



Vol. 05, Issue 04, No. 28, July-August 2021

# MEDIWORLD

## Middle East

### News & Update

*Turkish Cargo delivers 100m Covid-19 vaccines to more than 35 countries around the world*

### Feature

*Aesthetic Today:  
An ultimate beauty hub for UAE ecommerce market*

### Healthcare destination

*Israel - A hot spot for med-tech innovation*

### Cover Story

# EVOKE-

## Hands-free facial remodeling system

### Medical Research

*MIT researchers develop e-skin technology to prevent sweat accumulation underneath the eskin*

# ***SUPPORTING YOU THROUGH THE TOUGHEST OF TIMES***

As a global leader in the air cargo industry, we continue to deliver a world class service no matter what challenges there may be. And as cross border relationships flourish, we adapt and expand to keep things moving.

We're in this together, and together we're better.



**125+**

DESTINATIONS

**1400+**

WEEKLY FLIGHTS

**60,000+**

TONNES WEEKLY CAPACITY

**1 GOAL**

CUSTOMER SATISFACTION

***FLY BETTER***

**SKYCARGO.COM**



MediWorld ME aims to create the ultimate platform to share the latest news, updates & developments from the healthcare & medical technology industry within & beyond the GCC countries

• BAHRAIN • CYPRUS • IRAN • IRAQ • JORDAN • KUWAIT • LEBANON • OMAN • QATAR • SAUDI ARABIA • SYRIA • UNITED ARAB EMIRATES • YEMEN • ALGERIA • ANGOLA • BENIN • BOTSWANA • BURKINA FASO • BURUNDI • CAMEROON • CENTRAL AFRICAN REPUBLIC • CHAD • CONGO • COTE D'IVOIRE • DJIBOUTI • E. GUINEA • EGYPT • ERITREA • ETHIOPIA • GABON • GHANA • GUINEA • GUINEA • BISSAU • KENYA • LESOTHO • LIBERIA • LIBYA • MADAGASCAR • MALAWI • MALI • MAURITANIA • MAURITIUS • MOROCCO • MOZAMBIQUE • NAMIBIA • NIGER • NIGERIA • RWANDA • SAO TOME & PRINCIPE • SENEGAL • SEYCHELLES • SIERRA LEONE • SOMALIA • SOUTH AFRICA • SUDAN • SWAZILAND • TANZANIA • TOGO • TUNISIA • UGANDA • ZAIRE • ZAMBIA • ZIMBABWE • BANGLADESH • BHUTAN • INDIA • PAKISTAN • SRI LANKA • NEPAL



PO Box: 9604, SAIF Zone, Sharjah - UAE  
Tel: +971 6 557 9579, Fax: +971 6 579569,  
info@7dimensionsmedia.com  
www.7dimensionsmedia.com

### Chief Editor

Ayesha Rashid  
ayesha@mediworldme.com

### Editor

Rustu Soyden  
rustu@mediworldme.com

### Contributors

Nirmala Rao

### Sales & Marketing

Israr Ahamed  
israr@7dimensionsmedia.com

Tousif Ahmed  
tousif@7dimensionsmedia.com

### Head Operations

Mohammad Karimulla  
karimulla@7dimensionsmedia.com

### Creative Director

Mohammed Imran  
imran@7dimensionsmedia.com

### Photo Journalist

Wasim Ahmed  
wasim@7dimensionsmedia.com

### World wide Media Representatives

France, Belgium, Monaco, Spain: Aidmedia, Gerard Lecoeur;  
Tel: +33(0) 466 326 106; Fax: +33 (0) 466 327 073  
India: RMA Mesia, Faredoon Kuka;  
Tel: +91 22 55 70 30 81; Fax: +91 22 5570 3082  
Taiwan: Advance Media Services Ltd, Keith Lee;  
Tel: (886) 2 2523 8268; Fax: (886) 2 2521 4456  
Thailand: Trade and Logistics Siam Ltd, Dwighr A chivetta;  
Tel: +66 (0) 2650 8690; Fax: +66 (0) 2650 8696  
UK, Ireland, germany, Switzerland, Austria: Horseshoe Media,  
Peter Patterson;  
Tel : +44 208 6874 160

DISCLAIMER: All rights reserved. The opinions and views express in this publication are not necessarily those of the publishers. Readers are request to seek specialist advice before acting on information contained in the publication, which is provided for general use and may not be appropriate for the reader's particulars circumstances. The publishers regret that they cannot accept liability for any error or omissions contained in this publication.

## Editorial

# UAE's medical device market to grow on tech advances

The UAE's medical device market is expected to reach Dh5.6 billion by 2025, with a CAGR of 4.4 percent from 2020, according to Fitch Solutions UAE Medical Device report.

The market will benefit from an overall strong economic performance over the next five years with key drivers including population growth, changing epidemiology, a growing medical tourism industry, healthcare infrastructure developments, expanding health insurance, digital transformation and new technologies underpinning growth.

Facial remodeling continues to increase in popularity, because the face is typically first to reveal signs of aging. Facial rejuvenation procedures date back to the early 1900s. French surgeon Julien Bourguet is credited as the father and pioneer of neck rejuvenation. His work in 1928 describes differing platysmal configurations and specific treatments. He was also the first to describe the platysmaplasty through a submental incision.

Evolve is a facial remodeling system that uses radiofrequency technology to achieve results. The system offers a safe and no-downtime alternative to surgical procedures. It remodels the treated area to improve the contours and shape of the face without the pain and long recovery time. Mona Syed, CEO of biolite aesthetic clinic explains in our month's cover story how this revolutionary facial remodeling machine does not require invasive procedures to achieve desired results?

The UAE's ecommerce landscape 2020 (accelerated growth during turbulent times) report by Visa, states that the UAE ecommerce market is on an upward trajectory, driven by the demand for online purchasing by our young tech savvy population. With the country comprising a high percentage of digital native millennials who are at ease with technology the expectation is for seamless and convenient online purchasing power. The covid-19 pandemic has further accelerated this innovation and digital transformation plans, in response to the sudden consumer demand to shop online. Jumana El Khoury Maalouf, CEO of Aesthetic Today highlights key reasons for the booming aesthetic beauty ecommerce industry in the UAE in our month's first feature.

Israel is a global technology research and development center. Its strength stems from inter-disciplinary capabilities, bringing together medicine, clinical expertise, materials science, electronics, software expertise and engineering know-how. Israeli development centers of multinational companies have an annual turnover of billions of dollars. We explore Israel's healthcare sector under our medical destination.

As always we are always open for your feedback, and if you would like to be featured in our magazine you can get in touch with me at ayesha@mediworldme.com. We are also spread across all popular social media channels (Facebook, Twitter, LinkedIn & Instagram) so be sure to LIKE, SUBSCRIBE and FOLLOW us there as well.

**Have a great Summer everybody.**

Sincerely,

**Ayesha Rashid**  
**Chief Editor, MediWorld ME**



# CONTENTS

<i>Editorial</i>	<i>03</i>
<i>Cover Story</i>	<i>06</i>
<i>Feature</i>	<i>12</i>
<i>Healthcare Destination</i>	<i>18</i>
<i>Research</i>	<i>22</i>
<i>News &amp; Updates</i>	<i>25</i>
<i>Product Launch</i>	<i>29</i>



## TASTE THE SWEET PILLS OF SUCCESS?

Your key is a  
**Dr Batra's™ franchise**  
and success is all yours !

### WHAT YOU NEED:



**Low Initial  
Investment**



**Exclusive  
Floor Space**



**Easy Break-Even  
Model + High ROI**



**Round-The-Clock  
Support**

Wish to foray into healthcare sector? This could be your golden opportunity.

By owning a **Dr Batra's™ franchise**, you not only become a part of a leading homeopathy brand with over 240 clinics in India & abroad, but also a global homeopathy market growing at a rising rate of 30% annually.

**Grab the opportunity & taste the sweet pills of success !**



*Looking out for investors*

Bahrain | Canada | France | Hong Kong |  
Malaysia | Qatar | Singapore |  
Switzerland | USA and others



*Call*

Mr. Kartik Bhatt  
+971 52 655 9837



*Email*

[international.franchise@drbatras.com](mailto:international.franchise@drbatras.com)



# EVOKE

## Hands-free facial remodeling system

An advantage of using Radiofrequency to heat tissues, as opposed to lasers (which use higher-frequency light waves), is that the lower frequency of RF can safely penetrate to a deeper level, helping to improve skin tone and structure, even lifting tissues. Lasers for the most part work to improve the skin's surface. Moreover, RF can safely treat more patients with different skin tones without risking permanent discoloration

A

s we embrace technology in our everyday lives, through the increasing use of smartphones,

the boundaries between the virtual and real world has become increasingly blurred. Virtual wallets, virtual assistants, virtual try-on apps and even virtual currencies like Bitcoin are signs of what is about to come. Now, wearable technology is becoming more commercially available and beauty companies can no longer afford to be on the side-lines. Beauty companies have now started to put technology at the center of their core strategy, making it an intrinsic part of the product.

Technology in beauty has also been most pronounced in terms of customer service and interaction. Skin care diagnostic tools, from DNA testing to skin analysis, YouTube videos and diagnostic applications, are all adding to consumers' experience, both in store and online, thus affecting purchase decisions.

The global beauty devices market generated \$50,814.4 million revenue in 2020, and it is expected to grow at a CAGR of 20.6% during the forecast period (2021–2030). The major factors behind the growth of the market are the increasing appearance consciousness, surging awareness about beauty devices, rising prevalence of skin diseases, growing geriatric population, rising disposable income, and growing incidence of hormonal disorders, according to Precient & Strategic Intelligence.

The Global Facial Rejuvenation Market size was estimated to be \$19 billion in 2019 and the expected CAGR through 2030 is 11%. There has been an increase in life expectancy worldwide. Subsequent







result of the same is anti-ageing desire among masses. The combination of medical and cosmetic procedure leads to expected results. Minimal and Non-invasive treatments for facial rejuvenation have been witnessing higher demand than ever. Facial aesthetics occupies majority share of the medical aesthetic treatments. The shift from invasive to non-invasive treatment for aesthetic enhancement has been subtle. There has been proliferation of non-invasive medical aesthetic devices for facial rejuvenation across North America. Apart from the aesthetic devices, there are clinical products such as moisturizers, retinoids, and sunscreens among others which are being well accepted by the end users.

### **Radiofrequency in skincare**

Radiofrequency is a type of energy, which is measured in 'frequency,' or wavelengths per second. All types of energy, from the sound waves your listening devices emits, to sunlight, to the heat coming off your body, to gamma rays, are classified according to their frequency on the 'electromagnetic spectrum'.

RF has the capacity to produce heat—and while each brand-name application uses a slightly different technology, all work by heating the skin's deeper layers to induce new collagen and elastin production and encourage cell turnover, helping skin become firmer, thicker and more youthful-looking.

*The global beauty devices market generated \$50,814.4 million revenue in 2020, and it is expected to grow at a CAGR of 20.6% during the forecast period (2021–2030). The major factors behind the growth of the market are the increasing appearance consciousness, surging awareness about beauty devices, rising prevalence of skin diseases, growing geriatric population, rising disposable income, and growing incidence of hormonal disorders, according to Precient & Strategic Intelligence.*



An advantage of using RF to heat tissues, as opposed to lasers (which use higher-frequency light waves), is that the lower frequency of RF can safely penetrate to a deeper level, helping to improve skin tone and structure, even lifting tissues. Lasers for the most part work to improve the skin's surface. Moreover, RF can safely treat more patients with different skin tones without risking permanent discoloration.

**Evoke is a facial remodeling system that uses the same radiofrequency technology to achieve results. The system offers a safe and no-downtime alternative to surgical procedures. It remodels the treated area to improve the contours and shape of the face without the pain and long recovery time.**

The non-surgical treatment also eliminates the risks linked to invasive procedures. With this, patients can look their best without any pain, scarring, or downtime. Evoke also effectively alters the shape of your face by tightening facial and submental tissues.

**Mona Syed, CEO of biolite aesthetic clinic explains to Ayesha Rashid of mediworldme**

**how there revolutionary facial remodeling machine does not require invasive procedures to achieve desired results?**

***Can you tell us in detail about Evoke?***

Evoke is the first and only hands-free facial remodeling platform designed specifically to address patient's demand for remodeling the face and submental areas. This advanced system leverages InMode's unique Temperature controlled bipolar radiofrequency technology to deliver uniform and controlled heating of the skin and subdermal tissue. Evoke provides hands-free aesthetic procedures that allow patients to achieve a youthful appearance.

The energy delivered travels from one pole to another pole of the same handpiece. This effectively targets a specific volume of skin. With bipolar radiofrequency, it is easier and more efficient to target the subdermal layers and facial tissue.

Evoke's hands-free design and programmable technology enable practitioners to reallocate time to other patients and treatments while evoke is in use.

***How does it work as a 'hands free' facial remodeling solution?***

Evoke's hands-free facial applicators deliver proven bipolar radiofrequency (RF) energy to the cheeks, neck, and jawline. The RF energy penetrates deep into the subdermal layer, heating the Fibro Septal Network (FSN). With its ability to maintain a constant temperature, Evoke remodels the dermis and subdermal tissue to deliver more defined facial characteristics. Once the units are applied, they operate independently.

***What made you come up with a device like this?***

Facial remodeling continues to be the number one aesthetic procedure patients are demanding in their quest to turn back the hands of time. Launching Evoke into the market is a testament to delivering the InMode's strategic objectives of expanding our treatments that serve patients with surgical like result but minimal downtime, delivered in comfortable manner. This gives patients a growing choice of minimally invasive, sub-dermal and hands-free aesthetic



## About Biolite

Based in Dubai, Biolite Aesthetic Clinic offers a vast range of services, which include plastic surgery, specialist clinical and aesthetic dermatology. Over the years, the clinic has accumulated a number of awards for their services, including being selected in MEA Markets UAE Business Awards. The clinic's approach is scientific to skin care, featuring prevention and maintenance without surgical intervention. This approach allows the clinic to achieve results that were not previously possible.

procedures, without the shortcomings of plastic surgery.

Evoke contactless treatments are social-distancing friendly, as well as pain-free, with no downtime. The hands-free element frees the operator to treat other patients at the same time.

### ***How does your device help in improving skin texture and complexion in enhancing overall skin appearance?***

Evoke delivers the ultimate in thermal facial procedures to treat moderate wrinkles, fine lines and laxity. The patented technology harnesses the power of RF energy to remodel facial tissue and improve its appearance.

### ***What role does Evoke play in reviving aging skin?***

Radiofrequency (RF) therapy, also called radiofrequency skin tightening, is a nonsurgical method of tightening your skin. The procedure involves using energy waves to heat the deep layer of your skin known as your dermis. This heat stimulates the production of collagen. Collagen is the most common protein in your body. It creates the framework of your skin and gives your skin its firmness.

As you age, your cells produce less collagen, which leads to sagging skin and wrinkles. Skin laxity occurs around age 35 to 40 when the quantity and quality of your collagen begins to decline.

Evoke uses the same RF heat energy to create new collagen, tighten and lift tissue and where necessary can be used to melt fat, for example the double chin.

### ***What do your patients ask for using Evoke and why?***

Especially now in the age of zoom calls, many patients are very aware of their jawline, and necklines. Patients are looking for a solution to sharpen these lines with Evoke.

### ***What is this device best used for?***

Evoke technology can benefit those who have sagging, loose skin in the cheek and neck areas. Evoke's ability to remodel facial tissue makes it ideal for facial contouring. Specifically, it can help address the following facial and neck

concerns:

- Lack of definition along the jawline
- Excess submental (under the chin) fat or double chin
- Loose skin or excess fat on the neck
- Jowls

### ***Is this the new future of skin care technology? Your opinion?***

For many years now, the market in skin care is moving towards the less invasive procedures, and the quality of the non invasive devices are always improving. We believe that hands-free is one trend that will continue together with the demand for minimally invasive and non-invasive technologies.

Fun Facts - Nonsurgical facial remodeling procedures generated \$7.1 billion, or 83% of all nonsurgical treatment revenues in 2018.

Of the 15.9 million procedures performed, over 12.2 million (77%) were facial remodeling treatments.

### ***In your opinion why do people go for facial remodeling?***

Especially nowadays, people are looking at their faces more frequently in their screens, and they see the effects of aging. Whereas, once the only solution was a surgical facelift, today there are many alternatives that enable people to improve facial wrinkles, and sagging skin.



# Handled in good company.



From arrival until departure, your Dangerous Goods shipments will benefit from our experience, unique infrastructure and our careful and sensitive approach. Quality first.

- Unique area for DGR shipments: 1,000 sq. m.
- Staff trained to IATA standards and requirements.
- Acceptance and handling available 24/7.
- Handling capacity for all 9 hazard classes.

Please call **+352 2456 6001** or visit **[www.luxaircargo.lu](http://www.luxaircargo.lu)** for more information.

## Luxair CARGO

A portrait of Jumana El Khoury Maalouf, CEO of Aesthetics Today, sitting on a yellow sofa. She is wearing a vibrant, patterned blue and pink dress and has her hand resting on her cheek. The background features a yellow shelf with decorative items, including a gold-colored spherical ornament and a dark brown vase.

# Aesthetic Today: An ultimate beauty hub for UAE ecommerce market

"In the past few years as technology evolved, the beauty and skincare industry have noted a drastic change in the way things run and it adapted gracefully, Aesthetic today of course was excited to be on board on this amazing online journey and have planned innovative features and exciting online exposures with the help of its celebrities and influencers," says Jumana El Khoury Maalouf, CEO

Jumana El Khoury Maalouf  
CEO, Aesthetics Today



**D**ue to escalating consciousness regarding physical appearance and the desire to look healthy, attractive and young has raised the demand for aesthetic ecommerce market. With their significant convenience, faster operation and advanced automation features, beauty aesthetics is witnessing a massive demand in the market.

Disposable income of people in the UAE has been increasing due to economic development. This has boosted their purchasing power. Moreover, factors such as improving health care infrastructure and rising health care expenditure are driving the medical aesthetic devices market in the region.

The UAE's retail e-commerce market reached a record \$3.9 billion in 2020, a 53 percent year-over-year increase which was driven by the Covid-19-led digital shift, new analysis from the Dubai Chamber of Commerce and Industry has revealed.

The analysis, based on recent data from Euromonitor, projected the value of the market to grow by a compound annual growth rate (CAGR) to reach \$8 billion by 2025, supported by several key factors such as high-income potential, a high Internet penetration rate, developed transport logistics network, modern digital payment systems, a growing tech-savvy youth population, and strong government support.

Euromonitor's data also showed that e-commerce accounted for an eight percent share of the retail market during 2020. The share of mobile-commerce, in the UAE e-commerce



market increased from 29 percent in 2015 to 42 percent in 2020. Moreover, in 2020, UAE the retail m-commerce retail market value reached \$1.6 billion, 56 percent higher than the previous year. The retail m-commerce market of UAE is projected to reach \$3.9 billion by 2025, and grow with a CAGR of 18.9 percent between 2020 and 2025.

***Jumana El Khoury Maalouf, CEO of Aesthetic Today talks with Ayesha Rashid of mediworldme about the booming aesthetic beauty ecommerce industry in the UAE.***

***Why is your website an ultimate hub for online beauty shopping? What is so special about it?***

Aesthetic Today is a premium website and mobile application that offers a vast array of curated top of the range skin care, beauty, health and wellness brands. Aesthetic Today's platform is home to more than 100 brands available for our customers to browse through, discover, and choose from. With over 1000 products, every customer can enjoy an exclusive shopping experience in the United Arab Emirates and worldwide, accessible simply with a touch of a button. At Aesthetic Today, we believe that through the power of beauty we can positively impact the lives of our customers; to achieve that, we recommend trusted and highly acclaimed products we genuinely favor and choose to buy for ourselves.

***Do you plan on introducing services on your website?***

Aesthetic today will introduce a new feature very soon. we have partnered with the finest clinics and beauty salons to offer great packages and easy booking through website and application. So, stay tuned, all your beauty and skincare needs will be taken care of by us!

***What made you come up with an e-commerce website?***

In the past few years as technology evolved, the beauty and skincare industry have noted a drastic change in the way things run and it adapted gracefully, Aesthetic today of course was excited to be on board on this amazing online journey and have planned innovative features and exciting online exposures with the help of its celebrities and influencers.

***You mentioned on your website that "you are not interested in looking backwards but rather go forward in creating a future in skincare" can you tell why and what would that be?***





Our aim is to always be looking forward, I mean look at our office and the motivational quotes around us

We bring good vibes to our team and always aim for innovation and out of the box ideas!

In the world of social media and online businesses, you always have to listen to your audience and customers and help meet their needs and that is exactly what AESTHETIC TODAY is all about.

### ***In your opinion what does the future hold for aesthetic industry in the UAE?***

The coronavirus has dramatically changed the future of beauty and aesthetics, across the globe and in the UAE, consumers are likely to increase their online engagement and spending. They will prioritize digital channels to capture and convert attention of existing and new customers. Welcome to the digital world of beauty, a world with limitless possibilities, we believe you'll be seeing more artificial intelligence as well to analyze customer's needs and develop personalized skincare and beauty routine while also enabling virtual try-ons in the comfort and safety of the customers own homes.

### ***What has surprised you most about your Aesthetic Today journey?***

How fast our vision is coming into place, and the positive reviews we have been receiving, I actually feel grateful for this, what surprised me the most is that we accomplished so much in so little time, but we're going to keep all the surprises to the audience as we have exciting things planned.

### ***What advice would you give other entrepreneurs?***

- Being an entrepreneur is all about solving one problem at a time, look at entrepreneurship as a problem-solving career.
- Do not expect good results overnight, most people overestimate what they can do in a day, and underestimate what they can do in a month. We have to remember that consistent work, even a few hours every night, will get you far.
- Do not be afraid of failure, experiencing a lot of failures here and there is simply part of life.
- Approach it as a valuable lesson!
- Remember that everything happens eventually, if you're passionate about something and work hard, everything will fall in to place.

### ***What sets your website apart from other beauty websites?***

In Aesthetic Today website and the application, we point out detailed customization with our high-level dedicated design tool, enhancing amazing content and beauty mainly derma products with no age limit.

We have selected the best products for everyone, women, men and babies!

Total security for the customers as well and 24/7 support for any problem you might encounter will be resolved by our friendly support team.

### ***Why is beauty online purchases on the rise?***

- A rise in online purchases is a result of many factors such as
- Increase use of smartphones and mobile shopping
- Social meeting and social commerce
- Transformative technology
- The way shopping behaviors have changes for our generation to generation. For many of us this trend had shifted our focus to online shopping

The beauty world is only becoming more and more virtual. Aesthetic Today came in the right time and is here to help and facilitate its customer's shopping and booking experience!

## Saudia Cargo to continue flying vital human organs for free

JEDDAH, KSA: Saudia Cargo will continue flying vital human organs to Saudi for free to help patients in and around the Kingdom and other Arab nations who need them to live.

The company has been at the forefront of this humanitarian and social mission since 2014 under its agreement with the Saudi Center for Organ Transplantation.

First called as the Jeddah Kidney Center, the transplantation center was established by Dr. Faissal Shaheen who currently sits as its director-general.

The center has done hundreds of kidney, liver heart, cornea, pancreas, lung and bone marrow transplants over the years.

Nabil Khojah, Saudia Cargo Chief Executive Officer, who signed the agreement on behalf of their company, assured dedicating all logistics available in transporting human organs in accordance with the international laws.



Saudia Cargo CEO Nabil Khojah, left, with other executives from the center and the

Khojah said Saudia Cargo takes pride in its important role to carry sensitive human organs so that they can reach for Organ Transplantation Center and its noble mission.

He stressed that the company deals with sensitive shipments in accordance with international standards.

## Qatar Airways Cargo launches Phoenix Express flight



DOHA, Qatar: Qatar Airways Cargo has launched an additional Phoenix Express flight from Doha to Basel and Amsterdam, dedicated air cargo service for pharmaceuticals. The flight is operated by a Boeing 777-300ER. The service is available for pharmaceuticals and other sensitive cargo. The flight is operated by a Boeing 777-300ER. The service is available for pharmaceuticals and other sensitive cargo.



air  
cargo  
update

Mobile App

The first & only mobile news app  
in the Air Cargo Industry

# Read your Air Cargo Update Now on Mobile App

Be updated & get instant notification on  
Air Cargo Industry trends.

Download



Google play

# New technologies to accelerate data-driven healthcare transformation in the Middle East



**S**ince Covid-19 took a toll around the globe in 2020, the Middle East has been seen as a positive outlook when it comes to adopting technologies. Basic IT infrastructure such as the Hospital Information System (HIS), Electronic Health Record (EMR) or other database related technologies, are quite prevalent in the UAE and Saudi Arabia. On top of it, new technologies such as Artificial Intelligence (AI) are also being adopted in the region for providing opportunities, especially in the diagnostic space, where it is going to play a major role.

The healthcare sector is undergoing a critical, data-driven transformation. Arthur D. Little, the management consultancy firm with the longest-standing presence in the Middle East region, explores emerging technology trend including issues around increased data-gathering in their latest report entitled **Data-driven healthcare: Analyzing the forces driving the transformation of healthcare**. The viewpoint provides insights on *data-driven healthcare drivers and details how important technologies will industry transformation over the next decade*.

The consultancy highlights that digital transformation in healthcare is the key to enhancing quality, boosting access, and driving efficiency. Moreover, it projects that clinical workflow will become more agile by virtue of Artificial Intelligence (AI) and advanced analytics, ultimately automating decision-making processes while many important technologies reach mainstream adoption.





**King Khaled  
Eye Specialist Hospital**

"As we look ahead to the coming years, the influence and impact of emerging technologies are already apparent. Because of the fundamental reform they deliver, a data-driven transformation is the first step in moving the industry forward," said Vikas Kharbanda, Partner and Healthcare practice lead at Arthur D. Little Middle East. "Big data is particularly significant for healthcare players due to the benefits it offers. It allows for more accurate staffing, standardized treatments, and fewer medication errors which will entirely re-existing existing medical practices. Institutions at the earliest stages of their data-driven medical practices. Transformation journeys can take encouragement from various success stories where we have already seen emerging technologies implemented successfully the Middle East.

### **Emerging technologies**

Cleveland Clinic Abu Dhabi is one such example, becoming the UAE's first hospital to achieve HIMSS (Healthcare Information and Management Systems Society) Stage 7. This model measures and advances an organization's analytics, with Stage 7 meaning any given organization has robust analytics capabilities and uses the technology meaningfully. Cleveland Clinic Abu Dhabi has established a data-driven culture to better serve patients and is using cutting-edge IT solutions to improve operations. For example, the clinic has leveraged various AI applications to enhance patient care and support clinicians during the ongoing pandemic.

**Similarly, in the Kingdom of Saudi Arabia (KSA), King Khaled Eye Specialist Hospital (KKESH) is one of four hospitals nationwide to achieve the HIMSS Stage 7 rating. Following successful digitalization, KKESH now analyzes medical data to bolster decision-making and facilitation processes. Moreover, the institution has fully digitized medical records and clinical services.**

"Numerous Middle Eastern hospitals are pioneers in data-driven healthcare, and have proven strong examples for others to emulate," continued Kharbanda. "For all their success, though, it is important for every player to appreciate that focusing solely on new technologies will not be enough to achieve the transformation they seek and require.

Eight drivers of data-driven healthcare that have been identified can yield positive and negative outcomes. The report details how technology trends provide an essential foundation for the next generation of innovations and examines the challenge behind making data relevant, actionable, available, and

interoperable. Data security complexities, public-private partnerships, digital ecosystems, and skills development are all crucial ingredients for success, as well as taking into account patient participation and change management issues in the healthcare industry.

"Admittedly, the patient care revolution is still in its infancy, and value creation will hinge on vast amounts of data being processed and secured in order to overcome challenges more quickly than was previously possible. However, the introduction of AI, big data analytics, and cloudification are three of the many aspects driving widespread optimism throughout the wider health sector," concluded Dr. Patrick Linnenbank, Senior Advisor at Arthur D. Little Middle East. "Although there are many obstacles to overcome on one side of the data-driven spectrum, the other end will present an array of opportunities, and the coming decade represents a full period of possibilities and potential for Middle Eastern healthcare as a whole."

### **About Arthur D. Little**

Arthur D. Little has been at the forefront of innovation since 1886. We are an acknowledged thought leader in linking strategy, innovation and transformation in technology-intensive and converging industries. We navigate our clients through changing business ecosystems to uncover new growth opportunities. We enable our clients to build innovation capabilities and transform their organizations.

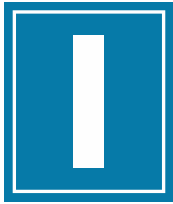
Our consultants have strong practical industry experience combined with excellent knowledge of key trends and dynamics. ADL is present in the most important business centers around the world. We are proud to serve most of the Fortune 1000 companies, in addition to other leading firms and public sector organizations.

# Israel

## A hot spot for med-tech innovation

According to recent data compiled by IVC Research Center, Israeli life sciences companies raised a total of \$1.5 billion in 2019, similar to the sum raised in 2018 (\$1.53 billion) and accounted for 17% of the total fundraising sum of tech companies in 2019. So far in 2020 according to Start-Up Nation Central, the digital healthcare sector saw more than \$700 million raised in roughly 25 rounds.





Israel is a country in Western Asia. It is situated on the southeastern shore of the Mediterranean Sea and the northern shore of the Red Sea, and shares borders with Lebanon to the north, Syria to the northeast, Jordan on the east, the Palestinian territories of the West Bank and the Gaza Strip to the east and west, respectively, and Egypt to the southwest. Tel Aviv is the economic and technological center of the country, while its seat of government and proclaimed capital is Jerusalem, although international recognition of the state's sovereignty over the city is limited.



Healthcare in Israel is universal and participation in a medical insurance plan is compulsory. All Israeli residents are entitled to basic health care as a fundamental right. The Israeli healthcare system is based on the National Health Insurance Law of 1995, which mandates all citizens resident in the country to join one of four official health insurance organizations, known as Kupat Holim ('Patient Funds') which are run as not-for-profit organizations and are prohibited by law from denying any Israeli resident membership. Israelis can increase their medical coverage and improve their options by purchasing private health insurance. In a survey of 48 countries in 2013, Israel's health system was ranked fourth in the world in terms of efficiency, and in 2014 it ranked seventh out of 51. In 2020, Israel's health system was ranked third most efficient in the world. In 2015, Israel was ranked sixth-healthiest country in the world by Bloomberg rankings and ranked eighth in terms of life expectancy.

### ***A hub for med-tech innovation***

In recent years, Israel has proven to be a hot spot for med-tech innovation. The country boasts more than 1,500 companies in the health care and life sciences sectors, roughly 70% in medical devices and digital health. More than a hundred new companies focused on medical technology launch each year.

The life sciences sector, and medical technology in particular, ranks high on the list of Israel's most developed and entrepreneurial industries, buoyed by a host of beneficial factors, including proactive and spinout-friendly academic institutions, a prevalent start-up culture and supportive policy from a government that is keen to maintain and build upon the country's reputation as an innovation and investment nexus to rival Silicon Valley and Europe's most prestigious tech hubs.

**Israel is also highly fertile ground for medtech financing, with \$473m of capital raised by medical device firms in 2017, and another \$254m raised in the fields of healthcare IT and diagnostics, according to Israel Advanced Technology Industries' June 2018 Life Sciences Industry Report.**

Global medical firms including GE Healthcare, Philips and Medtronic have been active in Israel for years, offering financing and acquisition opportunities for growing start-ups domestically, not to mention the funding options coming from the country's many life sciences-focused investment funds and venture capital groups.

### ***Digital healthcare sector***

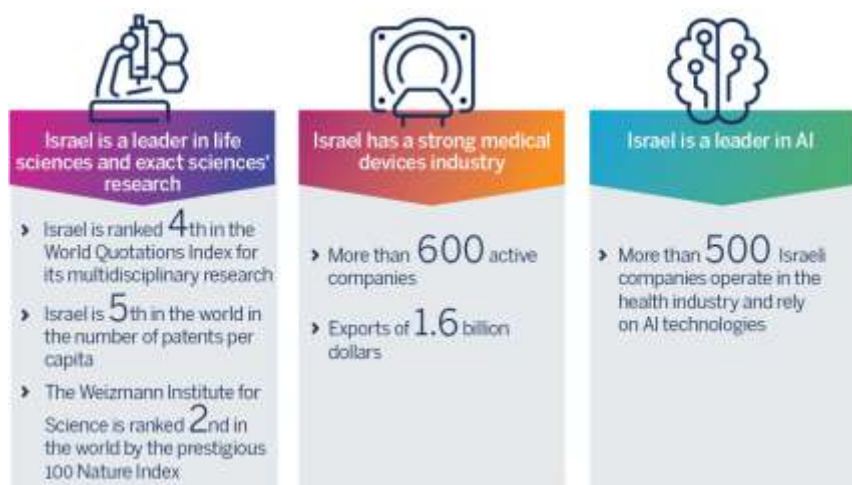
According to recent data compiled by Tel Aviv-based research firm IVC Research Center, Israeli life sciences companies raised a total of \$1.5 billion in 2019, similar to the sum raised in 2018 (\$1.53 billion) and accounted for 17% of the total fundraising sum of tech companies in 2019. So far in 2020 according to Start-Up Nation Central, the digital healthcare sector saw more than \$700 million raised in roughly 25 rounds.



According to a report by Israel Advanced Technology Industries (IATI), an umbrella organization of the tech and life science industries in Israel, the percentage of life science companies in advanced stages has been stable over recent years, making up roughly 35% of the ecosystem. An additional 4% are in the revenue growth stage, and the remaining 62% of the companies are still mainly in R&D stages, with fresh investment rounds being launched on nearly a weekly basis.

***With a vibrant innovation ecosystem, the Israeli healthtech sector has a wide array of sub-sectors ranging from wearable devices to remote diagnostics solutions. According to IATA figures, medical devices is by far the largest sector, making up roughly 40% of all companies, followed by healthcare IT and therapeutics at roughly 30% and the remainder split between half a dozen other subsectors, including diagnostic solutions, agrobiotech, bioinformatics, and industrial solutions. The ultimate tinkerers, Israeli innovators are quick to adopt new technologies and combine them with existing ones to create new and useful solutions. Lately, the major developments have come from the field of AI, machine learning and deep tech, offering new insights into diseases and ways to cure or treat them.***

Focusing specifically on medical devices, biopharma, and digital health, a recent report by leading VC Pitango Capital Partners' HealthTech fund found that 250 companies active in the space had raised a total of \$6.5



billion.

Israel is also home to scores of technology hubs, R&D centers, incubators and multinational corporations, all seeking to capitalize on the vibrant local entrepreneurial spirit and solid knowledge foundation provided by the country's top-tier academic institutions such as the Technion - Israel Institute of Technology and the Weizmann Institute and the country's top hospitals such as the Sheba Medical Center and Hadassah, which provide companies a fertile training ground for tests and clinical trials.

The Israeli government also does its share to promote the sphere. In 2018, it approved a \$300 million budget to support digital health as the country's next strategic economic growth engine and, earlier this year, government investment arm, the Israel Innovation Authority (IIA) invested tens of millions more in life science companies, particularly those who offered possible solutions for curbing the pandemic. The organization has already identified bioconvergence as the next strategic field it wants to promote, practically guaranteeing the emergence of a new slew of startups that will emerge in the space.

In addition to the government, there is also a vibrant private investment community for Israeli healthtech, which includes angel investors venture capital firms, incubators, innovation hubs and growth accelerators.

As Covid-19 continues to disrupt the world in general and the healthcare sphere in particular, in addition to pervasive problems like hospital overcrowding, malpractice lawsuits and an unending proliferation of environment-caused sickness and disease, it definitely certain that Israeli startups will be on the frontlines of the battle, employing the newest and most innovative technology to help save and improve the lives of people around the world.



# Aviation Guide™

EMERGING MARKETS

Middle East ✈ Africa ✈ South Asia

Year Book  
2021



**Awaiting your presence in our  
21st edition Launching during – Dubai Air Show. Nov 2021.**

The first & only Aviation, Airport and Airline Resource for the Emerging Markets

## B2B DATABASE

Airports | Airlines  
Aircraft Charter & Leasing  
Aircraft Components  
Aircraft Maintenance  
Ground Handling  
Aviation Safety & Security  
Helicopter | Defense

## Who's Who

In the aviation Industry

Who's Who | Aviation Features  
Break through | Defense Military

## Cheap strap system to monitor chronic fatigue syndrome



Researchers at the Universitat Autònoma de Barcelona in Catalonia, Spain, have developed a system to monitor the severity of myalgic encephalomyelitis (ME), also known as chronic fatigue syndrome. The system includes a commercial chest strap sensor that measures heart rate variability and a paired app that collects, collates, and presents these data, allowing patients to monitor their condition and share information with their clinician.

**ME is a debilitating condition, characterized by severe fatigue that interferes with daily activities. The prevalence of ME is expected to drastically increase in the coming years as it appears to be a common component of persistent COVID-19, also known as 'long COVID'. ME may be triggered by persistent COVID-19, along with infection with other viruses, and some expect it to be a significant part of the wave of long COVID cases currently developing around the world. The condition does not currently have diagnostic biomarkers or effective treatments, and historically has been largely overlooked and dismissed by medical science, so techniques to measure disease severity and track patient progress are surely welcome.**

These researchers had previously discovered that heart rate variability, which encompasses small differences between consecutive heart beats and provides an indicator of autonomic nervous function, may be correlated with ME disease severity. "Specifically, we had observed that this variability was lower in patients with ME, especially in the most disabling cases," said Dr. Jesús Castro, a researcher involved in developing the new system. "In this work we wanted to verify the relationship between heart rate variability and the syndrome in both women and men with ME compared to healthy controls and its usefulness for monitoring patients."

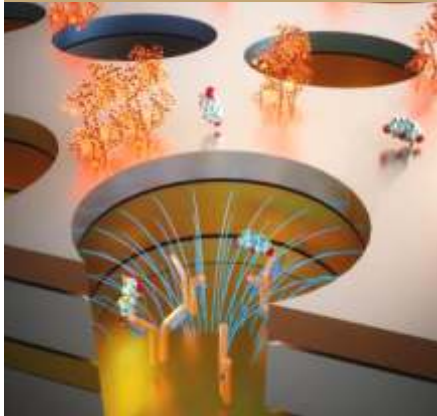
In this latest study, the researchers used technology to measure heart rate variability, consisting of a chest strap sensor, and a paired app that could communicate with the sensor through Bluetooth. They measured hemodynamic properties in a group of male and female volunteers with ME, as well as in healthy controls. The results suggest that the technology could be particularly useful in women with ME, which is convenient, as the condition appears to predominantly affect women.

"We demonstrated that the use of the app would be especially useful for the monitoring of women suffering from this syndrome, which clearly have a lower variability of heart rate compared to healthy women," said Dr. Rosa M Escorihuela, another researcher involved in the study.

In the future, it should be possible to incorporate the same underlying technology into wearable devices, such as a smart watches, to improve patient convenience and make it easier for clinicians to obtain patient data.



## Microchip to measure stress hormone levels in a drop of blood



Researchers at Rutgers University have developed a microchip that can perform real-time measurements of stress hormone levels in a drop of blood. The technology could provide a replacement for bulky and expensive lab tests for such hormones, and allow patients to monitor their stress levels more easily. The chip includes tiny wells that contain antibodies, and the technology monitors antibody binding through

impedance measurements performed using electrodes within the device.

Life has been stressful for many people during the pandemic, where illness, lockdowns and general societal turmoil have contributed to mental health issues and chronic stress. Aside from being an unpleasant experience, chronic stress is bad news for our health. Stress can be a big factor in sleep impairment, cardiac issues, and panic attacks, among other conditions.

One of the most effective ways to measure stress levels and provide concrete data on whether interventions are helping to reduce stress involves measuring levels of the stress hormone cortisol in blood. However, this is not convenient at present, as it requires a lab test, using techniques such as ELISA (enzyme-linked immunosorbent assay), which do not easily allow for point-of-care readings and require bulky equipment and highly trained laboratory technicians.

This latest technology aims to help patients measure the natural changes in cortisol levels and monitor trends over time, without having to send blood samples to a lab. "The use of nanosensors allowed us to detect cortisol molecules directly without the need for any other molecules or particles to act as labels," said Reza Mahmoodi, a researcher involved in the study, via a Rutgers press release.

The new chip was fabricated on a glass substrate and contains an array of tiny wells and electrodes. The electrodes can measure antibody binding within the device to provide sensitive measurements of cortisol levels in blood samples. So far, the researchers tested the device with human blood samples and showed that it is comparable in its accuracy and sensitivity to ELISA.

"With technologies like the new microchip, patients can monitor their hormone levels and better manage chronic inflammation, stress and other conditions at a lower cost," added Mehdi Javanmard, another researcher involved in the study. "Our new sensor produces an accurate and reliable response that allows a continuous readout of cortisol levels for real-time analysis. It has great potential to be adapted to non-invasive cortisol measurement in other fluids such as saliva and urine. The fact that molecular labels are not required eliminates the need for large bulky instruments like optical microscopes and plate readers, making the readout instrumentation something you can measure ultimately in a small pocket-sized box or even fit onto a wristband one day."

## Swedish researchers engineer blood-brain barrier on a chip using human-derived stem cells

Researchers at the KTH Royal Institute of Technology in Stockholm, Sweden, engineered a blood-brain barrier on a chip using human-derived stem cells. The device closely mimics the blood-brain barrier and allows the researchers to study its function and the effect of drugs without having to use experimental animals. By incorporating sensors, the chip can monitor barrier function in near real time.

The blood-brain barrier is a layer of endothelium that lines the vessels of the brain, and prevents the ingress of various small molecules. This layer protects the brain from many substances in the blood that could otherwise cause damage or problems in this highly specialized organ. Drugs intended to treat neurological issues in the brain must be able to cross the barrier. Moreover, the barrier can be affected and somewhat compromised by various physiological processes, including inflammation, but it has been difficult to study these phenomena.

This latest technology provides welcome assistance for researchers who hope to unravel the mysteries of the blood-brain barrier. The research group behind the development has created a blood-brain barrier on a chip, using human-derived stem cells to form the barrier.

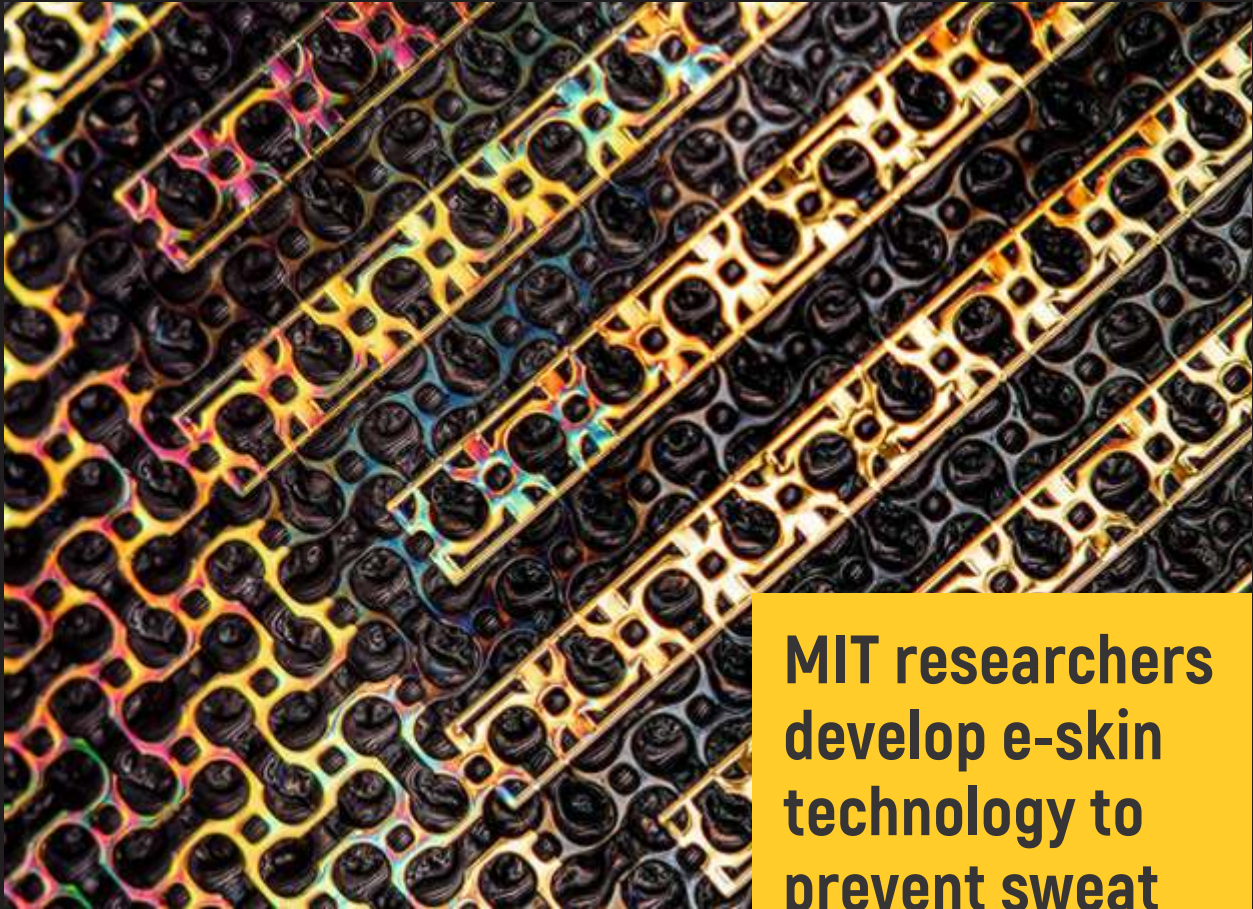
"We successfully based the barrier on human stem cell-derived cells so this model is relevant to drugs being tested for humans, while other models are made with animal cells or are too simple to monitor closely," said Isabelle Matthiesen, a researcher involved in the study.

The device provides near continuous monitoring of barrier integrity, allowing researchers to study processes that can affect the barrier in neurodegenerative diseases, such as inflammation. The current research group used the device to



study the effect of inflammation on barrier integrity and the effect of anti-inflammatory drugs on this process. Electronic sensors within the device provide a read-out of barrier integrity approximately once a minute.

"As an example, when you first administer a drug, it causes a huge change in cells, then levels out," said Thomas Winkler, another researcher involved in the study. "In the typical methods of testing drugs, you wouldn't see those rapid changes. We can now see that the breakdown of the blood brain barrier happens fast under stress and we could see how that could be prevented with the anti-oxidant."



## MIT researchers develop e-skin technology to prevent sweat accumulation underneath the eskin

Researchers at MIT have developed an e-skin technology that contains artificial sweat ducts. The ducts prevent sweat accumulation underneath the e-skin, helping to prevent interference with built-in sensors. Incorporating a kirigami-style design, the material conforms to human skin but maintains a high porosity and reduced sweat accumulation. The design should help the e-skin to stay in place over extended periods, allowing incorporated sensors to monitor health over this time.

Wearable patches or 'e-skin' are a hot research area at present, with the ultimate goal of unobtrusive health monitoring that does not require bulky and inconvenient monitoring devices. The technology is constantly evolving, and this latest device tackles a problem that all e-skin technology faces: sweat. Our skin is constantly producing moisture, and if it can't escape through an e-skin patch, it will accumulate, potentially leading to sensor malfunction or detachment.

"Sweat can accumulate between the e-skin and your skin, which could cause skin damage and sensor malfunctioning," said Jeehwan Kim, one of the developers of the new e-skin, in an MIT announcement. "So we tried to address these two problems at the same time, by allowing sweat to permeate through electronic skin."

Previous e-skin technologies have attempted to make such devices breathable, by using woven fibers for example, but sweat has posed a stubborn challenge. Initially, these researchers designed simple films with regular holes that would allow sweat to escape through. However, while this design lets sweat escape, the resulting e-skin was not sufficiently flexible and broke easily. To side-step this problem, the researchers used a kirigami-style design, which incorporates small slits between the e-skin pores, providing flexibility and strength along with sweat diffusion.

"If you wrap a piece of paper over a ball, it's not conformable," said Kim. "But if you cut a kirigami pattern in the paper, it could conform. So we thought, why not connect the holes with a cut, to have kirigami-like conformability on the skin? At the same time we can permeate sweat."

The e-skin is made using ultrathin semiconductor films, and the researchers have already tested it in a volunteer, who wore it for over a week. During this time the patch measured hydration levels, temperature, pulse, and UV exposure. The researchers put the volunteer through his paces, asking him to run on a treadmill for 30 minutes and eat a spicy meal, to produce plenty of sweating. The e-skin held up under this punishment.

"With this conformable, breathable skin patch, there won't be any sweat accumulation, wrong information, or detachment from the skin," said Kim. "We can provide wearable sensors that can do constant long-term monitoring."



## G42 Healthcare, Seegene partner to offer molecular diagnostic testing laboratory-on-wheels in MENA

**The MoU was signed by Ashish Koshy, CEO of G42 Healthcare, and James Park, Seegene Executive Director during the Medlab Middle East Exhibition – MENA's largest medical laboratory exhibition and congress underway at Dubai World Trade Center.**



G42 Healthcare, a leading health-tech company on a mission to develop a world-class healthcare sector in the UAE and beyond, and Seegene Inc., a global biotechnology company specializing in molecular diagnostics, have signed a Memorandum of Understanding [MoU] to offer fully equipped mobile diagnostics and testing laboratories across the Middle East and North Africa [MENA] region.

The partnership will offer the innovative Seegene Mobile Station – a laboratory-on-wheels facility providing optimized molecular diagnosis and tests at any location to safeguard the health of communities.

The services will be on offer across MENA, including the UAE, Algeria, Morocco, Tunisia, Libya, Egypt, Sudan, Palestine, Jordan, Syria, Iraq, Iran, Pakistan, Lebanon, Kuwait, Qatar, Oman, Saudi Arabia, Bahrain, and Yemen.

The MoU was signed by Ashish Koshy, CEO of G42 Healthcare, and James Park, Seegene Executive Director during the Medlab Middle East Exhibition – MENA's largest medical laboratory exhibition and congress underway at Dubai World Trade Center.

The Seegene Mobile Station conforms with the WHO guidelines of BioSafety Level-2 and offers automated testing with minimum supervision. It has all essential equipment, RT-PCR reagents, consumables, IT solutions, and technical support for diagnostic testing, is transportable by ship or land and can be made operational within few days.

In his comments, Ashish Koshy said: "We are

proud to enter into a collaboration with Seegene which offers equitable access to healthcare anywhere in the Pan-Arab region. This is part of our joint efforts with international organizations to share our knowledge and expertise to future proof the health of nations."

He added: "At G42 Healthcare, our commitment is to uphold patient health and reinforce our credentials as a transformation enabler in healthcare for the good of all humanity. The mobile testing services will further augment our business portfolio across the MENA region and help in reaching out to various markets, ensuring swift detection, and allowing patients to benefit from the most informed decision possible, regardless of the location."

**James Park, Seegene Executive Director, said: "Seegene is excited to be working with G42 Healthcare and contribute to the development of innovative solutions to bring healthy life for everyone by creating a new diagnostic paradigm. With this collaboration, we will join forces to serve the local communities with our expertise and resources. The Seegene Mobile Station will offer the most innovative mobile molecular diagnostic, testing and laboratory services and is part of our commitment to supporting the healthcare community in combatting COVID-19 infections, with a broad portfolio of research and development tools and diagnostics."**

He added: "The Mobile Station will significantly contribute to the mitigation efforts as it will help governments to control areas where epidemics spread easily and to place the laboratory near crowded places, such as community events."

The Mobile Station also includes an equipment room and an extraction room. It encompasses a container with biosafety level-2 laboratory for the extraction room, collection device, instruments compatible with all Seegene assays, IT solution with Seegene Viewer, Reagent and Consumables, and technical support.

The all-in-one platform enables 2,000 tests per day including 225 pathogens in 10 different criteria and offers a streamlined automated workflow from pre-extraction to data analysis.



# Turkish Cargo delivers 100m Covid-19 vaccines to more than 35 countries around the world



**As the cargo company that flies to more countries than any other, Turkish Cargo continues to fly uninterrupted and contributes to the fight against the pandemic for the return to better days. Managing to grow under the leadership of Turkish Airlines Chairman of the Board and the Executive Committee, M. İlker Aycı despite the shrinking sector during the pandemic, global air cargo brand also carries an important mission for the vaccine transportation. With its strong fleet, wide flight network and great service quality, Turkish Cargo delivered 100 million Covid-19 vaccine doses to more than 35 countries around the world.**

On the topic, Turkish Airlines Chairman of the Board and the Executive Committee, M. İlker Aycı stated; "As the pandemic is an unprecedented threat to the human health, our Turkish Cargo brand is a significant advantage when it comes to combatting this threat. Our brand is able to carry vaccine doses to more than 100 countries with its international air bridge, becoming a lifeline for countries that are located too far from the ones with vaccine production facilities. Proving itself with hundreds of vaccine transportation operations to countries all around the world ranging from China to Brazil, India to Democratic Republic of the Congo along with operations to our own country, Turkish Cargo showed its reliability by transporting 100 million doses. With these successful operations, we increased our global market share to 7.5 percent in

pharmaceutical transportation and became one of the most active carriers in vaccine transportation. Concurrent with the application of the vaccines which increases every day, we will continue to shoulder this responsibility until we win this battle against the pandemic."

With the start of the vaccine distribution, Turkish Cargo carried 100 million vaccine doses, which is approximately 450 tons, from the vaccine production centers to destinations in its wide flight network with over 250 flights. Air cargo carrier transported the Covid-19 vaccines to key and certificated destinations such as Turkey, Baku, Rome, Belgrade, Copenhagen, Miami, Sao Paulo and Mexico City, creating a global corridor between more than 400 destinations. With 30 years of experience when it comes to special cargo transportation, successful brand proved its capability with vaccines that have different transportation requirements by carrying 7 different Covid-19 vaccines in containers with special cooling systems.

Increasing its market share in pharmaceutical transportation to 7.5 percent, Turkish Cargo enhanced its capacity when it comes to cold air depots while increasing its active and passive container capacity in order to prioritize medical transportation during the pandemic. Successful brand continues its operations uninterrupted in order to deliver emergencies such as food, aid materials, medical products and equipment while maintaining the continuity in global medical supply chain.



Airbus Corporate Jets (ACJ) and Philips, a global leader in health technology, have signed a partnership agreement to equip ACJ aircraft with industry-leading on-board monitoring and medical equipment.

As part of its continuous customer care approach and the excellent connectivity on-board the ACJ aircraft, this new agreement will enable instant access to uniquely comprehensive in-air medical care supported by the latest technology for ACJ clientele. Philips Tempus IC2 patient monitor, can be operated on board, enabling flight crews to monitor vital signs of travellers and transmit data to ground-based medical support. Once connected, those support teams can view the medical data in real-time, allowing for key decisions to be made in a timely manner both on the ground and in the air that can help to avoid unnecessary medical diversions.

"We are pleased to partner with Philips in offering our customers state of the art inflight medical care. This is an enhancement of our customer services portfolio that our ACJ customers will benefit from," said Benoit Defforge, ACJ President

"When it comes to in-flight emergency preparedness and safeguarding the care of air travellers, remote access to data and ground based medical support is becoming increasingly important" said Ryan Landon, General Manager for Emergency Care at Philips. "With connected monitoring like Philips Tempus IC2 patient monitor and HeartStart FRx, flight and ground crews alike can access the right tools and information to make confident decisions in the air and provide better, more holistic care."

## ACJ & Philips announce new onboard holistic healthcare solutions

Current ACJ customers will have the opportunity to select from one of three packages providing different levels of support depending on their needs, while clients purchasing new aircraft will automatically receive the full comprehensive package for a 3-year period. Each package will feature elements to support an in-flight incident, including comprehensive 24/7 medical support, covering pre-flight, in-flight and crewcare, which is provided by Flightcare Global.

Additionally, the package will support ACJ customers' operational risk management by providing access to Osprey Flight Solutions' aviation alerting system, delivering proactive and preemptive rapid analysis and data.

The current environment has enhanced medical and risk management support solutions. This unique collaboration reflects a significant evolution in the Corporate Aviation Industry, highlighting the importance of providing flexible and adaptable levels of services and client support.

Airbus supports more than 500 airline and corporate jet customers with one of the largest support networks in the world, including tailored services for business jet needs. More than 200 Airbus corporate jets are in service on every continent, including Antarctica.



## AI on the rise in the UAE healthcare sector

solutions, especially related to the healthcare business where tech platforms are growing rapidly. It will also allow us to introduce best in class technologies in the healthcare sector more effectively."

Social distancing and working from home have become the 'new normal' and this has led to the demand for AI-based healthcare services, like telehealth and app-based health monitoring systems for chronic patients. Tech giants are taking great interest in the healthcare domain. The market size is set to reach \$267 billion by 2027 worldwide.

The UAE is well on its way to create a full-scale medical R&D ecosystem with large global health and pharma giants choosing Dubai as their home base for research. The country is making strides in its journey to become a global capital for medical research and development.

AI helps with patient engagement that leads to an educated consumer base. Moreover, it will provide better data and insights for physicians to make more informed evidence-based decisions to further improve the health outcomes of their patients

The digital transformation has helped link medical screening with the tourism sector, in which the covid testing has become one of the mandatory travel document. The online consultation market is blowing up with the huge number of the global population is opting for it. If reports are to be believed this market has a revenue opportunity of \$250 billion. Taking the advantage of telehealth market segment opportunity all the care providers and insurance companies are already in process. Many of the technology-driven apps like AI Hosn, Arogya Setu, IATA travel pass initiatives, etc. help not only the traveler but the authorities in mapping the vaccines, covid test, and health care.

The UAE is one of the biggest adopters of AI in the region and has invested a total of \$2.15 billion in the sector over the last decade. Artificial intelligence (AI) is transforming the healthcare industry - along with several other industries in the country and has augmented efficiency and productivity during the pandemic.

Karan Rekhi, CEO of Forte Healthcare, said, "UAE plans to build innovative digital companies and startups to work on cutting-edge projects to create futuristic technologies in AI. The country has opened its doors and is offering Golden Visas to coders from around the globe to become part of its success story."

Rekhi further added, "We expect that with this new development where the National Program for Coders is offering exceptional coders from across the world an opportunity to call UAE their home, we will see a fast-paced development of AI applications and



## Qatar Airways Cargo Offers Customers Innovative Releye® RLP container for Pharma Transport



Qatar Airways Cargo announces the approval of Envirotainer's latest innovation – The Releye® RLP container. With the newest addition to its range of temperature-controlled containers, the airline now offers 16 temperature-controlled container leasing options for life science and health care products to maintain a secure and seamless cool chain. It has been already offering customers Envirotainer's RAP and RKN active pharma containers since 2014.

Guillaume Halleux, Chief Officer Cargo at Qatar Airways said, "We are committed to provide our customers the best solutions. A seamless cool chain is paramount to maintain the efficacy of pharmaceuticals and we are pleased to offer our customers a technologically advanced container - Releye® RLP with live monitoring and intelligent cargo protection to transport their critical life science and health care shipments at the required temperature across our global network. Such an innovation is the need of the hour, especially in these uncertain times of the pandemic."

Fredrik Linnér, Chief Business Development Officer at Envirotainer said, "We are happy to welcome Qatar Airways Cargo as a carrier of our latest innovation, the Envirotainer

Releye® RLP container. With the new Releye® RLP, Qatar Airways Cargo can offer their customers the latest active fully connected solution to protect the integrity and quality of air freight medicine products throughout the supply chain."

The Releye RLP sets a new standard for secure cold chain solutions - maintaining the customers' pharma cargo longer, without the need of recharging and is enough to cover transit times and delays, if any. With live monitoring, the airline's customers will be able to track and monitor the product condition, location, temperature, humidity, battery levels, door openings, if their cargo is loaded or not and the progress of their shipments. Customized alert notifications can also be set up, offering full visibility to customers for proactive and reactive measures.

Its unique air flow technology provides maximum temperature stability in the cargo bay. These containers also deliver up to a 90 percent reduction in CO2 emissions, in perfect alignment with the airline's sustainability goals.

With considerable investments in quality handling, infrastructure, reefer trucks and facilities like the airside Climate Control Centre at the Doha hub, people and procedures at each of its 85+ pharma stations, the cargo carrier provides high operating standards for the transportation of pharmaceuticals and healthcare products globally. The airline is committed to ensuring the enhancement of service quality and constant innovation of the QR Pharma service for the benefit of its customers.





## ReActiv8 implantable restorative neurostimulation system

Mainstay Medical recently announced the limited commercial launch of its ReActiv8 implantable restorative neurostimulation system in the US to treat intractable chronic lower back pain.

The FDA granted ReActiv8 treats chronic low back pain associated with multifidus muscle dysfunction, as evidenced by imaging or

physiological testing in adults who failed therapy and are not candidates for spinal surgery.

Mainstay Medical also launched a new corporate website to support the commercial launch. In addition, it also launched updated tools, guidance and training materials to help identify prospective patients for ReActiv8 therapy, train physicians on the ReActivate system and help patients access ReActiv8 in the US.



## VenSure balloon sinus dilation system & Cube 4D navigation system

Intersect ENT recently announced that it has commercially launched its VenSure balloon sinus dilation system and Cube 4D navigation system in the US

Intersect ENT designed the VenSure balloon and Cube 4D navigation system to be used in procedures that improve debilitating chronic rhinosinusitis (CRS) symptoms. Cube 4D has VirtuEye photo registration that allows for easy 3D facial registration, pinpoint accuracy and improved workflow efficiency for balloon sinus dilation (BSD) procedures and other ENT-related skull-based surgeries, according to the company.

# UPCOMING EVENTS



**Global Meeting on  
Public Health &  
Health Care**

25-26 August  
**Dubai**



**Int'l Conference on  
Recent Advancement  
in Medical Education,  
Nursing, & Health  
Sciences (ICRAMNH)**

26 August  
**Dubai**



**Arab Cochlear  
Implant  
Conference  
(ACIC)**

9-11 September  
**Dubai**



**Annual MENA  
International  
Orthopaedics  
Congress**

16-18 September  
**Dubai**



**GTR  
Mena  
Dubai**

22 September  
**Dubai**



**World Congress  
& Expo on  
Biotechnology and  
Bioengineering**

27-28 September  
**Dubai**



**International  
Family Medicine  
Conference &  
Exhibition (IFM)**

10-12 October  
**Dubai**



**Annual Summit  
on Digital Health  
and Telemedicine  
Expo (DHTE)**

15-16 November  
**Dubai**





مطار الشارقة  
Sharjah Airport

# YOUR PHARMA IS IN SAFE HANDS

Sharjah Airport is the first to offer IATA CEIV Pharma certified cargo handling services in the Middle East and Africa, via its sole ground handling agent Sharjah Aviation Services.

## Dedicated Temperature Controlled Storage

- 1500 m<sup>3</sup> capacity of 2-8°C and 15-25°C temperature controlled and monitored storage

## Active Cooling Equipment

- Owned and managed rollerbed reefer trucks 4x Q7 Positions (or equivalent) with Real Time Temperature Monitoring & GPS tracking. Cooling range -18°C to +25°C
- 10Ft (or 2 LD3) ULD dollies. Cooling range -18°C/ +25°C
- Bulk trailers 2500Kg / 14m<sup>3</sup> capacity. Cooling range 0°C/ +18°C







## **THE WORLD'S HEALTH IS IN THE SAFE HANDS OF TURKISH CARGO**

AS THE CARGO AIRLINE THAT FLIES TO MORE COUNTRIES THAN ANY OTHER, WE CARRY ALL YOUR HEALTH AND WELLNESS NEEDS, FROM PHARMACEUTICALS TO MEDICAL SUPPLIES WITHOUT EVER INTERRUPTING THE TEMPERATURE-CONTROLLED COLD CHAIN.



**TURKISH CARGO**

[turkishcargo.com.tr](http://turkishcargo.com.tr)