

# INFOMEDIX™

I N T E R N A T I O N A L  
C O N N E C T I N G M E D I C A L B U S I N E S S W O R L D W I D E

[www.infomedix.it](http://www.infomedix.it)

**We can offer a worldwide visibility to your company. Even only one contract signed with one distributor of our database can help you multiply your ROI.**

INFOMEDIX INTERNATIONAL 2/2021 - INFODENT Srl - Via dell'Industria 65 - 01100 Viterbo - Italy  
Poste Italiane Spa - PP - Economy - DCO/DCVT/n°5 fb del 24/05/02 - Sped. in A.P. - art. 1 comma 1 D.L. 353/2003 conv. in L. n. 46/04 - CDSUVT G.C.



**Check here who is looking for distributors**

Visit us at  
Arab Health 2021  
Booth R.F01

# NEW NEWTOM 7G WIDE.VISION



## NEWTOM HAS YET AGAIN PUSHED BACK THE BOUNDARIES OF MEDICAL IMAGING.

Discover the NewTom 7G, the first ever Multi-Scan Body CBCT, available today!

[www.newtom.it/en/medicale](http://www.newtom.it/en/medicale)

Cone Beam 3D Imaging  
**NewTom**  
what's next

IEC is the leading International ISO 9001/13485 certified endoscope, endoscope parts, equipment, specialty service provider, and consulting firm since 1999.



**Rigid Endoscopes**



**Endoscope Parts - Rigid**



**Endoscope Parts - Flexible**



**Injection Molding**



**Industrial Endoscopes**



**Tools & Devices**



**CCD' & Electronics Repair**



**Processor Panel Repair**



**Laser Marking Services**



**Contract Manufacturing**



**Training & Consulting**



**Stolen Endoscope Registry**

**Please contact us today for more information.**

320 International Parkway, Ft. Lauderdale, FL 33325 Tel (954) 217-8780 Fax (954) 217-8781 [www.IECendoscopy.com](http://www.IECendoscopy.com)



## AUTOMATIC PRESSURE INFUSOR

Delivers fluids under constant pressure with electronic control

## Automatic Pressure Infusor

BIEGLER GmbH develops and manufactures medical devices and disposables for over 40 years. Biegler serves their customers by offering them not only high quality products and services but comprehensive and personal support as well.

The company based in Austria / Europe introduced the AUTOPRESS device as an important part of its fluid warming philosophy. Autopress works directly with Biegler blood and infusion warmers to deliver blood and fluids at high flow rates or as a stand-alone unit to deliver fluids at constant pressure up to 300 mmHg wherever needed.

Pressure infusing bags are mainly used for irrigation purposes during arthroscopy, laparoscopy and hysteroscopy. The adjusted pressure is constantly maintained and therefore does not require manual compensation.

When connected to an electrical outlet, Biegler Pressure Infusor automatically maintains pressure on blood and IV fluid bags. Pressure range is zero to 300 mmHg.

### Features at a glance:

- Pressure is adjustable and always maintained
- Precise pressure setting from zero to 300 mmHg with electronic control
- Accommodates pressure cuffs 2 x 500, 2 x 1000 or 2 x 3000 cc
- Small and lightweight
- Mains operated
- Pressure cuffs can be emptied rapidly and easily
- Significant reduction of set up time

**Biegler GmbH**  
**Allhangstrasse 18a**  
**3001 Mauerbach**  
**Austria**

Tel.: +43 1 979 21 05  
 email: [office@biegler.com](mailto:office@biegler.com)

CE 0123

Arab Health  
 By Informa Markets

**Arab Health 2021 - Dubai**  
 Dubai International Convention  
 & Exhibition Centre  
 June 21 - 24, 2021, Booth SA.J19  
[www.biegler.com](http://www.biegler.com)

# Contents



All our advertisers are looking for distributors worldwide. Check here for more information.



Given the current situation worldwide, we warmly invite you to check trade shows dates, venues and booths location listed in this magazine



## HIGHLIGHTS



# 24

## REGENERATIVE MEDICINE



## SPECIAL GCC COUNTRIES

INFOMEDIX INTERNATIONAL 2/2021

**INFOMEDIX**  
PUBLISHING & CONSULTING HOUSE

www.infomedix.it | infomedix@infomedix.it  
Tel: +39 0761 352198 | WhatsApp: +39 351 741 5005

Marketing & Consulting:  
Riccardo Bonati, riccardo.bonati@infodent.com  
Ilaria Ceccariglia, ilaria.ceccariglia@infodent.com  
Veronica Viti, veronica.viti@infodent.com

Exhibition Manager:  
Cristina Garbuglia, cristina.garbuglia@infodent.com

Infomedix International 2/2021  
Quadrimestrale di informazione tecnico-scientifica  
anno XVI - numero 49 - maggio/settembre 2021  
Registrazione al Tribunale di Viterbo  
VG616/03 aut. trib. VT n°528 del 21/07/2004

Editorial Director: Silvia Borriello

Newsroom:  
Claudia Proietti Ragonesi,  
Nadia Coletta,  
Manuela Ghirardi



Infodent s.r.l.  
• Headquarters: Via dell'Industria, 65  
01100 Viterbo - Italy  
• Registered Office: C.ne Gianicolense, 68  
00152 Rome - Italy  
VAT 01612570562

CEO - Publisher: Baldassare Pipitone, baldo.pipitone@infodent.com  
General Manager: Paola Uvini, paola@infodent.com

Scientific Consultant:  
Luca Maria Pipitone, luca.pipitone@infodent.com

Contributors for this issue:  
Thy Dinh - Dezan Shira & Associates  
Alberto Farina - Celltrion Healthcare Italy Medical Advisor

Press Officer:  
Claudia Proietti Ragonesi, pressoffice@infodent.com

Social Media Strategist:  
Ilaria Ceccariglia, ilaria.ceccariglia@infodent.com

Graphic Department:  
Silvia Cruciani, silvia.cruciani@infodent.com  
Antonio Maggini, artwork@infodent.com

Accounting Department:  
Fausta Riscaldati, fausta.riscaldati@infodent.com

Printer: Graffietti Stampati s.n.c.  
Strada Umbro Casentinese Km 4,500  
01027 Montefiascone (VT)

Spedizione in Italia: Poste Italiane s.p.a.  
PP Economy - DCO/DCVT/N° 5 fb del 24/05/2002  
Spedizione in A. P. - art.1 D.L. 353/2003 Conv. In L. n. 46/04-CDSUVT G. C.

Spedizione all'estero: IFS Italy s.r.l.  
Viale dell'Industria, 58/A 20037 Paderno Dugnano (MI)  
P.IVA: IT08577970968

Licenza Postale Generale n.3502/2014 rilasciata dal Ministero dello Sviluppo Economico

Questo numero è stato chiuso in tipografia il: 24/05/2021  
Costo copia 0.77

Infodent tm is the title of this magazine as well as an applied for trademark. Any use there of without the publisher's authorization is to be deemed illegal and shall be prosecuted.

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001:2015 =

ANES ASSOCIAZIONE NAZIONALE  
EDITORIA DI SETTORE  
Aderente a: Confindustria Cultura Italia



## FOCUS

Vietnam's Impressive Healthcare Approach



## FOCUS

Vietnam's Medical Devices Industry: Key Market Entry Considerations



## HOT TOPIC

A Very Promising Protein



## CALENDAR



## THE DISTRIBUTORS WALL



## NON PROFIT



**Baldo Pipitone**  
CEO  
[baldo.pipitone@infodent.com](mailto:baldo.pipitone@infodent.com)



**Paola Uvini**  
General Manager  
[paola@infodent.com](mailto:paola@infodent.com)



**Riccardo Bonati**  
Marketing Consultant  
Manager  
[riccardo.bonati@infodent.com](mailto:riccardo.bonati@infodent.com)



**Ilaria Ceccariglia**  
Marketing Consultant  
[ilaria.ceccariglia@infodent.com](mailto:ilaria.ceccariglia@infodent.com)



**Claudia Ragonesi**  
Marketing Consultant  
[claudia.ragonesi@infodent.com](mailto:claudia.ragonesi@infodent.com)



**Cristina Garbuglia**  
Exhibition Manager  
[cristina.garbuglia@infodent.com](mailto:cristina.garbuglia@infodent.com)

### Cover page

**NewTom - Cefla s.c.**  
Via Selice Provinciale, 23/A  
40026 Imola (BO), Italy  
+39 0542 653111  
[info@newtom.it](mailto:info@newtom.it)  
[www.newtom.it](http://www.newtom.it)

- 7. Ambulanc (Shenzhen) Tech.
- 21. B.M.S. Dental
- 1. Biegler
- 18. BMI Biomedical International
- 16. BTC
- 5. Calze G.T.
- 6. DAS
- 6. GEMAVIP
- 8. General Medical Merate
- 17. IAE
- 9. IMS Giotto
- II Cover. Innovative Endoscopy Components

### Back Cover

**Malaysian Rubber Council (MRC)**  
Unit No 36-02, Level 36, Q Sentral, 2A  
Jalan Stesen Sentral 2, KL Sentral  
50470 Kuala Lumpur, Malaysia  
+60 3 2782 2100  
[info@myrubbercouncil.com](mailto:info@myrubbercouncil.com)  
[www.myrubbercouncil.com](http://www.myrubbercouncil.com)

- 60. Invivo Medical
- 5. J.D. Honigberg International
- 19. Kugel Medical
- 15. New Life Radiology
- 11. Sanyleg
- 24. Silfradent
- 13. Spectra Medical Devices
- 60. SW Safety Solutions
- 12. Technix
- III Cover. Trident
- 7. Villa Sistemi Medicali



# Opportunity Out of Adversity



The most important part of constructing effective marketing communications is being able to adapt, and marketers must be ready to change their approach when old strategies start to look obsolete.



According to a survey by the Society for Human Resource Management, published on Forbes, some 75% of small business owners agree that if a crisis like the coronavirus pandemic were to happen again, they would be better prepared to handle it. Additionally, 52% of small businesses surveyed expect to recover to pre-Covid profitability in six months or less. This optimism is encouraging, small to medium enterprises seem to be confident again, even if still navigating the pandemic. As a matter of facts, we saw a glimpse of a light already from last May, when consumer confidence began to rise and the economy seemed to be opening back up again.

The power of the consumer is not to be underestimated. Once people feel safe enough to enter their communities and spend again, like they used, or as close to as they used while implementing social distancing, they will. More than anything, people want to safely get back to normal, to take care of all the things that have been put on hold for social distancing. With the rise of consumer confidence comes increased spending, whether in-person or through online vendors, and profits for companies everywhere.

Even just almost one year ago, did you think it would have been possible to see the light at the end of the tunnel, knowing what we know now? Maybe not. We have undergone one of the worst economic downturns a business can face and have kept pushing through. When the whole world changed seemingly overnight, we did not walk away. We have been resilient in discovering ways to cope with a new world, responding to changes and been flexible enough to adapt to whatever ends up working for us. The pandemic has taken us to places we never thought imaginable. But, in reality, we have made it, against all odds. Many small businesses, spurred by the limitations imposed by the coronavirus, have invented new products, and found new ways to deliver services, creating opportunities out of

adversity. Covid-19 has been a large, uncontrolled experiment in changing what work looks like, a "big driver of innovation" that has opened the door to a lot of ideas that had been dismissed only because change is hard...and if things are good enough, then why change them?

Despite all concerns, the way in which small and medium businesses have been able to successfully pivot has made them optimistic about the future, and the support they have received within their communities has only helped; businesses have helped one another survive, donating goods, offering free services, as well as money. But, on top of everything is internet. The internet has been a lifeline to businesses throughout the pandemic. Businesses have been able to share their struggles in real time via social media and on their websites. We read the latest news on statistics and updates and share our stories on how we have been personally affected, often with complete strangers. The internet has made it possible for many businesses to stay afloat.

Increased stability is sure to follow, but when all seemed dark, *Infomedix International* has reached out to its medical community for support, offering free services to customers, to help them stay afloat, using all media. We have brought together manufacturers and distributors from 178 countries through our Smart Medical Fair, our B2B platform open all year round, and offered webinars, courses and live meetings.

Your business cannot thrive without you being proactive and responding to the change around you. *Infomedix International* can help you do just that!

**Baldo Pipitone**  
CEO Infodent S.r.l.

[baldo.pipitone@infodent.com](mailto:baldo.pipitone@infodent.com)

# Suction Devices for Covid-19 Patients

Millions of COVID-19 infected people resulted in an unprecedented surge in airway emergencies, requiring more suctioning than ever inside and outside of hospitals.

## Hospital use

The SSCOR Duet is perfect for hospital crash carts, patient transport, surgi-center backup, long term care facilities...

- An AC suction unit, with battery back-up, the Duet provides instant, powerful suction with or without availability of AC power.
- When fully charged, the sealed lead acid battery provides 45 minutes of suctioning power giving the needed suction for emergency care procedures.

## Pre-Hospital use

The SSCOR VX-2 is a lightweight, portable, powerful and tough, battery powered suction unit. It's powerful enough to meet international standards for portable suction equipment (>30 lpm airflow and >525mmHg negative pressure). The control panel indicates vacuum level, battery condition, connection to power and lets the user know the pump is running. Charging is controlled for maximum battery life. The PC board protects the battery from deep discharge.



[www.jdhmedical.com](http://www.jdhmedical.com)  
[medical@jdhintl.com](mailto:medical@jdhintl.com)

## Visit us at:

- Arab Health 2021, Booth H1-E01
- FIME 2021, Booth E62
- Smart Medical Fair 2021, [www.smartmedicalfair.com/stand/h6p1b7z2396](http://www.smartmedicalfair.com/stand/h6p1b7z2396)



PREMIUM HIGHLIGHTS

Essential+  
In everything You Do

GRADUATED COMPRESSION

RELAXSAN  
Essential+  
In everything You Do

relaxsan.it/essential

Discover all the features

MEDICAL DEVICE    DOUBLE LAYER    NO LACE EFFECT    SOFT TOUCH

RELAXSAN  
MADE IN ITALY

The advertisement features a woman and a man walking, with red and white spiral lines around their legs. A box of Relaxsan Essential+ socks is shown on the right. The bottom of the ad lists features: Medical Device, Double Layer, No Lace Effect, and Soft Touch. The Relaxsan logo and 'MADE IN ITALY' are also present.



## Compression socks for athletes

Compression therapy has a long history, but the development of new elastic textile materials opened the possibilities to produce advanced compression socks with graduated compression and functional materials.

The increased use of compression socks among athletes aroused an interest from scientists to explore what the real benefits are from using compression in sports. Many studies have been done to find out if the use of compression can have an impact on performance and recovery. With the attempt to answer the question: Is there evidence that runners can benefit from wearing compression socks? A review of studies on the subject was made by researchers

Engel, Holmberg and Sperlich and published in Sports Medicine December 2016. When going through relevant studies the conclusion was that the main gains for runners using compression socks are less muscle soreness, damage, and inflammation in muscles after running. In other words, there are large positive effects on recovery after exercise. Thanks to our know-how we realize the Compression Sport Socks with these features.

[www.sanyleg.com](http://www.sanyleg.com)  
[sanyleg@sanyleg.com](mailto:sanyleg@sanyleg.com)  
Visit us at: Arab Health 2021,  
Booth R.F01



## ELITE LINE - Advanced Automated Processors - ELISA - IFA - BLOT



The most advanced and sophisticated automated processors to facilitate and expedite the analytical development of autoimmune-allergen & others tests carried out on Microplates, Slides or Strips.

The processors fully automated and powered by the well-known DAS' original solutions, have all built-in functions, software inclusive.

Main characteristics: easy installation, user friendly, precision, reliable & fast, easy maintenance, flexible, effective technical support provided.

All systems can be configured according customer needs.

[www.dasitaly.com](http://www.dasitaly.com)  
[commercial@dasitaly.com](mailto:commercial@dasitaly.com)  
Visit us at: Virtual Medlab 2021



## Gemavip Ialozon Blu Mouthwash: Ozone Therapy at home



Gemavip is pleased to present Ialozon Blu, an innovative mouthwash that can be used every day and several times a day for its multiple beneficial and therapeutic effects. It does not contain alcohol and chlorhexidine.

The innovative element is the OZONIZED EXTRA VIRGIN OLIVE OIL which has long-lasting antiseptic properties (6/8 hours): anti-inflammatory, anti-edema, haemostatic, anesthetic combined with a moisturizing, regenerating and oxygenating action, suitable for all phases of the healing and of its maintenance; moreover, its constant use does not generate extrinsic discoloration.

It also contains: Hyaluronic Acid, Vitamin E, Aloe Vera and Rhatany.

Our team has managed to stabilize the ozone, to bind it in a lipid vehicle, the extra virgin olive oil, this has allowed the creation of a very effective product that is partially absorbed by the mucosa without any side effect. Moreover it normalizes the bacterial load of the oral cavity solving problems of halitosis.

**We are looking for distributors!**

[www.gemavip.com](http://www.gemavip.com)  
[info@gemavip.com](mailto:info@gemavip.com)

## T7 Ventilator

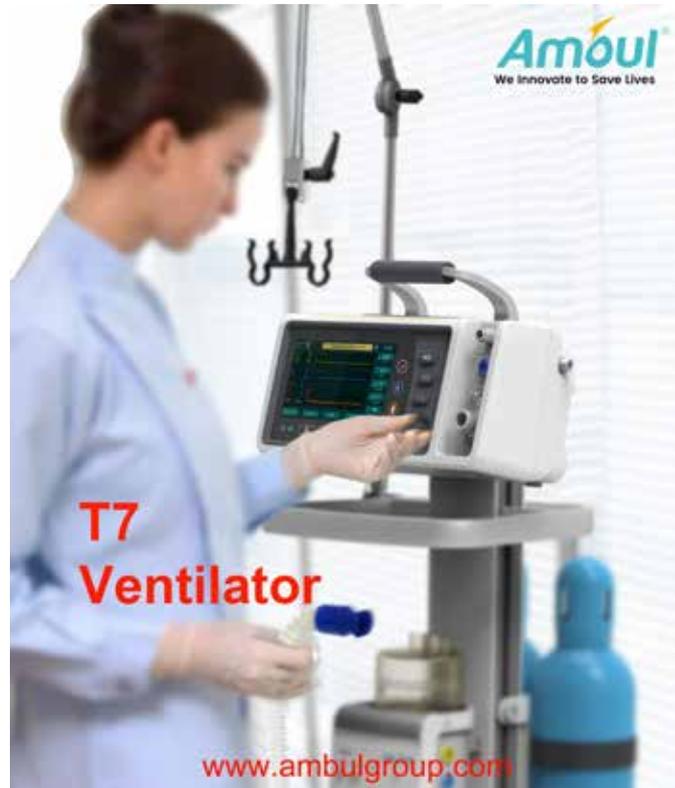
AMBULANC (SHENZHEN) TECH.CO.,LTD is dedicated to developing life support total solutions, and manufacturing medical emergency and critical care devices like ICU & Transport ventilators, AED, Auto-CPR, sedation stations, Laryngoscope etc.

Ambulanc owns 230 Patents and 13 CFDA certificates for Class II and Class III medical equipment. A range of international certifications as well like ISO13485, FDA, EU CE, Canadian MDL and AU TAG etc. The exports covering over 100 countries around the globe.

Amoul® T7 Ventilator is high-end multipurpose 5G ventilator for rescue site, air ambulance and in ICU room. 17 ventilation modes available for all kind of patients. 7" display with user-friendly interface. The Tidal Volume ranges 20-2500ml with O2 concentration 40%~100%. Integrated with Internal PEEP valve. T7 supports Non-Invasive & Invasive ventilation with HFNC mode suitable for Covid 19 patients. Rechargeable, working time over 5 hours, compact size and waterproof IPX4.

[www.ambulgroup.com/en](http://www.ambulgroup.com/en) // [info@ambu-lanc.com](mailto:info@ambu-lanc.com)

Visit us at: Arab Health 2021



PREMIUM HIGHLIGHTS

**VILLA**  
radiology ahead

**Armonicus**  
compact | fast | global

Villa Sistemi Medicali SpA | [vsmmkt@villasm.com](mailto:vsmmkt@villasm.com) | [www.villasm.com](http://www.villasm.com)

Infomedix International | 2 2021

## RF line: a wide range of solutions for definite diagnosis

GMM offers an extensive and differentiated range of RF remote-controlled systems: starting from the simple and compact OPERA Evolution to the more complete and performing OPERA Sharp and Clisis Evolution and, as top of range, the extraordinary multifunctional "all in one" system OPERA Swing. All our solutions have been conceived to offer the best user experience ever. The innovative structural design simplifies transferring stretched patients ensuring an immediate intervention in emergency applications. Thanks to their cutting-edge ergonomics, all systems provide the most advanced features to optimize image quality and consistent dose reduction. User-friendliness, as well as an unrivalled operational efficiency in any kind of diagnostic procedure: skeleton, thorax, gastroenterology, gynaecology, paediatrics, emergency, angiography, tomography, tomosynthesis, stitching and dual energy.

Wide range of accessories, state-of-the-art digital flat panel detector, powerful image processing, advanced UI, fully DICOM: a complete line for any diagnostic needs.

[www.gmmspa.com](http://www.gmmspa.com)

[info@gmmspa.com](mailto:info@gmmspa.com)

Visit us at: Smart Medical Fair 2021

[www.smartmedicalfair.com/stand/h4p4b5z1516](http://www.smartmedicalfair.com/stand/h4p4b5z1516)





Inspired by radiology

MAC

SYMBOL

GIOTTO Class

KALOS

CALYPSO F

MED VET

OPERA SWING

OPERA Evolution

CLISIS Evolution

CALYPSO Evolution fully automatic










[www.gmmspa.com](http://www.gmmspa.com)

## Giotto Class S - Productivity combining innovation and quality in the breast care

Giotto Class S is a versatile system that can be configured for 2D or/and 3D breast tomosynthesis imaging choosing between different options, accessories and advanced interventional applications like high-precision tomo-guided biopsy or contrast enhanced spectral mammography, including an integrated biopsy specimen checker. It features a unique, particularly ergonomic design which ensures patient comfort and user-friendliness for the operator. The C-arm stand enables a wide freedom of inclination: it can be tilted downwards and upwards to maximize patient comfort and breast positioning. The system is easy to use and fits small places offering high throughput thanks to the increased speed of gantry's movement and positioning. IMS Giotto is a company of GMM Group.

[www.imsgiotto.com](http://www.imsgiotto.com)  
[imscomm@imgiotto.com](mailto:imscomm@imgiotto.com)

Visit us at: **Smart Medical Fair 2021**  
[www.smartmedicalfair.com/stand/h4p5b5z1517](http://www.smartmedicalfair.com/stand/h4p5b5z1517)





**IMS Giotto**

**Design  
Technology  
Ergonomy  
Never seen.**

**ALL-IN-ONE-SYSTEM**

- TOMOSYNTHESIS
- SYNTHETIC VIEW
- 2D MAMMOGRAPHY
- TOMO-BIOPSY in PRONE or UPRIGHT POSITION
- DUAL-ENERGY

**Giotto Class**  
The new dimension in Tomosynthesis and Breast Biopsy

**IMS Giotto S.p.A.**  
[www.imsgiotto.com](http://www.imsgiotto.com)  
[imscomm@imgiotto.com](mailto:imscomm@imgiotto.com)

 **GMMGROUP**



## New Life Radiology

NEW LIFE RADIOLOGY presents **ALOZON UVC PLUS**, its **PROFESSIONAL OZONE GENERATOR WITH BUILT-IN UVC PHILIPS LIGHTS** (18,36,48 WATT) for a perfect sanitization of environments, objects, surfaces and fabrics and also a complete air purification: **TWO DEVICES IN ONE!** Its technology allows you to sanitize and purify any space in a short time, in absolute comfort and with high performances. Furthermore, it ensures hygienic-sanitary conditions in compliance with ECC regulations. The oxygen from the surrounding environment enters the machine device, oxygen is transformed into ozone, which eliminates 99,9% of viruses and bacteria present on any type of object, surface and fabric. Once the environment has been sanitized, the system quickly converts the ozone into oxygen. This while UVC light guarantees a continuous air purification, even in presence of people. Easy interaction with ALOZON thanks to the dedicated APP; ALOZON works also with Google Home and Alexa.

[www.newliferadiology.it](http://www.newliferadiology.it)  
[info@newliferadiology.it](mailto:info@newliferadiology.it)

Visit us at: **Smart Medical Fair 2021**,  
[www.smartmedicalfair.com/stand/h4p1b2z2267](http://www.smartmedicalfair.com/stand/h4p1b2z2267)

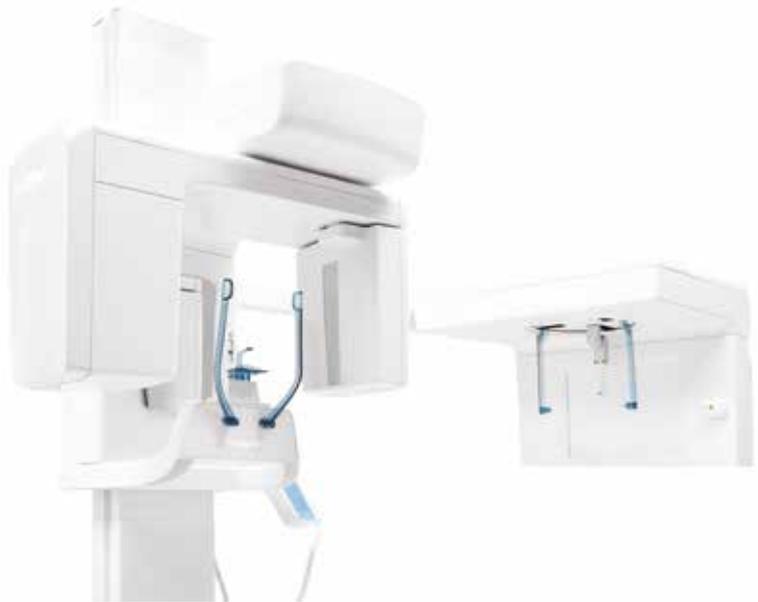
## X-VIEW 2D PAN CEPH DR

The 2-in-1 model of the X-VIEW family is a multifunctional and integrated system that puts the advantages of 2D and cephalometric imaging within the reach of the general dentists, periodontists, orthodontics and other specialists working from medium offices to hospitals and clinics. X-VIEW 2D PAN CEPH incorporates a high-frequency generator and a noise- and imperfection-free acquisition system, providing high quality clinical images.

### Two detectors for Workflow optimization

In addition to the CMOS scanning detector for all 2D images, X-VIEW 2D PAN CEPH is equipped with a dedicated DR flat panel detector for Ceph images acquisition. The DR (Digital Radiography) version is the highest quality technology available to obtain sharp images:

- Better contrast
- More details and filtering
- No background disturbance
- Exposure time: 200-500ms
- Reading time: immediate
- Detector-PC image transmission: 2sec
- Image store after shot: 200
- Calibration Method: easy intuitive and manageable from remote

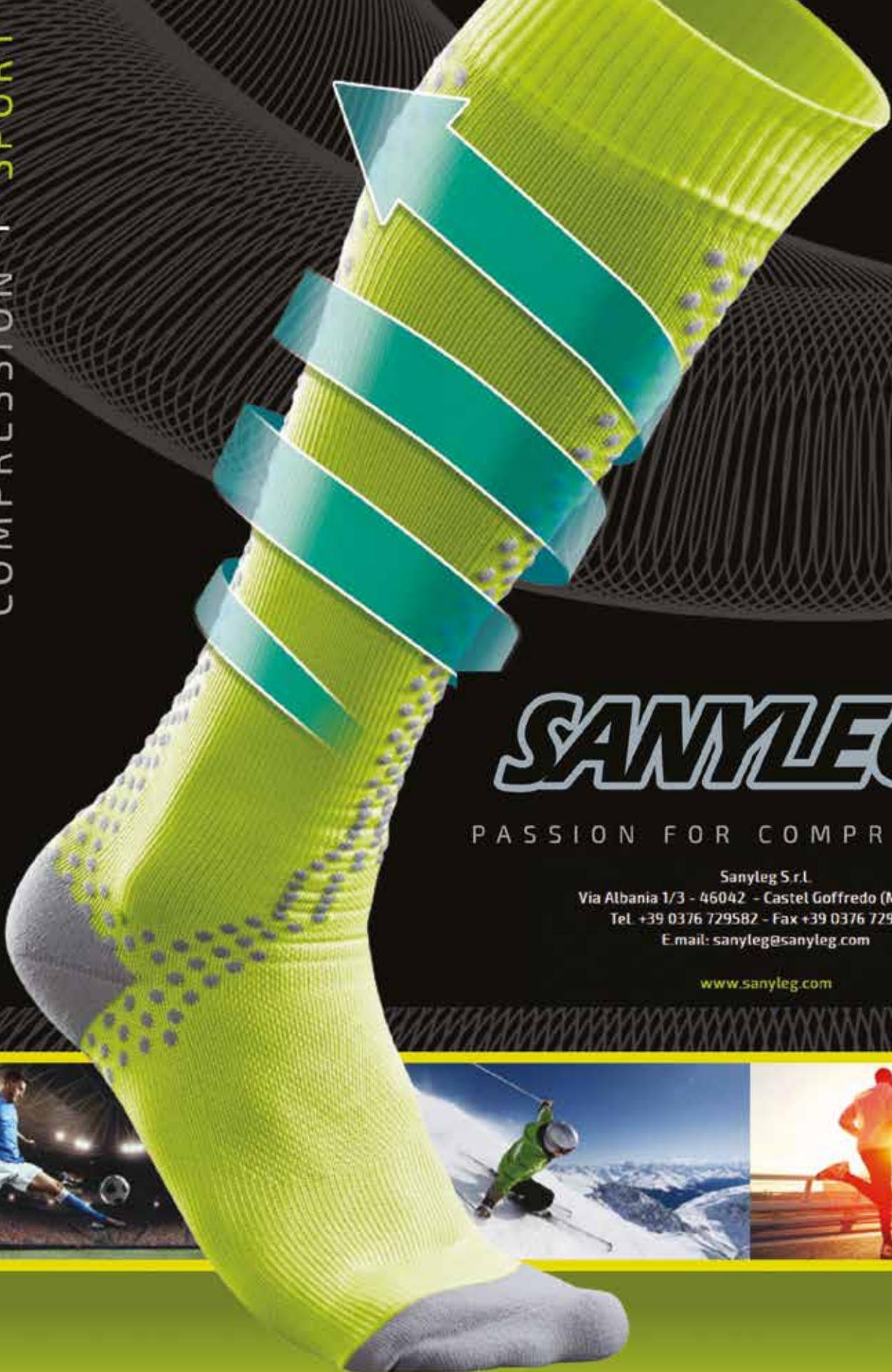


Two detectors reduce the risk of damages and prolong the useful life of your unit.

[www.trident-dental.com](http://www.trident-dental.com)  
[info@trident-dental.com](mailto:info@trident-dental.com)

**trident**  
 discover a world of images

COMPRESSION + SPORT



# SANYLEG

PASSION FOR COMPRESSION

Sanyleg S.r.L.  
Via Albania 1/3 - 46042 - Castel Goffredo (Mantova)  
Tel. +39 0376 729582 - Fax +39 0376 729584  
E-mail: [sanyleg@sanyleg.com](mailto:sanyleg@sanyleg.com)

[www.sanyleg.com](http://www.sanyleg.com)



IMPROVE YOUR PERFORMANCE

# The diagnostics of the future is now a reality



Quantic is an advanced DR fluoroscopic equipment design to satisfy the flexibility requests of the applications allowing doctors to care with ease, precision and flexibility. The full motorized C-arm assures possibility to work with FPD above and below the combined table with which it has synchronized movements. By an innovative DR software, in only one system are suitable all the examinations in radiology, radiography and diagnosis oriented such as traumatology, pediatrics, interventional application, operating theater, respiratory system, gastroenterology, skeletal structure, electrophysiology studies, angiographic procedures, vascular surgery, endovascular applications, neuroradiology. In particular, the isocentricity of the C-arm motorized movement is design for the 3D reconstruction of the spine and lower limbs. The strength of the system is achieved thanks to the integration of fluoroscopy and radiography in one system with a user-friendly interface.



[www.technix.it](http://www.technix.it) // [info@technix.it](mailto:info@technix.it)

X

## X-RAY IMAGING SYSTEMS

TCA7 COMPACT

TMB400 DR

**TECHNIX S.P.A. || [www.technix.it](http://www.technix.it) || [info@technix.it](mailto:info@technix.it)**

## Innovative Endoscopy Components, LLC Premium Endoscope Repair Parts



Innovative Endoscopy Components, LLC has been the ISO13485/ISO9001 Certified vendor of choice to hundreds of endoscope service facilities and dealers worldwide, for over 21 years.

Our product range and services are constantly growing with international demand. Rapid prototyping, optical assemblies, injection molding, and CNC machined parts are offered just like OEM endoscope and equipment labeling as well as CCD repair and multilingual repair training and consulting.

Please contact us: Innovative Endoscopy Components, LLC: 320 International Parkway, Fort Lauderdale, FL 33325, USA Tel: 954-217-8780, Fax: 954-217-8781

[www.IECendoscopy.com](http://www.IECendoscopy.com)  
[info@endoscopy.md](mailto:info@endoscopy.md)



Visit us at: Smart Medical Fair 2021, [www.smartmedicalfair.com/stand/h4p3b1z1553](http://www.smartmedicalfair.com/stand/h4p3b1z1553)

## Spectra Medical Devices



In 2020 Spectra Medical Devices is celebrating its 25th anniversary as one of the largest procedural needle manufacturers in the world, with substantial market share in over 40 countries. Spectra utilizes the latest state-of-the-art manufacturing, measuring and inspection systems, along with over 225 years of senior staff needle-manufacturing experience. Spectra has been awarded several U.S. patents for



special needle processing and products, as well as U.S. FDA medical device clearances and drug approvals for lidocaine and sodium chloride.

In the future we will be offering several more similar drugs as well.

Our primary focus is on patient safety and achieving substantial growth through quality and innovation. Spectra has five manufacturing plants worldwide, employing over 300 personnel. Our corporate headquarters is located in Wilmington, Massachusetts.

[www.spectramedical.com](http://www.spectramedical.com)  
[sales@spectramedical.com](mailto:sales@spectramedical.com)

Visit us at: Smart Medical Fair 2021, [www.smartmedicalfair.com/stand/h6p1b4z3501](http://www.smartmedicalfair.com/stand/h6p1b4z3501)

### Leading Edge Medical Devices

As a world leader in needle production and innovation, Spectra Medical Devices has been improving healthcare around the world since 1995



[www.spectramedical.com](http://www.spectramedical.com)  
[sales@spectramedical.com](mailto:sales@spectramedical.com)



## JET DR: Our motorized digital radiographic unit

Our motorized digital radiographic unit JET 32 PLUS DR is finally made available for our international dealer network. This unit is supplied with a wi-fi 35x43cm flat panel detector (brand: Canon) and a powerful and versatile Workstation, also battery-powered, through which the operator can set the generator for the acquisition of the images along with their visualization, post-processing and manage the DICOM connectivity as well. Charging the battery pack is extremely easy and quick with a resulting motion autonomy of about 10km and an exposure autonomy of about 450 shots. Come



find out some more information on our website and feel free to contact us for more detailed commercial and pricing details!



[www.bmibiomedical.it](http://www.bmibiomedical.it)

[info@bmibiomedical.it](mailto:info@bmibiomedical.it)

Visit us at: **Arab Health 2021, Booth H3.E59**

## EDGE M Multi-Specialty Examination and Surgery Chair



EDGE M is BTC ultimate concept of Multi-Specialty Examination and Surgery Chair; it is the result of innovative technical and engineering solutions that enable the Professionals to perform any examination and treatment in the outpatient and/or Ambulatory Surgery Centres.

EDGE M can be equipped with multiple accessories providing the perfect working tool for Ambulatory Day Surgery, Hair-Transplant FUT & FUE, Bariatric and Surgical Podiatry, ENT, Gynaecology/Urology, Oral and MaxilloFacial Surgery, Dermatology and Aesthetic Surgery, General Examination and Minor Procedures.

Edge M is conceived in a solid metal structure and operated with 3 silent linear actuators and one telescopic column by a Wireless Multifunction Foot Control with Sync Function, Patient Entry-Exit Function and 2 Memorizable Working Positions Function. The upholstery comprises 4 separate padded fully detachable sections for easy disinfection made of high density undeformable foam and the cover is a bi-elastic medical grade Skai.

[www.btc-med.it](http://www.btc-med.it)

[btcmmed@btc-med.it](mailto:btcmmed@btc-med.it)

Visit us at: **Arab Health 2021, Booth Z2.G18**



Innovative Medical Solutions



# All the nuances of radiology.



## SANITIZATION PRODUCTS

NEW

ALOZON UVC PLUS  
Professional ozone generators  
(10g/h, 20g/h, 40g/h models)  
with built-in UVC lamps  
(18,36,48 WATT)



www.newliferadiology.it



**INTRAORAL  
X-RAYS**



**INTRAORAL  
SENSORS**



**PHOSPHOR PLATE  
SCANNERS**



**DIGITAL PANORAMICS  
AND CBCT**

## New Life Radiology

Corso Giuseppe Canonico Allamano 13/15 Int. G  
10095 | Grugliasco (TO) | Italy

info@newliferadiology.it  
www.newliferadiology.it



## Biegler

Biegler GmbH based in Austria/Europe extends its product line of blood and infusion warmers with the device **BW 410**.

At a glance:

- Adjustable temperature
- Consumable inserted through the side
- Easy to open and cleanable design
- Mounting on infusion stand or normed rail
- Consumable available with integrated bubble trap
- Continuously operating safety and alarm systems

You are invited to learn more about Biegler at [www.biegler.com](http://www.biegler.com)

[www.biegler.com](http://www.biegler.com)  
[office@biegler.com](mailto:office@biegler.com)

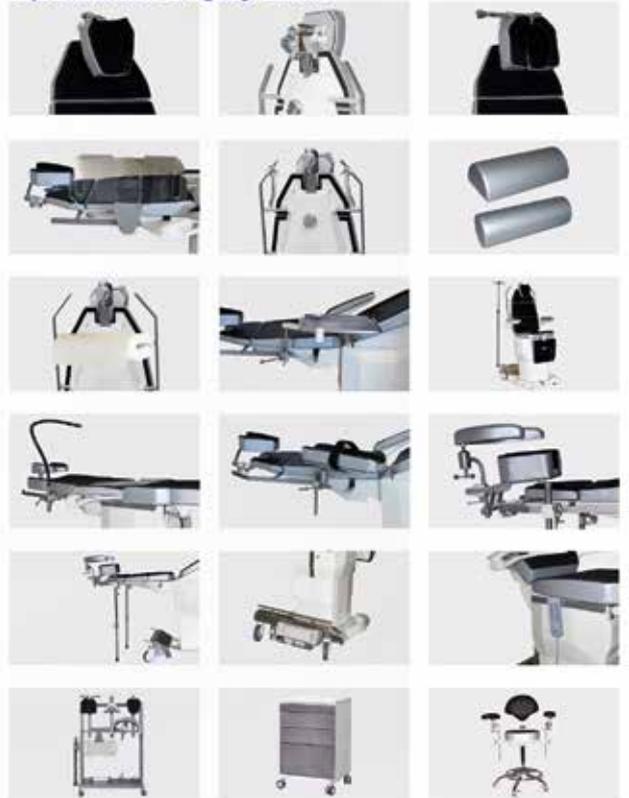
Visit us at: Arab Health 2021, Booth SA.J19

## EDGEo



Innovative Medical Solutions

### Ophthalmic Surgery Chair



**BTC SRL**

[www.btc-med.it](http://www.btc-med.it) - [btcmmed@btc-med.it](mailto:btcmmed@btc-med.it)



C52S

C100

C30

ALL YOU NEED IS

iae 



C31



C339



CT



C100XT

[www.iae.it](http://www.iae.it)

## STERIL MAXIMUM - Class B autoclave designed and manufactured according to EN13060.

Built-in vaporizer, which generates overall energy savings thanks to more rapid cycles and consequent drastic reduction in water and energy consumption. Stainless-steel chamber. Large graphic display, a complete management and control software, make the autoclave extremely user-friendly: each single operation may be displayed in more than 10 different languages which can be selected and set up through the user menu. Built-in printer, electrical door lock and internal connection settings for water purification system. The MTS (Memory Test System) is a technical backup which has been developed to assist the user with more reliable and faster diagnosis, reducing as a consequence the management costs. 10 different sterilization cycles and 2 test cycles ("Vacuum Test" and "Helix/Bowie&Dick Test"). It is possible to select both type-B cycles (6, with fractioned vacuum) and type-S cycles (4, with pre and post vacuum), according to the type of material to be sterilized.



### BMS DENTAL S.r.l.

Via M.Buonarroti, 21-23-25  
Z.Ind.le 56033 CAPANNOLI (PISA) ITALY  
Tel : +39 0587 606089 Fax: +39 0587 606875

[www.bmsdental.it](http://www.bmsdental.it)  
[info@bmsdental.it](mailto:info@bmsdental.it)

Visit us at: Smart Medical Fair 2021, [www.smartmedicalfair.com/stand/h4p6b5z1522](http://www.smartmedicalfair.com/stand/h4p6b5z1522)







**JOLLY-PLUS**  
Mobile Radiographic Unit



**BCA-PLUS**  
Digital Mobile C-Arm



**DR**  
Radiographic system



**Milady**  
Mammographic Unit





BMI Biomedical International s.r.l. Via E. Fermi 52 O/R - 24035 Curno (BG) - Italy - Tel. +39 035.43.76.381 - [info@bmibiomedical.it](mailto:info@bmibiomedical.it)






Made in Germany

# We create solutions for professionals



Product overview  
available for download



- Histology
- Pathology
- Anatomy
- Veterinary
- Forensic Medicine



info@KUGEL-medical.de

## Ventilated Laboratory bench with recirculation air system



Over the years, air purifying and recirculation systems with active carbon filter technology have gained more and more importance as there is not always the possibility to connect the respective equipment to a site-mounted ventilation system. With that in mind, we designed various solutions with active carbon filter systems.

All our tables guarantees a laboratory environment free of pollutants while slicing and preparing histological slide preparations.

Airflow travels over the entire working area and is vacuumed out downwards which provides optimal removal of unsanitary vapours.

MAC (maximum allowable concentration) values for formalin are below target throughout the entire vacuum-effected area. Unit's including a recirculation air system with a activated carbon filter as well as a HEPA Filter. The complete cabinet is manufactured in sound-proofed design for optimal noise reduction Just like our motto „We create solutions“ set up, plug in and let's work.

[www.KUGEL-medical.de](http://www.KUGEL-medical.de)

[Info@KUGEL-medical.de](mailto:Info@KUGEL-medical.de)



## Villa presents the new Armonicus 2.0

The new Armonicus 2.0 represents the best U-arm solution by Villa: a modern and efficient system integrating all our knowledge on DR products and providing its effectiveness for all radiology departments.

Featuring a redesigned stand with extensible U-arm, Armonicus 2.0 now can be chosen with integrated or Wi-Fi flat panel detectors and can be customized in all its principal parts, with an extensive offer of generators, collimators and X-ray tubes. As long as user-friendliness and patient safety are our top priorities, Armonicus 2.0 features a simplified user interface based on a big touch screen with multi-functional activation buttons, while an advanced AEC system grants the delivery of an appropriate dose to any patient. Moreover, it can now automatically perform in sequence exposures, stitching them together for fast and effortless execution of full leg and full spine examinations. Armonicus 2.0 can be easily installed even in narrow spaces thanks to its unique design.

[www.villasm.com](http://www.villasm.com)

[vsminfo@villasm.com](mailto:vsminfo@villasm.com)

Visit us at:

- Arab Health 2021, Italian Pavilion, Hall Z2, Booth E39
- Smart Medical Fair 2021,  
[www.smartmedicalfair.com/stand/h4p1b1z1241](http://www.smartmedicalfair.com/stand/h4p1b1z1241)





*Our satisfaction is yours.*



Disinfection



Cleanmed Hand-gel



Bowie and Dick Test



Sterilization

*and much more*

## Medifuge MF 200: a special blood separator for tissue and bone regeneration, platelets + concentrated growth factors



The Silfradent Medifuge MF200 is a dedicated medical plasma blood separator. It is designed to prepare autologous concentrated growth factor (CGF) and CD 34 + cells using patient's own blood which is the ideal autologous source without the addition of exogenous substances. CGF represents a new generation of platelet that able to hold inside a higher concentration of autologous. Growth factors are proteins which regulate the complex processes of wound healing and enhance the body's healing abilities without side-effects. The Medifuge prepares up to 8 test tubes of various levels of concentrate with active proteins in liquified or Fibrin form to create membranes, glue or other particulars for tissue regeneration and bone augmentation in a short period of 12 minutes. These features, together with the simple and standardized centrifugation protocol MEDIFUGE, make the CGF a superior autologous product which can be used in different areas of regenerative surgery; for example in dentistry, maxillofacial surgery, cosmetic surgery and orthopaedics.

[www.silfradent.com](http://www.silfradent.com)  
[www.cgfregenerativemedicine.com](http://www.cgfregenerativemedicine.com)  
[info@silfradent.com](mailto:info@silfradent.com)

Visit us at: Smart Medical Fair 2021, [www.smartmedicalfair.com/stand/h1p3b5z1376](http://www.smartmedicalfair.com/stand/h1p3b5z1376)  
[www.smartmedicalfair.com/stand/h4p3b5z1401](http://www.smartmedicalfair.com/stand/h4p3b5z1401)

## RelaxSan ESSENTIAL+ the Revolutionary Patented Compression Socks



Something more compared to traditional compression stockings. Essential+ is a revolutionary, with high technological content Compression Socks. A double fabric layer provides adds elasticity for improved fit and enhanced comfort for everyday wear. The inner cotton and cashmere lining guarantees a remarkably soft sensation on skin, whereas the outer microfibre layer provides a pleasant sensation of elegance and resistance to the touch. Product comfort is immediately perceptible during wear: thanks to the absence of the stretch trim edge around the knee, no marks are left on skin and the fit encourages better circulation. Micro Cotton sponge under the foot to protect and comfort and X-Static silver fiber around the foot to guarantee a bacteriostatic and anti-odour effect. Perfect to be used in everything you do, at home, at work and for travel. Products developed and produced 100% in Italy.

[www.gtcalze.com](http://www.gtcalze.com)  
[cristiano@relaxsan.it](mailto:cristiano@relaxsan.it)

Visit us at:  
 • FIME 2021, Italian Pavilion  
 • Smart Medical Fair 2021,  
[www.smartmedicalfair.com/stand/h3p1b2z2375](http://www.smartmedicalfair.com/stand/h3p1b2z2375)

**Essential+**  
*In everything You Do*

- 01 MEDICAL DEVICE
- 02 DOUBLE LAYER
- 03 100% SILVER PROTECTION
- 04 NO LACE EFFECT
- 05 SOFT TOUCH
- 06 COMFORT AND RESISTANCE

Discover all the features

## NewTom has yeat again pushed back the boundaries of medical imaging

# NewTom

A global benchmark in the field of diagnostic imaging technologies, NewTom was the first company to introduce Cone Beam technology into the dental sector with a pioneering range of CBCT units. Today, NewTom is a vast array of clinical solutions for both medical, dental and veterinary diagnostics. A trusted brand delivering state-of-the-art equipment and providing professional support and service around the globe. NewTom has extended the boundaries of medical imaging, introducing the most advanced diagnostic devices capable of micrometric, ultra-high-resolution detail of bone structure, covering all anatomical areas, from Head & Neck examinations to ENT, MSK for orthopaedics as well as dental maxillofacial radiology. In each area NewTom has led the field, innovating through technology and, as a benchmark within the market, driving scientific trends. Patented algorithms, advanced functions for imaging, as well as a host of features devoted to reducing the effective dose, thereby safeguarding the health of operators and patients alike, are just a part of the innovations achieved through NewTom's constant commitment to technological excellence. All devices are supported by powerful DICOM 3.0 compatible NNT software which can interface with third party systems and software to store and exchange medical data. Discover the NewTom 7G, the first ever Multi-Scan Body CBCT, available today!



[www.newtom.it/en/medicale](http://www.newtom.it/en/medicale)  
[info@newtom.it](mailto:info@newtom.it)

Visit us at: Smart Medical Fair 2021,  
[www.smartmedicalfair.com/stand/h4p2b6z1434](http://www.smartmedicalfair.com/stand/h4p2b6z1434)





## A world first from Silfradent research team: Regenerative medicine

The CGF (Concentrated Growth Factors) initial popularity grew from its promise as a safe and natural alternative to surgery. The CGF promoters supported the procedure as an organism-based therapy that allowed healing thanks to its own natural growth factors.



### Doctor Paola Pederzoli

*specialist in dentistry, dental prosthetics and aesthetic medicine.*

*She organizes courses in aesthetic medicine by Silfradent Academy company  
pederzoli.paola@gmail.com*

In recent years, scientific research and technology provided a new perspective on platelets. Studies suggest that platelets contain abundance of growth factors and cytokines which can affect the inflammation, the post-operative blood loss, the infection, the osseogenesis, the wound, the muscle laceration and the soft tissue healing.

Research now shows that platelets release also numerous bioactive proteins responsible for the attraction of macrophages, mesenchymal stem cells and osteoblasts that not only promote the removal of degenerated and necrotic tissues, but also improve tissues regeneration and healing.

In regenerative medicine, three factors are important to optimize the regenerative process: the scaffold (biological, natural or synthetic), growth factors and autologous cells. All the above is present in CGF. CGF is obtained following a process of blood separation collected in vacuum tubes, using a special medical device (Medifuge, Silfradent Srl, Italy). The CGF technology has an interesting characteristic: the centrifugation simplicity and speed, allow a more elastic matrix of fibrin glue rich in growth factors. Using SEM analysis (Electron Scanning Electron Microscopy), Rodella and associates (University of Brescia) showed the presence of a fibrin network formed by thin and thick elements with numerous platelets trapped in the network itself, representing an optimal autologous scaffold. In addition to the growth factors released after the platelets activation and degranulation, we also count the vascular endothelial growth factor (VEGF), the insulin growth factor (IGF), the transforming growth factor (TGF), the tumour necrosis factor (TNF), the brain-derived neurotrophic factor (BDNF) and the presence of TGF- $\beta$ 1 and VEGF.

In recent years, scientific research and technology provided a new perspective on platelets.

"APAG" DENATURATION DEVICE  
- A.P.A.G. Activated Plasma Albumin Gel  
- I.C.F. Induces Collagen Formation  
Built with anti-static and anti-magnetic materials.  
Operations with heating pulse and thermal equilibrium temperature



The presence of autologous cells like platelets and leukocytes, including CD34+ cells, have been described in the CGF. The histochemical evidences indicate the role of CD34+ cells, circulating on vascular level: neovascularization and angiogenesis. The presence of these cells in the PRP benefit the tissue re-growth. The CGF has a good regenerative capacity and various fields of application. The use of Platelet-rich Plasma (PRP) has already been for years a reality and a scientific evidence verified by the international medical community for plastic surgery in the treatment of severe burned cases. Plastic surgeons and their patients benefit greatly from tissue regeneration through PRP, obtaining a clearly superior recovery both in tissue quality and healing speed.

In Maxillary facial surgery and Implantology, the potentialities of CGF Concentrated growth factors have been known for years. Its application helps and stimulates the bone regeneration both in managing endosseous implants and in the healing of difficult fractures.

This is a well-documented and effective procedure. Already in 1970, using PRP it was proven a 20% increase in the trabecular bone density, a 40% reduction in healing times and an 80% decrease in pain levels.

Researcher have investigated this effect also in periodontal problems. Conclusions reported that PRP technique represents a rich source of growth factors able to bring significant changes in periodontal damages and it is capable to suppress the cytokines release, limit inflammation and promote in such way the tissue regeneration.

Orthopaedic surgeons know well how the speed of healing processes for tendons and articular surfaces traumas improves thanks to the use of PRP platelets Growth Factors.

The CGF is now used in musculoskeletal medicine with increasing frequency and effectiveness. Soft tissues injuries, such as tendinopathies and tendinitis, have been treated with PRP since the early '90s.

The PRP has also been used for the treatment of muscle fibrosis, ligament distortions, joint



"MEDIFUGE MF 200"

Blood Separator

- Differentiated acceleration
- Speed and fractional - alternating RCF (does not allow the platelet degranulation)
- Anti-static and anti-magnetic rotor
- Constant temperature maintained by self ventilation / self decontamination

capsular laxity and in intra-articular injuries like arthritis, arthrofibrosis, injuries of the articular cartilage, meniscus injuries, chronic synovitis or joints inflammation.

Retrospective assessment in patients treated with a single injection of PRP for chronic tendinopathy, revealed that 78% had a clear clinical improvement within 6 months, avoiding surgical intervention.

"Excellent results were found also in the healing of skin sores in diabetic subjects."

In short, a valid technique that optimizes the healing processes of every tissue where it is applied. With the CGF technique instead, all that is necessary for our regeneration is autologous therefore already within us and we make it work for us. In the dermatological field CGF is used for alopecia (bulbar implants and mesotherapy). It's



## In Maxillary facial surgery and Implantology, the potentialities of CGF concentrated growth factors have been known for years.

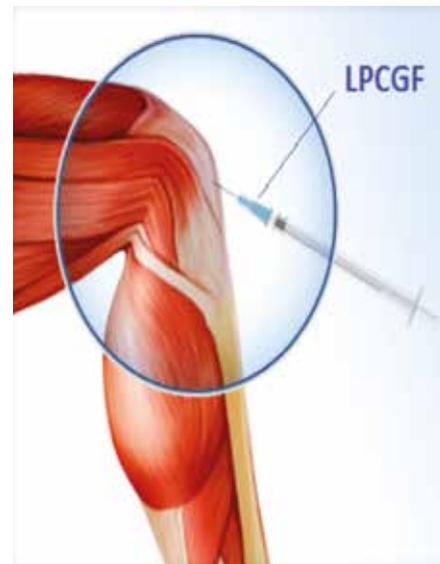


clear that it opens a new and exciting chapter, a true revolution in the field of aesthetic medicine: the application of the Platelet Growth Factor for skin rejuvenation through the stimulation of skin regeneration.

The growth factors contained in the platelets are able to stimulate various cellular mechanisms like the proliferation and migration of fibroblasts (dermis functional units!) and the synthesis of collagen, recalling and reactivating the stem cells present in the area we are treating, improving the skin condition. It is important to point out that the Platelet Growth Factor CGF Treatment is not a mere aesthetic treatment, but a biological method that tends to restore the best vital conditions of our skin with an excellent improvement of the skin's aesthetic and an optimization of the cutaneous physiological parameters. The number of platelets, concentration and release of the growth factors, strongly depend on the type of kit used, on how the platelets are activated and on the centrifuge used.

Could modern Aesthetic Medicine not benefit of this miraculous solution?

Aging is not only made of wrinkles. Flattened cheekbones add various years to the ID as well. Luckily, today we can earn back fullness and



turgidity typical of youth without falling into the unpleasant "pillow face" effect, showed by many stars.

The technique is ESSENTIAL!

We can create a volumizing filler (A.P.A.G.) using a component (PPP) to reach, with thermal impulses, a high temperature (75°) to obtain a gel that, once cooled down will be mixed with CD34+.

Or we can obtain a filler that creates an aged collagen reconstruction bringing the PRP to 44°, again with thermal impulses. Therefore, with a simple peripheral venous blood sample we can create:

- L.P.C.G.F. for cutaneous BIOSTIMULATION
- I.C.F. for collagen RECONSTRUCTION
- A.P.A.G. to create a filling effect

At the end of the first session, all patients are given a kit containing mask, cream and lotion, with the addition of growth factors to prolong the treatment effect, for home care maintenance. It is recommended to respect the protocol: three treatments over a two months period, the fourth after six months, the fifth at the end of the year and a maintenance treatment every year. The whole treatment is relatively painless; a topic anaesthetic can be applied, twenty minutes before the injection.

[www.silfradent.com](http://www.silfradent.com)  
[info@silfradent.com](mailto:info@silfradent.com)



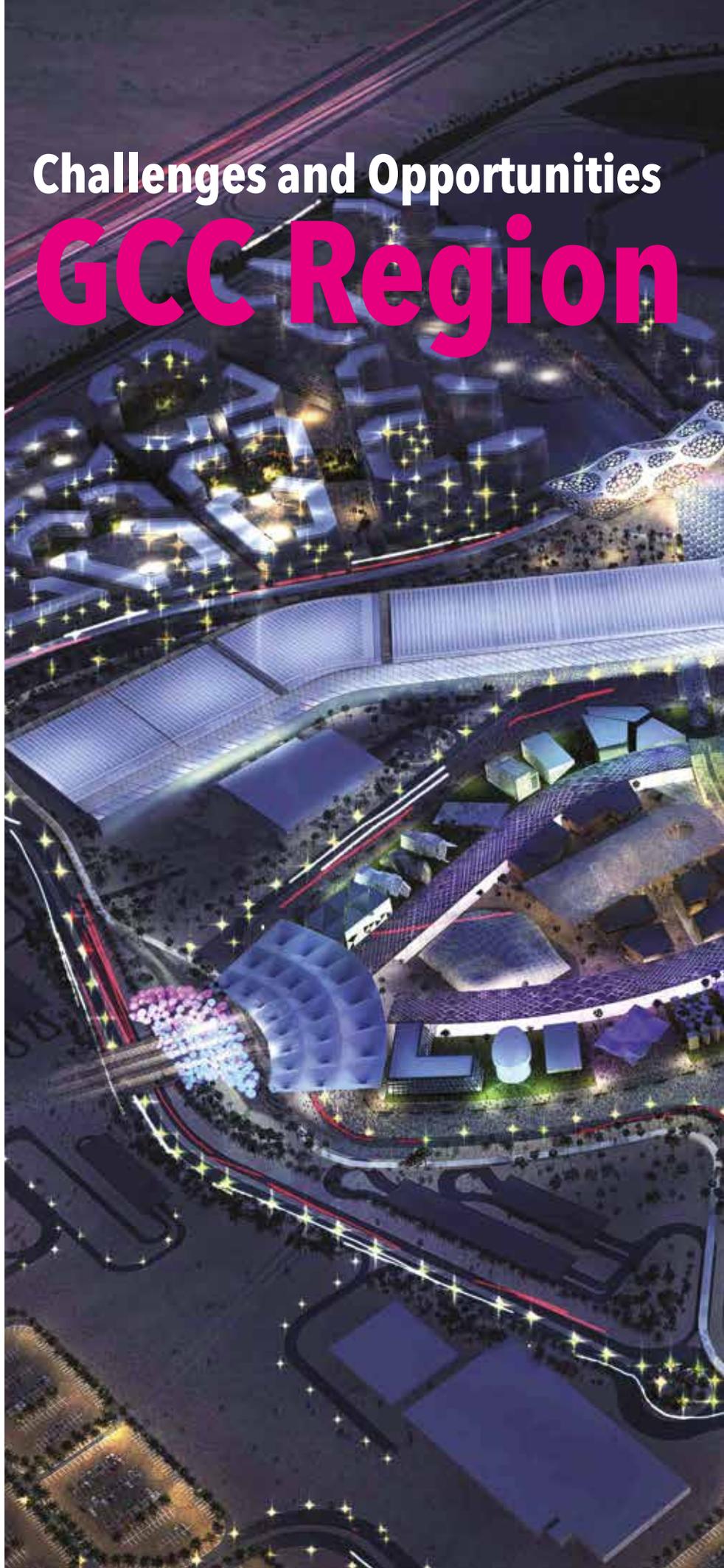
**Author: Silvia Borriello**  
Editorial Director  
[silvia.borriello@infodent.com](mailto:silvia.borriello@infodent.com)



*Ageing population, high prevalence of NCDs, focus on preventive care and quality enhancing reforms are reshaping the GCC healthcare industry.*

*A post pandemic expected economic recovery, coupled with favorable policy changes, will offer interesting growth opportunities to investors that will continue to consider the GCC health sector as a safe haven.*

# Challenges and Opportunities GCC Region





The Gulf Cooperation Council (GCC) is an inter-governmental organization made up of six member nations, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). Significant investments in healthcare infrastructure by GCC governments were observed in the past 25 years in the form of large medical cities and complexes. This increase in hospitals and clinics raised the quality of healthcare services in the region, reflecting a rise in health status. According to WHO World Health Statistics, the life expectancy in GCC countries has increased to 77.2 years in 2018, with Qatar topping the region, and infant mortality decreased to 6.9 deaths per 1,000 live births in 2018, from 8 in 2013.

Growing at a faster annual rate than the world average of 1.0%, the GCC population size is projected to increase to 61.6 million by 2022, also as direct consequence of the huge influx of expatriates (migrant workers, about 48.1% of total population), of which nearly 17% will be aged 50 years and above. The expanding size of population and the ageing factor is set to exert pressure on the healthcare system, together with the swift transition of the region to non-communicable diseases (NCDs), considering the high cost and length of treating such lifestyle ailments. **Sedentary lifestyle**

Growing at a faster annual rate than the world average of 1.0%, the GCC population size is projected to increase to 61.6 million by 2022, also as direct consequence of the huge influx of expatriates (migrant workers, about 48.1% of total population), of which nearly 17% will be aged 50 years and above.

**and poor dietary habits have in fact led to the rise in diabetes and obesity to epidemic levels with incidence rate of cardiovascular disease, diabetes, cancer, and respiratory ailments amongst the highest in the world. Moreover, lack of adequate focus on disease management, prevention and early-stage intervention is driving NCDs as being major cause of the deaths and disability in the region.**

The confluence of these factors is challenging

the capability of the already limited available healthcare resources and rising healthcare expenditure, while at the same time representing a key driver to the region's healthcare system. Regional governments and private operators have consequently laid out plans to increase the number of hospitals, primary healthcare centers, clinics, and laboratories. The region has an estimated 161 healthcare projects with a combined value of US\$ 53.2 billion under various stages of development.

	Population, 2020	% in Total Population Nationals	% in Total Population Non-Nationals	Type of Government	GDP (Current US\$, billion), 2019	GDP per capita (Current US\$), 2019
Kingdom of Saudi Arabia	34,813,871	62%	38%	Absolute monarchy	792.967	23,139.8
United Arab Emirates	9,890,402	11.5%	88.5%	Federal monarchy, Absolute monarchy	421.142	43,103.3
Sultanate of Oman	5,106,626	56.0%	44.0%	Absolute monarchy	76.332	15,343.1
State of Kuwait	4,270,571	30.8%	69.2%	Parliamentary system, Constitutional monarchy	134.629	32,000.4
State of Qatar	2,881,053	14.3%	85.7%	Absolute monarchy	175.838	62,088.1
Kingdom of Bahrain	1,701,575	48.0%	52.0%	Constitutional monarchy	38.574	23,504

Source: worldmeter, elaboration of data by United Nations, Department of Economic and Social Affairs. / International Monetary Fund, 2019 and 2021 / The World Bank

### Transformation, Recovery and Growth

The GCC nations were swift in their response to the COVID-19 crisis, however the pandemic has had a much more of a profound impact on the GCC than in many other countries, as the region is also dealing with an economic slowdown due to lowest oil prices in the past 17 years. GCC governments took several fiscal and economic measures to mitigate economic consequences stemming from the outbreak and to help regenerate growth. Although these measures have helped in restoring confidence, according to the IMF, the GCC's 2020 shrink in GDP, at around 6.0%, is in line with contraction of the global economy and other major economies, while the region is expected to rebound over the next two years with the GDP likely to see a 2.3% and 3.5% growth in 2021 and 2022, respectively, as the COVID-19 situation normalizes. The GCC is then expected to revert to pre-pandemic levels by as early as 2022, marginally surpassing projections in peer countries like the US, UK, Singapore, Japan, and Germany.

**A changing demographic and epidemiologic structure, unprecedented reforms, and effective responses to curb the rising cases of infection, coupled with strong**

The GCC is then expected to revert to pre-pandemic levels by as early as 2022, marginally surpassing projections in peer countries like the US, UK, Singapore, Japan, and Germany.

**emphasis towards economic diversification and private sector participation are currently transforming the region's health systems at an unprecedented pace and scale, and will aid economic growth, in the long run.** Health systems are currently better positioned to rethink their traditional models. The healthcare ecosystem is in fact not only moving from curative to preventive care but also adopting a value-based and integrated delivery model. It will look to further invest in digitization, while increasing investments in critical care infrastructure. Pandemic preparedness will speed up the deployment of telemedicine and remote care, while also accel-

erating innovation in AI solutions, creating new revenue streams for the health systems and, in turn, boost the GCC healthcare ecosystem.

**At the same time, regional governments play an instrumental role in strengthening the sector, which remains one of the most critical avenues for the region's long-term economic diversification strategy, also by encouraging private sector participation, through PPP (Public Private Partnership) initiatives, mandatory health insurance and other reforms aimed to bridge the demand-supply gap of healthcare services.** Health services in GCC are provided free of cost to all residents



## The cost of healthcare is also higher than most Asian countries including India and Thailand, leading to a lot of Emiratis seeking medical services outside the home nation.

and, despite the current economic slowdown and budget constraints, regional governments continue to bear a sizeable part of the healthcare expenditure, which has put significant burden on state finances however, the gradual rollout of compulsory health covers across the region will increase the utilization of medical services at private healthcare facilities in a bid to transfer some of the cost to individual citizens, employers, and insurers. **Currently at different stages within the GCC countries, the implementation of mandatory health insurance is already widespread in the UAE and Saudi Arabia and is expected to be fully implemented by 2021-22 in the rest of the GCC countries.** Significantly increasing

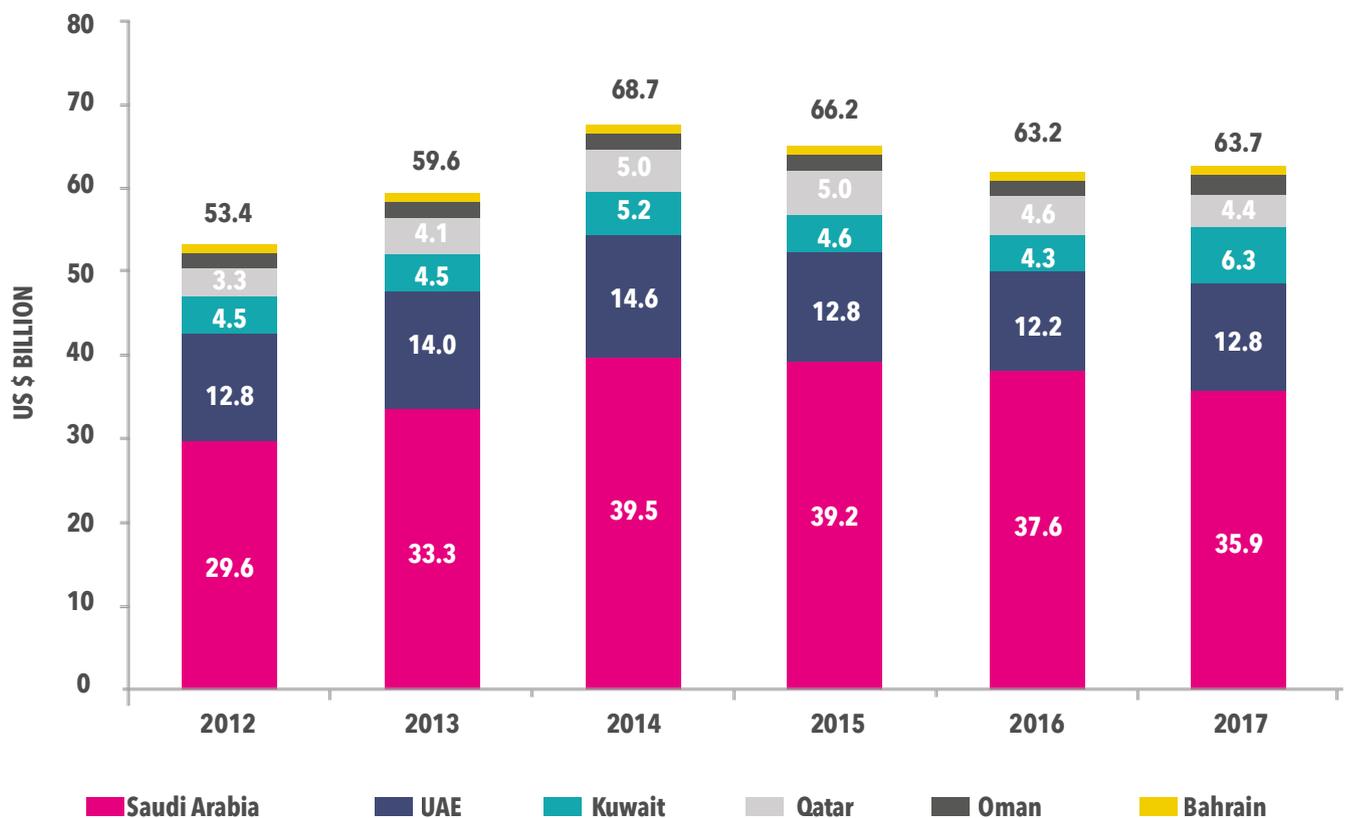
the utilization of medical services at private healthcare facilities, the health insurance market in the GCC is estimated to have reached US\$ 13.4 billion in 2019 and is expected to reach US\$ 25.5 billion by 2025.

As part of their economic diversification plans, medical tourism has been receiving stimulus from the GCC governments. Dubai and Abu Dhabi are at the forefront amongst the GCC nations and ranked as the sixth and ninth most popular medical tourism destinations in the world during 2020-21. Dubai witnessed a 4% y-o-y rise in medical tourism arrivals in 2019 to reach 350,118, with Asian tourists as the highest share of 34%, followed by neighboring Arab countries at 28%, and 17% from

Europe. The growth can be largely attributed to the Emirate's modern healthcare facilities and its commitment to enhance the experience of international patients and wellness tourists. **Within Dubai, dentistry, orthopedics, and dermatology were found to be the key treatments for inbound tourists. Dubai is also a prominent hub for cosmetic surgery and is home to the largest number of cosmetic surgeons per capita in the region, at about 50 specialists per million people.** To attract over half a million medical tourists by 2021, the Dubai Health Authority (DHA) issued 3,397 licenses to healthcare facilities in Dubai, while 45 new health facilities, a hospital, and 10 general and specialized medical clinics were inaugurated during the first half of 2020.

However, the recent advances in medical technology, growing sophistication and improving capabilities of hospitals and clinics have made treatments more expensive. Furthermore, cost of healthcare services continues to rise within the region also due to the absence of specialty segments, or the quality of the available treatment in the home country, such as cancers, neurological disorders, cardio surgeries, and trauma & rehabilitation services. **As a result,**

### CURRENT HEALTHCARE EXPENDITURE BY COUNTRY



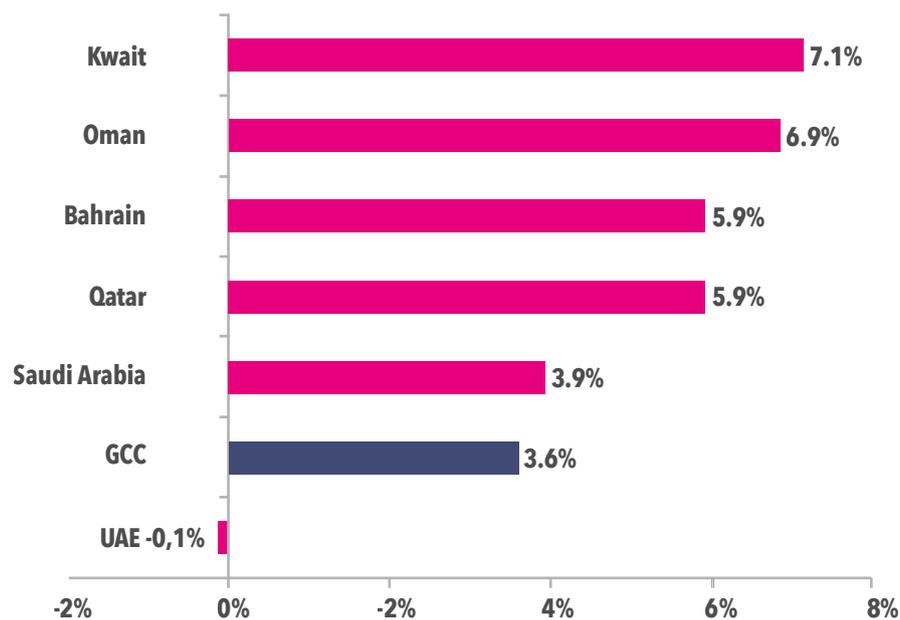
**outbound medical tourism for such complex cases has been on the rise, creating a huge strain on the government budgets as these treatment costs, incurred abroad, are mostly paid by the healthcare authorities and other government agencies in the Council States.**

For instance, the DHA spends millions of dollars to cover the costs of UAE nationals seeking healthcare overseas. Nearly 25.4% of the patients sent abroad sought oncology treatments, followed by 10.8% for orthopedic surgery, 7.6% for ophthalmology, and 6.7% for neurology and neurosurgeries. Privatization of healthcare facilities in the region has further escalated healthcare costs. Within the region, there is a wide disparity in treatment cost, with Kuwait and UAE considered to be the most expensive countries for treatments. The cost of healthcare is also higher than most Asian countries including India and Thailand, leading to a lot of Emiratis seeking medical services outside the home nation. According to a poll, about 39% UAE nationals said they would travel abroad for treatment, 47% in Bahrain and 43% in Qatar and Oman would also prefer to get treated abroad. Even though a higher proportion of patients choose to travel abroad, the Gulf residents reported that they are satisfied with the quality of healthcare services provided.

**Private Sector Contribution**

With healthcare expenditure averaging 5% of GDP, much below other developed countries, the region offers immense scope for growth. **Even though challenges like shortage of skilled healthcare professionals, limited specialized care centers and medical inflation exist, private players are making inroads to capitalize on the growing demand, technological advancements, and medical tourism.** Saudi Arabia represents around 56.3% of the region's healthcare market. While the spending proportion correlates with the high population concentration, Saudi Arabia has started focusing on developing the sector through increased private sector participation and PPP projects. In contrast, spending growth in the UAE, the second largest market in the GCC, recorded a negative CAGR of -0.1% between 2012 and 2017. The slowdown can be attributed to a fall in government as well as private spending. While expenditure in the UAE, Kuwait and Bahrain revived in 2017, an estimated lower private spending in Saudi Arabia and lower government spending in Qatar and Oman led to a downfall in the overall ex-

**CURRENT HEALTHCARE EXPENDITURE GROWTH PER COUNTRY (CAGR: 2012-2017)**

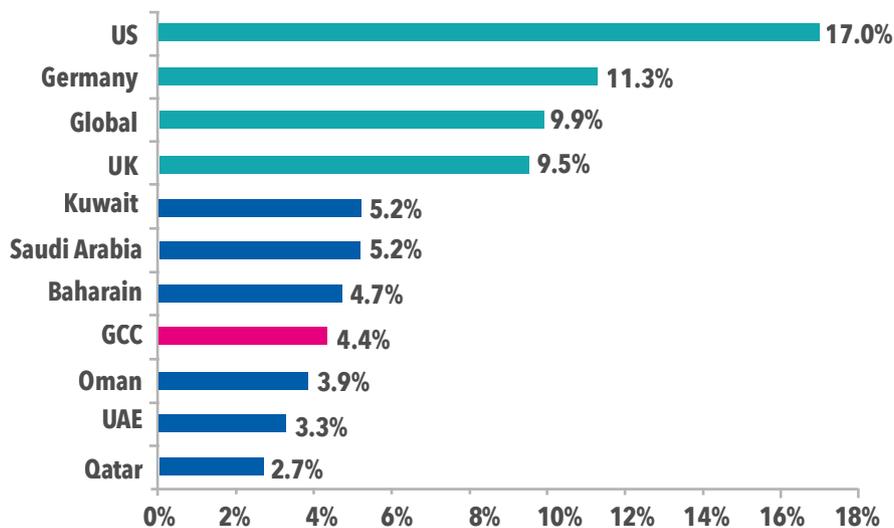


Source: WHO. Taken from Alpen Capital, GCC Health Industry Report 2020

Note: Current Health Expenditure (CHE) for Saudi Arabia in 2017 is an average of last 5 years CHE (2012-2016)

penditure for these countries. On the contrary, GCC's current health expenditure per capita at US\$ 1,147.8 has risen significantly in the years and is higher than the global average (of US\$ 1,059), but substantially lower compared to other developed countries.

**CURRENT HEALTH EXPENDITURE AS % OF GDP, 2017**



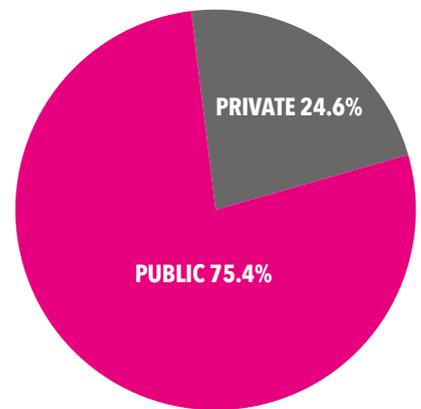
Private sector contribution has also improved bed density, at 1.9 beds per 1,000 people, but still below developed nations, also significantly lower than the Organization for Economic Co-operation and Development (OECD) average of 4.7 beds per 1,000 people. **While the public sector dominated the region's bed capacity, this share has gradually reduced from approximately 78.0% in 2012 due to the push towards privatization.** Saudi Arabia and the UAE lead the region in gradually privatizing the healthcare sector. The share of private hospitals in the region has risen to around 39.8%, with the UAE having 143 hospitals and a total bed capacity of 13,312, of which, 68.5% privately held.

**The Covid-19 outbreak has nevertheless eroded profits in the private sector as demand for primary and secondary care, dental services, mental healthcare, and allied health services have contracted significantly due to rise in COVID-19 medical procedures.** This has led to around 8 million fewer patient contacts per week in the region, hampering profitability for many operators. The private healthcare sector is largely facing the heat as people opt for public providers as cheaper alternatives for treatment. As a result, hospitals are lowering their prices to stay competitive, which

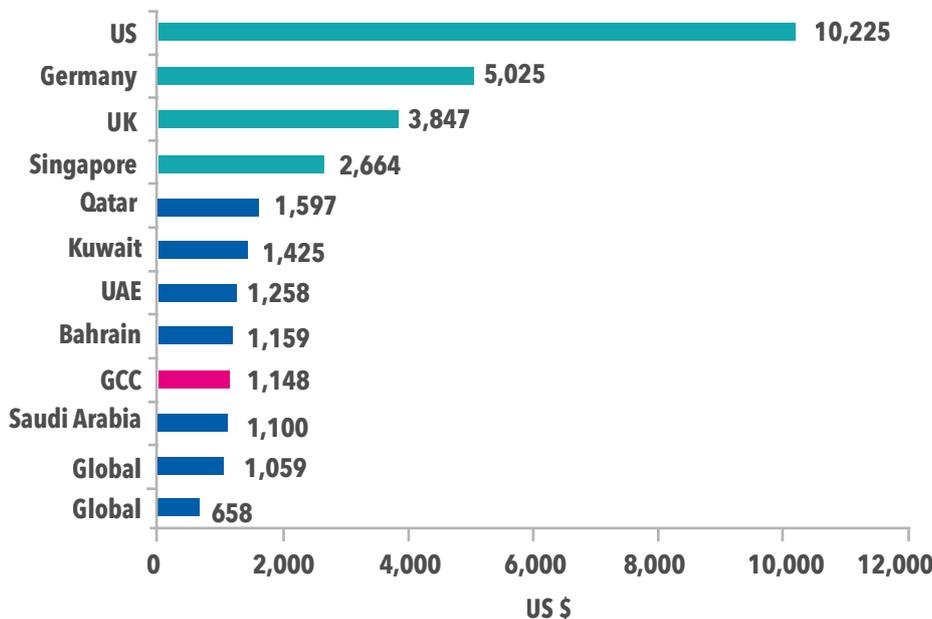
This has led to around 8 million fewer patient contacts per week in the region, hampering profitability for many operators. The private healthcare sector is largely facing the heat as people opt for public providers as cheaper alternatives for treatment.

is likely to erode profit margins, strain revenues and derail any expansion strategy. On the other hand, health insurers in Saudi Arabia and the UAE face a profit squeeze as insurance premiums are failing to keep pace with the rising value of medical claims amid the COVID-19 pandemic. While treatment is free for the nationals of the two nations, foreign residents - who constitute approximately 38% and 88% of the Saudi and UAE populations respectively - rely on private insurance provided by their employer, consequently, insurers are likely to tweak their product offerings with a potential increase in rates.

**GCC HOSPITAL BEDS SPLIT**



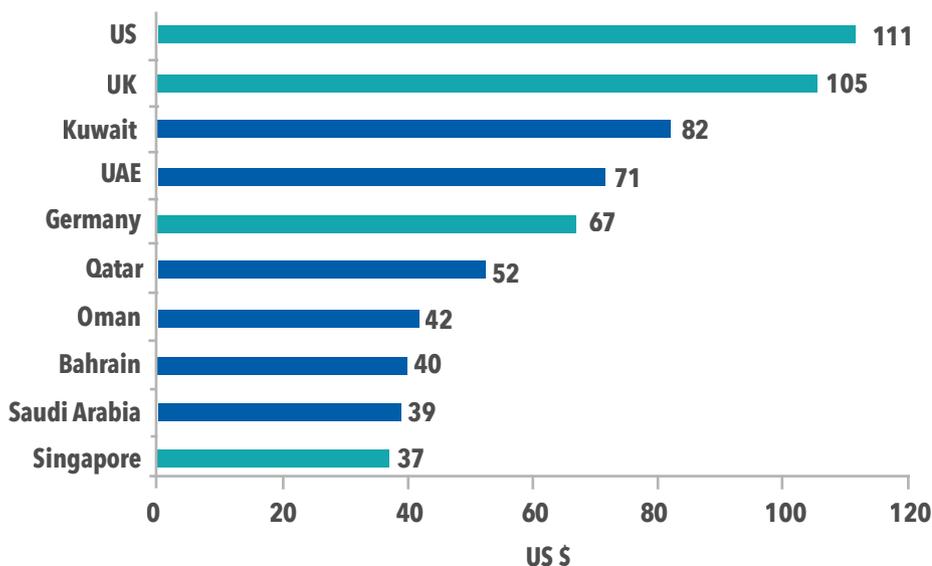
**CURRENT HEALTH EXPENDITURE PER CAPITA, 2017**



Country	No. of Hospitals, 2017
Saudi Arabia	475
UAE	143
Qatar	19
Oman	76
Bahrain	29
Kuwait	33

Source: WHO, World Bank, IMF. Note: CHE for Saudi Arabia in 2017 is an average of last 5 years CHE (2012-2016). Taken from Alpen Capital, GCC Health Industry Report 2020

### AVERAGE COST OF VISIT TO A DOCTOR



Source: Cost of Living Index - Expatistan (October 2020). Taken from Alpen Capital, GCC Health Industry Report 2020

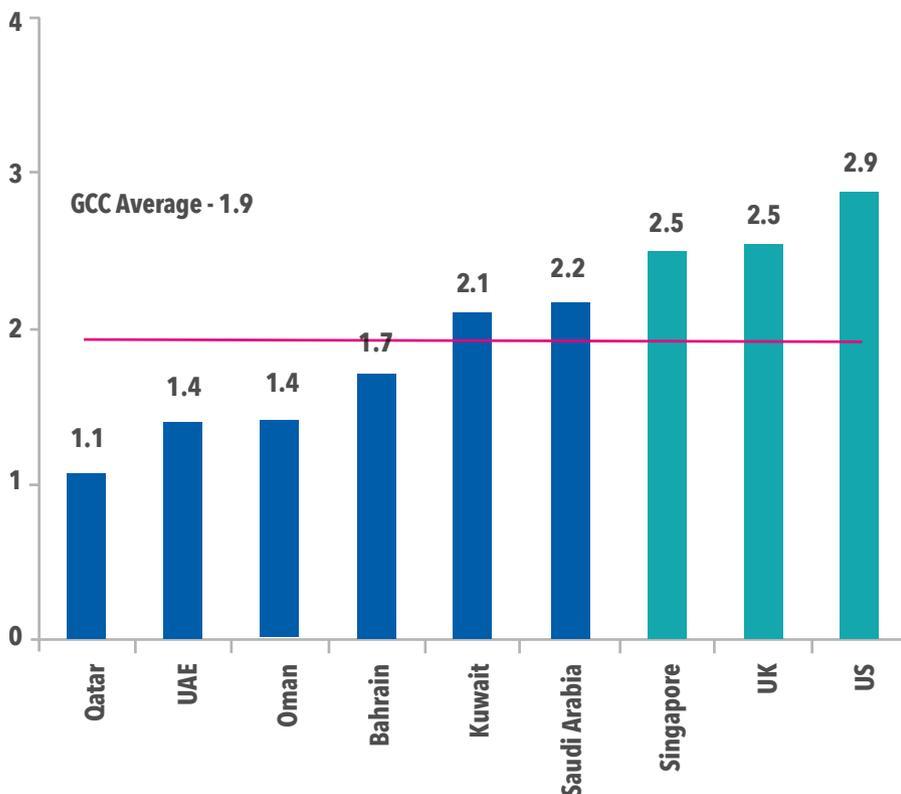
Note: The above costs are for visit to private doctors for 15 minutes

### Dependence on highly Skilled Expatriate Talent

Although regional governments have framed long-term strategies aimed at developing

highly accredited medical institutions, the region largely depends on expatriates for healthcare professionals due to scarcity of skilled and experienced national physicians and nurses.

### HOSPITAL BED DENSITY, 2017



Source: Health Ministries of Bahrain, Oman, Qatar, and Saudi Arabia, FCSA, CSB, MDPS, Health Planning & Assessment Department of Qatar, Department of Statistics Singapore, OECD, IMF, Alpen Capital.

The lack of home-grown professionals is one of the major factors hindering the growth of the healthcare sector and can be partly attributed to the limited number of healthcare educational institutions in the region. On an average, the GCC had 5.7 nurses and 2.9 physicians and dentists per 1,000 population as of 2017. While the physicians (including dentists) density was close to that in developed nations, nurse density in the region was significantly lower. The outbreak of COVID-19 has intensified the burden on the region's limited healthcare resources and doctors and paramedics from Asian countries, such as India and Pakistan, were called by Kuwait and UAE to meet the sudden rise in demand for care.

However, the growing nationalization of jobs within the region is likely to present a unique challenge for healthcare operators going forward. In Saudi Arabia, for example, authorities recently denied the renewal of employment contracts of many expatriate health employees who exceeded 10 years of service in the Kingdom, in line with their 'Saudization' plans. Similar localization initiatives are being implemented in the other GCC nations such as Oman. As of 2017, the GCC was home to 139 healthcare education institutes with

The outbreak of COVID-19 has intensified the burden on the region's limited healthcare resources and doctors and paramedics from Asian countries, such as India and Pakistan, were called by Kuwait and UAE to meet the sudden rise in demand for care.

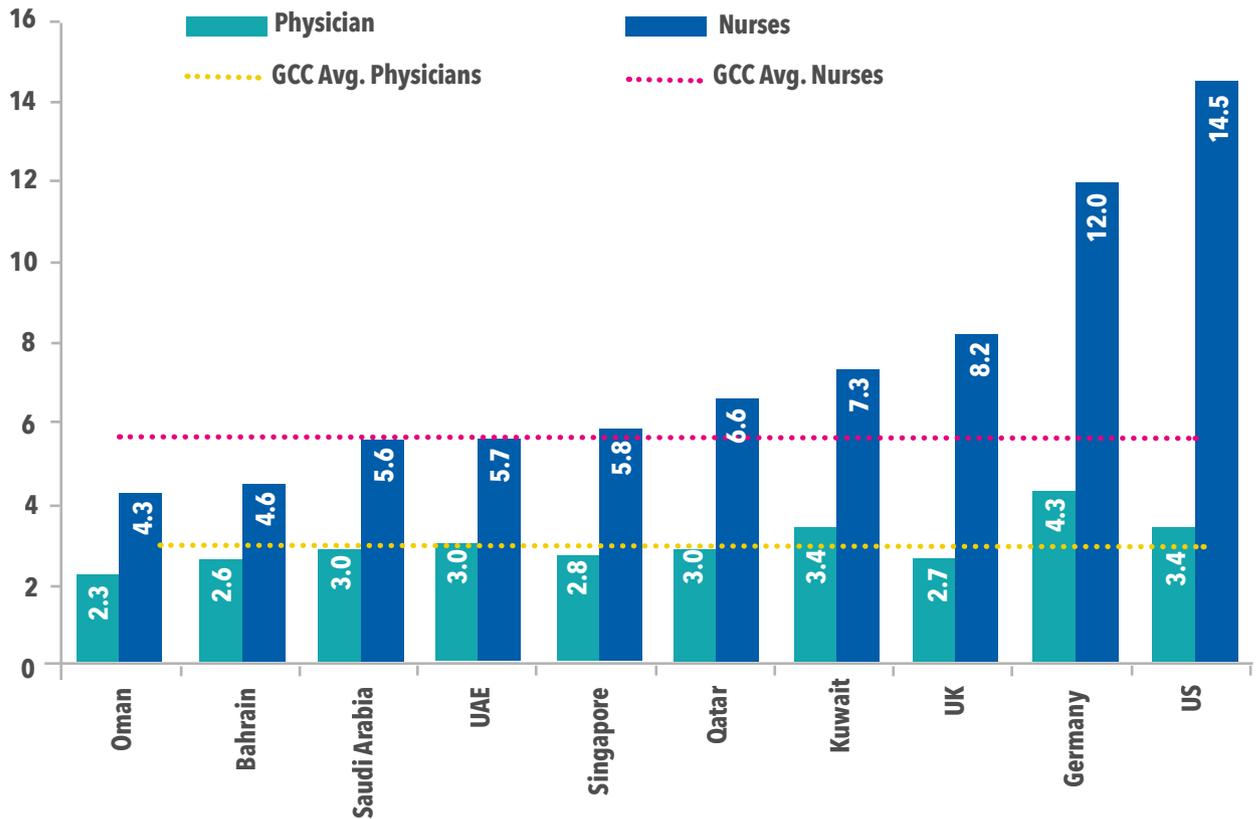
Saudi Arabia (77 institutes) and the UAE (24 institutes) accounting for 73% of the total. While there are several nursing schools in the region, institutes for other health disciplines such as dental, medical, and pharmaceutical are inadequate. For instance, there is a need to establish a college of dentistry in Bahrain and Qatar so that the nations are less reliant on international dental graduates. Moreover, the region should focus on scaling up the training capacity of their existing schools and aim for international accreditation for the development of higher quality healthcare programs. This will reduce the shortfall in nationally trained medical professionals and the subsequent dependency on expatriate workforce.

**Among Main Sources:**

-Extracts (both text and graphs) from Alpen Capital, GCC Health Industry Report 2018 and 2020, for full and detailed report: <http://www.alpencapital.com/industry-reports.html>  
 Alpen Capital\* offers a comprehensive range of financial advisory services to institutional and corporate clients across the GCC and South Asia. Alpen Capital combine the disciplines of strategy, organisation, leadership and finance into an integrated approach to help clients grow the long-term value of their companies. Alpen Capital works with some of the leading business groups in the GCC and South Asia providing them with unique investment banking advisory solutions based on their requirements. Alpen Capital's team comprises of experienced and innovative professionals who create value through extensive knowledge of local and international markets and access to key decision makers. It was established in 2005 in Dubai at the Dubai International Financial Centre and expanded its operations to Qatar, Oman, Abu Dhabi and India.  
 (\*Alpen Capital refers to Alpen Capital (ME) Limited, Dubai,

Alpen Capital (ME) Limited, Abu Dhabi branch, Alpen Capital Investment Bank (Qatar) LLC, Alpen Capital LLC, Oman and Alpen Capital India Private Limited collectively).  
 -Embassy of the United Arab Emirates, <https://www.uae-embassy.org/about-uae/health-care>  
 -Health Care in Gulf Cooperation Council Countries: A Review of Challenges and Opportunities  
 Monitoring Editor: Alexander Muacevic and John RAdler, Tawfiq Khoja, 1 Salman Rawaf, 2 Waris Qidwai, 3 David Rawaf, 2 Kashmiri Nanji, 3 and Aisha Hamad2  
 Cureus. 2017 Aug; 9(8): e1586. Published online 2017 Aug 21. doi: 10.7759/cureus.1586. For full article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5650259/>

**PHYSICIANS AND NURSES DENSITY (2017)**



Source: Health Ministries of Bahrain, Oman, Qatar, and Saudi Arabia, FCSA, CSB, MDPS, IMF, OECD, WHO, Alpen Capital



# FOCUS

FOCUS



**Author: Silvia Borriello**

Editorial Director

*silvia.borriello@infodent.com*



# Vietnam's

## Impressive Healthcare Approach

Over the past 30 years, Vietnam's average economic growth rate of 5.5% has been second only to China in Asia

Vietnam's GDP growth is forecast to reach 6.5% in 2021, provided the COVID-19 pandemic is controlled and business activities recover, according to the I.M.F.

Vietnam will move from the 32nd largest economy to the 20th by 2050, according to PriceWaterhouse Coopers predictions

One of the most rapidly aging countries. The 65+ age group is expected to increase 2.5 times by 2050

**Virtually every country worldwide is committed to achieving universal health coverage by 2030 and Vietnam's approach in delivering equitable access not only to health services, but also to affordable medicines and vaccines is remarkable.**

**A large population, political stability, strategic public-private partnerships, major economic and political reforms have transformed the healthcare landscape of the country providing favorable growth opportunities in the healthcare domain.**

**Experiencing rapid demographic and social change, Vietnam's population is expected to expand to 120 million by 2050**

**Vietnam's emerging middle class, currently accounting for 13% of the population, is expected to reach 26% by 2026**

**Vietnam's rapid growth and industrialization have had detrimental impacts on the environment and natural assets, emerging, over the past two decades, as the fastest growing per-capita greenhouse gas emitters in the world - growing at about 5% annually**

**Among the 10 countries worldwide most affected by air pollution**

The Socialist Republic of Vietnam is the easternmost country on the Indochina Peninsula in Southeast Asia. Its 97.3 million inhabitants stretch across its diverse landscapes; crammed into bustling cities such as Hanoi and the capital Ho Chi Minh and spread across countless villages and smaller towns that dot the countryside. A Communist country since 1975, when North Vietnam and South Vietnam were unified, Vietnam embarked on a course of increased economic liberalization and structural reforms to modernize its economy, moving from a closed, centrally planned economy, towards a globally integrated, socialist-oriented market economy. **Its development over the past 30 years has been remarkable. Economic and political reforms under Đổi Mới, “to renovate”, launched in 1986, have spurred rapid economic growth, transforming what was then one of the world’s poorest nations into a lower middle-income country.** Between 2002 and 2018, GDP per capita increased by 2.7 times, and more than 45 million people were lifted out of poverty. Poverty rates declined sharply from over 70% to below 6%. The vast majority of Vietnam’s remaining poor are ethnic minorities.

Continued strong economic growth, ongoing reform, and a large population have combined to create a dynamic and quickly evolving commercial environment in Vietnam, further boosted by the recent free trade rules in force. **As of 8 June 2020, the National Assembly voted to pass and adopt the EU-Vietnam Free Trade Agreement (EVFTA) and the EU-Vietnam Investment Protection Agreement (EVIPA), which will considerably increase trade and investment for pharmaceutical/ medicinal products and medical devices, from the European Union, as the result of a 99% cut in tariffs and other trade barriers, over the next ten years.** Vietnam’s strong economic growth has resulted in a booming and optimistic middle class (projected to rise from 12 to 33 million people) and affluent class, as well as the emerging of young and dynamic small and medium-sized enterprises. Sales of equipment, technologies and consulting and management services associated with growth in Vietnam’s industrial and export sectors and implementation of major infrastructure projects continue to be a major source of commercial activity and interest for foreign firms. With disposable income levels in major urban areas four to five times the national average, significant opportunities in the consumer and services sectors are fast emerging. The Government of Vietnam plays a significant role in

“The dramatic growth of ultra-high net worth individuals in Asia is set to be reinforced by stellar growth rates in several countries, including Vietnam, which is expected to see its ultra-wealthy population rise by 170% to 540 over the next decade – the highest rate of growth in the world. Millionaire numbers are expected to jump from 14,300 to 38,600 over the same period.” This growth rate exceeds neighboring China and India.  
(Knight Frank’s the Wealth Report)

the economy, with state-owned enterprises making up 35% of GDP. The Government strategy to “equitize” (partially privatize) state-owned enterprises in all sectors of the economy is slowly moving forward while the government will maintain majority ownership in the largest and most sensitive sectors of the economy – including energy, telecommunications, aviation, and banking. Healthcare is one of the major focus of the Vietnamese government, which has been working hard to upgrade the sector and expand programs that have generated many positive health benefits. The extraordinary economic growth is reflected in the higher living standards that many Vietnamese people now can enjoy and an increasingly wealthy population spending more on medical treatment. **Today, Vietnam’s evolving health system is a mixed public-private provider system based on mandatory social health insurance; particularly, Vietnam’s public healthcare expenditure is predicted to increase partly due to the government’s effort in promoting partnerships between public and private (PPP) healthcare providers to share the cost.** The PPP model can mobilize financial resources to upgrade infrastructure and facilities, purchase modern medical equipment, and improve the qualifications of healthcare personnel. The transformation, from a fully public services system to a

mixed public-private provider system, has introduced more selections and different alternatives for people to get better services. Despite its low healthcare expenditure (around 6.8–6.9 percent of its GDP), Vietnam has achieved remarkable population health outcomes as result of the country’s continuing investments in its health system, coupled with multisector initiatives aimed at addressing the social determinants of health such as access to clean drinking water, sanitation facilities, education, and better nutrition to reduce maternal and child undernutrition. A young country—only 5.6 % of the population is aged 65 and older, and 42% is under 25—Vietnam has a life expectancy of 76.3 years. According to the World Health Organization (WHO) and the World Bank, this is on a par with Hungary and Venezuela, whose per capita GDPs (in PPP dollars) are far higher (\$22,878 and \$18,194, respectively) than Vietnam (\$7,463 as of 2018), and just below China, which has a life expectancy of 76.4 and a per capita GDP of \$11,904. Since 1990, the country’s maternal mortality rate has fallen by 75% and according to the latest Global Monitoring Report on Universal Health Coverage, published jointly by the WHO and the World Bank, 97% of Vietnamese children now receive standard immunizations, compared to 95% of children in the United States. Committed to achieving universal health cover-

age by 2030, today, 87.7% of Vietnam's population – or 85.3 million people – are covered by social health insurance with the Government's intent to reach 95% of the Vietnamese population by 2025. **Vietnam has managed to reach such impressive milestones ahead of schedule, despite having a low average per capita income, not on the scale of investment in healthcare, which amounts to a modest US\$ 216 (PPP) per person annually (including both public funding and out-of-pocket expenses), but rather on how the government uses its resources, including the country's intellectual capital.** But significant are the challenges ahead. Among other things, it will need to grapple with behavioral and environmental factors underlying poor health and disease, especially high rates of smoking among males, high rates of alcohol consumption, and air pollution. The country also has one of the world's most rapidly aging populations. Among the



strategies is Vietnam's priority in developing its primary and preventive care system, with the country spending about 30% of total health-

care budget on preventive medicine. However, there remains a large gap between the standard of care between urban and rural regions, with a further unbalanced level of care between

### HEALTH OUTCOMES, COMPARISON BY COUNTRY, 2016

	Life expectancy at birth (years) both sexes	Healthy life expectancy at birth (years)	Probability of dying from any of CVD, cancer, diabetes, CRD between age 30 and exact age 70 (%)
Vietnam	76.3	67.5	17.1
Cambodia	69.4	60.8	21.1
Philippines	69.3	61.7	26.8
Japan	84.2	74.8	8.4
Australia	82.9	73.0	9.1
China	76.4	68.7	17.0

Note: CDV= cardiovascular disease, CRD = chronic respiratory disease

Source: World Health Statistics 2018 WHO

	Maternal mortality ratio (per 100 000 live births), 2015	Proportion of births attended by skilled health personnel (%) latest available data, 2007-2017	Neonatal mortality rates (per 1000 live births), 2016
Vietnam	54	94	11.5
Cambodia	161	89	16.2
Philippines	114	73	12.6
Japan	5	100	0.9
Australia	6	100	2.2
China	27	100	5.1

Source: World Health Statistics 2018 WHO

primary, secondary, and tertiary sectors.

*Public Healthcare* - Over the past two decades Vietnam has made enormous progress toward achieving universal coverage. **The Vietnamese government plays a central role –setting fees, regulating hospitals, subsidizing the poor—including global healthcare budget allocation, working together with the social health insurance agency.** The public system, representing the largest part of healthcare, is administered in a decentralized system with the central level under the Ministry of Health and local levels under provincial and municipal authorities. There are four levels of service delivery: the central level (central and regional hospitals and research institutes), managed directly by the Ministry of Health; the provincial and district levels; the commune level; and at the bottom of the hierarchy is a network of village health workers. A network of skilled birth attendants serves Vietnam fifty-three ethnic minorities—13.8% of the population—many of whose members reside in the vast mountainous areas and central highlands and along the borders with China, Cambodia, and Laos. At each level, there is a two-track system, one focused on prevention and mother and child healthcare, called the “public health center” system, providing public health services. The other is devoted to clinical acute care.

**Social health insurance (SHI) began in 1992 and is the main public financing method of healthcare in Vietnam. First initially covering the poor and the formal-sector workers, the 2008 Law of Health Insurance and the Health Insurance Law**

**Amendment of 2014 both stipulated a mandate, effective as of January 1, 2015 that made it mandatory for everyone to join by then, making SHI the primary mechanism for achieving universal coverage.** Just one health insurance scheme is available, which covers all enrollees, with everyone paying the same premium (single-payer system). The Vietnam Social Security (VSS) is the main entity that reimburses services provided to patients covered by social health insurance. The current SHI benefit package is generous and continues to be expanded to include a wide range of curative and preventive care services. Recent reforms have increased depth of coverage and all members are entitled to the same package, although not everyone benefits equally. In fact, a direct consequence of this benefit package design is that costs have increased rapidly, both for the insurer and the insured while, on the contrary, the user fee schedule that VSS uses to reimburse providers was not increased. **Thus, faced with a binding budget constraint, providers have sought to ration services by billing patients for the extra cost of services covered by the generous benefits package which, in turn, explains the high and persistent out-of-pocket payments.** Social insurance covers medical examinations and treatments including expensive diseases like cancer treatment, rehabilitation, prenatal care and delivery, screening; excluded services are post-discharge care at nursing facilities, early detection of pregnancy, medical checkups, family planning services and infertility treatment, prostheses and aesthetic surgery (related to artificial arms, legs, teeth, and so forth), hearing aids, abortions (except for medi-

cally necessary abortions), vision care including glasses, etc. Vietnam’s health insurance scheme also covers a generous list of drugs.

Private households pay for their health insurance premiums, with varying government subsidies according to the enrollee’s economic status. The government subsidizes 100% of premiums for the poor, children under six, the elderly over eighty years old, war veterans, and people under other social protection schemes. Some other groups—pupils in elementary school, students in junior high school and above, the near poor, and workers in the agriculture and forestry and fishery sectors, who have average living conditions, have about a 30% government premium subsidy to buy a health insurance card. Households where all members are enrolled receive premium discounts. There is no ceiling for health insurance payments based on the seriousness of sickness. However, the category of the insured leads to different levels of insurance reimbursements: worker households have 80% reimbursement with a 20% copayment; retired people and the near poor have 95% reimbursement with a 5% copayment; and for the poor, children under six, and people under other social protection schemes, the government covers 100% of costs with no copayment from patients. There is some private health insurance for foreigners working in Vietnam and for those that can afford it.

*Hospital System* - Public hospitals play a substantial role in providing healthcare services to the people. **It is estimated that hospitals in Vietnam accommodate more than 50% of total healthcare visits and consume more**

“Even if hit hard by the ongoing COVID-19 pandemic, Vietnam is one of the few countries in the world not to expect a recession, though its growth rate for 2020 was far less than the typical 6-7% pre-crisis projections. Thanks to its strong fundamentals, and assuming the relative control of the COVID-19 pandemic both in Vietnam and the world, the Vietnamese economy should however rebound in 2021.”



**than 95% of total health insurance spending. Many people come to the hospitals as their first contact care creating an imbalance between supply and demand, resulting in overloaded public hospitals.**

Public hospitals are divided into three levels: central level (47 hospitals, approx.); provincial level (419 hospitals, approx.) and district level (684 hospitals, approx.). Besides the public hospitals, the country also has around 182 private hospitals, mostly located in urban areas.

Hospital autonomy reforms in Vietnam were initiated in the 1990s, with a new policy allowing hospitals to charge user fees. Thus, financed by state budget allocations, health insurance payments as well as user fees, public hospitals, mostly provincial and central level, are no longer strictly dependent on the direct budget subsidy but are operating autonomously for professional, organizational, and human resource management and revenue generation. Although difficult to change medical service fees because of Vietnamese mentality, as a socialist country, that medical services should be free, the Ministry of Health is nonetheless working to increase user fees (copayments), so as to increase hospitals revenues to further share the costs for medical services. In recent years, Vietnam has, in addition, intensified its investment building new hospitals and renovating existing ones in the provinces

and districts, increasing the overall number of beds. **However, even if total budget for the health sector has slowly increased, it is still too low to meet demand, as public hospitals still largely rely on a state budget to upgrade their facilities, equipment, and services and much of the existing medical equipment in public hospitals is obsolete and needs replacement.**

With approximately 24.5 beds per 10,000 population, public hospitals have a chronic bed shortage and chronic overcrowding, mainly at the central level—Hanoi and Ho Chi Minh City—which often do not have the capacity to serve both local as well as provincial, district, and commune level patients. Although the total number of hospital beds in Vietnam increased to 254,885 (2016), bed occupancy rate is much higher than the 80% threshold recommended by the WHO, reaching up to 170% according to Health Ministry estimates. It is not uncommon to see multiple patients sharing hospital beds or waiting outside the hospital on bamboo mats. On this regard, since the introduction of the 2008 Law of Health Insurance, a gatekeeper system was introduced even if Vietnamese still often try to bypass their local healthcare centers in favor of major hospitals in urban centers, due to better availability of higher quality medical equipment and staff, creating inefficiencies and

increases in out-of-pocket costs for patients and their families.

Government's priority today is investment in the lower levels and primary healthcare. On this regard, the country's strategic approach can be seen in its Ministry of Health's Direction of Healthcare Activities scheme, which requires health facilities at the central and provincial levels of government administration to help build up the capacity of district and community facilities. **Although at initial stage, a key objective of this scheme is to shift more of the burden of delivering medical services from higher-level hospitals onto lower-level primary healthcare centers, reducing overcrowding in "core hospitals" (central and tertiary hospitals), and promote overall service integration across the system and care provider, also given the long history of inequities with deep disparities in health outcomes between urban and rural areas.** The policy focuses on technical skills transfer: health staff at provincial hospitals receive clinical skills training from their colleagues at core hospitals to help them perform their work at higher quality, thereby reducing the number of patients who bypass the provincial or district hospitals and go directly to the large core hospitals for care. Similarly, additional training is provided for family doctors

## HEALTHCARE WORKFORCE, COMPARISON BY COUNTRY, LATEST AVAILABLE DATA 2007-2016

	Density of physicians (per 1000 population)	Density of nursing and midwifery personnel (per 1000 population)
Vietnam	0.8	1.4
Cambodia	0.1	1.0
Philippines	-	0.2
Japan	2.4	11.2
Australia	3.5	12.6
China	1.8	2.3

Source: World Health Statistics 2018 WHO

to provide higher-quality basic services to the community, thereby preventing patients from going to hospitals for only basic services.

The lack of resources, both manpower and facilities, to meet the demand of the patients means that not everyone would be guaranteed the best care, especially in disadvantaged areas. **With the public hospitals overstrained and often running past capacity, the need for a more active and robust private sector and for public-private partnerships is preeminent in Vietnam and is encouraged by the government.** Many big domestic corporations like Vingroup and Hoan My Corporations have started to create hospital and clinic chains across Vietnam that offer high-quality medical care. **Private hospitals constitute approximately 15% of all hospitals and are growing rapidly, even if they are mostly concentrated in the outpatient care sector (60% of outpatient service providers are private, while only 4% of inpatient providers are).** However, even if Vietnam has formalized recognized private services nearly 30 years ago, private facilities are often overpriced, even if generally lower than Western costs, and their reputation is still limited. According to Health Ministry estimates, only 7% of Vietnamese use private-sector health services.

With a physician-to-population ratio of around 8 physicians per 10,000 population (2015), a shortage of specialized medical staff is common in many hospitals. In addition, government regulations call for four nurses per doctor, in reality, the ratio is 1.5 nurses per doctor. Doctors and nurses work under stressful conditions and wages are relatively low with many physicians that prefer working in big cities, thus creating maldistribution of doctors, especially in rural

areas. To address this problem, policy of rotation in place for doctors to serve in underserved areas has been introduced by the government. Besides the official basic government salary and supplemental pay for delivering more services to patients (such as operations), public hospital doctors can practice in a private clinic at home after office hours, or in private clinics or foreign investor-owned private hospitals and earn additional income. The Asian Development Bank (ADB) has approved an US\$80 million loan to build and equip two new facilities of Hanoi Medical University and the University of Medicine and Pharmacy in Ho Chi Minh City, with the aim to increase the annual undergraduate enrolment capacity and produce 1,863 additional health professional graduates from 2032. This loan is part of the second phase of the Health Human Resources Development Project, aiming to further improve the quality of health education and professional training at universities. The project also includes a US\$3 million grant from the Japan Fund for Poverty Reduction, financed by the Japanese government, which will support the updating of training programs to ensure that graduates are better skilled to meet community health needs, particularly in disadvantaged areas. The quality of health workers in remote health facilities will also be strengthened through the delivery of continuous medical education programs by using innovative distance learning technologies. **The project aims to address one of the major obstacles: limited infrastructure and outdated programs at Vietnam's health education and professional training institutions restrict increases in student enrolment and subsequently the number of qualified graduates.**

**Medical Equipment** - Roughly 50 domestic firms make approximately 600 products licensed by the Ministry of Health, representing approximately only 10% of market share. **Thus, high demand for foreign suppliers of medical devices together with demand for better healthcare has greatly contributed to the growth of the medical device market in Vietnam over the years. Primary foreign suppliers of medical devices include those from the United States, Japan, Germany, Italy, the Netherlands, Korea, Taiwan, and China.**

The largest medical device purchasers are government-funded hospitals, which account for 80% of the market. Foreign-owned hospitals and clinics are also large purchasers. Local private hospitals will show the strongest growth, while research and educational institutions will also account for some of the demand. Several medical education and research institutions are open to experimenting with new systems and innovative methods.

At present, the level of IT application is still low and uneven among hospitals. Data connection is still difficult and the process of implementing electronic health records (HER) faces many difficulties however, in June 2019, the Vietnamese Deputy Minister of Health announced the launch of HER pilots in eight provinces and cities of Vietnam. While not yet fully integrated within the whole territory, from December 2019 they became mandatory within all of Ho Chi Minh City's hospitals.

While, on the other hand, the Vietnamese e-commerce market is forecasted to continue to boom. A report by the Vietnam e-Commerce and Digital Economy Agency (iDEA), under the Ministry of Industry and Trade, shows that 53%

of the population participates in online shopping. The e-commerce market in Vietnam grew 18%, reaching \$11.8 billion last year, accounting for 5.5 % of total retail sales of consumer goods and services nationwide. According to the national master plan on e-commerce development, by 2025, up to 55 % of the population will participate in online shopping, with the average value of online purchases of goods and services reaching US\$600 per person annually. **From 2015 up to now, the growth rates of the three largest internet economies in the region have averaged 35-36 %, of which, Vietnam grew by 36%, Indonesia 41%, and the Philippines 30%.** Since the COVID-19 pandemic broke out, the demand for shopping on e-commerce platforms has increased sharply. Last year, 70% of Vietnamese had access to the internet and 53% of e-wallet users made payments when buying online, up 28% compared to 2019. In Hanoi and Ho Chi Minh City, e-commerce activities grew strongly and accounted for 70% of the total number of e-commerce transactions of the country. According to Amazon Vietnam, Vietnamese sellers exceeded \$1 million in sales on Amazon last year, a three-fold increase from 2019. Amid

digital transformation and the development of the online shopping market, iDEA has implemented the Online Vietnamese Store program on three major Vietnamese e-commerce platforms, including Tiki, Sendo and Voso. The program has created a new playground for manufacturing enterprises to develop distribution systems with digital transformation solutions and apply e-commerce and digital technologies in connecting the domestic market. Promoting e-commerce in parallel with perfecting the electronic payment system and improving the quality of shipping activities would create an exciting and potential shopping and trading environment in Vietnam.

Among main sources:  
 - "Vietnam's Health Care System Emphasizes Prevention And Pursues Universal Coverage", by Tsung-Mei Cheng, For full article: <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1141>  
 - The World Health Organization (WHO), "Hospitals in Viet Nam", for full report: <https://www.who.int/vietnam/health-topics/hospitals>  
 - World Health Statistics 2018, WHO  
 - "Healthcare Resource Guide: Vietnam", by the U.S. Commercial Service. For full reports: <https://www.trade.gov/knowledge-product/vietnam-market-opportunities>, <https://www.trade.gov/knowledge-product/exporting-vietnam-mar>

[ket-overview, https://www.trade.gov/knowledge-product/vietnam-healthcare](https://www.trade.gov/knowledge-product/vietnam-healthcare), <https://www.trade.gov/knowledge-product/vietnam-market-challenges>, [https://2016.export.gov/industry/health/healthcareresourceguide/eg\\_main\\_108629.asp](https://2016.export.gov/industry/health/healthcareresourceguide/eg_main_108629.asp)  
 Contact Information: Thao Nguyen (Commercial Specialist), [thao.nguyen@trade.gov](mailto:thao.nguyen@trade.gov), Phone: (84-28) 3520-4660  
 - "E-commerce to continue booming in 2021", News source: Vietnam News – VNS (ICE HO CHI MINH CITY), taken from the Italian Trade Commission (I.C.E.) website <https://www.ice.it/it/mercati/vietnam>, <https://www.ice.it/it/news/notizie-dal-mondo/170835>  
 - "Vietnam's impressive health care strategy", by Jörg Reinhardt. For full article: <https://theaseanpost.com/article/vietnams-impressive-health-care-strategy>  
 - The World Bank <https://www.worldbank.org/en/country/vietnam/overview>  
 - An extract from The Healthcare Law Review, 4th Edition, For full report: <https://www.lexology.com/library/detail.aspx?g=fd04ebe3-11c5-497f-a624-62122b94beb7>  
 - "ADB assists Vietnam to strengthen health professionals". Taken from the Ministry of Health website. For full report: [https://www.moh.gov.vn/en\\_US/web/ministry-of-health](https://www.moh.gov.vn/en_US/web/ministry-of-health)  
 - Vietnam Healthcare Outlook Report, 2020, <https://www.giiresearch.com/report/del966952-vietnam-healthcare-outlook-report.html>  
 - "Moving toward Universal Coverage of Social Health Insurance in Vietnam" by Aparna Somanathan, Ajay Tandon, Huong Lan Dao, Kari L. Hurt, and Herman L. Fuenzalida-Puelma. The World Bank, Washington, D.C., <http://dx.doi.org/10.1596/978-1-4648-0261-4>

## EU-VIETNAM TRADE AGREEMENT

**The "most modern and ambitious agreement ever concluded between the EU and a developing country."**

**Almost all customs duties gone.** The agreement will remove virtually all customs duties between the two parties over the next ten years, including on Europe's main export products to Vietnam: machinery, cars, and chemicals. It extends to services such as banking, maritime transport and postal, where EU companies will have better access. Companies will also be able to bid on public tenders put out by the Vietnamese government and several cities, including Hanoi. The deal also safeguards 169 emblematic European products. In addition, the agreement is an instrument to protect the environment and to sustain social progress in Vietnam, including labour rights. It commits Vietnam to apply the Paris Agreement. Vietnam committed to ratify two bills as requested by Parliament, one on the abolition of forced labour, the other on freedom of association, by 2020 and 2023, respectively. The trade deal can be suspended if there are human rights breaches.

**Dispute settlement between companies and state.** the Parliament agreed to an investment protection agreement providing an investment court system with independent judges to settle disputes between investors and state.

**Background.** Vietnam is the EU's second largest trading partner in the Association of Southeast Asian Nations (ASEAN) after Singapore, with trade in goods worth €47.6 billion a year and €3.6 billion when it comes to services. EU exports to the country grow by 5-7 % annually, yet the EU's trade deficit with Vietnam was €27 billion in 2018. The main EU imports from Vietnam include telecommunications equipment, clothing and food products. The EU mainly exports goods such as machinery and transport equipment, chemicals and agricultural products to Vietnam.

Source: European Parliament, for the details of the trade deal: [www.europarl.europa.eu/news/en/press-room/20200206IPR72012/parliament-approves-eu-vietnam-free-trade-and-investment-protection-deals](http://www.europarl.europa.eu/news/en/press-room/20200206IPR72012/parliament-approves-eu-vietnam-free-trade-and-investment-protection-deals)



**FOCUS**



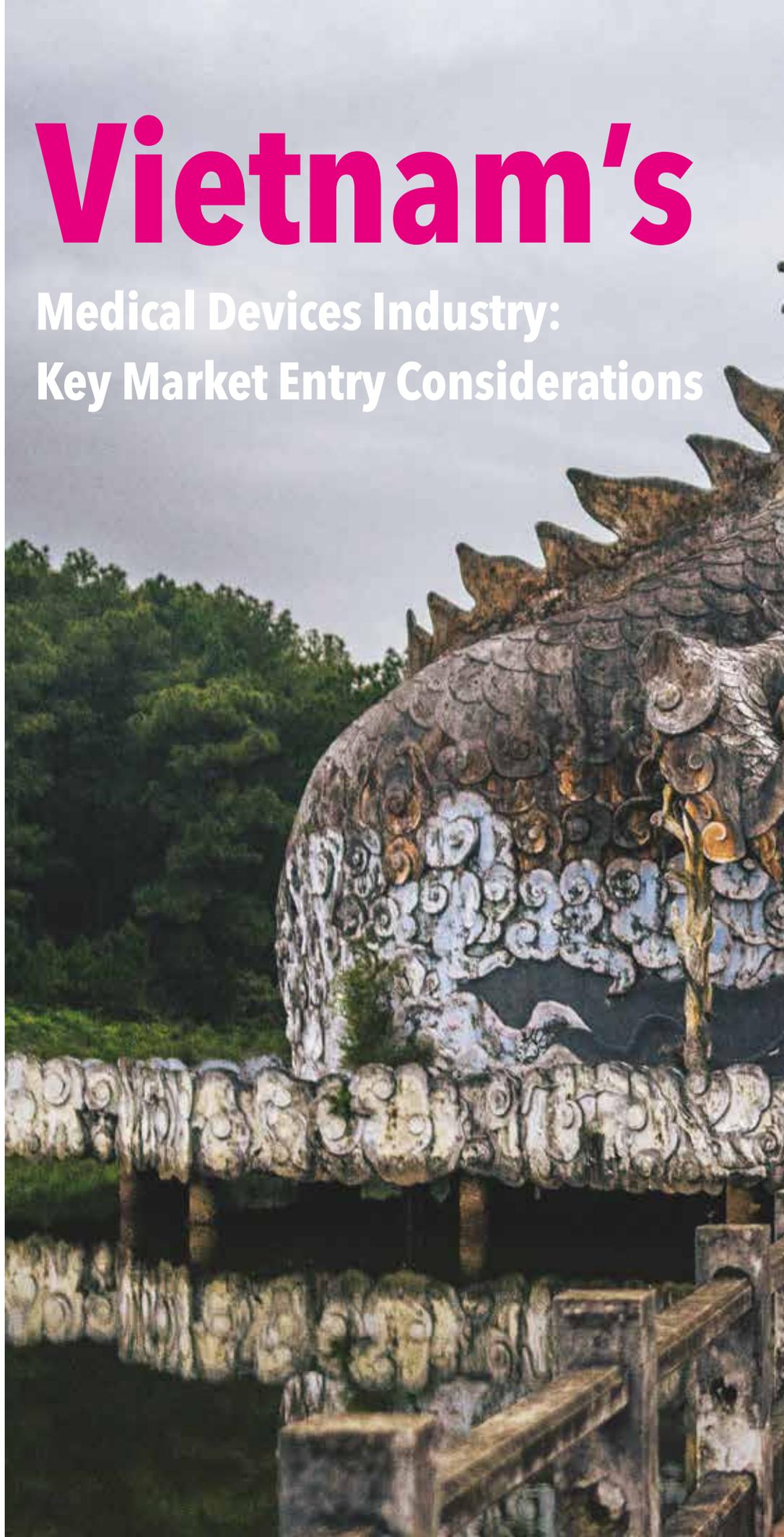
**VIETNAM BRIEFING**

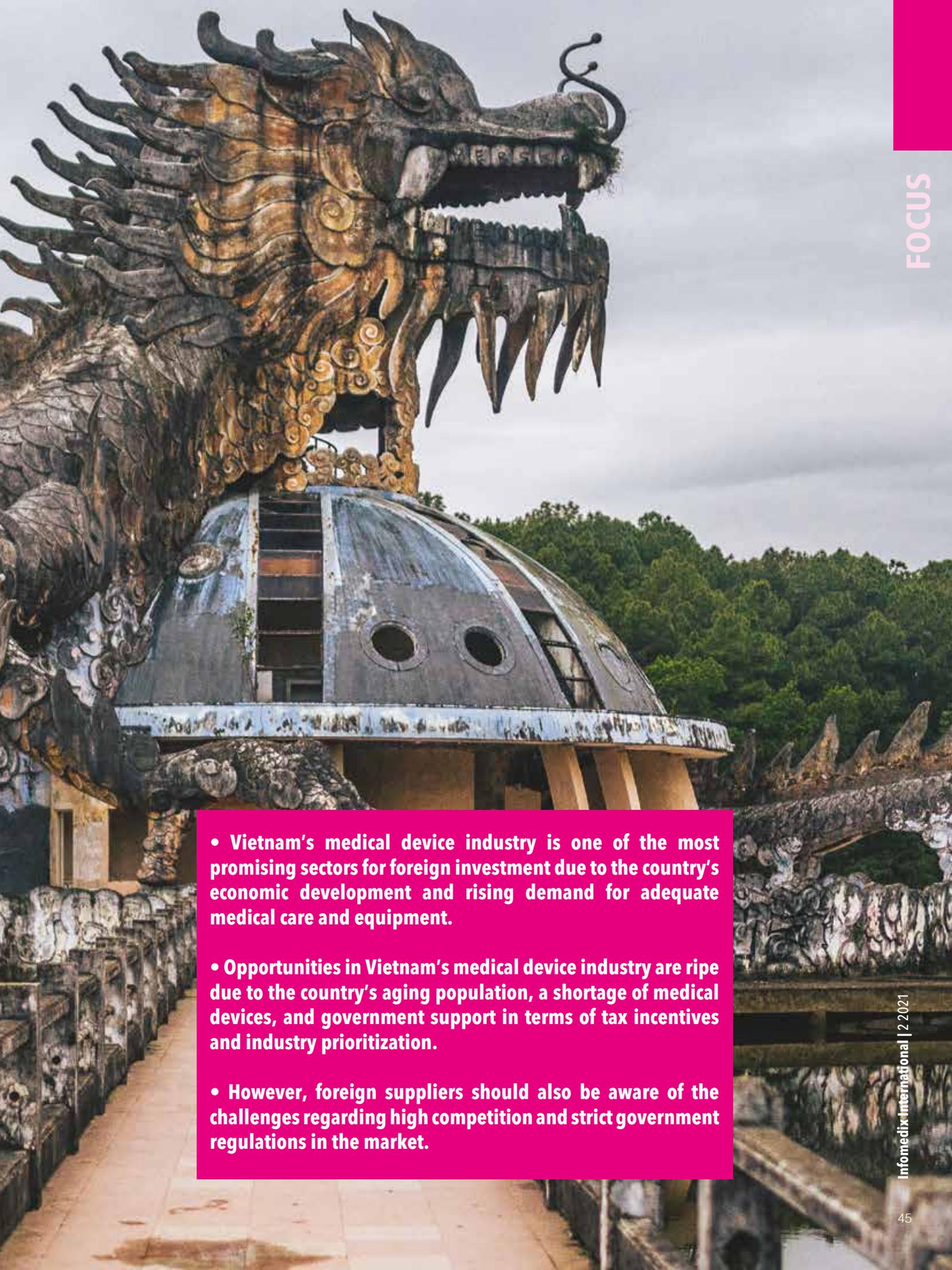
**by Thy Dinh**



# Vietnam's

## Medical Devices Industry: Key Market Entry Considerations





- Vietnam's medical device industry is one of the most promising sectors for foreign investment due to the country's economic development and rising demand for adequate medical care and equipment.
- Opportunities in Vietnam's medical device industry are ripe due to the country's aging population, a shortage of medical devices, and government support in terms of tax incentives and industry prioritization.
- However, foreign suppliers should also be aware of the challenges regarding high competition and strict government regulations in the market.

During the last decade, Vietnam has been experiencing rapid economic and population growth, making the country an attractive investment destination for foreign investors in the public healthcare sector. The Vietnamese healthcare industry is one of the country's development priorities, having received an increasing level of financial support and incentives for investment from the government over the years.

Apart from economic development, the COVID-19 pandemic has also influenced the rising demand of the Vietnamese healthcare sector. Throughout the epidemic, the industry fortified its stance as a top priority due to the increased government support in terms of healthcare expenditures and healthcare access.

In the healthcare sector, the medical device industry is one of the most promising subsectors for foreign investors since most medical equipment in Vietnam is imported from international multinational companies.

More specifically, Vietnam's scarcity of low-cost generic drugs, along with the country's inadequacy in meeting local demands for medical devices' production and innovation, have provided bright prospects for foreign corporations to dominate the Vietnamese medical devices industry.

Reports indicate that over 90 percent of medical devices in Vietnam are imported from foreign countries, of which 55 percent are from Japan, Germany, the US, China, and Singa-

More specifically, Vietnam's scarcity of low-cost generic drugs, along with the country's inadequacy in meeting local demands for medical devices' production and innovation, have provided bright prospects for foreign corporations to dominate the Vietnamese medical devices industry.

pore. The domestic market contributes less than 10 percent to the market share, coming from 50 domestic manufacturers.

The value of imported medical devices into Vietnam has been increasing for the previous five years, surging from 359.1 million in 2014 to 543.5 million in 2019, demonstrating a substantial growth of 51 percent.

Experts predict the Vietnamese medical device industry to continue to improve from 2020 to 2025, demonstrating a bright outlook for foreign investors to enhance their investment

activities in Vietnam.

Vietnam Briefing provides an analysis of the Vietnamese medical device industry in terms of market entry conditions as well as opportunities and challenges for foreign investors looking to enter the market in the near term.

**MARKET ENTRY REQUIREMENTS**

**Requirements and registration process**

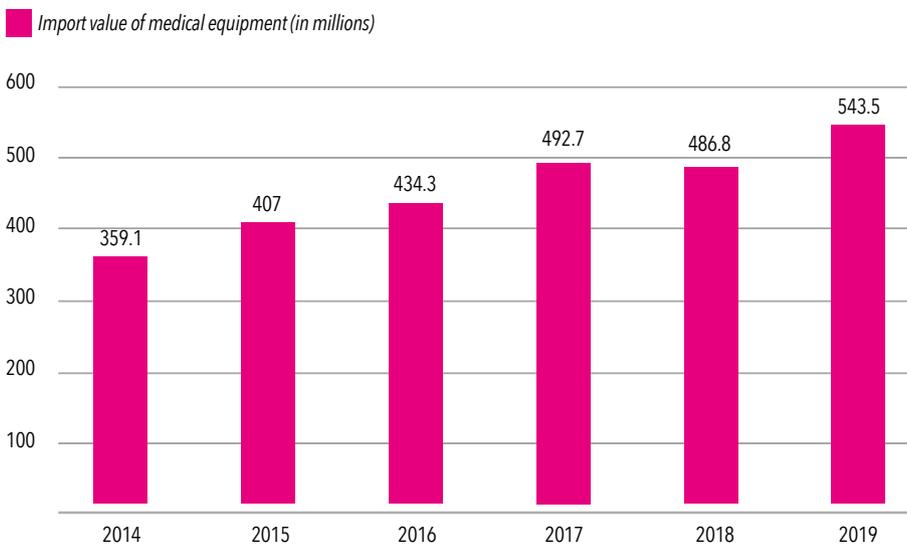
Vietnam's healthcare sector, particularly the medical device industry, is strictly regulated by the Vietnamese authorities. Specifically, imported medical devices have to comply by the regulations and licensing requirements administered by the Ministry of Health (MOH).

According to the MOH's policies, foreign companies are required to register a legal business entity in Vietnam and obtain an import license in order to be eligible to sell medical devices in the Vietnamese market. To meet this requirement, foreign companies usually distribute their products through local distributors or agents.

Further, although imported medical devices are not obliged to be registered, the MOH requires exporters to provide a Certificate of Free Sale, certified by the Embassy of Vietnam in the foreign supplier's country.

In addition, the Vietnamese government issued Decree 36, stating that all medical equipment imported into Vietnam are required to register for marketing authorization (MA) licenses. A marketing authorization license is an application submitted by a foreign manufacturer seeking approval of the host country to bring a medical device to the market.

**Vietnam's Medical Device Imports (In US\$)**



Source: TrendEconomy

## Entry strategy and market considerations

Due to the high complexity and rapid growth of the industry, foreign companies looking to enter the Vietnamese medical device market should consider the following factors:

- Build a specific and strategic plan before entering the market and keep a persistent and resilient attitude since it might take one or two years to thrive in this market;
- Build strong relationships and partnerships with domestic companies (such as joint ventures or mergers & acquisitions) to gain a comprehensive understanding of the market as well as approaching substantial networks and establish a customer foundation. This is a critical factor determining the success of the foreign player in this market;
- Understand that the Vietnamese medical device is divided into two distinct markets: the north and the south, with separate practices and local institutions. The northern part of the country has more government ministries, regulatory agencies, and national healthcare institutions. On the other hand, the southern part of Vietnam has a higher concentration of private institutions and is considered a dominant industry hub; and
- Foreign companies can enter the Vietnamese market indirectly through an agent or a distributor. If investors want to enter the market directly, they should establish a commercial operation by setting up a representative office, a branch office, or a foreign investment project license under Vietnam's revised Law on Investment.

## Competition

Since a majority of the market is dominated by foreign suppliers, the competition between foreign companies is intense. More than 400 businesses from 25 countries and territories have shown interest in this billion-dollar market by attending the annual Vietnam Medi-Pharm Expo in 2020. This is a sign demonstrating that a considerable number of foreign competitors may enter the market in the near future. The primary existing manufacturers and competitors come from the US, Japan, Germany, Italy, the Netherlands, South Korea, Taiwan, and China. Although local manufacturers are not dominant suppliers, foreign investors should be aware that about 50 domestic firms produce approximately 600 products licensed by the MOH, including implantable devices, surgical instruments, diagnos-

tic imaging equipment, hospital beds, scalpels, cabinets, scissors, and consumables.

## Tax incentives

Vietnam has one of the most competitive tax regimes in Southeast Asia, where foreign investors in the medical device industry can benefit from several investment incentives such as:

- Corporate income tax (CIT) incentives;
- Reduction on import duty and exemption of quota restriction; and
- Exemption or reduction of land rental fee.

Due to the inadequate production and quality of domestic medical devices, the Vietnamese government encourages foreign companies to enhance their exportation to Vietnam by enforcing low import duties and no quota restrictions on imported medical equipment. With regards to CIT, foreign companies will receive a CIT rate of 10 percent throughout the entire project life span, a four-year tax exemption, and a 50 percent tax cut in the following five to nine years, depending on the location of the project.

Further, foreign investors are also offered a reduction or exemption on land rental fees for at least seven years.

## OPPORTUNITIES AND CHALLENGES FOR FOREIGN INVESTORS

### Opportunities

According to the United States International Trade Administration (ITA), the healthcare sector is the best prospect industry sector for foreign investors looking to invest in Vietnam. The reason lies in three factors: Vietnam's aging population, insufficient quantity and quality of medical devices, and government support.

As of 2020, Vietnam had a population of over 97 million, with around 60 percent participating in the country's labor force. With rapid social and economic development, Vietnam's working population will continue to increase. As more women are engaged in the workforce, the country's birthrate is projected to drop, while the aging population will rise substantially.

It is forecast that the number of people from 60 years old and over in Vietnam will surge more than double, from 11.9 million to 29 million, by 2050. The age group of over 80 will

triple to account for around six percent of the country's population.

The shift in demographics in Vietnam's population presents development prospects for the Vietnamese healthcare sector, specifically the medical device industry.

Also, Vietnam's healthcare system faces major challenges in overcrowding and poor quality of care and equipment, presenting the medical device market as an attractive investment for market entry and distribute up-to-date equipment to improve the country's healthcare sector as a whole. As mentioned above, the Vietnamese government offers low import duties and no quota restrictions for imported medical devices, and foreign suppliers also receive attractive tax incentives to enhance their trade and investment in the Vietnamese medical device industry.

### Challenges

Foreign investors should be aware of the challenges they might encounter when entering the market, regarding high competition and strictly regulated policies and procedures.

All activities in the Vietnamese medical device industry are strictly governed by legal documents related to technical standards and regulations on the import and distribution of medical equipment. However, the current legal framework has not yet provided clear policies or procedures for foreign investors, bringing them uncertainties regarding regulatory issues.

It is expected that in the near future, the Vietnamese government will make amends on the strict regulations, enhance tax incentives, and formulate clearer policies, encouraging more foreign investors to establish a business in the Vietnamese medical device industry.

### About Vietnam Briefing

*Vietnam Briefing is produced by Dezan Shira & Associates. The firm assists foreign investors throughout Asia from offices across the world, including in Hanoi, Ho Chi Minh City, and Da Nang. Readers may write to [vietnam@dezshira.com](mailto:vietnam@dezshira.com) for more support on doing business in Vietnam or to [info@dezshira.com](mailto:info@dezshira.com) for more support. We also maintain offices or have alliance partners assisting foreign investors in Indonesia, India, Singapore, The Philippines, Malaysia, Thailand, Italy, Germany, and the United States, in addition to practices in Bangladesh and Russia.*

*Article taken from: <https://www.vietnam-briefing.com/news/vietnams-medical-devices-industry-key-market-entry-considerations.html/>*



**Author: Luca Maria Pipitone**

Degree in Biotechnology

luca.pipitone@infodent.com



## HOT TOPIC

# A Very Promising Protein

**Considering that the human body naturally eradicates infectious agents through antibodies production, it comes alone to think that these, if specifically engineered for viral antigens, could become a winning strategy to be adopted in the current pandemic scenario.**

When we talk about biotechnological revolution, the first thing that comes to mind is genetic engineering which is, in fact, the main protagonist. An enormously powerful tool, capable of manipulating biological "matter" to obtain a very wide range of medical products. Thanks to this technology, a series of specifically designed drugs are developed, more or less indirectly, according to the pathology to treat.

If, in a period of technological innovation like this one, genetic engineering is like the orchestra conductor of biotechnologies, around it we have a whole series of top-class molecular instruments capable of materializing what the genetic code is asking for. Among these, the most precise and adaptable one is for sure the antibody, more specifically, monoclonal antibody (mAb). It is such a "configurable" protein that can act as fingerprint for any macromolecular target we want to reach, becoming useful in many fields of medicine. From oncological to rheumatic therapies, passing through the treatment of infectious diseases, antibodies have immense potential but, like everything that is young, they need to grow.

For sure, monoclonals have started their growth process already a few years ago. As a matter of fact, in a moment of crisis like this one, where as much help as possible is requested from science, mAbs have responded by making them-

selves available to the pharmaceutical market. In fact, if we consider that the human body naturally eradicates infectious agents through antibodies production, it comes alone to think that these, if specifically engineered for the viral antigens of SARS-Cov-2, could become a winning strategy to be adopted in the current pandemic scenario.

### FDA Approved Antiviral Therapies

To date, given the emergency, the FDA has authorized 2 therapies based on monoclonal antibodies for the treatment of the early stages of Covid-19. These are two substantially similar drugs produced by the US biotech companies Eli Lilly and Regeneron/Roche which, from a few days, are being used in clinical settings throughout the country.

In an exploratory analysis, bamlanivimab (commercialized by Eli Lilly) has proven useful in outpatients' treatment, reducing hospitalization rate by 11% in those at risk of developing severe symptoms, and by 5% in the general population. In addition, data, regarding the combination bamlanivimab/etesevimab, were also presented in the context of a phase III clinical study on approximately 1,000 patients. The results show that the combination of monoclonal antibodies leads to a 70% reduction in hospitalization related to COVID-19, compared to the placebo group.

While as regards Regeneron, it presented its exploratory data regarding the combination casirivimab/imdevimab and, similarly to the previous case, the drug proved to be more effective in subjects with at least two risk factors. Here, statistics are similar to Eli Lilly's drug, with a percentage reduction in general population hospitalization of around 3%. This combination has also resulted in significant viral load reduction in treated patients, compared to placebo treatment.

These figures must be interpreted. In fact, as expected, older patients, being more susceptible to developing a more severe health status and to hospitalization, have greater benefits from this therapy than younger people. After all, a drug helping the most fragile subjects is, by itself, an excellent result.

In any case, it should still be emphasized that the efficacy rates of these treatments are not exactly astounding but, considering that there are currently no alternative therapies, monoclonals remain a good support for the sick. Support for those people who, as the EMA (European Medicines Agency) points out, are still in the initial stages of infection, for those at high risk of developing severe symptoms, and for those who do not need oxygen.

### A Third Option is on The Way

Other similar monoclonal antibodies are be-

ing tested by international biotech companies and, among these, regdanvimab has already started phase III testing.

It is a mAb from the South Korean company Celltrion, with the SARS-CoV-2 spike protein as a molecular target. Analogously to the other two mAbs produced by the US companies, the action mechanism is based on the link between antibody and viral protein; this bond reduces the ability of the virus to access into cells and therefore leads to an attenuation of the infectious process. According to data provided by the manufacturer, in previous clinical studies, regdanvimab has significantly reduced hospitalization rate, thus attenuating the evolution of the infection towards the severe form. Given the encouraging results obtained in the preliminary testing phases, the study is being reviewed by the EMA and, unless of any problems, the approval for its therapeutic use in Europe is soon to be expected.

In any case, evidence is showing that mAbs are currently unable to offer a resolutive therapeutic solution and that the vaccine remains the only real mean to exit this pandemic scenario. Nonetheless, it should be remembered that any therapeutic support available, regardless of its success rate, plays a substantial role for patients, for society, and for the pharmaceutical sector technological development.

### Bibliography

Myron S. Cohen et al., "Bamlanivimab prevents COVID-19 morbidity and mortality in nursing-home setting", *vCROI* (2021); n°121, Page 34. <https://www.croiconference.org/croi-2021/>

Michaël Dougan et al., "Bamlanivimab+etesevimab for treatment of COVID-19 in high-risk ambulatory patients", *vCROI* (2021); n°122, Page 34-35. <https://www.croiconference.org/croi-2021/>

Meagan P. O'Brien et al., "Casirivimab with imdevimab antibody cocktail for COVID-19 prevention: interim results", *vCROI* (2021); n°123, Page 35. <https://www.croiconference.org/croi-2021/>

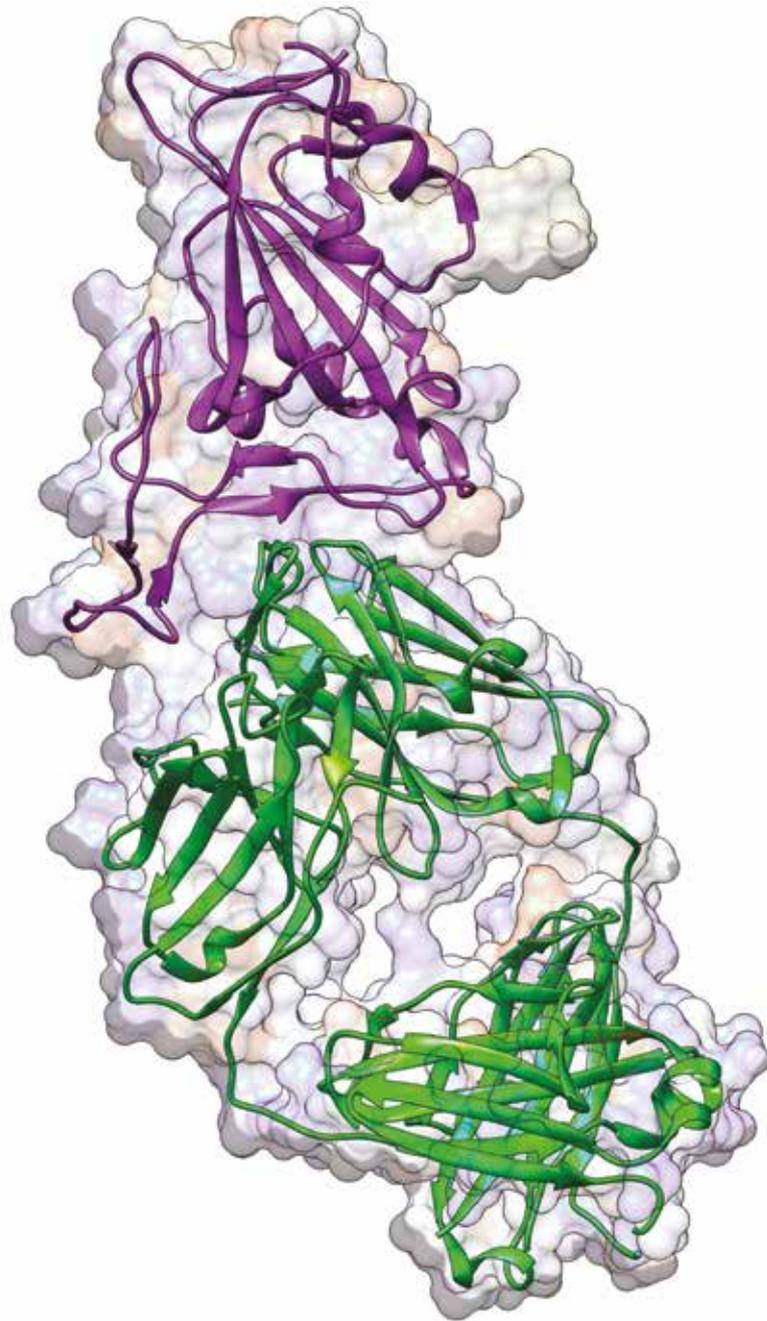
[https://www.aifa.gov.it/documents/20142/1289823/2021.02.04\\_com-EMA\\_revisione\\_dati\\_uso\\_antikorpi\\_monoclonali\\_COVID-19\\_EN.pdf/445a2230-dc39-35ad-5ccc-a009f171d9f5](https://www.aifa.gov.it/documents/20142/1289823/2021.02.04_com-EMA_revisione_dati_uso_antikorpi_monoclonali_COVID-19_EN.pdf/445a2230-dc39-35ad-5ccc-a009f171d9f5)

[https://www.aifa.gov.it/documents/20142/1289678/parere\\_cts\\_monoclonali\\_04.02.2021.pdf/68737075-6f07-2a43-7f94-0bc55f2e38f1](https://www.aifa.gov.it/documents/20142/1289678/parere_cts_monoclonali_04.02.2021.pdf/68737075-6f07-2a43-7f94-0bc55f2e38f1)

[https://www.aifa.gov.it/documents/20142/1289678/press\\_release\\_n629.pdf/f35eb965-022c-09db-408a-ed4cf109e946](https://www.aifa.gov.it/documents/20142/1289678/press_release_n629.pdf/f35eb965-022c-09db-408a-ed4cf109e946)

[https://www.aifa.gov.it/documents/20142/1289823/2021.03.02\\_com-EMA\\_regdanvimab\\_COVID-19\\_IT.pdf/6c8db637-540b-4665-38ac-88304275bc73](https://www.aifa.gov.it/documents/20142/1289823/2021.03.02_com-EMA_regdanvimab_COVID-19_IT.pdf/6c8db637-540b-4665-38ac-88304275bc73)

In any case, evidence is showing that mAbs are currently unable to offer a resolutive therapeutic solution and that the vaccine remains the only real mean to exit this pandemic scenario.



**3D model of the neutralizing interaction between monoclonal antibody CT-P59 (green) and SARS-CoV-2 spike protein (purple), achieved by X-ray diffraction method. Crystal structure has been taken from protein data bank.**



**Author: Luca Maria Pipitone**

Degree in Biotechnology  
luca.pipitone@infodent.com



# What about monoclonal antibodies?

**Monoclonal antibodies are playing an increasingly predominant therapeutic role in the current global pandemic scenario. We've had an in-depth talk with Alberto Farina, Celltrion Healthcare Italy Medical Advisor, on their specifically made mAb as well as on their development as key therapeutic options in the future of medicine.**

## ABOUT REGDANVIMAB

**Since Regdanvimab is a monoclonal antibody (mAb) specific for the spike protein, do you think this could limit its use towards the new variants (English, Brazilian, South African etc.)?**

Regdanvimab shows strong neutralizing activity against S, V, L, G, GH, GR type variants including UK. However decreased neutralizing effect against South African variant. Regarding Brazilian variant, it is under testing. To cope with South African variant, the Company is committed to develop a "mAb cocktail" including new mAbs identified by Celltrion.

**How long do you think the drug will take to complete phase III?**

Phase III already started in several countries globally and Italian centers are expected to be opened very soon. The goal is to complete enrollment by the end of April and have top-line results in mid-2021. Final results are expected within late 2021.

**How many patients are involved in the phase III study?**

Up to 2000 patients to be enrolled in phase III. This number is in addition to 327 patients already enrolled in phase II, and 54 in phase I.

**Why are antibodies ineffective in the most advanced stages of infection?**

The mechanisms of the disease are different in the early mild-to-moderate phase, vs. advanced stage with severe clinical symptoms. The activity of the anti-spike protein of monoclonal antibodies finds its rationale in the initial phase by counteracting the virus infection process and therefore preventing the evolution of the disease towards a serious condition. In severe disease other phenomena prevail, e.g. inflammation or thrombosis, so the anti-spike mechanism is not effective.

**What are the main risks / side effects of monoclonal antibody-based therapies?**

Currently available data show a favorable safety and tolerability profile for all mAbs with a very similar occurrence of adverse events between patients treated with mAbs or placebo. This evidence reassures on safety profile and makes the efficacy/safety ratio positive, also considering the severity and absence of valid alternative therapies for the ongoing pandemic. Anyway, data are still limited, and treatments are under investigation. More and larger data are needed, and careful safety monitoring will be performed in the future.

**The drug has been shown to accelerate the recovery time of patients. Was this result**

**observed in all patients? Regardless of age? Regardless of previous pathologies?**

A positive effect was observed in all patients, but it was larger and more evident in high-risk patients. Briefly:

- Regdanvimab treated patients reported reduced progression rates to severe COVID-19 by 54% for patients with mild-to-moderate symptoms (all patients) and 68% for moderate patients aged 50 years and over
- Regdanvimab treated patients reported a significantly shortened time to clinical recovery ranging from 3.4 to 6.4 days quicker compared to placebo
- A significant reduction of viral load compared to placebo was reported at Day 7 in patients treated with Regdanvimab.

## ABOUT MONOCLONAL ANTIBODIES IN GENERAL

**Monoclonal antibodies, due to their "programmability" and their selectivity against many antigens, possess an enormous therapeutic potential. From oncological to rheumatic therapies, mAbs seem to be destined to play a central role in the future of medicine. Do you think that this point of view will become real or technical limits will prevent this growing process?**

Thanks to their specificity, they are able to hit key molecular targets to cure many diseases, representing a real turning point in clinical management, allowing previously unattainable results to be achieved, for example to prevent disability in patients with immune-mediated inflammatory diseases or to prolong survival in cancer patients. By their nature, monoclonal antibodies require administration via injection. In recent years the development of subcutaneous formulations has contributed to making administrations fast and easy, in comparison to long intravenous infusions, which must take place under the supervision of healthcare professionals. Monoclonal antibodies continue to be studied and represent a substantial part of the global research pipeline. mAbs will continue to represent a key therapeutic option for many years to come.

***In the field of monoclonals, in your opinion, in which direction should scientific research mostly use its resources?***

Specifically, for monoclonals it is advisable to develop SC formulations which do not require hospitalization of patients for their administration, this helps to optimize the organization of national health systems and improve quality of life. Additional efforts should be made to develop molecules that, in addition to being effective, are well tolerated and compatible with the human body. Let's not forget that mAbs are complex biological substances that could induce immune responses if the body recognizes them as foreign.

Furthermore, but this holds true for all new drugs and therapies, it is a priority to focus on unmet medical needs, conditions with no or non-adequate cure, and to bring to the market new drugs that have additional therapeutic value.

The development of biosimilar medicines is equally important. Biosimilars are "copies" of an originator medicinal product with an expired patent, they are approved following rigorous evaluation by regulatory agencies, and



***Alberto Farina, Celltrion Healthcare Italy Medical Advisor***

guarantee a high standard of care at a lower cost. They allow for greater global access to therapy and the optimization of resources to invest to treat more patients.

***Do you think that in the socio-technological context in which we find ourselves there are some technical or bureaucratic aspects that could be updated to accelerate the development of new generations of monoclonal antibodies?***

Bringing a new therapy into clinical practice requires several years. Developing a new monoclonal antibody, even in the case of a biosimilar, requires huge financial and human resources, and the need for expertise in many areas: preclinical research in the laboratory, clinical research on patients, regulatory skills to obtain authorizations, and distribution capacity on a global scale.

All the aforementioned areas can be improved, however, based on my experience, I hope for

greater speed in the ethical-regulatory process of authorization of clinical trials, which can often take months or even more than a year. The approval phase also takes a very long time and is still very uneven between the EU, the USA and other countries, making access to the same medicine very different among geographical areas.

If there is anything the pandemic has taught us, it is that, with the right will and cooperation between industry, the scientific community and regulatory agencies, this is possible. By January 2020, we barely knew about COVID-19, and by the end of the year the first vaccines and therapies were already available.

***Regardless of regdanvimab, what can you tell us about Celltrion Healthcare as a company and its international perspectives?***

Celltrion Healthcare has become one of the best-known biopharmaceutical companies, globally. Headquartered in South Korea, Celltrion network is present all around the world through affiliates, such as Celltrion Healthcare Italy, or business partners. Celltrion is focused on biological medicines, and the name itself is a combination of the terms "cell" in our body and "Triones," a guiding star that is also known as the Big Dipper. The name of our company conveys our will to promote the health and welfare of humanity by becoming a "guiding star" in the biopharmaceutical industry. Celltrion was the first company in the world to market a biosimilar of a monoclonal antibody, infliximab (Remsima), in 2013, offering the highest standards of care and improving global access to the drug. In the following years Celltrion successfully marketed additional biosimilars (rituximab – Truxima, trastuzumab Herxuma, adalimumab – Yuflyma) and strengthened its pipeline with innovative products such as the first and only subcutaneous (SC) formulation of infliximab (Remsima SC) and Regdanvimab (CT-P59 or Regkirona). Our research and development program includes several additional biosimilar and innovative candidates, which we plan to bring to market in the coming years.

**Biosimilars are "copies" of an originator medicinal product with an expired patent, they are approved following rigorous evaluation by regulatory agencies, and guarantee a high standard of care at a lower cost.**

# Calendar

Here our trade shows selection.  
Discover all worldwide exhibitions at  
[www.infomedix.it/calendars/tradeshows](http://www.infomedix.it/calendars/tradeshows)



**01/01-31/12/2021**

## SMART MEDICAL FAIR 2021

**The International Virtual Medical  
Trade Fair  
Italy**

Organized by:  
Infodent&Infomedix International

**[www.smartmedicalfair.com](http://www.smartmedicalfair.com)**

Smart Medical Fair is an international virtual exhibition open all year round organized by categories.

The platform virtually connects manufacturers with a global audience.

For further information, visit  
Infodent&Infomedix Information Booth!  
[www.smartmedicalfair.com/stand/h5p1b0z1217](http://www.smartmedicalfair.com/stand/h5p1b0z1217)

## JUNE



**21-24/06/2021**

## Arab Health 2021

**Online: 23 May - 22 July 2021**  
**Infomedix Int'l Booth R.F01**

**Dubai - United Arab Emirates**

Informa PLC  
Registered Office  
5 Howick Place  
London SW1P 1WG - UK  
Phone: +44 20 7017 5000  
Website: [www.arabhealthonline.com](http://www.arabhealthonline.com)  
Venue: Dubai International Convention & Exhibition Centre - Dubai  
United Arab Emirates  
**[www.arabhealthonline.com](http://www.arabhealthonline.com)**

## JULY

**06-08/07/2021**

## Dubai Derma

**20th Dubai World Dermatology and  
Laser Conference & Exhibition**

**Dubai - United Arab Emirates**

Organized by: Index Conferences & Exhibitions

Organisation Est.  
P.O.Box 13636, Dubai, United Arab Emirates  
Phone: +971 4 3624 717  
Fax: +971 4 3624 718  
[derma@index.ae](mailto:derma@index.ae)  
[www.dubaiderma.com](http://www.dubaiderma.com) // [www.index.ae](http://www.index.ae)  
General Enquiries: Vaneza Liaguno (Senior Project Manager)  
Phone: +971 4 520 8888 Ext: 603

Direct: +971 4 520 8848  
Mobile: +971 50 8939312  
[vaneza.santos@index.ae](mailto:vaneza.santos@index.ae)

Venue: Dubai International Convention and Exhibition Centre  
Dubai - UAE

**[www.dubaiderma.com](http://www.dubaiderma.com)**

**01-03/07/2021**

**Medical Taiwan 2021**

**International Medical, Health & Care Expo**

exhibit@taitra.org.tw  
Website: www.taitra.org.tw

**Taipei - Taiwan**

Organized by: TAITRA  
5, Xinyi Rd, Sec. 5, Xinyi District  
Taipei 11011  
Taiwan  
Phone: +886 2 2725 5200  
Fax: +886 2 2725 1314

Venue:  
Taipei Nangang Exhibition Center  
Hall 2 - TaiNEX 2  
Taipei  
Taiwan

**www.medicaltaiwan.com.tw**



**21-24/07/2021**

**Vietnam Medi-Pharm 2021**

**Hanoi - Vietnam**

VIETNAM ADVERTISEMENT & FAIR EXHIBITION  
JSC - VIETFAIR  
Address: Bien Phong Newspaper Bldg., 40A  
Hang Bai St., Hoan Kiem Dist., 07 Tran Phu St.,

Ba Dinh Dist.  
Hanoi, Vietnam  
Phone: +84 02439 365 566  
Email: xttm@vietfair.vn  
Website: www.vietfair.vn

Venue: Friendship Cultural Palace  
91 Tran Hung Dao St  
Hanoi  
Vietnam

**www.vietnammedipharm.vn**

**AUGUST**

**04-06/08/2021**

**CPhI South East Asia 2021 - P-MEC, InnoPack - ICSE - NEX - FDF**

**Bangkok - Thailand**

Informa PLC  
Registered Office

5 Howick Place  
London SW1P 1WG  
UK  
Phone: +44 20 7017 5000  
Customer Service Team: +31 20 708 1637

Venue:  
IMPACT Exhibition Center  
Hall 7-8  
Muang Thong Thani, Bangkok  
Thailand

**www.cphi.com**



**AUGUST**

**07-10/08/2021**

**AORN 2021 -  
68th Global Surgical  
Conference and Expo**

**Orlando, FL - USA**

Association of periOperative Registered Nurses  
2170 South Parker Road, Suite 400  
Denver, CO 80231  
Toll-Free: 800 755-2676  
Phone: +1 3030 755 6300  
Email: [custsvc@aorn.org](mailto:custsvc@aorn.org)  
Website: [www.aorn.org](http://www.aorn.org)  
Venue: Orange County Convention Center  
9800 International Dr.  
Orlando, FL 32819 - USA  
[www.aorn.org/surgicalexpo](http://www.aorn.org/surgicalexpo)



**09-13/08/2021**

**HIMSS Annual  
Meeting 2021**

**Las Vegas, NV - USA**

Healthcare Information  
and Management Systems Society (HIMSS)

33 West Monroe Street, Suite 1700,  
Chicago, IL 60603-5616  
USA

Phone: +1 312 664 4467  
Fax: +1 312 664 6143

Venue:  
to be announced

[www.himssconference.org](http://www.himssconference.org)

**24-27/08/2021**

**EMIM 2021 - 16th  
European Molecular  
Imaging Meeting**

**Göttingen - Germany**

Organized by:  
European Society for Molecular Imaging

ESMI Management Office  
Berrenrather Str. 188c  
50937 Cologne  
Germany  
Phone: +49 221 78966180  
Email: [office@e-smi.eu](mailto:office@e-smi.eu)

Venue: Lokhalle  
Göttingen  
Germany

[www.e-smi.eu](http://www.e-smi.eu)



Infodent & Infomedix International

# ADVices

“

***Marketing is really just  
about sharing your passion.***

---

Michael Hyatt

## SEPTEMBER

**31/08-03/09/2021**

## ISICEM 2021 - 40th International Symposium on Intensive Care and Emergency Medicine

**Brussels - Belgium**

Erasme Hospital  
Intensive Care Department  
Route de Lennik 808  
B - 1070 Brussels  
Fax: +32 2 555 4555

Exhibition and Faculty Members:  
Colette Dutilleu  
Phone: +32 2 555 3215

colette.dutilleu@intensive.org

Manager:  
Véronique De Vlaeminck  
Phone: +32 2 555 4757  
veronique.de.vlaeminck@intensive.org

Venue: Square Brussels  
1070 Brussels  
Belgium

**www.isicem.org**

**01-03/09/2021**

## Expo Med Mexico 2021

**Mexico City - Mexico**

Organised by: Informa Markets  
Informa PLC  
Registered Office  
5 Howick Place  
London SW1P 1WG - UK

Phone: +44 20 7017 5000  
Website: [www.arabhealthonline.com](http://www.arabhealthonline.com)

Exhibition Contact:  
Phone: +52 55 8896 9741  
Email: [expomed@informa.com](mailto:expomed@informa.com)

Venue:  
Centro Citibanamex  
Mexico City  
Mexico

**www.expomed.com.mx**

**01-03/09/2021**

## Fime 2021

**Miami Beach, FL - USA**

\*\*\*FIME 2021 is ONLINE  
from 16 August 2021 to 1 October 2021  
Organised by: Informa PLC  
Registered Office - 5 Howick Place  
London SW1P 1WG - UK  
Phone: +44 20 7017 5000  
Website: [www.arabhealthonline.com](http://www.arabhealthonline.com)  
Exhibition Contact: [fime@informa.com](mailto:fime@informa.com)  
Venue: Miami Beach Convention Center  
Miami Beach, Florida  
USA

**www.fimeshow.com**



# ANNUAL™ RADIOLOGY MEETING IN UAE

10 - 12 October 2021  
Dubai World Trade Centre

## In-person Event **Radiology Dedicated** Middle-East Focused

### DON'T MISS IT OUT!

  
**1,000+**  
Participants

  
**60+**  
Leading Brands

  
**3-Day**  
Focused  
Radiologist  
Conference

  
**2-Day**  
Dedicated  
Radiographer  
Sessions

  
**1-Day**  
Special  
Ultrasound  
Seminar

  
**CME**  
Accredited

### They Trust Us

**UNITED  
IMAGING**



**AGFA**   
HealthCare

 **AMICO**  
x-ray technologies

**Canon**

**PHILIPS**

 **EIZO**

**FUJIFILM**



**HITACHI**  
Inspire the Next



**INFINITT**

**SIEMENS**  
Healthineers 

# APPLY NOW

**Exhibition inquiries:**  
[exhibit@radiologyuae.com](mailto:exhibit@radiologyuae.com)

**Conference inquiries:**  
[info@radiologyuae.com](mailto:info@radiologyuae.com)

     
Radiology\_UAE

[radiologyuae.com](http://radiologyuae.com)

**INDEX® Conferences & Exhibitions Organization Est.**  
INDEX Holding Headquarters, Road D-62, Opposite to Nad Al Hamar | P.O. Box 13636, Dubai, UAE  
Tel: +971 4 5208888 | Fax: +971 4 3384193 | e-mail: [info@radiologyuae.com](mailto:info@radiologyuae.com) | [index.ae](http://index.ae)

Organized by



In collaboration with



## OCTOBER

10-12/10/2021

## ARM 2021 - Annual Radiology Meeting in UAE

Dubai - United Arab Emirates

Organized by:  
Index Conferences & Exhibitions  
General information:  
Andrea Barretto

info@radiologyuae.com  
Operations Manager  
Phone: +971 4 520 8907

In collaboration with:  
Radiology Society of the Emirates (RSE)  
Email: info@rse.org.ae  
Phone: +971 4 255 6655

Venue:  
Dubai World Trade Centre - DWTC  
Dubai - UAE

[www.radiologyuae.com](http://www.radiologyuae.com)



## NOVEMBER



15-18/11/2021

## MEDICA and COMPAMED 2021

Meet us at Infomedix Int'l Booth  
Düsseldorf - Germany

Organised by Messe Duesseldorf GmbH  
Messeplatz, Stockumer Kirchstrasse 61  
D-40474 Duesseldorf  
Germany  
Postal Address: PO Box: 10 10 06

D-40001 Duesseldorf  
Germany  
Phone: +49 211 45 60 01  
Infophone: +49 211 45 60 900  
Fax: +49 211 45 60 668  
Email: info@messe-duesseldorf.de  
Website: www.messe-duesseldorf.de  
Venue:  
Duesseldorf Trade Fair Centre  
Messeplatz  
40474 Duesseldorf  
Germany

[www.medica-tradefair.com](http://www.medica-tradefair.com)



**Given the current situation worldwide,  
we warmly invite you to check trade shows dates,  
venues and booths location listed in this magazine**

Welcome to

SMART ®

MEDICAL

FAIR

the virtual trade fair  
open all year round

**NOT YET AN EXHIBITOR?**

Drop us an email:

[customercare@smartmedicalfair.com](mailto:customercare@smartmedicalfair.com)

and discover our special offers.

**ARE YOU A DISTRIBUTOR?**

Visit the international virtual exhibition open all year round,

**e-meet 245 medical and dental companies**

looking for worldwide distributors. You can be their next customer!

[www.smartmedicalfair.com](http://www.smartmedicalfair.com)

# The Distributors Wall

Looking for distributors? Interested to deal new products and improve your business? These are the pages for you: announcements of companies and distributors searching for each other. Your next partner is already waiting for you.

Write to [classified@infomedix.it](mailto:classified@infomedix.it) to be in the next issue. Always free for distributors!

● Looking for products

● Looking for distributors

● Miscellaneous



Infomedix International  
Advertisers

All classifieds we receive will be verified.

Any fraud or incorrect behavior will be reported to the competent international authorities.

As a consulting agency we can only guarantee the reliability of classifieds carrying our world logo, since they are our customers and we are aware of their proven seriousness.



"Amoul®" is a leading global provider of emergency care devices and solutions. Founded in 2001, The company have grown into an innovation-driven with integrated services of R&D, innovating and manufacturing products widely used in the areas of rescue, intensive care, respiratory resuscitation, conscious sedation etc. Welcome new distributors to join us.

**AMBULANC**

[www.ambulgroup.com/en](http://www.ambulgroup.com/en)  
[info@ambu-lanc.com](mailto:info@ambu-lanc.com)



External Access Targeting Device (EATD) - Precio.UroGuide (P.UG)

The world's first Class I surgical device to assist surgeons in precision image-guided percutaneous accesses to deep organs such as kidney, is looking for regional/country distributors, surgeons and JV investors to work together to bring the device into operating theatres around the world. CE, FDA & HSA registered/approved. **Invivo Medical**  
[business@invivo-medical.com](mailto:business@invivo-medical.com)  
[www.invivo-medical.com](http://www.invivo-medical.com)



Quality. Innovation. Experience. **SW** is pioneering sustainability in nitrile gloves with over 40 years' experience. SW is known for breakthrough innovations in hand health and quality, now experience true biodegradability without performance loss with EcoTek® Nitrile Biodegradable Technology. Help us distribute the next generation of nitrile gloves.

[www.SWSafety.com](http://www.SWSafety.com)  
[marketing@swsafety.com](mailto:marketing@swsafety.com)



**Biegler Medizintechnik**, based in Austria/Europe, has to its credit more than 40 years of research, development and production in the service of medicine. Biegler's expertise is in the development and manufacture of ready-for-sale medical products. The company operates distribution in over 70 different countries with distribution partners. [www.biegler.com](http://www.biegler.com)  
[office@biegler.com](mailto:office@biegler.com)

● We are a trusted partner for medical equipment manufacturers providing disruptive supply chain solutions across 23 countries in the MEA region. Our solutions substantially reduce import clearance & fulfilment lead time from 3-4 weeks to 1-2 days, improve ROI & Field support SLA, and ensure E2E real-time visibility on supply chain operations through our AI-enabled platform.

**Pedigri Technologies** U.A.E.

[info@pedigritechnologies.com](mailto:info@pedigritechnologies.com)  
[www.medical.pedigritechnologies.com](http://www.medical.pedigritechnologies.com)

● **IVD** Reagent chemical and make one joint venture medical disposable and surgical product in Bangladesh.

VIP Traders - Bangladesh  
[viptradersbd@gmail.com](mailto:viptradersbd@gmail.com)



**New Life Radiology s.r.l.** is a company with 30 years of experience, whose main activity is the manufacture of devices and the assistance in the field of Dental Radiology. NEW LIFE RADIOLOGY, ISO 13485 certified, manufactures intraoral x rays, intraoral sensors, phosphor plate scanners, Digital Panoramics and CBCT: all Made in Italy and CE certified products.

[www.newliferadiology.it](http://www.newliferadiology.it)  
[info@newliferadiology.it](mailto:info@newliferadiology.it)

● Our company is specialised in neurosurgery and orthopaedics products. We look forward to distributing products for pain treatment.

**TCP Health**  
[ormigareinaldo@gmail.com](mailto:ormigareinaldo@gmail.com)



**DAS** since 1977 designs and produces a wide range of high standard analytical instruments, manufactured in its facility in Italy. Main products: Fully automated processors for ELISA microplates, IFA-slides, BLOT strips.

Bench top instrument: ELISA Micro-Plate Reader, ELISA Plate-Washers, Neonatal bilirubin-meters and more.

[www.dasitaly.com](http://www.dasitaly.com)  
[commercial@dasitaly.com](mailto:commercial@dasitaly.com)

● Sui Generis is a 12-old healthcare distributor in Sri Lanka.

Our range of suppliers can be seen at [www.suigeneris.lk](http://www.suigeneris.lk)

We want to further expand our product range. We would like to work with manufacturers who are willing to believe in developing distributors with training and CMEs for users.

**Sui Generis (Pvt) Ltd.**  
Sri Lanka  
[info@suigeneris.lk](mailto:info@suigeneris.lk)

● We are **Tadbir Gostar Darman Iranian Co., Ltd (TGMED)**, a medical distributor company in Iran. We are looking for European surgical blades, Chinese hot water bottle, European adult incontinence pants, women sanitary products, and advanced wound dressing.

**Tadbir Gostar Darman Iranian Co., Ltd.**  
Iran - [import@tgdarman.com](mailto:import@tgdarman.com)



**Spectra** utilizes the latest state-of-the-art manufacturing, measuring and inspection systems, along with over 225 years of senior staff needle-manufacturing experience. Spectra has been awarded several U.S. patents for special needle processing and products, as well as U.S. FDA medical device clearances and drug approvals for lidocaine and sodium chloride.

[www.spectramedical.com](http://www.spectramedical.com)  
[sales@spectramedical.com](mailto:sales@spectramedical.com)

● We are a company that have been selling medical equipment in Chile for 37 years. We are looking for in-hospital and transport defibrillator monitors and monitors.

**Imedica del Pacifico Ltda** - Chile  
[horacio.repetur@imedicadelpacifico.cl](mailto:horacio.repetur@imedicadelpacifico.cl)

● **NATURAMedicatrix** is a Belgian-Luxembourg based company that develops and distributes a wide range of food supplements. We are always looking for new innovative products to expand our range of products. Please contact: Mr Guillaume Castronovo

**NATURAMedicatrix** - Belgium  
[exportassistant@naturamedicatrix.be](mailto:exportassistant@naturamedicatrix.be)  
[www.fertilhom.eu](http://www.fertilhom.eu)  
[www.naturamedicatrix.be](http://www.naturamedicatrix.be)



**KUGEL** medical professional Pathology Equipment. For more than 25 years, we have been selling our devices and systems very successfully through an international distribution network for pathology, histo-pathology, forensic medicine and universities, Highest quality "made in GERMANY" is what we stand for. If you would like to become one of our exclusive distributors, please contact us at

[www.KUGEL-medical.de](http://www.KUGEL-medical.de)  
[info@KUGEL-medical.de](mailto:info@KUGEL-medical.de)

● As a leading corporation in pharmaceuticals and generally in health care products and dental range, we have a great responsibility towards the medical society and citizens. To be amongst the top 10 pharmaceutical agencies/distributors in the coming years. **Batterjee Bros Co.** - Saudi Arabia [k.abukishik@batterjeenat.com](mailto:k.abukishik@batterjeenat.com)

● We sell endodontic, dental restoration, periodontic and implant and surgical products and we have companies in Malaysia, Singapore and Indonesia. I am looking for a good quality local anaesthetic and periodontal pocket medicament. **TKDS Group** - Malaysia

[tkdental@gmail.com](mailto:tkdental@gmail.com)

● We are **Ramses Medical Company** located in Egypt and established in 1996. For 25 years we have been one of the biggest and famous companies in Egypt in physiotherapy and rehabilitation equipment and we have a great previous experience in Egypt market and an extensive customer list. We have a big names of mother companies in Europe as an agent and we are looking for to more for expansion of our company. **Ramses Medical** - Egypt

[shebkh@yahoo.com](mailto:shebkh@yahoo.com)

● We are a Belgian distributor who is active in the distribution and repair of surgery, endoscopy and echography field. Currently, we are looking for cooperation with European repair companies of medical devices. **DL Medical** - Belgium

**Dieter.lembrechts@dlmedical.eu**  
[www.dlmedical.eu](http://www.dlmedical.eu)

● **M E D Line Medical Supplies, LLC** from Dubai is specialised in medical devices and implants of spine and orthopaedics products.

We are looking to expand our range in ENT or gynae or another specialty with the specific items. You can check our website

[www.medline-uae.com](http://www.medline-uae.com)

Our priority is finding radio frequency for pain management and adhesive dressing for spine.

**M E D Line Medical Supplies L.L.C.**

UAE - +971 4 368 8865

[hidriss@medline-uae.com](mailto:hidriss@medline-uae.com)

[www.medline-uae.com](http://www.medline-uae.com)

● **Asia Jarah Pishro** is a leading producer and distributor company for disposable medical equipment such as surgical covers, surgical tampons, tip suction, polypropylene mesh, laparoscopic accessories and so on under the QC management. **Asia Jarah Pishro** - Iran

[md\\_ahmadi@hotmail.com](mailto:md_ahmadi@hotmail.com)  
[info@asiajarah.com](mailto:info@asiajarah.com)

● **Arquimed Chile**, the largest importer for over 90 years in the medical equipment and disposables with more than 70 million dollar per year sales. Open for new opportunities. Please write to:

[Bkaufmann@arquimed.cl](mailto:Bkaufmann@arquimed.cl)

Arquimed Chile - Chile

● **Elis Pharmaceutical Wholesaler** is a registered pharmaceutical warehouse located in Ankara, Turkey with a professional team for sourcing and supplying a vast range of medicines. Currently we are looking for new business partners and distributors from all over the world for selling pharmaceuticals. Please contact us for more details:

**Elis Pharmaceutical Wholesaler** - Turkey

[Ali.hassan@elisilac.com](mailto:Ali.hassan@elisilac.com)

[www.elisilac.com](http://www.elisilac.com)

● We are a fast-growing company in Saudi Arabia market with a highly professional well-trained team. We have seven branches in deferent cities in Saudi Arabia to cover the most important cities and we have an excellent penetration in both governmental and private sectors. We are looking for new products to distribute in Saudi Arabia market.

**MEDIWAY Pharma Co.** - Saudi Arabia

[essam@medi-way.com](mailto:essam@medi-way.com)



**Gemavip** is an Italian company with a long experience in producing oral care products such as toothpaste, and mouthwashes. Our products are sold

on the market with IALOZON brand. Gemavip evaluates the possibility of partnership in the international distribution of the lalozon brand, for information send an email to

[info@gemavip.com](mailto:info@gemavip.com)



**Technix** is a company with 40 years of experience in X-ray field. Our main goal is to develop high quality products at competitive prices. Technix

products include mobile X-ray equipment, C-arm and multifunctional tables. We are looking for OEM partner and distributors interested in our systems.

[info@technix.it](mailto:info@technix.it)

● Established in 2012, **Semo Technology Marketing Products Ltd** mainly engaged in promoting medical equipment and engineering products. **SEMO Technology Products** India

[semomohan@rediffmail.com](mailto:semomohan@rediffmail.com)

[mohan@semotechnology.in](mailto:mohan@semotechnology.in)

● **Ni Tun Oo Trading Co., Ltd** is one of the leading and premium distributors of pharmaceuticals products, medical devices, health care products, food and beverages in the Myanmar market.

**Ni Tun Oo Trading Co., Ltd.**

Myanmar

[nto.trading@gmail.com](mailto:nto.trading@gmail.com)

● We need 200 and 240 strokes hydraulic oil cylinder for medical beds. We use around 200pcs per month. **SAPEC** - South Korea  
[sapac@sapac21.co.kr](mailto:sapac@sapac21.co.kr)



With over 25 years of Experience in the Surgical service industry, **IEC** is offering training and consulting for technical companies that want to start their own in-house Endoscope repair program or an existing facility expansion. We customize single day training events as well as full staff training over several weeks. Please contact us for further information. [www.IECendoscopy.com](http://www.IECendoscopy.com)  
[info@endoscopy.md](mailto:info@endoscopy.md)



We are **BMI Biomedical Intl.** a Company with 25+ years of experience in the medical X-ray field (both for human and veterinary applications) with a current worldwide network covering about 70 Countries: any distributor or OEM partner interested in our products please get in touch with us. T.+39 035 4376381  
[info@bmibiomedical.it](mailto:info@bmibiomedical.it)  
[www.bmibiomedical.it](http://www.bmibiomedical.it)

● Our company was established in 2011 in Benghazi (Libya) and we import from China, Turkey, Egypt, and Korea.

We are looking for new suppliers and manufacturers for ultra-sound machine, x-ray machine surgery equipment, medical furniture, first aid, disinfection materials, autoclave machines, medical fridge, telescopes.

#### **PLUTO MEDICAL**

Lybia  
[Plutomedical@gmail.com](mailto:Plutomedical@gmail.com)



#### **SUCTION DEVICES for COVID-19 PATIENTS**

Millions of COVID-19 infected people resulted in an unprecedented surge in airway emergencies, requiring more suctioning than ever inside and outside of hospitals. The **SSCOR Duet** is perfect for hospital emergency carts, patient transport, surgi-center backup, long term care facilities... The **SSCOR VX-2** is a lightweight, portable, powerful and tough, battery powered suction unit.

[www.jdhmedical.com](http://www.jdhmedical.com)  
Contact: [medical@jdhintl.com](mailto:medical@jdhintl.com)

● We have 20 years' experience in Brazilian market to develop a long-lasting business relationship. Currently we are working with suppliers from 7 different countries.

We are looking to distribute medical disposables with innovative approach mainly for pain management, spine surgery, orthopaedics, neurosurgery, wound care and ENT.

#### **Innport**

**Innovative Imports**  
Brazil - [fgalvao@innport.com.br](mailto:fgalvao@innport.com.br)



Looking for distributors for Graduated Compression medical stockings and Anti-Embolism stockings.

Looking for distributors for Shapewear and modeling underwear.

All products Made in Italy, certified CE, ISO 13485 and Oekotex.

#### **Calze G.T. S.r.l.**

Via Walter Tobagi 14/21  
46040 Casaloldo MN, Italy  
Contact details: Mr. Gorgaini Cristiano  
Phone: +39-0376-780686  
[cristiano@relaxsan.it](mailto:cristiano@relaxsan.it)  
[www.relaxsan.it](http://www.relaxsan.it)

**NEW**

# What is

**SMART**   
**MEDICAL  
FAIR**



The **Smart Medical Fair** is an international virtual exhibition open all year round that gives you the power to connect with a global audience and virtually showcase your products and services to meet your business objectives.

The **Smart Medical Fair** is made up of the following pavilions:

- Dental Technology;
- Laboratory Equipment, Diagnostics, Test;
- Physiotherapy, Orthopaedic Technology, Sport;

- Electromedical Equipment, X-Ray, Medical Technology;
- Communication Technology & Software;
- Commodities & Consumer Goods;
- Technology Components;
- Start-up & Innovation Products.

**Do you want to join our Smart Medical Fair?**

**Write to [advertise@infodent.com](mailto:advertise@infodent.com) and ask our Marketing Consultants!**

**Be online anytime and anywhere on [www.smartmedicalfair.com](http://www.smartmedicalfair.com)**



**Infodent**®  
**Infomedix**  
**International**  
Publishing  
& Consulting  
House



# Climate Change is no Longer a Future Threat. It's Happening Now.

*Rising temperatures and extreme weather are having a huge impact on vulnerable communities already struggling to get the food they need. We see it in more frequent extreme weather like floods, droughts and storms. These destroy homes, habitats and livelihoods and they're a leading cause of rising hunger levels around the world. No nation, no matter how rich, is immune to the damage climate change is causing. Many of the worst affected countries are home to people who will find it difficult to adapt to the impacts of climate change due to poverty and inequality.*

## Extreme weather and hunger

Extreme climate-related disasters have doubled in the last 30 years. In particular, droughts are driving a continued rise in the number of people going hungry. They lead to steep falls in food production, which means less income for small producers and higher food prices – putting a healthy diet beyond reach for the poorest people.

Sadly, countries across Latin America, South-east Asia and Africa are experiencing more and more of them. Severe drought is a leading cause of undernutrition in more than a third of countries that have seen a rise in hunger levels in the last 15 years.

## Climate change, conflict and forced migration

Many countries experiencing the worst effects of the climate crisis are in regions dealing with long-term conflict. This is particularly the case across East and West Africa, from Somalia to Nigeria, where conflict between states and non-state armed groups is raging in areas affected by extreme weather, making food production harder.

In the Sahel region of Africa, which includes countries such as Niger, Mali, Chad and Burkina Faso, the rainy seasons are becoming more erratic. Droughts are leading to a decrease in food production while floods are causing outbreaks of diseases like cholera.

At the same time, violence in the region is driving millions of people from their homes. Thousands of displaced people now have to share land with struggling host communities whose crop yields are falling.

As temperatures continue to rise, the impact of climate change on food production will only get worse. Unless we take urgent action, the rise in the number of displaced people affected by hunger and undernutrition will continue.

## How we help people affected by climate change

We support families around the world who rely on farming and those whose livelihoods are at risk from climate change. Here are some examples of our work helping communities adapt to the climate crisis.

**Senegal** - In West Africa's Sahel region, we're supporting herders to use artificial intelligence (AI) and tele-detection to help find food for livestock and prepare for droughts, heatwaves, bushfires and even Covid-19 closures. With support from the World Bank, we applied AI to create a unique system for real-time data collection and analytics for remote farmers – called the Pastoral Early Warning System (PEWS). The AI analyses data and PEWS pushes out updates in French and other local languages to herders via radio, SMS and local bulletins every ten days. This helps herders to

choose the best place to graze their cattle or spot signs of animal disease outbreaks. So far, these tech-enabled alerts have reached more than 52,000 people in Senegal alone.

**Niger** - We're training smallholder farmers to manage their land in a more holistic way. This means farming in a way that is more resilient to weather extremes, that gradually reverses soil degradation and improves crop and pasture productivity, while being kind on the environment.

**The Philippines** - We're helping local government authorities build climate data into their planning processes, helping to build early warning systems to alert vulnerable communities to imminent weather extremes. We're also training farmers in new agricultural approaches that drive development, create food security, build resilience and drive down carbon emissions.

## About US

*Action Against Hunger is an international charity committed to saving the lives of malnourished children and supporting their families to beat hunger. For more than 40 years, we've led the global movement that aims to end life-threatening hunger for good within our lifetimes. Our teams are on the front lines – treat*

ing and preventing malnutrition in some of the world's most remote places. We empower people to provide for themselves, see their children grow up strong, and help their communities prosper. Thanks to generous support from people like you, we're creating better ways to deal with hunger.

We work in 46 countries around the world to support people without access to essential food and healthcare. These numbers are rising because of the impacts of conflict, climate change, inequality and, now Covid-19. For more info: [www.actionagainsthunger.org.uk](http://www.actionagainsthunger.org.uk)

Source: article taken from, [www.actionagainsthunger.org.uk/why-hunger/climate-crisis](http://www.actionagainsthunger.org.uk/why-hunger/climate-crisis)



We support families around the world who rely on farming and those whose livelihoods are at risk from climate change. Here are some examples of our work helping communities adapt to the climate crisis.



trident  
Discover a world of images



# X-VIEW 2D PAN CEPH

Digital Flat Panel | Single Shot | 200 ms of Exposure Time

## Discover DR technology

The highest quality digital system  
to obtain sharp images in less than 0,5 sec.

Castenedolo (BS) - Italy  
Tel 39 030 2732485  
[www.trident-dental.com](http://www.trident-dental.com)  
[info@trident-dental.com](mailto:info@trident-dental.com)

MADE IN MALAYSIA

# QUALITY

— makes the —

# DIFFERENCE



Our commitment to Quality is the reason why Malaysia continues to be the world's leading exporter of medical gloves, condoms & rubber catheters.

When it comes to rubber, **No One Knows Rubber Like Malaysia Does.**

Reach Malaysian manufacturers via marketplace at [www.myrubbercouncil.com/marketplace](http://www.myrubbercouncil.com/marketplace)

World's No. 1 in Natural Rubber  
Gloves & Nitrile Gloves



Excellent Barrier  
Protection



Conform to International  
Standards



Exported to  
195 Countries



## MALAYSIAN RUBBER COUNCIL

(Formerly known as Malaysian Rubber Export Promotion Council)  
Unit No 36-02, Level 36, Q Sentral, 2A Jalan Stesen Sentral 2  
KL Sentral, 50470 Kuala Lumpur, Malaysia

tel: (603) 2782 2100 | fax: (603) 2782 2199 | e-mail: [mpd@mrepc.com](mailto:mpd@mrepc.com)

[www.myrubbercouncil.com](http://www.myrubbercouncil.com)