Elcam
Drug Delivery Devices

MEETING THE CHALLENGES OF COVID-19

In this article, Beo Arana de Martinez, Customer Service & Marketing Assistance, and Ilan Shopen, Marketing & Business Development Director, both of E3D – Elcam Drug Delivery Devices, discuss the effects that the COVID-19 pandemic has had and is still having on patient populations, how the healthcare industry has intensified activity to fight the virus, and – using the example of the FlexiQ eMU-P connected autoinjector – how connected devices that facilitate self-injection and remote monitoring, are coming into their own.

Based on the authors' blog articles, "Meeting the challenges of COVID-19", and, "The Day That COVID-19 Dies", that originally appeared on the E3D Web Page in June 2020.

Can you imagine that one day the coronavirus will be history, a creepy story to tell your grandkids? Anxiety is becoming more prevalent as the crisis stretches on, as are negative feelings such as uncertainty and loss of control, which prevent us from understanding that this difficult time will soon become a chapter in the history books.

In the healthcare industry, the story we'll tell is a different story. COVID-19 brought the world to a standstill but, since then, the healthcare industry has been motivated by the challenge of how to stop the virus spreading, find a cure and develop a vaccine. It's at times like these that we truly see the importance of the healthcare industry maintaining routines and providing the essentials to healthcare systems, as well as focusing on how the "day after" will look – the day that COVID-19 dies.

Today, the call to stay home still reverberates around the world. The effects of the virus continue to be felt worldwide and many people have stopped their usual visits to healthcare practitioners due to fear of infection. The need for safe and easy-to-use homecare solutions has been brought into strong focus, as has the need for online connectivity to enable healthcare providers to keep track of patient health remotely.

This crisis has made it clear that the trends towards homecare, improved patient compliance and quality of care utilising self-administered therapy, and a growing awareness of the environmental impact of products as well as the associated costs, will drive the development of solutions that meet these needs.

Home care integrates patient care with the various activities of daily living. A balanced approach to tomorrow's healthcare involves developing solutions that enable as much patient care as possible in a home environment. This requires an approach that is not only limited to clinical need, but also takes a more holistic view of patients' lives and an understanding of their physical and emotional environments.

It's here that E3D's FlexiQ eMU-P (Figure 1) provides the perfect homecare solution. It comprises an electro-mechanical multi-use driving unit, prefilled syringe and disposable cassette, enabling home self-administration. FlexiQ eMU-P is part of E3D's Flexi-Q family of mechanical autoinjector products, which also includes Flexi-Q PFS, Flexi-Q DV, FlexiQ mMU-Pand Flexi-Q eAI.

"The FlexiQ eMU-P allows physicians to monitor adherence through the connectivity system incorporated in the autoinjector."

Beo Arana de Martinez
Customer Service &
Marketing Assistance
T: +972 77 2568677
E: beo.a@elcam.co.il

Ilan Shopen
Marketing & Business
Development Director
T: +972 77 2568601
E: ilan@elcam.co.il

E3D – Elcam Drug Delivery Devices
BarAm 1386000
Israel

www.elcam3d.com

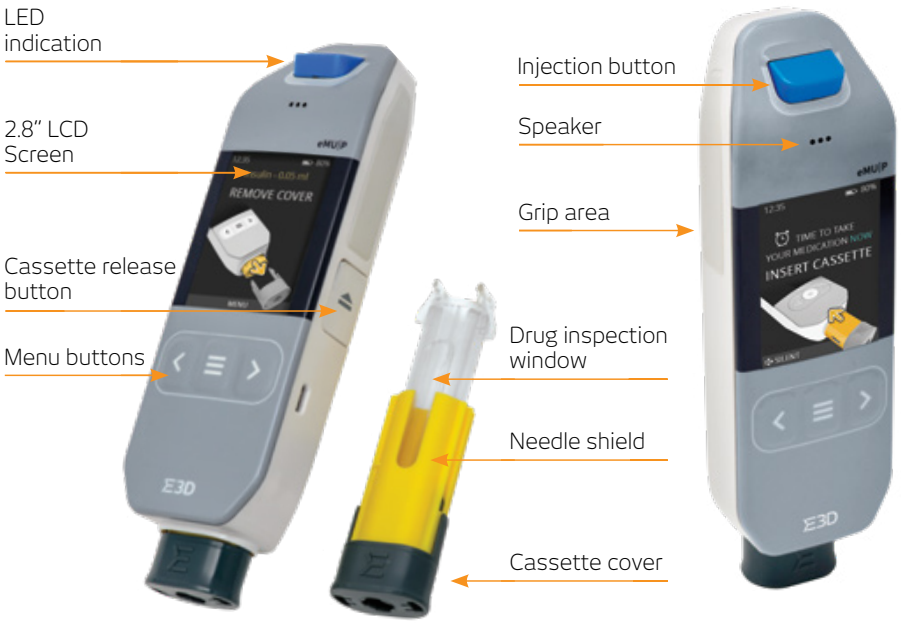

Figure 1: E3D's FlexiQ eMU-P connected autoinjector enables self-administration of drug dosages at home.

Designed for ease of use and with patient safety in mind, it prevents needle-stick injuries before and after use. Since the device is self-administered at home, monitoring dosages is extremely important. Users receive audible signals at the start and end of the injection process and a viewing window also allows progress and completion of the injection to be visually monitored. But crucially the FlexiQ eMU-P also allows physicians to monitor adherence through the connectivity system incorporated in the autoinjector.

In any self-administration device, safety is a key consideration, especially when it comes to verifying that drugs are administered in the correct dosage and at the correct time. It's also vital to ensure that the administered drugs are suitable for use by verifying the temperature, expiry date and any other relevant information. FlexiQ eMU-P's noiseless operation is a key feature, as is the rechargeable battery which ensures the device can be used for at least 30 injections before recharging.

CONCLUSION

COVID-19 has demonstrated how much our lives are dependent on others. Our needs and desires have to be balanced with our responsibility to the world around us, not only as individuals but also as companies and countries. The pharmaceutical industry has to contribute its part to this global effort.

In summary, when the coronavirus pandemic is behind us, a greater emphasis will be placed on three existing trends that drive drug delivery system development, in addition to increasing the commercial value (and lifecycle) of drug products. Those trends are:

- improved patient compliance and quality of care
- growing awareness of production footprint and associated costs
- increased use of self-administered, connected drug therapy

It's unsure when the world will return to business as usual. At E3D, the work has never stopped and throughout the crisis, we continue to focus on refining and developing homecare solutions to ensure that patients are able to administer treatments safely from the comfort of their homes.

ABOUT THE COMPANY

Elcam Drug Delivery Devices (E3D) portfolio encompasses a wide range of injectables produced in the company's manufacturing facilities in Europe, the US and Israel. These devices include single-use and multi-use, spring-powered autoinjectors designed for 1 mL and 2.25 mL prefilled syringes; wearable injectors for bolus, high-volume and viscous drug delivery; electromechanical and mechanical "smart" injectors with wireless connectivity; autoinjectors for viscous formulations; emergency-use injector devices; and injectors with both automated and manual reconstitution for lyophilised products.