Winter 2023

London BioScience Innovation Centre WHERE ENTERPRISE COMES TO SUCCEED

# **LBCCNEWS** From the London BioScience Innovation Centre



# Major Milestone in Prokarium's Bladder Cancer Programme

Prokarium, the biopharmaceutical company at the forefront of applying synthetic biology to create novel cancer treatments, is delighted to announce that the U.S. Food and Drug Administration (FDA) has granted the company's Investigational New Drug (IND) application for their immunotherapy, ZH9. The approval enables initiation of the clinical development programme for ZH9 in the U.S., focusing on patients with non-muscle invasive bladder cancer.

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#### WELCOME

It is an exciting time at LBIC as we continue preparations for our 2024 expansion into brand-new grow-on space at the Apex building. As we go to press, we have just welcomed our newest member of the team, Lauren Smith, as Marketing and Events Executive. Lauren will play a key role in delivering engaging events for the life science community and spreading the word about just how amazing LBIC is! This issue celebrates some great innovations and achievements from our clients, and we also welcome the newest Business Support Network (BSN) provider, Mathys & Squire - the latest addition to a strong team of experts on hand to help guide clients through all aspects of running a successful life science business. Here's to 2024 and continued success for LBIC, our clients and partners.

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Lucy Garnsworthy, Editor

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### We know biotech

From startups to multinationals, we can help you to strengthen and secure your IP

Patents • Trade marks • Designs • Litigation



### Spray-on fabric: Innovation for Circular Fashion

Dr Manel Torres, Founder & CEO, Fabrican One of the most pressing challenges in the fashion industry today is creating products that can be recycled back into their virgin state to reduce waste and environmental impact. Fabrican's initiative in this direction aligns perfectly with leading brands' mission to guide the fashion industry to a more sustainable future.

Fabrican's innovative spray-on fabric formulas can be sprayed onto 3D garment moulds. What sets Fabrican apart is it enables seamless construction of garments, as well as creating 'monomaterial' garments, eliminating the need for sorting and separating different components in the recycling process. Sprayed materials can be redissolved using organic diluents, allowing for the creation of new garments and articles.

Monomaterial construction permits entire garments to be redissolved, setting the stage for a fully circular product.

To enhance the circularity of fashion,

Fabrican incorporates seaweed in its fabric formulations. These seaweed resin/ cellulose-based liquid fabric formulations render a soft textured fabric that offers insulation and waterproofing properties – making it ideal for outerwear.

The seaweed-based fabric's material properties are comparable to conventional materials, making it not just environmentally friendly but also an attractive choice for a range of products.

Robotics technology employed in the automotive industry can be adapted for garment manufacturing, paving the way for fully automated, circular production processes. Spray fabrics created with robotics exhibit improved strength, uniformity, consistency of materials, and faster production speeds.

Fabrican's spray-on fabric technology represents a giant leap towards circular fashion. By seamlessly blending innovation, automation, and sustainability, Fabrican is poised to redefine the fashion industry while reducing its environmental footprint. Fabrican continues to innovate in the quest for more sustainable future fashion. www.fabricanltd.com

# Introduction to Carocell Bio: Healthier skin through healthier healing

We would like to introduce our newest client, Carocell Bio.

Carocell Bio are developing novel anti-inflammatory peptides to improve treatments for inflammatory diseases.

Carocell's lead peptide JEL3108 has the potential to treat atopic dermatitis (AD, eczema) more safely, prevent its recurrence and possibly delay ageing of the skin through a novel, next-generation anti-inflammatory MAP kinase-inhibiting mechanism.

The company has successfully carried out pre-clinical tests after fundraising of USD \$800,000 (£650,000) from Deepbridge Capital and is seeking additional investment to develop the treatments further.

Carocell Bio's CEO, Dr Mike Davies, said:

"The pre-clinical data demonstrate the potential of our anti-inflammatory peptide approach to help prevent scarring and potentially be used for other indications where inflammation plays a role. Applied topically, our novel MAP kinase inhibitory peptides could therefore make a positive and lasting change in patients' lives. We are now focused on generating further preclinical data to help support our current findings.

"We are excited to become LBIC clients in order to take our next steps towards delivering this life-changing treatment to patients."

https://carocellbio.com/

### Leading Pathology at LBIC:CVRM



LBIC is delighted to welcome Leading Pathology as the first occupier at LBIC:CVRM, its brand-new Category II wet lab space. Clients of LBIC:CVRM are co-located with world experts in vaccines and stem cells at the Centre for Vaccinology and Regenerative Medicine (CVRM) at the RVC's Hawkshead site in Hertfordshire.

Leading Pathology was established in 2017 by expert consultant histopathologists Dr Adam Levene and Dr Stefano Crippa in response to requests from clinicians for a high quality histopathology service.

Leading Pathology offers a complete end-to-end histopathology service, including collection and reporting of specimens. Osman Perwaiz, an experienced Senior Biomedical Scientist, has recently joined Dr Levene and Dr Crippa to extend the service to include training courses. Students will gain practical experience in histopathology, which is essential for enabling them to obtain those sought-after first jobs in a histopathology or research laboratory.

To learn more about Leading Pathology, contact enquiries@leadingpathology.co.uk

Visit **www.lbic.com/lbic-cvrm** for more details on the new space.

LBIC welcomes these new clients to the Centre:

- AMR Therapeutics
- Carocell Bio
- Leading Pathology

"The FDA's approval of our IND application is an important milestone and a clear recognition of the preclinical data already generated for ZH9," stated Prokarium's CEO, Kristen Albright, PharmD. "Importantly, it also validates the innovative design of the PARADIGM-1 study, paving the way for collaboration with top-tier research centres in the U.S."

"Urologists are excited to see the emergence of new therapies in clinical development for bladder cancer patients," stated Sam S. Chang, MD, Chief Surgical Officer at the Vanderbilt Ingram Cancer Center. "The urgent and continuous need to prevent bladder cancer recurrence, especially given the ongoing shortage of BCG, the standard treatment option for high-risk patients, makes the development of innovative alternatives a matter of importance."

In a strategic move, Prokarium strengthens its leadership team with the appointment of Dara Henry, PhD, as Chief Operating Officer. Dara brings over two decades of experience in biotech and large pharma. His recent role as an entrepreneur-in-residence at Evotec, and prior senior positions in operations and business development at Achilles Therapeutics and GlaxoSmithKline, demonstrate his commitment to advancing biopharmaceutical innovation. "Prokarium is uniquely positioned in the biotech landscape with a compelling lead programme targeting an underserved population of bladder cancer patients," stated Henry, "and beyond the immediate value of this programme, Prokarium's Living Cures platform has the potential to be a game-changer in the field of immunotherapy, enabling a new generation of highly innovative, off-theshelf programmable therapeutics."

"I'm excited to welcome Dara to our team during this transformative phase, as Prokarium enters clinical development, solidifying our status as a leader in synthetic biology and immuno-oncology," said Albright.

# Morula Health Expands to North Carolina

LUCY HARGREAVES & TARA QUINN, MORULA HEALTH

#### Introduction

We are excited to announce that we have opened a new American headquarters in North Carolina, in the heart of Research Triangle Park (RTP). This is our third office, after our headquarters in LBIC and second office in Altrincham, Manchester. As a medical writing partner, we are always looking for opportunities to grow and collaborate with the best in the industry.

#### LBIC base

We have been based in LBIC since 2021 and have enjoyed working with some of the most innovative and cutting-edge biotech companies in the world. LBIC's state-ofthe-art facilities, networking events, and business support have given us a sound base for delivering high-quality medical writing services to our clients, covering a wide range of therapeutic areas and regulatory documents.

#### **Research Triangle Park**

RTP is the largest research park in the US,

spanning over 7,000 acres and hosting more than 300 companies, universities, and research institutes. It is home to some of the most renowned names in biotechnology, pharmaceuticals, and healthcare, such as GlaxoSmithKline, Merck, and Duke University. We have chosen RTP as our second office location because of its vibrant and dynamic environment, its proximity to major markets and regulatory agencies, and its talent pool of highly skilled and experienced professionals. RTP will allow us to expand our reach and capabilities, and to offer our clients more flexibility and diversity in our medical writing solutions.

#### UK-North Carolina Memorandum of Understanding Working Group

This recent event, held in Manchester, provided a platform for leaders to explore collaboration opportunities. With our offices in both London and North Carolina, we were thrilled to attend the event and learn more about the life science industry in NC



and how it offers a supportive business environment and robust research capabilities. Through this event, we engaged with partners to drive growth in NC, providing innovative medical writing solutions for biotech and pharma. It brought together like-minded individuals and organisations, opened opportunity for us to continue to expand globally and ultimately foster a brighter future for healthcare for both the UK and NC.

#### Conclusion

We are thrilled to be part of both LBIC and RTP, two of the most prestigious and influential biotech hubs in the world. We believe that our presence in these locations will enhance our reputation and credibility as a medical writing partner and will enable us to deliver exceptional value and quality to our clients. We look forward to working with you from either of our offices, and to supporting your medical writing needs.

https://morulahealth.com/

# Endless applications for NanoRegMed's innovative graphene-based polymers

NanoRegMed uses nanotechnology to develop graphene-based polymers that can be used in the form of liquid, fibre, or polymer sheets. The company's patented family of non-biodegradable and biodegradable graphene-based polymers – Hastalex and BioHastalex – have a wide range of potential applications due to their unique properties and characteristics. Most recently, NanoRegMed has secured an Innovate grant for nerve regeneration using Hastalex.

There are many possibilities for future advancements using Hastalex in both medical and non-medical fields.

#### **Medical applications**



#### **Biomedical Implants**

Hastalex's high strength and biocompatibility make it an excellent choice for creating durable and longlasting implants, including orthopaedic and dental implants, that can withstand the stresses and strains within the human body.



#### **Drug Delivery Systems**

With a large surface area and ability to carry a high payload of drugs, Hastalex is an ideal material for controlled release systems, allowing for targeted and sustained drug delivery to specific areas of the body, enhancing efficiency and effectiveness.



#### **Tissue Engineering**

Hastalex can serve as a scaffold for the growth and regeneration of tissues and organs. Its biocompatibility and mechanical properties make it suitable for creating three-dimensional structures for supporting cell growth, promoting tissue regeneration, and ultimately aiding in the development of functional replacement tissues.



#### **Biosensors**

Due to its electrical conductivity and high surface area, Hastalex can be used to create sensitive and selective sensors for detecting various biological markers, such as glucose, DNA, proteins, and other biomolecules. These biosensors can have applications in medical diagnostics, monitoring of diseases, and point-of-care testing.



#### **Wound Dressings**

Hastalex can be incorporated into wound dressings as its antimicrobial properties can help prevent infections, while its flexibility and breathability can provide comfort and promote faster healing.





Typical fabricated prototype heart valve using Hastalex® materials

#### **Non-medical applications**



#### **Aerospace and Aviation**

The aerospace industry can benefit greatly from Hastalex due to its lightweight nature and high strength. It can be used in the manufacturing of aircraft components, such as wings, fuselage panels, and interior structures, to reduce weight and improve fuel efficiency without compromising structural integrity.



#### **Electronics and Electrical Applications**

Due to its electrical conductivity, Hastalex can be utilised in the development of conductive films, flexible electronics, printed circuit boards, and electromagnetic shielding.



#### Automotive

Hastalex can find applications in the automotive industry, particularly in the development of lightweight vehicles. By incorporating Hastalex into various parts, such as body panels, chassis components, and interior parts, automakers can improve fuel economy, increase range in electric vehicles, and enhance overall performance.



#### **Construction and Infrastructure**

With its enhanced mechanical properties, Hastalex is a valuable ingredient for use in structural components, reinforcing materials, and composites for buildings, bridges, and other infrastructure projects that require high strength, durability, and resistance to environmental conditions.



#### **Sports Equipment**

Tennis rackets, golf clubs, and bicycle frames can be made lighter and stronger with the use of Hastalex, allowing athletes to achieve better performance and control with high-performance equipment.



#### **Protective Gear**

Hastalex's strength and impact resistance make it ideal in the manufacture of protective gear – such as helmets, body armour, and other safety equipment – to provide enhanced protection without adding excessive weight.



#### Energy Storage

Hastalex's electrical conductivity and thermal stability make it a candidate for use in the development of advanced batteries, supercapacitors, and energy storage devices, enabling efficient energy storage and delivery. As the field of graphene-based polymers continues to evolve, new applications for Hastalex may emerge, further expanding its potential uses.

www.nanoregmed.com

### **Bishop Simon**

Health, Safety and Biosafety Consultancy



info@bishopsimon.co.uk www.bishopsimon.co.uk Do you need a safety and biosafety consultant? Contact us.

We provide:

- Auditing and Gap Analysis
- Biosafety E-learning
- Advisory Service
- GM Risk Assessments
- Other Bespoke Services



### Introducing: Liberum Health: Addressing the gender health gap

Liberum Health is a female-led women's health startup focused on bridging the gender health gap and leading innovation to provide solutions for unmet clinical needs in women's health. Women's health has historically been a neglected field, and the management of dysmenorrhea (menstrual cramps) and endometriosis has not seen significant advancements in the last century. Studies (by BUPA Ltd) report that nearly 25% of women have missed work in the past six months due to menstrual-related pain, with an even larger proportion experiencing a negative impact on their quality of life and daily activities.

The team at Liberum Health is unwaveringly committed to addressing the inequalities of this gender health gap. Liberum Health has made significant progress with emerging health technologies, including a novel vaginal drug delivery system to treat and manage chronic pelvic pain. Traditional treatment options for dysmenorrhea, whether primary or secondary, often involve oral drug administration, which can reduce treatment efficacy. A significant portion of the medication is wasted in the digestive system, and systemic absorption increases the risk and frequency of harmful side effects and toxicity.

Liberum Health has introduced a novel drug delivery system that utilises advanced materials to locally deliver



pharmaceutical drugs at the site of pain and directly target pain receptors. The system harnesses the remarkable properties of graphene, which is considered the wonder material of this century, to provide locally modified drug release. This method effectively minimises the majority of side effects associated with systemic drug absorption. The success of Liberum Health has the potential to revolutionise women's health on a global scale, improving the quality of life for women worldwide.

The future of Liberum Health is promising, and we look forward to sharing our continued success with the LBIC team. For more information, please visit Liberum Health's website

- https://www.liberumhealth.com

### Patient-centric support from Medisonal

The Medisonal Group is a patientcentric healthcare company headquartered in the UK, with a mission to educate and support both patients and doctors on the use of unlicensed medicines where traditional treatments may have failed.

Our education platform, Medisonal Institute of Education (MIE), now hosts 18 live modules on a variety of treatments, including medical conditions that can be treated with cannabinoids right up to the other end of the spectrum with four dedicated modules on Psychedelics.

The M3 platform has been developed specifically for consultants to help ease the burden of the prescribing process of controlled drugs. The M2 platform is a one-stop shop for patients, where they can book their appointments, renew their prescriptions and monitor their symptoms through a bespoke symptom tracker platform.

Medisonal's dedicated R&D arm is operated by Liberum Health from a laboratory based at LBIC. Liberum Health

### MEDIS ONAL®

has patented its drug delivery technology aimed at the women's health market and is in the process of registering its bespoke devices.

#### www.group.medisonal.co.uk



# IP powerhouse Mathys & Squire joining LBIC's Business Support Network

Mathys & Squire is delighted to be working with LBIC, joining the Business Support Network as an IP services provider. The firm is an IP powerhouse, with a team of experienced attorneys and scientists who will offer LBIC clients advice on patents, trade-marks, design protection and IP litigation. They pride themselves on putting specialist knowledge to work to help clients strengthen and secure their most valuable strategic assets.

Partner lain Armstrong says: "We're very excited to be working with LBIC. Like LBIC, Mathys & Squire's team has a proven track record in helping businesses to grow. Wherever our clients are in their IP journey, we'll make sure they have attorneys to provide help and support. Whether they're protecting their own innovations or working round others' IP, we'll offer pragmatic advice that focuses on their business' needs."

Mathys & Squire will provide a team of attorneys chosen to reflect their business requirements, with each team including a named partner as a point of contact. Patent drafting and filing is carried out to agreed budgets to ensure clarity and avoid surprises. Mathys & Squire is also offering a number of special benefits, including free IP consultations, and discounted hourly rates for non-drafting work. Free consultations will allow LBIC clients to speak to an appropriate attorney to discuss protection of their own innovations or address any other IP questions they may have.

Mathys & Squire's specialist "Scaleup

### Mathys&Squire

Quarter" team brings together attorneys dedicated to helping new businesses reach their potential. The firm is consistently highly ranked in all leading legal and IP directories, and is one of Europe's most highly regarded IP law firms.

Lucy Garnsworthy, Head of Business Services at LBIC, commented: "The LBIC BSN provides clients with specialised, industry-specific support to optimise their growth. We are delighted to welcome Mathys & Squire to the BSN, as their experts show the same commitment to enabling growth in life sciences as our own team does, reassuring clients that their needs are taken care of."

To learn more about the BSN, visit www.lbic.com/business-support-network

#### **Drive Phase PV celebrates two anniversaries**

TOM NICHOLS, DRIVE PHASE PV

2023 saw Drive Phase PV celebrate five years of trading and four happy years as a tenant of LBIC! Founded by Tom Nichols as a one-man band in 2018, 2021 saw the addition of Ka-Mei Au before Esther Poole joined as Principal Consultant this year.

Along with an ever-growing network of consultants and medics, the Drive Phase PV team offers support for projects of all sizes. LBIC has been a fantastic and supportive place for a growing business to be based and Tom, Ka-Mei and Esther can't wait to see what future milestones are achieved here.

Drive Phase PV is a pharmacovigilance (PV) consultancy providing global services to a broad client base, from single-centre Phase I studies through to Top 20 pharmaceutical companies. Extensive cross-functional expertise ensures that PV solutions integrate into wider teams, leading to truly collaborative project delivery.

Whether it be process build-out, audits, GAP analyses, or just a PV MOT, our highly experienced team can make sure you stay on track and accelerate your PV standards to where you want them to be.

2023 has also seen a huge increase in our full-service offerings for our clinical trial clients. Providing full case processing and expedited reporting services for Phase I-II development programmes, we understand and appreciate the importance of every case for our clients. In the rapidly moving clinical environment, safety is not just a tick-box exercise, but requires a holistic approach and long-term strategy to achieve Sponsor goals. We're delighted to offer the SafetyEasy safety database, which was, in 2021, selected by the French regulator, Agence nationale de sécurité du médicament et des produits de santé (ANSM), as its safety database, guaranteeing best-in-class functionality and compliance.

"One-size-fits-none" is an oft-repeated phrase when discussing best practice in outsourcing and we pride ourselves on providing pragmatic and tailored solutions, ensuring compliant, and proportionate systems suited for our clients' individual structures. Having worked across the full PV spectrum, we can support in both clinical and post-marketing settings, and especially the transition between the two. Moving from small-scale clinical trials to full-blown post-marketing PV systems can seem a daunting task and we are here to help navigate a smooth transition. From the pharmacovigilance system master file (PSMF) and Qualified Person for Pharmacovigilance (QPV) to SOP development and roll out, we have your marketing application covered.

Away from the day job, Drive Phase PV is the proud sponsor of British bobsledder Risqat Fabunmi-Alade. We're looking forward to some 2024 company trips to some glorious mountainous locations to support her!

Website: www.drivephasepv.com Email: info@drivephasepv.com



### LBIC's services

#### **Virtual tenancy**

Make LBIC the London office, suitable for micro businesses or larger groups looking for a central base.

#### LBIC:CVRM

Affordable lab space at the Centre for Vaccinology and Regenerative Medicine (CVRM) at the RVC's beautiful Hawkshead site in Hertfordshire. Take advantage of specialist equipment and collaboration opportunities.

#### LBIC

Lab and office space at our King's Cross site, with scientific support services, reception and access to RVC equipment and biological services.

#### **LBIC:APEX**

Coming in 2024, grow-on space for scaling companies. Clients will benefit from LBIC's expert support, including a serviced core sterilisation facility, at a premium canal-side location.

**Apex** is on the Tribeca site, London's largest purpose-built life science campus, offering in combination with LBIC a home for the full life cycle of a life science business.





#### The set-up process is quick and straightforward

To enquire about becoming an LBIC client, contact lbicenquiries@rvc.ac.uk

Additional charges may apply for certain services. A full list of charges can be supplied on request. Prospective clients will be subject to due diligence checks by LBIC management.

# Would you like to feature in our newsletter?

If you would like to contribute to a future issue of LBIC News, contact Lucy Garnsworthy on +44 (0) 20 7691 0982 or email Ibic@rvc.ac.uk



Scan the QR code for instant access to our website



### **Contact us**

LBIC has been supporting life sciences companies since 2001. Today we host around 60 companies, ranging from entrepreneurial start-ups to more established UK companies and overseas subsidiaries from Europe, North America and Asia Pacific. The Centre is owned and operated by the prestigious Royal Veterinary College, one of the independent Colleges of the University of London.

The Centre is a 10-minute walk from St Pancras International for Eurostar services and The Francis Crick Institute.



Management Team: Rich Ferrie Chief Executive

Janette Richardson Director of Operations

Amanda Keightley-Pugh Head of Business Development

Lucy Garnsworthy Head of Business Services

#### For further information, or to enquire about our services, contact:

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