Presented by:

Michael Drues, Ph.D.

President, Vascular Sciences Carlsbad, California

and

Adjunct Professor of Regulatory Science, Medicine and Biomedical Engineering

George Washington University Graduate Dept. of Regulatory Science Cornell University Graduate Dept. of Biomedical Engineering

GreenLight.Guru Webinar (April 22, 2020)

https://www.greenlight.guru/webinar/covid-19-emergency-use-authorization-eua-medical-device-companies

For questions or more information, call (508) 887 – 9486 or e-mail mdrues@vascularsci.com

© Copyright 2020 by <u>Vascular Sciences</u> and <u>Michael Drues, Ph.D.</u> All rights reserved.

presented by: Michael Drues, Ph.D.

From facemasks to ventilators, the medical device industry has the potential to lead the response to the COVID-19 pandemic. For companies developing new devices, or for companies making modifications to existing devices, how can companies get these devices to market quickly to benefit the growing number of COVID-19 patients who need them?

The Emergency Use Authorization (EUA) is one regulatory mechanism some have used successfully to bring devices to market quickly. But is the EUA the only option? What are the requirements of the EUA and how do we use it? Does the EUA mean a lower regulatory burden, i.e., less testing and faster to market compared to other pathways?

In an attempt to get devices to patients who need them, FDA is "relaxing the rules" for more devices including infusion pumps, clinical thermometers, extracorporeal membrane oxygenation and cardiopulmonary bypass devices, and remote ophthalmic assessment and monitoring devices. As the current health emergency continues, more devices will likely be added to this list.

But it's not enough for companies and FDA to respond quickly... we must also respond correctly. What's worse: **not having enough ventilators OR having ventilators that don't work?** Regrettably, we are already seeing cases of this happening. There are reports of **hundreds to thousands of ventilators that don't work!** How do we meet the regulatory and quality requirements that ensure devices are safe and effective while at the same time making sure these devices are available quickly to the increasing number of people who need them?

FDA has now issued nearly as many warning letters to companies marketing products for coronavirus as the number of EUA's issued thus far! Why is this important? Simple. The more warning letters, the more scrutiny FDA will apply to future EUA applications meaning more supportive evidence will be required and the longer the time to review.

In this workshop, we will explore the Emergency Use Authorization— specifically in the context of COVID-19— and how device companies can use it. Using the case study approach, these questions and others will be presented in an interactive fashion including:

- What is the Emergency Use Authorization (EUA) and how do we use it?
- Which devices qualify for the EUA and which do not? Does it matter if it's an existing device or a new device?
- What are the regulatory requirements for the EUA and what's the process for applying?
- What are the testing requirements for the EUA and how do we find them? How much evidence is required for an EUA?
- If the EUA is not applicable, what other options exist?
- What are the quality and validation requirements for COVID-19 related devices?
- How should we modify our QMS for devices used during the COVID-19 crisis?
- How do we handle devices coming back from the field, i.e., devices recalled from hospitals?
- What happens to devices with EUA after this public health crisis is over?
- How can a company get their device authorized quickly without the risk of receiving a warning letter later?

Bottom line: Like all pathways to market, the EUA has the potential to get lifesaving medical devices to patients quickly who desperately need them. But if used improperly, the EUA has the potential to make things even worse than they already are. Its up to us as medical device professionals to use the EUA *responsibly* to achieve speed to market and safety at the same time!

What to know more?

For a comprehensive list of columns, webinar, podcasts, etc., visit Global Medical Device Podcast (GreenLight.Guru) here, Mike on MedTech (Medical Product Outsourcing) here, Medical Design and Outsourcing here, Guerilla Regulatory Strategy (MED Device Online) here and Healthcare Packaging here, LinkedIn here.

Speaker Biography



Michael Drues, Ph.D., is President of Vascular Sciences, an education, training, & consulting company offering a broad range of services to medical device, pharmaceutical & biotechnology companies including stimulating & innovative educational programing, creative regulatory strategy & completive regulatory intelligence, regulatory submission design, FDA presentation preparation & defense, brain-storming sessions, prototype design, product development, benchtop & animal testing, , clinical trial design,

reimbursement, clinical acceptance, business development & technology assessment.

Dr. Drues received his B.S., M.S., and Ph.D. degrees in Biomedical Engineering from Iowa State University in Ames, Iowa. He has worked for and consulted with leading medical device, pharmaceutical and biotechnology companies ranging in size from start-ups to Fortune 100 companies. He also works on a regular basis for the U.S. Food and Drug Administration (FDA), Health Canada, the US and European Patent Offices, the Centers for Medicare and Medicaid Services (CMS) and other regulatory and governmental agencies around the world.

Dr. Drues is an internationally recognized expert and featured keynote speaker on cuttingedge medical technologies and regulatory affairs. He conducts seminars and short-courses for medical device, pharmaceutical and biotechnology companies, the U.S. Food and Drug Administration (FDA), Health Canada, the US and European Patent Offices, the US Centers for Medicare and Medicare Services (CMS) and other regulatory and governmental agencies around the world.

Finally, as an Adjunct Professor of Regulatory Science, Medicine, Biomedical Engineering & Biotechnology, Dr. Drues teaches graduate courses in Regulatory Affairs & Clinical Trials, Clinical Trial Design, Medical Device Regulatory Affairs & Product Development, Combination Products, Pathophysiology, Medical Technology & Biotechnology at several universities & medical schools on-ground & on-line.

For a comprehensive list of columns, webinar, podcasts, etc., visit,

Global Medical Device Podcast (GreenLight.Guru) here, Mike on MedTech (Medical Product Outsourcing) here, Medical Design and Outsourcing here, Guerilla Regulatory Strategy (MED Device Online) here and Healthcare Packaging here or LinkedIn here.

Dr. Drues can be reached at:

 Vascular Sciences
 Phone: (508) 887-9486

 2105 Twain Avenue
 Fax: (508) 861-0205

Carlsbad, CA 92008 E-mail: mdrues@vascularsci.com

For additional information, contact Dr. Drues directly at (508) 887-9486, e-mail mdrues@vascularsci.com or via LinkedIn at www.linkedin.com/in/michaeldrues.



Want the handout? podcast?

We have a my card, my portfolio, my video, my brochure, my vision...

Connect with me on LinkedIn or give me your business card!

We linked in com/in/michaeldrues

Please remember to include the presentation and date!

How can Medical Device Companies use the

By greenlight guru

Vascular Sciences

O Copyright 2020 by Michael Drues, Ph.D.
and Vasculiar Sciences. All rights reserved.

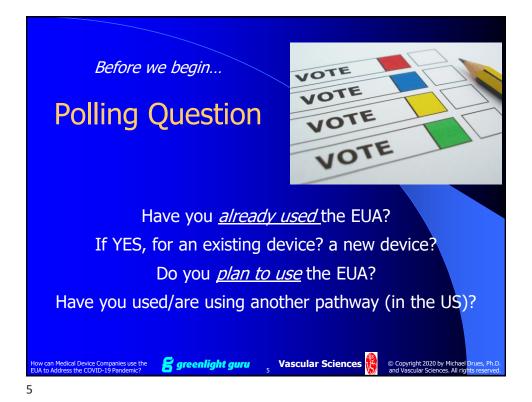
2

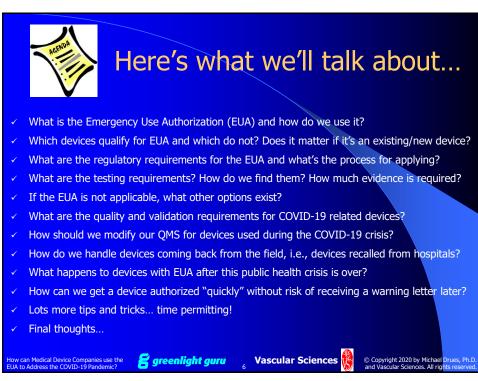


3

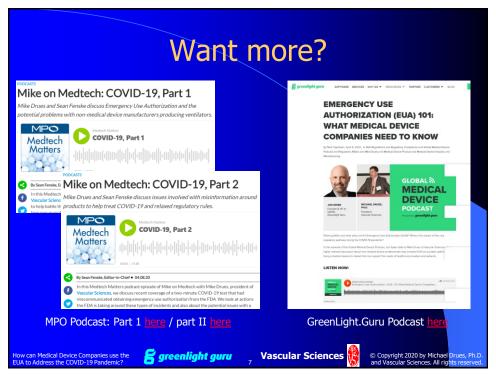


4

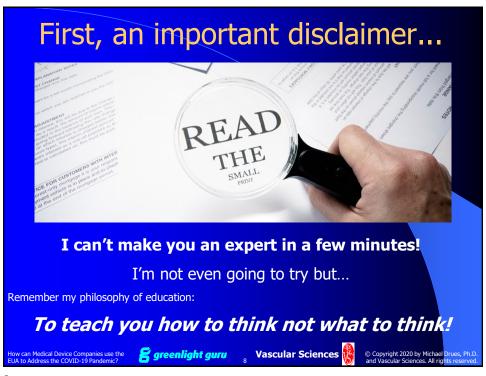




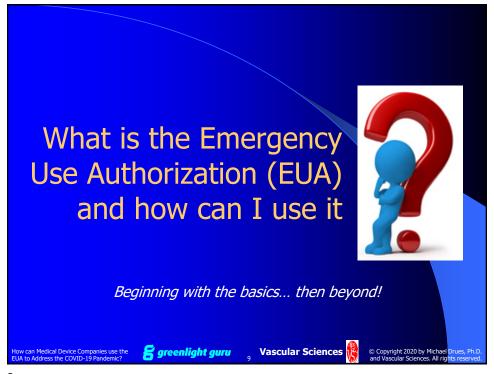
6



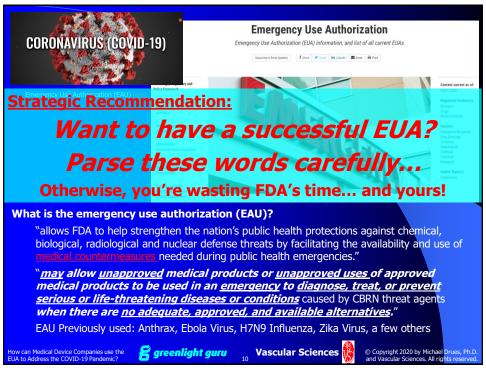
7



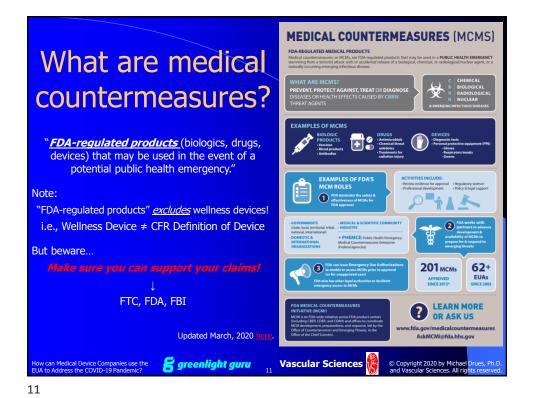
8



9



10





12



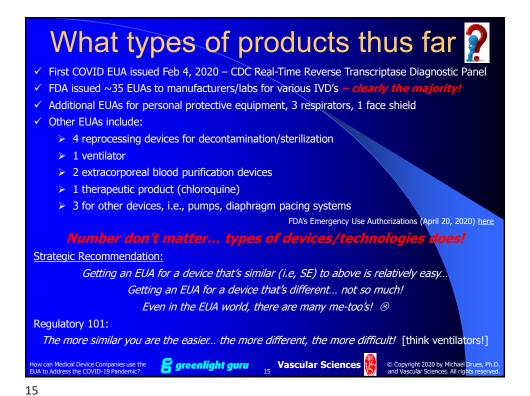
13



14

April 22, 2020

www.greenlight.guru/webinar/covid-19-emergency-use-authorization-eua-medical-device-companies



How long will the Emergency Use Authorization (EUA) last

Until HHS says the emergency is over but... the window is closing... (fast?)

[Note: this is a political decision]

Two scenarios:

- 1. For companies with existing EUA's, what happens to your device after?
- 2. For companies pursuing an EUA now, is it still worth it?

How can Medical Device Companies use the FIIA to Address the COVID-19 Pandemic?

Vascular Sciences

© Copyright 2020 by Michael Drues, and Vascular Sciences. All rights res

16



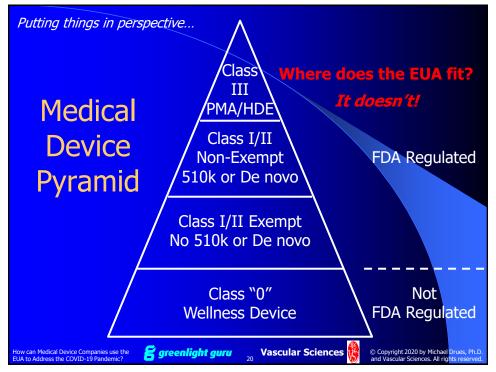
17



18



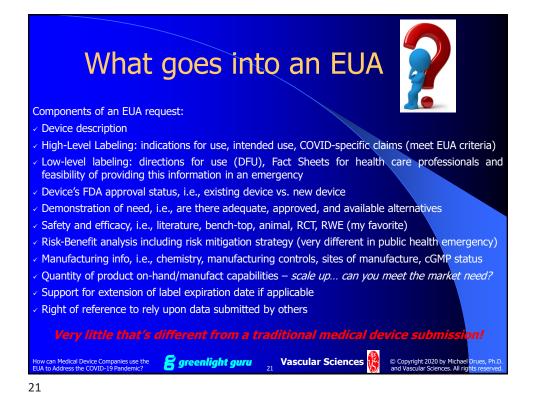
19



20

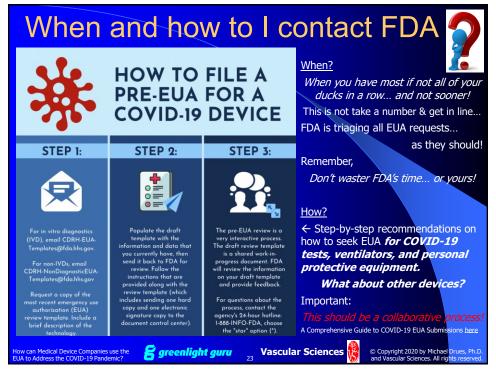
April 22, 2020

www.greenlight.guru/webinar/covid-19-emergency-use-authorization-eua-medical-device-companies

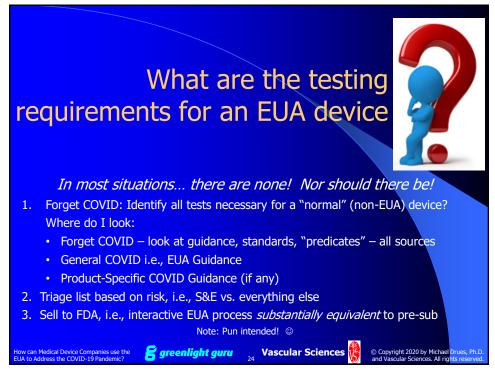


How about an example? TransAeris used to assist in weaning patients determined by their healthcare provider to be at high risk of weaning failure off of ventilators in healthcare settings during the COVID-19 pandemic for no more than 30 days. Device to Assist in Weaning Patients Off Ventilators is Granted EUA here. / The above described product, when labeled consistently with the labeling authorized by FDA... is authorized to be distributed under this EUA, despite the fact that it does not meet requirements otherwise *required* by applicable federal law. it is reasonable to believe that the known and potential benefits of the authorized TransAeris Diaphragm... Pacing System, when used consistently with the Scope of Authorization of this letter (Section II), outweigh the known and potential risks of such products." ...based on the totality of scientific evidence available to FDA, that it is reasonable to believe that the authorized TransAeris Diaphragm Pacing System may be effective for emergency use in treating patients by assisting in weaning patients off ventilators in healthcare settings during the COVID-19 pandemic when used consistently with the Scope of Authorization of this letter." This EUA will cease to be effective when the HHS declaration that circumstances exist to justify the EUA is "[FDA] is waiving applicable cGMP requirements, including the quality system requirements under 21 CFR Part 820 *with respect to the design, manufacture, packaging, labeling, storage, and* <u>distribution</u> of the authorized TransAeris Diaphragm Pacing System that is <u>used in accordance with</u> this "[Company] will have process for *reporting adverse events of which they become aware to FDA* greenlight guru **Vascular Sciences** © Copyright 2020 by Michae

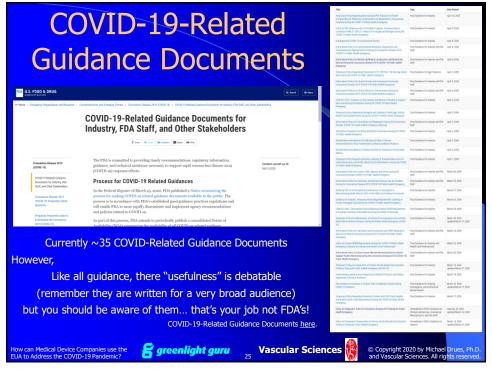
22



23



24

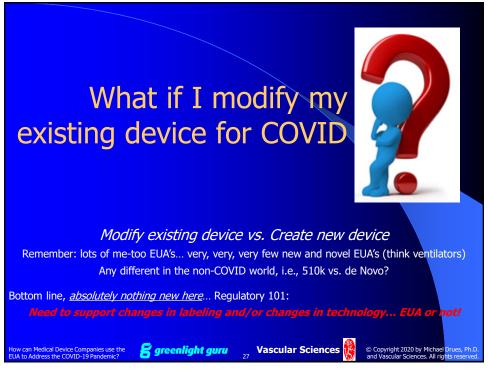


25



26

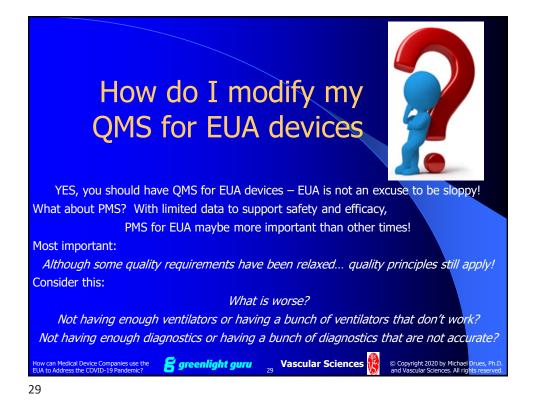
April 22, 2020



27

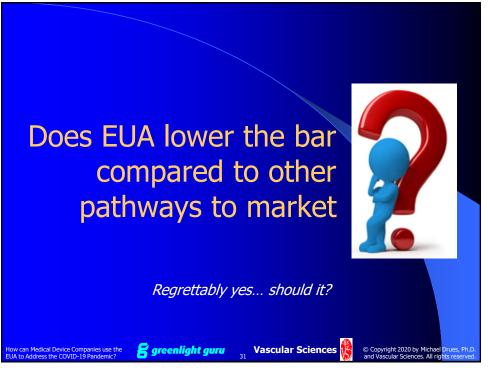


28



Haste makes Waste... or Worse? "LA County got 170 broken ventilators from feds... silicon valley is fixing them." LA Times, March 30, 2020 Los Angeles Times This was 100% predictable! So what's worse? Not having enough ventilators... Having a bunch of ventilators that don't work? Is it possible to have enough ventilators that work? Absolutely YES! Take-aways: Importance of having a good QMS One would like to think QC tested ventilators before releasing to hospitals Suffocating 179 patients using malfunctioning ventilators would not a mistake I would want to make! Personal e-mails from FDA expressing concerns News Video: Can Tesla, GM And Ford Help Solve The Coronavirus Ventilator Shortage? (CNBC, Mar 27, 2 **Vascular Sciences** 🛱 greenlight guru

30



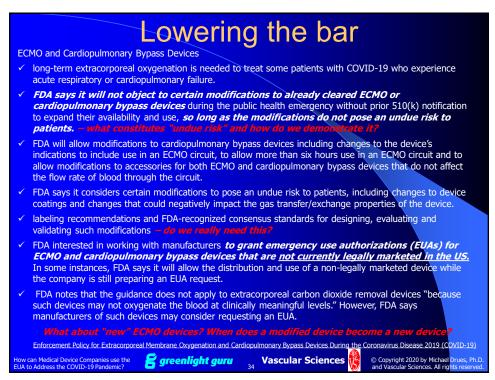
31



32



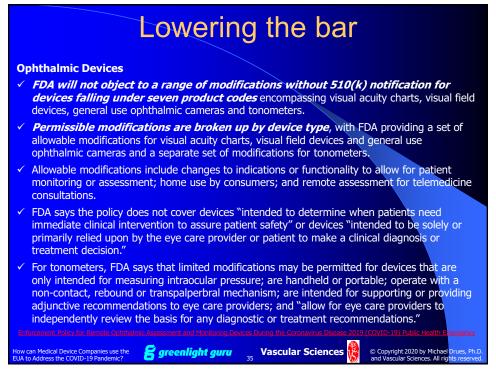
33



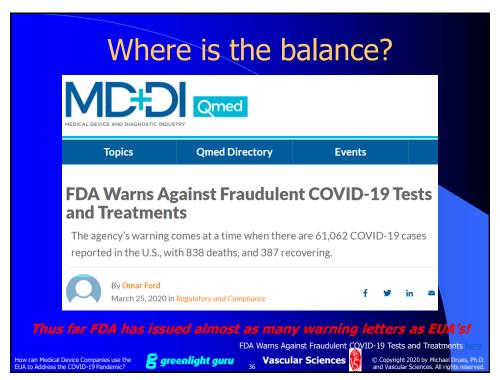
34

April 22, 2020

www.greenlight.guru/webinar/covid-19-emergency-use-authorization-eua-medical-device-companies



35



36

April 22, 2020

www.greenlight.guru/webinar/covid-19-emergency-use-authorization-eua-medical-device-companies



37



38



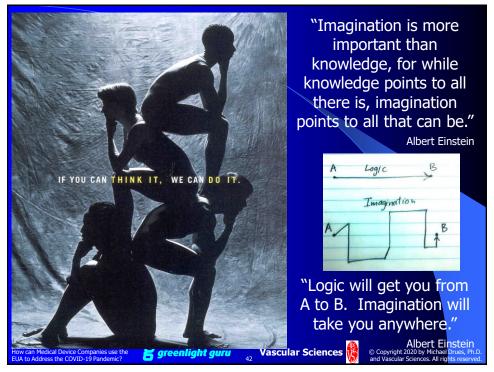
33



40



41



42

April 22, 2020