities to pursue additional opportunities that can address important unmet needs in dermatologic care."

The dedicated dermatology business will focus on building awareness of ADQUEY, engaging with dermatology healthcare professionals and supporting patients throughout their treatment journey, while developing the infrastructure and expertise required to expand Acrotech's presence in the specialty dermatology market.
The launch of ADQUEY builds on Acrotech's strategy to expand its portfolio of innovative medicines and establish focused commercial platforms in areas of significant patient need.

About ADQUEY™ (difamilast)
ADQUEY™ (difamilast) 1% ointment is a non-steroidal topical phosphodiesterase 4 (PDE4) inhibitor indicated for the topical treatment of mild-to-moderate atopic dermatitis in adults and pediatric patients 2 years of age and older. ADQUEY was discovered and developed by Otsuka Pharmaceutical Co., Ltd. and is licensed to Acrotech Biopharma for commercialization in the United States.

India to Cut Prices of 137 Cancer Medicines by Up to 70% Under New Government Policy

India has announced a major pharmaceutical pricing intervention aimed at improving access to cancer treatment, with the National Pharmaceutical Pricing Authority (NPPA) introducing trade-margin rationalisation for 137 identified non-scheduled anti-cancer medicines. The revised prices are scheduled to take effect on 9 November 2026.



Under the policy, maximum retail prices of the affected medicines are expected to decrease by up to 70%, depending on their existing price structures. The measure is designed to address excessive trade margins and reduce the financial burden faced by patients and their families.


Verify Your Moisture Analyzer in Just 10 Minutes
Use SmartCal™ for fast, simple, and reliable instrument performance verification to help ensure dependable moisture results whenever you need them.
METTLER TOLEDO
Your Partner in Precision™
Call us on
1800 22 8884/
1800 10 28460
Find out More

The list includes medicines used in the treatment of multiple cancers, including breast, prostate, ovarian, cervical and colorectal cancers. The policy also covers selected immunotherapy and targeted cancer treatments, reflecting the government's focus on improving the affordability of advanced oncology care.

According to the government announcement, trade margins on the identified medicines will be capped at 30% under the applicable provisions of the Drugs (Prices Control) Order, 2013. Manufacturers must submit revised maximum retail prices to the NPPA within seven days of the notification.

The development has implications for pharmaceutical manufacturers, distributors, hospital pharmacies and oncology-care providers. Companies marketing affected products will need to review pricing structures, communicate revised prices through distribution networks and ensure compliance with the updated requirements.

Importantly, the measure does not mean that every cancer medicine will become 70% cheaper. The actual reduction will vary by product and its existing pricing structure. For pharmaceutical companies, the announcement highlights the continuing importance of balancing commercial sustainability with patient access and regulatory compliance.

Nxera Pharma and Synmosa Expand Asia-Pacific Access Plans for QUVIVIQ® (Daridorexant)

Nxera Pharma has entered into an exclusive licensing, supply and commercialisation agreement with Synmosa Biopharma Corporation to expand the potential availability of QUVIVIQ® (daridorexant) across eight Asia-Pacific markets. The agreement covers Singapore, Thailand, Indonesia, Malaysia, the Philippines, Vietnam, Australia and New Zealand.

QUVIVIQ® is a prescription medicine containing daridorexant, an orexin receptor antagonist used to treat insomnia in adults. The treatment works by targeting orexin signalling, a biological mechanism involved in wakefulness, rather than relying on the same mechanism as conventional sedative-hypnotic medicines.

Under the agreement, Synmosa will lead regulatory approvals, market access, distribution and sales across the designated territories.

Nxera will supply the drug product and may receive upfront payments, regulatory approval milestones, royalties and product-supply revenue under the commercial arrangement.

The partnership represents a significant regional expansion opportunity for the product. Rather than developing separate commercial infrastructure in every country, Nxera can work with an established regional pharmaceutical partner to navigate national regulatory requirements and distribution channels.

For Southeast Asian pharmaceutical markets, the agreement highlights the growing role of cross-border licensing in bringing specialist prescription medicines to new patient populations. Local registrations, reimbursement arrangements and prescribing practices will remain important factors in determining the pace of market entry.

The companies have not announced a single launch date covering all eight markets. Actual availability will depend on country-specific regulatory approvals and commercial preparations. The agreement nevertheless creates a defined pathway for the potential expansion of QUVIVIQ® beyond its existing Asian commercial footprint.

Grünenthal Partners with DKSH to Expand Four Pain-Treatment Brands Across Southeast Asia

Grünenthal has partnered with DKSH's Healthcare business to expand access to four pain-management medicines across eight Asia-Pacific markets. The portfolio includes Qutenza®, Vimovo®, Palexia® and Zomig®, with the planned expansion covering

Indonesia, Malaysia, the Philippines, Singapore, Thailand, Vietnam, Taiwan and Hong Kong.

The agreement combines Grünenthal's expertise in pain-management medicines with DKSH's regional market-expansion, distribution and healthcare commercialisation capabilities. It is intended to support the introduction and broader availability of the selected products in markets where additional regulatory and commercial work is required.

The four brands serve different therapeutic needs. Qutenza® is a topical capsaicin treatment for certain forms of peripheral neuropathic pain, while Vimovo® combines naproxen with esomeprazole. Palexia® contains tapentadol and is used for specified pain indications, whereas Zomig® contains zolmitriptan and is used for acute migraine treatment.

By combining medicines with different mechanisms and indications, the partnership broadens the portfolio that can be developed across regional markets. It also demonstrates how established pharmaceutical companies are using specialised distribution partners to extend the reach of existing brands.

Southeast Asia presents opportunities as healthcare systems respond to chronic disease, ageing populations and the need for improved pain management. However, market access for prescription medicines varies significantly by country, particularly for products subject to controlled-drug rules, reimbursement policies and local prescribing restrictions.

The agreement is a commercial expansion initiative rather than confirmation that all four brands are immediately available in every covered market. Country-level registrations, distribution plans and applicable prescribing requirements will determine when each product reaches local healthcare professionals and patients.

Orient EuroPharma and Maruho Expand Rapifort® Licensing to 10 ASEAN Countries

Taiwan-headquartered Orient EuroPharma (OEP) has expanded its pharmaceutical licensing partnership with Japanese dermatology company Maruho to cover Rapifort® Wipes 2.5%, a prescription treatment for primary axillary hyperhidrosis, or excessive underarm sweating. The expanded agreement covers 10 ASEAN countries, excluding Timor-Leste. The newly covered territories include Singapore, Malaysia, the Philippines, Indonesia, Thailand, Vietnam, Brunei, Cambodia, Laos and Myanmar. The agreement follows an earlier licensing arrangement between the two companies for Taiwan, announced in January 2026.

Rapifort® Wipes 2.5% contains glycopyrronium tosylate hydrate, a topical anticholinergic agent that reduces sweating by inhibiting cholinergic signalling to the sweat glands. Maruho has marketed the product in Japan since May 2022. The expanded agreement gives OEP exclusive rights to develop and market the product across the specified ASEAN territories. The financial arrangements include an upfront payment and milestone payments linked to development and regulatory progress.

For OEP, the collaboration supports its strategy of expanding beyond Taiwan and strengthening its position as a regional pharmaceutical commercialisation partner. For Maruho, it provides an opportunity to extend the geographical reach of its dermatology research and product portfolio through an established regional operator.

The announcement is particularly relevant to the Southeast Asian dermatology market, where access to specialised prescription treatments remains dependent on local registration and distribution. The agreement does not confirm immediate commercial availability in all 10 countries; product launches will proceed in line with individual national regulatory requirements.

Indian Pharmaceutical Market Surges 17.1% in September as Mounjaro® Leads the Growth Story

India's pharmaceutical market recorded strong growth in September 2026, with sales increasing by 17.1% year-on-year to approximately ₹25,276 crore, according to market data attributed to IQVIA. The performance indicates a broad recovery in pharmaceutical demand, supported by chronic therapies, product launches and higher prescription volumes.



Among the most notable developments was the performance of anti-diabetic medicines and GLP-1 therapies. Eli Lilly's Mounjaro® (tirzepatide) emerged as India's leading pharmaceutical brand in the annualised-sales ranking reported by Moneycontrol on 8 October 2026, reflecting the growing commercial importance of incretin-based therapies.

The market expansion extended beyond diabetes treatment. Cardiac, dermatology and pain-management medicines also recorded strong growth, while the vitamin, minerals and nutrition segment gained momentum. These trends reflect continuing demand for chronic-disease management and a broader range of healthcare products.

Company-level performance also remained strong. September data reported by ICICI Direct showed double-digit growth across several major pharmaceutical companies, including Zydus Lifesciences, Glenmark Pharmaceuticals, Emcure Pharmaceuticals, Torrent Pharmaceuticals and Sun Pharmaceutical Industries.

The market's performance is relevant to pharmaceutical manufacturers, contract development and manufacturing organisations, formulation developers and suppliers of laboratory equipment. Higher demand can encourage investment in manufacturing capacity, quality-control systems, analytical testing, packaging and product-development infrastructure.

Nevertheless, market growth should not be interpreted as uniform performance across every therapeutic segment. Anti-infective and respiratory categories lagged some chronic-treatment segments in September. For pharmaceutical businesses, the latest figures underline the importance of portfolio diversification, reliable supply chains and innovation in high-growth therapeutic areas.

India's CDSCO Records New Drug and Vaccine Approvals, Including HPV and Dengue Candidates

India's Central Drugs Standard Control Organisation (CDSCO) has published a series of new drug and vaccine approval records during October 2026, covering treatments for several therapeutic areas. The entries include products submitted by Indian pharmaceutical manufacturers as well as multinational companies, highlighting continued activity across the country's drug-development and regulatory landscape.

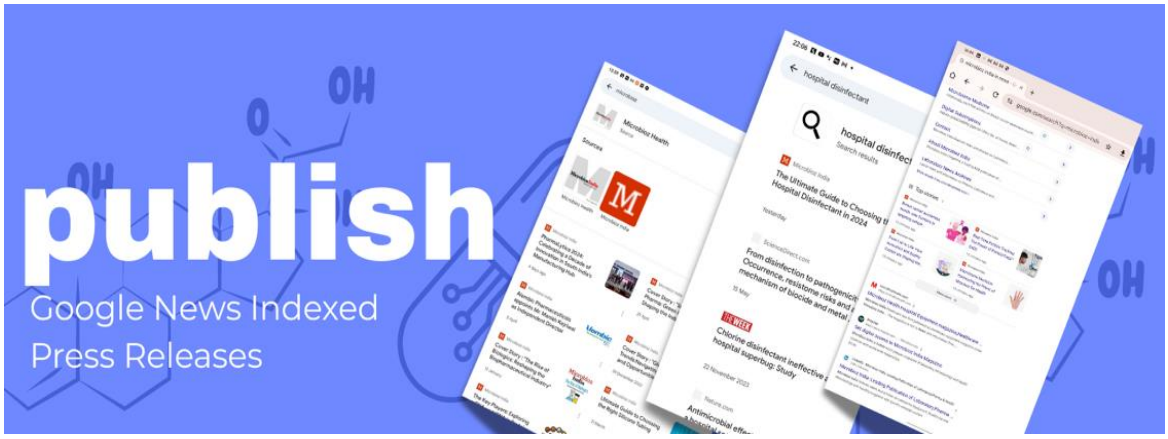
Among the listed entries are perfluorohexyloctane ophthalmic solution 1.338 g/mL, associated with Mankind Pharma, and vonoprazan tablets in 10 mg and 20 mg strengths, listed for Dr. Reddy's Laboratories. The CDSCO record identifies these by active ingredient and formulation; a commercial brand name should not be assumed unless separately confirmed by the manufacturer.

The approval records also include cenobamate tablets in multiple strengths, submitted by Synokem Lifesciences, and gefapixant 45 mg tablets, associated with Pure & Cure Healthcare. These entries illustrate the range of product development and regulatory activity being pursued in the Indian pharmaceutical market.

The vaccine-related listings are particularly noteworthy. CDSCO's published records include a live attenuated tetravalent recombinant dengue vaccine associated with Human Biologicals Institute and a recombinant nine-valent human papillomavirus (HPV) vaccine associated with MSD Pharmaceuticals.

The HPV vaccine listing covers the nine targeted HPV types specified in the regulatory record. HPV vaccination is an important preventive approach against diseases associated with oncogenic HPV infections, while dengue vaccines represent a distinct area of preventive medicine relevant to countries facing mosquito-borne disease burdens.

For manufacturers, regulatory affairs teams and pharmaceutical supply-chain partners, these records reinforce the importance of tracking approval status, formulation specifications, manufacturing responsibilities and the conditions attached to each regulatory decision. A CDSCO approval record does not, by itself, confirm that a product has been commercially launched or that a particular brand name has been announced. Companies should verify the final authorisation and launch details before publishing commercial availability claims.





Mankind Pharma to Invest €48 Million in Armed Cell Therapeutics, Entering Next-Generation CAR-T Cancer Therapies

Indian pharmaceutical company Mankind Pharma has entered into a definitive agreement to acquire a 70% stake in Belgium-incorporated biotechnology company Armed Cell Therapeutics B.V. (ACTx), marking a strategic move into next-generation cell therapies for cancer. The transaction involves an investment of €48 million through Mankind Pharma's subsidiary, Mankind Pharma (Netherlands) B.V.

ACTx is developing chimeric antigen receptor T-cell (CAR-T) therapies, an advanced approach that engineers immune cells to recognise and attack cancer cells. Its lead development programmes target non-Hodgkin lymphoma and small-cell lung cancer, two areas where new treatment approaches remain important.

The company's research programme includes approaches designed to generate CAR-T cells inside the body, potentially offering an alternative to conventional treatment processes that require cells to be collected, modified and returned to the patient. These approaches remain subject to development and clinical validation.

The acquisition represents a shift in Mankind Pharma's business strategy towards innovation-led biotechnology alongside its established pharmaceutical operations. The company will gain exposure to an international research platform and a pipeline of advanced oncology candidates.

ACTx's research and development activities are led by teams based in the United States and Europe. The acquisition could provide Mankind with access to specialised scientific capabilities, international development expertise and future opportunities in advanced cancer treatment. The transaction is an investment in a development-stage biotechnology business, not the acquisition of an already commercialised CAR-T portfolio. Future value will depend on clinical progress, regulatory outcomes, manufacturing capabilities and the ability to translate research into approved therapies.

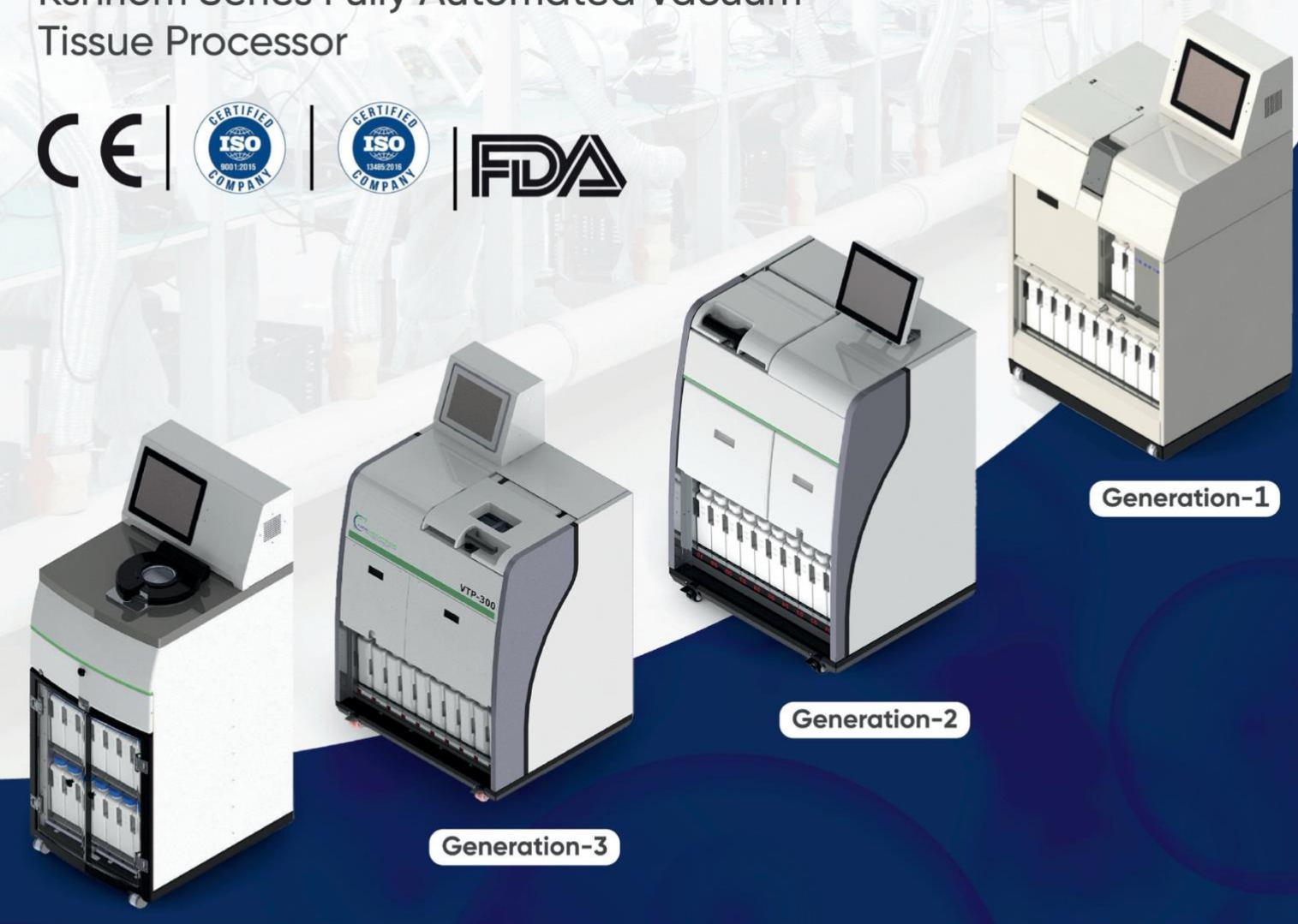
UNIMEDITREK
UNIVERSAL GUIDANCE TOWARDS
A HEALTHY FUTURE

UNIMEDITREK KSHRIOM SERIES VTP 300

Finer Specimen Processing on Each Run!

Kshriom Series Fully Automated Vacuum
Tissue Processor

CE | CERTIFIED ISO 9001:2015 COMPANY | CERTIFIED ISO 13485:2016 COMPANY | FDA



UPCOMING

UNIMEDITREK PRIVATE LIMITED
14 Chitra vihar,New Delhi-110092, India
Mob: +91-9810533445 | **Email:** sales@unimeditrek.com | **Website:** www.unilabequipments.com

Zydus Sunshine Lifesciences Commits More Than US$20 Million to Sri Lankan Pharmaceutical Manufacturing Facility

Zydus Sunshine Lifesciences, a proposed joint venture between Zydus Lifesciences Limited and Sunshine Healthcare Lanka Limited, has signed an investment agreement with Sri Lanka's Board of Investment to establish a pharmaceutical manufacturing facility in Horana. The project represents an investment of more than US$20 million and aims to strengthen local pharmaceutical production.

The facility's first phase is expected to focus on oral solid dosage forms for the Sri Lankan market. These formulations commonly include tablets and capsules used across a range of therapeutic categories, providing a foundation for local production and distribution.



The proposed project combines Zydus's pharmaceutical manufacturing and product-development experience with Sunshine Healthcare's established presence in Sri Lanka. This structure is intended to support local market access while developing domestic manufacturing capabilities.

The investment comes as pharmaceutical companies across Asia seek to strengthen regional supply chains and reduce dependence on imported finished medicines. Local manufacturing can also improve production planning, distribution efficiency and responsiveness to domestic demand.

For Zydus, the project offers a route to expand its regional footprint beyond India. For Sri Lanka, the facility could contribute to industrial development, technical employment and the growth of pharmaceutical manufacturing expertise.

The investment announcement is an important business milestone, but the facility's operational timeline, final production capacity and product portfolio should be confirmed through subsequent company disclosures. The first phase is intended to serve the Sri Lankan market rather than establish immediate commercial supply across the entire ASEAN region.

Laurus Labs Invests ₹107.8 Crore in KRKA Pharma Through Rights Issue

Laurus Labs Limited has invested ₹107.8 crore in KRKA Pharma Private Limited through a rights issue, acquiring 10.78 crore equity shares, according to an industry investment report published on 16 October 2026. The transaction highlights continuing capital deployment within India's pharmaceutical manufacturing and business ecosystem.

A rights issue allows an existing company to raise additional capital by offering shares to eligible shareholders under specified terms. The investment strengthens the financial resources available to KRKA Pharma, although the precise use of proceeds should be verified against the company's transaction disclosures.

Laurus Labs has established operations in active pharmaceutical ingredients (APIs), finished dosage formulations and contract development and manufacturing. Its business also includes specialised chemistry and manufacturing services for pharmaceutical and biotechnology customers.

For pharmaceutical businesses, investments through equity transactions can support manufacturing expansion, product development, working capital or strategic growth initiatives. The commercial rationale depends on the investee company's business model, the investor's ownership position and the agreed allocation of funds.

The transaction also reflects the importance of capital access in a sector where manufacturing facilities, quality systems, regulatory compliance and product-development programmes can require sustained investment.

Further details concerning the investment's strategic objectives, ownership implications and expected commercial returns should be assessed against the relevant corporate filings. The reported transaction establishes the investment amount and share acquisition, but does not alone confirm any new product launch or increase in manufacturing capacity.

Gland Pharma Approves US$21 Million Investment to Acquire 60% Stake in Novelstar Pharma

Indian injectable pharmaceutical manufacturer Gland Pharma Limited has approved an investment of US$21 million in its proposed wholly owned subsidiary, Gland Pharma USA Inc., to facilitate the acquisition of a 60% equity stake in newly incorporated US company Novelstar Pharma Inc. The board approved the investment on 1 October 2026.

Under the proposed transaction structure, Gland Pharma USA will subscribe to 60% of Novelstar's equity capital, while Fosun Pharma USA Inc., an affiliate of Gland Pharma's promoter group, will hold the remaining 40%. Upon completion, Novelstar will become an indirect subsidiary of Gland Pharma.

The investment forms part of Gland Pharma's strategy to strengthen its presence in the United States, one of the world's largest pharmaceutical markets. The company has an established position in sterile injectable medicines and supplies pharmaceutical products to multiple international markets.

The proposed investment is expected to increase Gland Pharma USA's share capital from US$500,000 to approximately US$21.5 million. Novelstar itself was newly incorporated in September 2026 and had not yet generated turnover at the time of the announcement.

The transaction demonstrates how pharmaceutical manufacturers use subsidiary structures and strategic equity partnerships to develop their international businesses. Such arrangements can create a platform for future commercial activities, although the precise operational role of Novelstar and its future product portfolio require further company disclosures.

Gland Pharma indicated an expected completion timeline of 31 October 2026. As of the announcement, the transaction was proposed rather than completed. Its eventual commercial contribution will depend on the company's execution plans, product strategy and development of the US business.

Aptar Pharma Expands Mumbai Manufacturing Operations to Strengthen Inhalation-Drug Supply Across Asia

Aptar Pharma has expanded its Mumbai manufacturing operations to introduce local production of several pharmaceutical inhalation technologies, strengthening its ability to serve customers in India and Southeast Asia. The expansion includes pressurised metered-dose inhaler (pMDI) valves, breath-actuated systems and multidose nasal spray systems.

The development is significant for pharmaceutical companies manufacturing respiratory medicines and nasal formulations. Inhaler valves and actuation systems are critical components of drug-delivery devices, helping ensure that medicines are dispensed in the intended manner when products are manufactured and used according to their specifications.

Aptar's expanded Mumbai footprint now covers approximately 11,300 square metres, with additional moulding capabilities complementing its existing assembly operations. The site has become an important part of the company's wider pharmaceutical manufacturing network.

The company has steadily expanded its Indian presence over several decades. Its commercial operations in Mumbai date back to 1998, followed by an assembly facility in Rabale in 2012 and a manufacturing site in Taloja in 2023.

By expanding local production, Aptar aims to improve customer proximity, supply reliability and responsiveness to regional demand. The investment also supports pharmaceutical manufacturers seeking dependable suppliers for inhalation and nasal drug-delivery components. For the regional pharmaceutical industry, the expansion highlights the growing importance of specialised packaging and delivery technologies alongside conventional drug manufacturing. Local production capabilities can help strengthen supply chains, although the availability of specific components will depend on customer programmes, qualification requirements and production schedules.

Venus Remedies Secures Five International Marketing Authorisations Across Four Countries

Indian pharmaceutical company Venus Remedies has secured five marketing authorisations across Kazakhstan, Peru, Kuwait and Argentina, expanding its international regulatory footprint. The approvals cover established pharmaceutical molecules used in anti-infective treatment and oncology-related care.

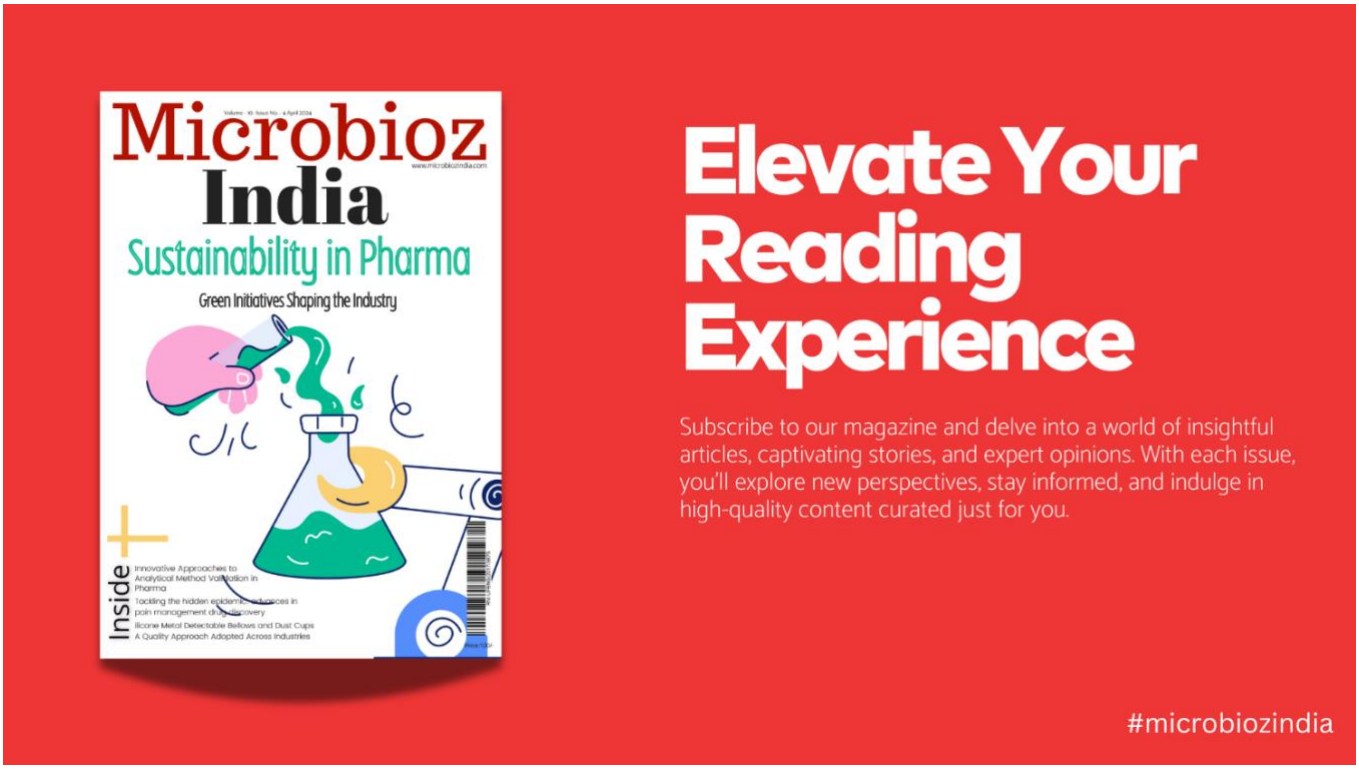
The reported approvals include vancomycin and fluorouracil in Kazakhstan, fulvestrant in Peru, methotrexate in Kuwait, and meropenem in Argentina. These medicines address different therapeutic needs, including serious bacterial infections and selected cancer indications.

Vancomycin and meropenem are antimicrobial medicines used for specific bacterial infections, while fluorouracil, fulvestrant and methotrexate have established roles in selected oncology or other specialist treatment settings. Their use is governed by approved indications and the applicable prescribing requirements in each market.

International marketing authorisations are important commercial milestones for pharmaceutical exporters. They enable companies to move towards market entry, subject to remaining requirements involving local distribution, import procedures, pricing, labelling and commercial arrangements.

For Venus Remedies, the approvals offer opportunities to broaden its geographical reach and strengthen its portfolio in regulated and emerging international markets. Multiple-country registrations can also support longer-term business development by creating additional routes to market for established pharmaceutical products.

However, a marketing authorisation does not automatically translate into immediate sales. Commercial performance will depend on launch timing, distributor partnerships, procurement opportunities, local competition and demand. The latest approvals nevertheless demonstrate the continuing importance of regulatory expansion as a growth strategy for Indian pharmaceutical manufacturers.

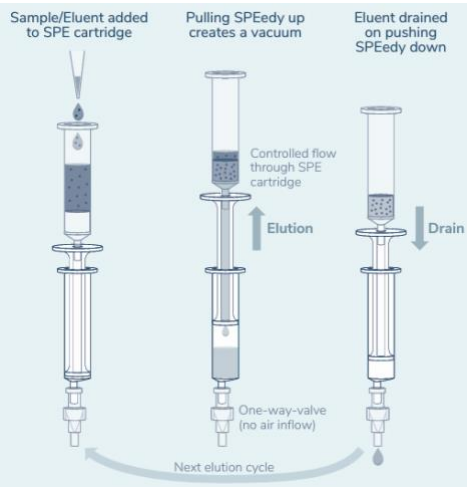


Patented device reinvents **Solid Phase Extraction**

Biotech Fluidics announce **SPEedy™** - a device that provides an effortless way to perform **Solid Phase Extraction (SPE)** sample preparation procedures without need of an external vacuum and compatible with any adsorption chemistry or eluent composition.

Small enough to fit in your lab coat pocket, yet so powerful it will accomplish complete SPE procedures within minutes.





Effortless Solid Phase Extraction using SPEedy™ device

The innovative design of SPEedy™ eliminates the traditional SPE sample preparation hassle of having to use heavy manual manifolds connected to sometimes inconsistent vacuum sources. In addition, you do not need to purchase positive pressure laboratory instruments that require a constant gas supply.

SPEedy™ delivers easy and complete control of your SPE processes. No more dried out samples waiting for the neighboring sample to elute. Just full and accurate control of every sample your lab is tasked with. Each sample processed by a SPEedy™ device has its own flow path minimizing cross contamination risk.

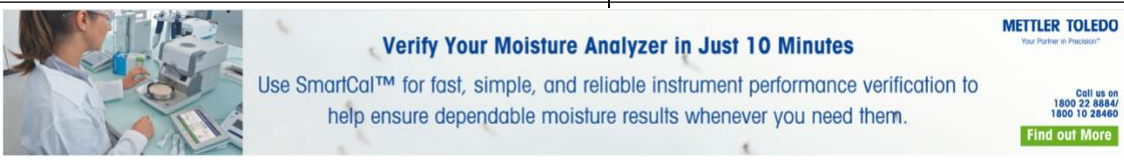
The device can be easily adapted to almost any SPE format in terms of volume and working diameter. Coming soon - is a fully automated version of SPEedy™ that will provide highly accurate controlled flow management of multi parallel SPE procedures.

The innovative design of SPEedy™ is protected by Swedish patent SE547146.C2 and has global patent applications pending.

For further information please visit:
https://biotechfluidics.com/products/solid-phase-extraction/speedy-solid-phase-extraction/ or contact Biotech Fluidics on + 46 300 56 91 80 / + 1-612-703-5718 / info@biotechfluidics.com.

Biotech Fluidics is a leading supplier of fluidic system solutions, liquid transfer components, degassing systems, and innovative laboratory technology to instrument developers, manufacturers, and distributors all around the world.

The company's mission is to empower its customers by designing and assembling unique products, being a dependable partner, offering first-class service, in-depth knowledge, and offering advanced technical support for all the items it provides from sites in Sweden, USA, and Japan. For further information - www.biotechfluidics.com





JULABO VALEGRO: Smart **Sustainable Temperature Control** for Modern Laboratories and Industry

Lab environments and industries are demanding higher levels of precision, energy efficiency, and operational flexibility. For scientific workflows to be effective, they must integrate reliable temperature controls. The JULABO VALEGRO Recirculating Cooler Series provides a solution as it integrates advanced temperature control with powerful cooling capabilities, all within a compact design that incorporates eco-friendly, low-GWP refrigeration technologies.

Q1. What is the JULABO VALEGRO Recirculating Cooler and what makes it unique?

The JULABO VALEGRO series offers an array of recirculating coolers for use in a variety of laboratory, industrial and research settings. The models combine strong cooling performance, eco-friendly refrigeration and a compact design with ease of use. As such, they offer flexible solutions in situations where reliable thermal management is required. The models in the series offer a range of cooling and flow rates to meet different requirements and a variety of pressure ratings.

Q2. How does VALEGRO support precise and reliable temperature control?

VALEGRO uses PID temperature control to keep an environment across many types of applications. Standard cooling models can work from -15 °C or -20 °C, depending on the model up to +40 °C with cooling power ranging from 0.25 to 1.8 kW. Models that also have heating can go from -20 °C to +85 °C. For situations that need pressure some models allow pump pressure to go up to 3.5 bar, which helps with more complicated temperature setups.

Q3. What features make VALEGRO convenient for use?

VALEGRO is made with user convenience in mind. It has an OLED touch screen with simple menu options, adjustable screen brightness and clear messages for operation. Other useful features include a timer, a lighted and easy-to-clean liquid-level indicator and a ventilation grid that can be taken off without tools. Its small size and quiet performance make it good for labs and work areas where space's important and a comfortable environment is needed.

Q4. How does VALEGRO help make laboratory work more eco-friendly?

The VALEGRO series uses refrigerants, which is a better choice for the environment when it comes to temperature control. Its small design brings together cooling performance and efficient use of space and the different model options help users pick the right equipment for their needs. By adding climate-refrigeration technology with easy-to-use features VALEGRO helps labs and industrial places that want to be more sustainable in their equipment choices.

Q5. Which industries and uses can get help from VALEGRO?

VALEGRO works for different temperature-control jobs in pharmaceutical and chemical labs, research and development centers, analytical labs and industrial production areas. Depending on the setup uses can be cooling lab tools helping with temperature- tests removing heat from machines and circulating temperature-controlled liquids through other systems.

Higher-pressure models can be used in situations where more pump pressure is needed long as the connected equipment meets the pressure and temperature needs.
Q6. How can people pick the VALEGRO model for what they need?
Choosing the model depends on the temperature needed cooling load, temperature stability flow rate and pump pressure. JULABO has cooling models, models that also have heating and models with higher pump pressure. The series can offer cooling power up to 2.5 kW depending on the setup. With help from experts and the right system selection people can find a VALEGRO solution that works for their process needs. Makes sure temperature control is reliable and easy to use.
Explore the VALEGRO series:
https://www.julabo.com/en-in/products/recirculating-coolers/valegro-recirculating-coolers

About SRICO:

SRICO's product range includes Analytical Instruments, General Laboratory equipment and consumables. The products represented by us are supplied/supported across India through our own branch offices and residential representatives spread across India.

SRICO
INNOVATIVE LABORATORY TECHNOLOGY

In addition, a reliable, reputed and efficient distribution network is available at your door-step to serve your needs all the time. SRICO's team of Product & Application specialists and Technical Support Engineers will co-ordinate through our colleagues/ Partners across India to provide you the best technical support. SRICO's team along with its Distribution partners and Principal companies will work as ONE TEAM to provide the most effective and efficient support to end-users and offer the best timely solutions in product, application, and technical service support at an optimal price intended to benefit our customers.





New Electronic Pipette Features High-Resolution Touchscreen



The device incorporates intelligent power management and advanced programming capabilities to enhance reproducibility in laboratory workflows.

Thermo Fisher Scientific has introduced the Fluid Ease Pro ClipTip electronic pipette, which includes what the company says is the first large, high-resolution pipette touchscreen on the market.

The pipette features intelligent power management and advanced programming capabilities designed to support reproducible pipetting across routine and demanding laboratory workflows. The device is combined with the Thermo Scientific ClipTip attachment, which secures tips through a consistent, reliable seal between pipette and tip.

ThermoFisher SCIENTIFIC

The company says the system offers one of the widest speed selections available, **giving users control** over pipetting behavior across applications, liquid types, and workflow demands.

The touchscreen approach transforms setup and protocol execution into a visual experience, reducing complexity and shortening training time for both new and experienced users.

"Labs are facing increasing research demands, emphasizing the importance of small, but necessary procedures like pipetting," says Karolina Pranckevičiūtė, Thermo Fisher global product manager, in a release. "The new Fluid Ease Pro ClipTip is designed to help not only enhance the pipetting process but to help create reproducible results across research teams all at a faster speed."



Ergonomic Design and User Profiles

The pipette's ergonomic design helps reduce strain during extended use throughout the workday, supporting both routine and high-throughput applications. The device features electronic tip ejection, reducing the force required during tip removal for safer, more comfortable operation during repetitive tasks.

Fluid Ease Pro pipettes unify operations across users and global laboratory networks with an interface that supports five language options and up to five user profiles. The structured interface includes shared preset protocols and custom calibration options to align performance to specific liquids or laboratory conditions. Teams can align on workflows and achieve consistent results between regions and sites, supporting scalable laboratory operations worldwide, according to the company.

Applications and Capabilities

Key applications include pharmaceutical and biotechnology companies testing drug products in quality control laboratories or conducting micro incubation in research and development labs. Academic laboratories can use the device for stability testing, plant growth studies, and animal hatching experiments. Industrial and applied laboratories can apply it to cosmetics, packaging, and food and beverage shelf life testing.

The Fluid Ease Pro pipette can adapt to various tasks with gentle handling for sensitive or viscous samples. Users can tailor dispense speeds to fit a range of research applications. Flexible charging solutions and power-safe mode functions help protect battery performance while keeping pipettes ready for use in demanding laboratory environments.

The system supports up to five user profiles and shared preset protocols to help ensure consistent execution across the laboratory and reduce user-dependent variability.

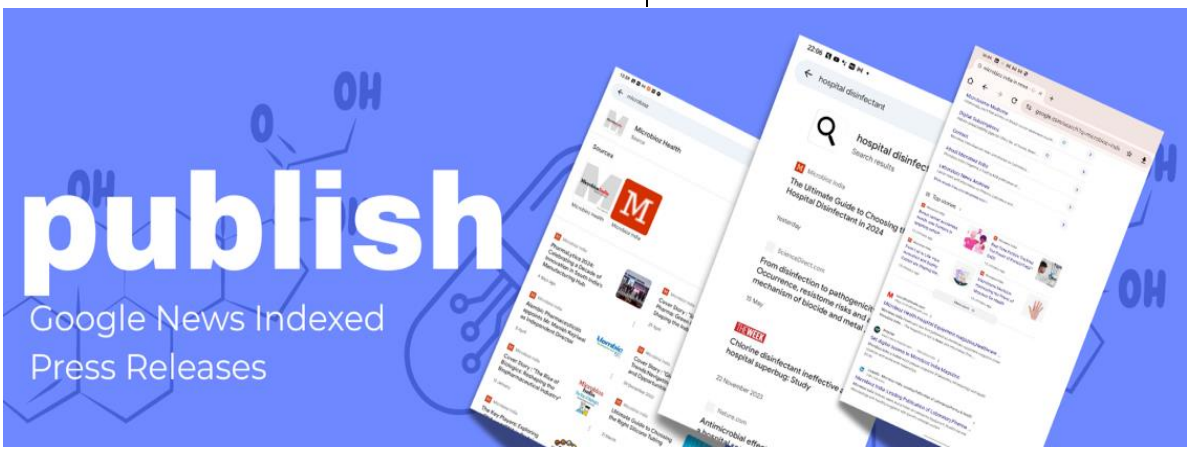
Thermo Fisher Scientific Introduces Gibco CHO-K1 Catalog Panel to Boost Biologics Titer and Cell Density



The cGMP-ready media and feed panel demonstrated up to 73% higher titer and 202% higher viable cell density in fed-batch study evaluations.

Thermo Fisher Scientific has launched the Gibco CHO-K1 Catalog Panel, a cGMP-ready portfolio of basal and feed media designed to support cell growth and protein production across CHO-K1 cell lines.

Available in both liquid and dry powder media formats, the panel offers options for biologics and biosimilars developers working across upstream process development, scale-up, and manufacturing workflows.



The formulations are chemically defined and animal origin-free to help teams address regulatory considerations and establish reliable supply assurance. "Biologics developers need flexible solutions that help them move quickly while maintaining confidence in process performance and scalability," says Alex Cherkassky, vice president and general manager of Thermo Fisher Scientific's cell culture business, in a release. "With the Gibco CHO-K1 Catalog Panel, teams have access to multiple media and feed options that can help them identify high-performing combinations while supporting productivity, product quality and progression toward scalable manufacturing."

Study Results and Evaluation Performance

In a 14-day fed-batch study utilizing a CHO-K1 GS cell line, select combinations from the catalog panel demonstrated significant performance gains compared with benchmark catalog media and feeds tested.

According to study data, the panel achieved:

- Up to 73% higher titer compared with benchmark catalog media and feeds tested
- Up to 202% higher peak viable cell density compared with the benchmark products tested
- Strong product quality performance across evaluated conditions

Workflow Optimization and Scale-Up

Upstream development teams frequently evaluate diverse media and nutrient feeds to establish optimal conditions for specific cell lines. The panel comprises multiple ready-to-use basal media and feed combinations to help developers rapidly identify high-performing pairings, accelerate evaluation timelines, and support transition into scalable biomanufacturing.

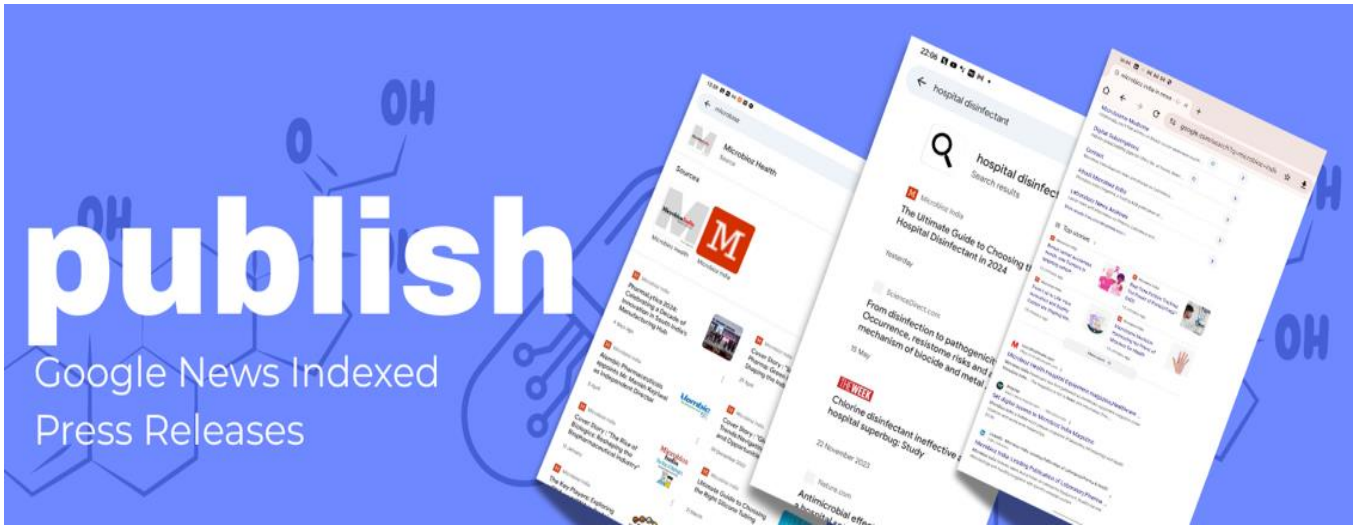
Thermo Fisher Launches Thermal Cycler for Workflow Flexibility and Lab Automation



The system features advanced thermal technology and modular block configurations to support complex molecular biology protocols.

Thermo Fisher Scientific has launched the Applied Biosystems PowerFlex Thermal Cycler, a next-generation polymerase chain reaction (PCR) instrument designed to improve flexibility and productivity for molecular biology laboratories.

ThermoFisher SCIENTIFIC



PCR remains a foundational technique in life science research, and laboratories are increasingly sharing instruments across teams while managing more complex workflows. The PowerFlex Thermal Cycler was developed to address these needs through new block technology and precise thermal performance. "Today's labs are being asked to run more complex PCR workflows, often across shared instruments and under increasing time pressure. That's where traditional systems start to fall short," says Pawan Singh, vice president and general manager, molecular biology,

Thermo Fisher Scientific, in a release. "With the PowerFlex Thermal Cycler, we've reimagined flexibility and performance together so researchers don't have to choose between speed, accuracy, and ease of use. We've also added support for fully skirted plates to enable lab automation."

Modular Configurations for Throughput

The system is available in two models to accommodate different laboratory requirements. A standard 96-well configuration offers broad plate compatibility for existing environments. For laboratories running multiple assays, a 3×32-well configuration features independently controlled VeriFlex blocks. This allows three different protocols to run simultaneously on a single instrument, helping to maximize bench space. The technology is engineered to shorten run times while maintaining the reproducibility required for both routine and complex molecular biology workflows. "We especially value the flexibility of running three independent experiments simultaneously, as well as the ability to set precise ramp rates in °C per second to optimize our protocols," says Maria Lung, a research scientist at Xpress Genomics AB, in a release. "The intuitive interface and the option to easily share log files provide additional confidence and support."

Interface and Automation Support

Operation is managed through a 10.1-inch touchscreen with a user-friendly interface. The system includes built-in simulation capabilities and AI-assisted Smart Help features to guide users through setup and troubleshooting, which the company says helps reduce training time and minimize workflow disruptions. The PowerFlex Thermal Cycler is intended for use in life science research, biotechnology, pharmaceutical research, food testing, and human identification workflows. The platform is designed to support future expansion as laboratory needs evolve.

The instrument is currently designated for research use only and is not for use in diagnostic procedures. Additional information regarding technical specifications and PCR workflow solutions is available through the company's digital platforms.

Photo caption: Applied Biosystems PowerFlex Thermal Cycler
Photo credit: Thermo Fisher Scientific

SPT Labtech and EMBL GeneCore Partner to Advance Automated Genomics Workflows



The collaboration focuses on implementing a liquid handling platform to streamline end-to-end laboratory processes and protocol development.

SPT Labtech and the European Molecular Biology Laboratory Genomics Core Facility (EMBL GeneCore) have announced a collaboration to develop fully walkaway automated genomics workflows. As part of the agreement, SPT Labtech has installed its firefly+ liquid handling platform at the EMBL GeneCore facility in Heidelberg, Germany.

Through the installation, EMBL GeneCore will expand its capacity to develop new protocols and optimize existing workflows for applications such as metagenomics and low-input samples. The firefly+ platform is an all-in-one instrument that integrates pipetting, dispensing, incubating, and shaking technologies into a single system.

"The installation of SPT Labtech's firefly+ platform as part of our collaboration underscores our commitment to remain at the forefront of scientific innovation," says Vladimir Benes, head of genomics core facility at EMBL, in a release. "Fully walkaway automation will address key bottlenecks in genomics workflows, helping us develop high-quality, scalable [next-generation sequencing] protocols."

The automated protocols utilize New England Biolabs (NEB) next-generation sequencing, known as NEBNext, to produce high-yield libraries from various input ranges. These kits are designed to enable the development of high-sensitivity next-generation sequencing protocols while minimizing plastic waste.

"Our latest collaboration with EMBL GeneCore marks a significant step towards advancing fully walkaway automation, providing end-to-end genomics workflows for a much wider range of applications, including environmental and rare species research," says Morten Frost, chief commercial officer at SPT Labtech, in a release.
The integration of the liquid handling platform with NEB library preparation kits is intended to create a foundation for end-to-end workflows, allowing laboratories to scale automation more easily.

"Integration of our library prep kits with SPT Labtech's firefly+ platform at EMBL GeneCore creates a compelling opportunity for faster, scalable DNA and RNA-Seq workflows, and we look forward to working together to develop novel solutions to overcome persistent challenges in genomics research," says Bjoern Textor, PhD, sales and senior applications manager at New England Biolabs GmbH, in a release.

Cryometrix Launches PF-90 Blast Plate Freezer for Biopharmaceuticals and Cell Therapy



Reflect Scientific, through its Cryometrix brand, has announced the launch of the PF-90 Blast Plate Freezer, a new ultra-low-temperature freezing system designed for biopharmaceutical manufacturing, cell and gene therapy, blood banking and life sciences research. The equipment combines two freezing methods within a single platform.

CRYOMETRIX™

The PF-90 integrates liquid nitrogen (LN_2)-powered blast freezing with conductive plate freezing. This dual-mode configuration allows laboratories and manufacturing facilities to select the appropriate freezing method for different product formats and process requirements.



Blast freezing is useful for mixed or irregularly shaped loads, while plate freezing provides direct-contact cooling for products such as bagged biological materials. Combining these approaches may help facilities simplify equipment requirements and accommodate different freezing workflows.

According to the manufacturer, the system operates across a temperature range extending down to −90°C. Its design is intended to provide rapid cooling, repeatable freezing conditions and improved temperature uniformity for sensitive biological materials.

Potential applications include vaccines, plasma, blood products, biologics, pharmaceutical drug substances and cell and gene therapy materials. Controlled freezing is important for maintaining product integrity during manufacturing and preparation for storage or transportation.

The launch reflects growing demand for specialised cold-chain equipment as advanced biologics and cell therapies become more prominent in pharmaceutical development. The PF-90 is a newly announced product, and its suitability for a specific regulated manufacturing process will depend on qualification, validation and application-specific requirements.

Agilent Technologies Launches NovoStation to Automate Flow Cytometry Sample Preparation



Agilent Technologies has introduced the NovoStation Sample Preparation System, an automated platform developed to simplify sample preparation and connect it with downstream flow cytometry analysis.

The system is designed for pharmaceutical, biopharmaceutical, clinical research and academic laboratories. NovoStation automates labour-intensive steps, including reagent cocktailing and sample washing. When paired with a compatible Agilent NovoCyte flow cytometer and NovoExpress software, it supports a connected sample-preparation-to-analysis workflow.

The platform addresses a common challenge in flow cytometry laboratories: manual sample processing can consume significant operator time and introduce variability between samples, users and sites. Automation can help standardise preparation procedures and improve workflow consistency.

Agilent Technologies

In validation studies reported by Agilent, NovoStation reduced hands-on time by more than 90% while maintaining data quality comparable to manual processing. One example involving a 25-colour immunophenotyping workflow with 30 samples required 7.9 minutes of operator time, compared with 85.5 minutes for manual preparation.

The system is intended to help laboratories process increasing sample volumes while allowing scientists to devote more time to data interpretation and research. It may be particularly relevant to laboratories conducting complex immunophenotyping and other flow cytometry assays.

Agilent announced the product on 1 October and planned to showcase it at the International Clinical Cytometry Society's 2026 conference. Laboratories considering the system should confirm instrument compatibility, validated protocols and performance for their specific assays.

Promega Introduces 24-Capillary Spectrum CE System to Increase Forensic DNA Testing Throughput



Promega Corporation has launched a 24-capillary version of its Spectrum CE System, expanding its capillary electrophoresis instrument portfolio for DNA typing and forensic analysis. The new configuration is intended for high-throughput laboratories processing large numbers of DNA samples.

Capillary electrophoresis is widely used in forensic laboratories to separate DNA fragments and analyse short tandem repeats (STRs), which are important for human identification. The new system is designed to support 5-, 6- and 8-dye STR analysis chemistries.

A key feature is its compatibility with advanced multiplex STR kits, including Promega's Paradyme™ 27GY STR System. The company's Reduced-Stutter Polymerase technology is designed to reduce stutter artefacts that can complicate the interpretation of mixed DNA samples.

The 24-capillary configuration complements the existing Spectrum CE System 8-Capillary and Spectrum Compact CE System 4-capillary models. This gives laboratories options for selecting throughput according to their workload, available resources and testing requirements.

Promega also highlights continuous access to four 96-well plate positions on the 8- and 24-capillary configurations, allowing analysts to add or remove samples during an active run. The platform is designed to support more flexible scheduling and higher-volume DNA typing operations.

The instrument is relevant to forensic laboratories, national DNA databases, paternity testing facilities and human-identification programmes. Promega reported that the 24-capillary model was available for sale immediately following its commercial launch in October 2026.



Haier Biomedical and Resonant Clinical Solutions Launch LX-60T100R Refrigerated Benchtop Centrifuge



Haier Biomedical and Resonant Clinical Solutions have introduced the LX-60T100R refrigerated benchtop centrifuge, a jointly developed instrument designed primarily for clinical-trial laboratories and pharmaceutical research organisations. Its key differentiator is the use of a natural hydrocarbon refrigerant instead of conventional high-global-warming-potential refrigerants.

Haier Biomedical
Intelligent Protection of Life Science

The centrifuge uses R290 refrigerant, which the companies say substantially reduces the environmental impact associated with cooling. The design also anticipates regulatory changes affecting fluorinated greenhouse gases in the United States and Europe.

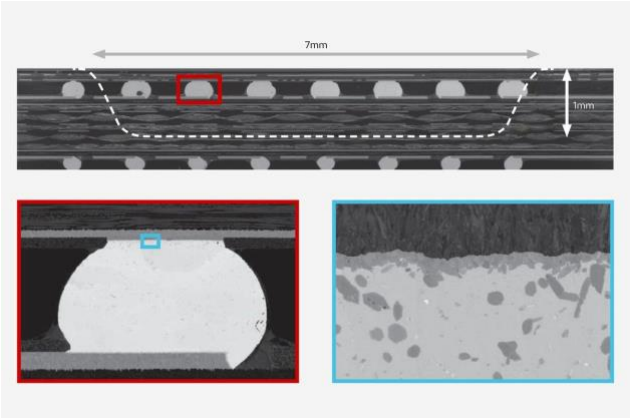
According to the announcement, the LX-60T100R can cool from room temperature to 4°C in approximately five minutes. Rapid precooling can help reduce waiting times in clinical research workflows where temperature control is important.

The instrument features a 7-inch touchscreen, RFID rotor recognition, user access controls and storage for more than 1,000 programmes. Built-in monitoring functions include vibration and imbalance detection, rotor-life tracking and alerts intended to support safe and reliable operation.

Its configuration accommodates routine clinical-trial sample formats, including blood collection tubes, 15 mL and 50 mL conical tubes, and bottles up to 100 mL. The approximately 46 kg benchtop design is intended to fit into standard laboratory spaces without dedicated floor mounting.

The partners reported that the 220–240 V model was available for purchase or rental at launch, with the 110 V model planned for the first quarter of 2027. The collaboration illustrates how environmental considerations are increasingly influencing laboratory equipment design, alongside performance, safety and ease of use.

JEOL Launches HAXIS Low-Angle Ion Milling Scanning Electron Microscope for Semiconductor Failure Analysis



JEOL Ltd. has announced the sales launch of HAXIS, a low-angle ion milling scanning electron microscope platform developed for semiconductor failure analysis. The system is intended to help engineers locate defects in increasingly complex semiconductor devices.

As semiconductor structures become smaller, conventional approaches to probing and analysing electrical defects can become challenging. Physical contact with delicate structures may also affect the sample, creating a need for alternative approaches to failure localisation.

HAXIS combines low-angle ion milling (LIM), scanning electron microscopy (SEM) and passive voltage contrast (PVC) analysis. This integrated workflow is designed to reveal electrical anomalies and help engineers identify defect locations while minimising sample-preparation damage.

The system uses argon ion beams for layer-by-layer sample preparation. JEOL says its approach can produce flat sample surfaces while retaining structural and electrical-potential information, supporting more reproducible observations of advanced devices.

The platform is designed to improve the process from initial failure detection through physical investigation and root-cause analysis. Faster defect localisation can be valuable in semiconductor development, process engineering and quality investigations, where delays in identifying the source of a failure can affect production and research schedules.

JEOL announced that sales would commence on 5 October 2026 and listed a sales target of 15 units per year. Although this is not a conventional pharmaceutical laboratory instrument, it is a significant analytical equipment launch for the wider materials science, electronics and advanced manufacturing sectors covered by laboratory and analytical publications.

Eppendorf Launches SpinPro® 8 R High-Speed Centrifuge for High-Volume Laboratory Workflows



Eppendorf has introduced the SpinPro® 8 R, a refrigerated, floor-standing high-speed centrifuge designed for demanding laboratory workflows involving large sample volumes. Announced on 22 September 2026, the system expands Eppendorf's centrifugation portfolio following the integration of himac into the Eppendorf Group.

Eppendorf Southeast Europe (Checkout)

The centrifuge is designed to support high-capacity separation processes in pharmaceutical research, biotechnology, bioprocess development and other laboratories handling large sample batches. Its capacity reaches 6 litres per run, with configurations supporting 4 × 1.5 L or 6 × 1 L.



Product Launches

Temperature control ranges from −20°C to 40°C, enabling laboratories to process temperature-sensitive samples under controlled conditions. The system also offers compatibility with more than 30 existing rotors, alongside two new rotor options, providing flexibility for different vessels and applications.

A major feature is its CO_2-based cooling technology, which uses R744 refrigerant with a global warming potential of 1 and an ozone depletion potential of zero. This approach is intended to reduce the environmental impact associated with conventional refrigeration technologies.

The SpinPro® 8 R includes a 7-inch touchscreen, traceable run documentation and connectivity options through Eppendorf's VisioNize® platform. Its software and documentation capabilities are designed to support shared laboratory environments and workflows that require reliable records and monitoring.

Eppendorf announced that the centrifuge would become available for purchase at the end of September 2026. The launch is significant for laboratories seeking higher sample throughput, temperature control and improved digital oversight without sacrificing rotor flexibility



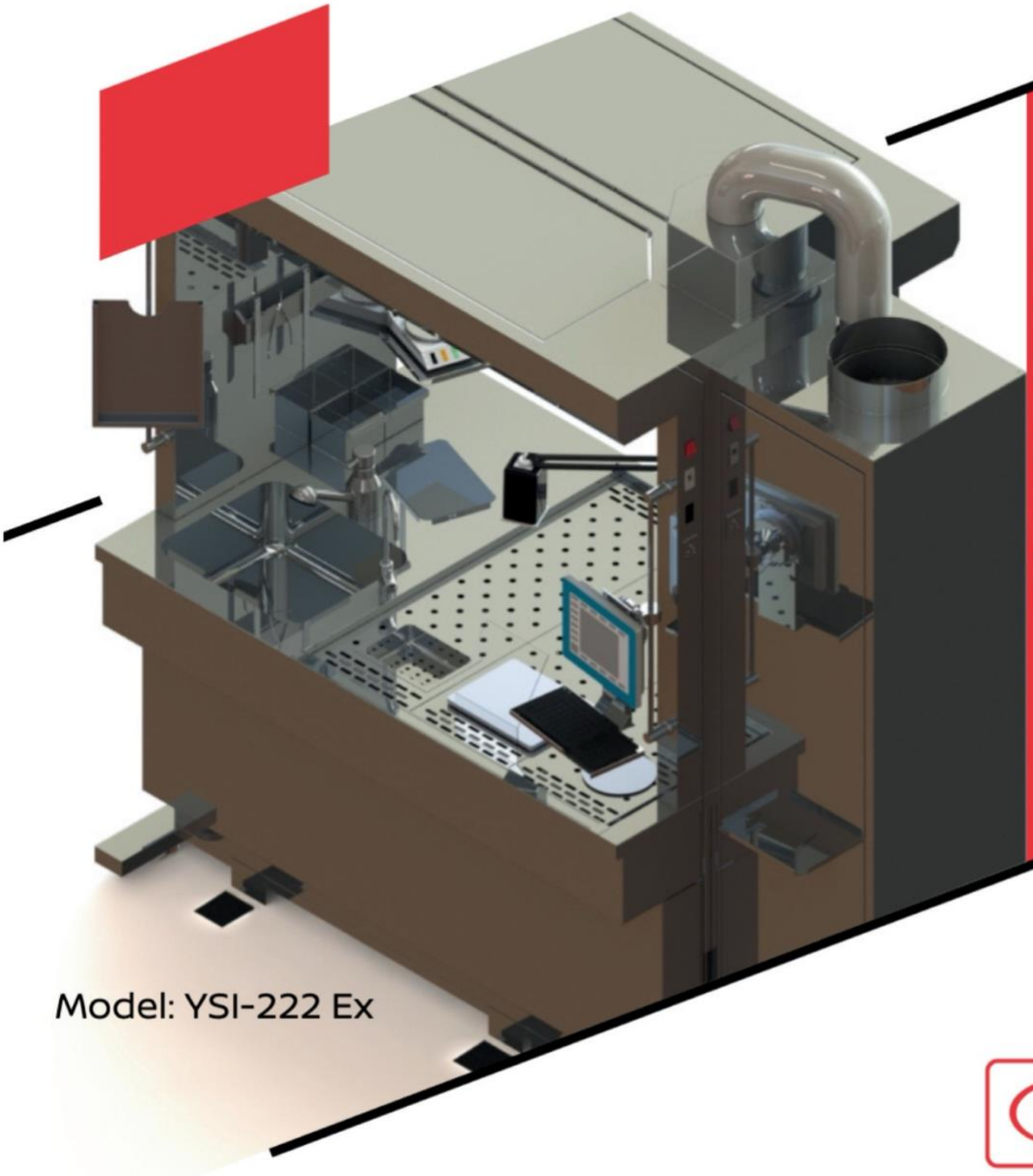
CE FDA NSIC CERTIFIED CO. ISO 13485 Quality Management System ISO 9001:2008

YORCO®

FACTUAL LEGACY SINCE 1964

YORCO Grossing Station

EVOLVE YOUR LAB WITH ADVANCE TECHNOLOGY



- High performance airflow
- Negative pressure air curtain/air flap
- Unique top fume catchment slots
- Crucially designed
- Ease of Use
- Integral Ventilation
- UV Disinfection
- Simplified controls
- Under Table tub wash

Model: YSI-222 Ex

YORCO®

YORK SCIENTIFIC INDUSTRIES PRIVATE LIMITED

Laboratory Equipment & Instruments

+91-1204741800

www.yorco.co.in

sales@yorco.co.in

PUBLISHED ON: 25th OCTOBER 2026 RNI NUMBER: UPENG/2017/73675

GLASSCO®

BEGINS WITH CLARITY

Time to Restock Your **Filtration Setup?**

A lost vacuum mid-run means a repeated run, and a repeated run means the whole afternoon's schedule slides.



Reordering brings the same joint-checked spec you've had before, **no re-qualification needed.**

Visit us at:



CPHI PMEC INDIA

24 25 26 Nov 2026

Booth H7-D18

India Expo Center, Greater Noida

GLASSCO LABORATORY EQUIPMENTS PVT. LTD.

www.glasscolabs.com www.glasscolabs.in media@glasscolabs.com