



Considering common inhalers too large, unwieldy and indiscreet, Don Smith went ahead and invented his own device: The 1nhaler. But it was a long road from the initial idea to the groundbreaking concept. The inventor's creativity, optimism and ability to inspire others kept him going.

# PASSION AND PATIENCE

In his capacity as a successful creative director, Don Smith was solving the design and communication problems of numerous customers for years. In 2016, however, this was no longer enough for him: He quit his job and became an inventor. The idea for his first invention, the 1nhaler, occurred to him when his physician offered him the opportunity to test a new inhaler. Smith is asthmatic and has long been frustrated by the size and bulkiness of current devices.

The new inhaler also disappointed him. However, he found one detail very promising: The inhaler was a dry powder inhaler. "This technology inspired me to come up with the idea of packing a single powder dose into a completely new kind of small, discreet inhaler," says the inventor. "It would be capable of releasing the active ingredient in just one breath: a 1nhaler."

1nhaler Ltd. Illustration: Vectorjuice/Freepik

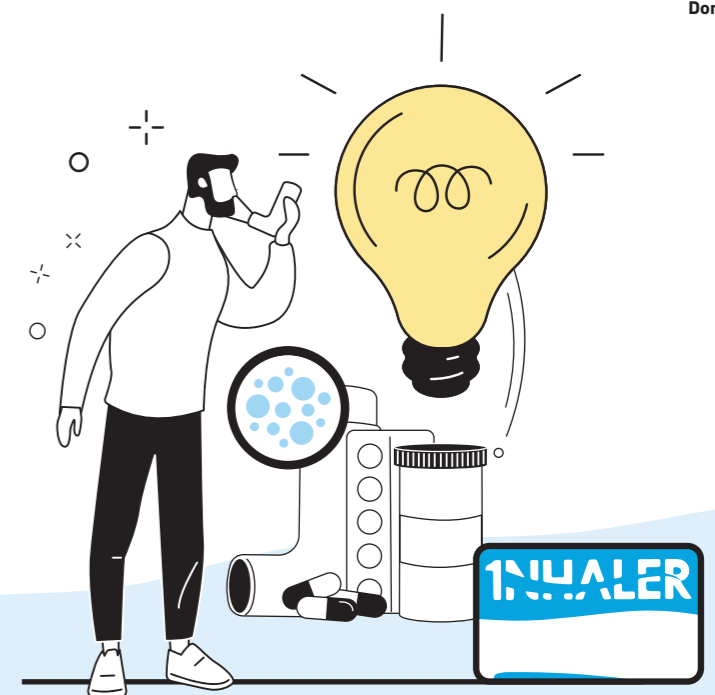


## CHARISMATIC GENERALIST

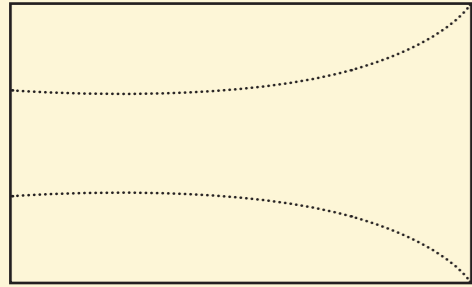
Smith started to read specialist literature about pharmacology, physics and powder processing. He visited pharmaceutical conferences and congresses and talked to experts. "I know a lot about a lot," he says with a smile. "But I never pretended to be an expert for airways or inhalation. I presented my idea saying that I would appreciate receiving support in the inhaler's development." This honesty paid off. "The pharmaceutical industry is full of passionate people who want to keep others healthy," he says. "Many were inspired by this idea and supported me with their knowledge."

*"Having the idea is the easiest part of any invention. Making it work is the hard part."*

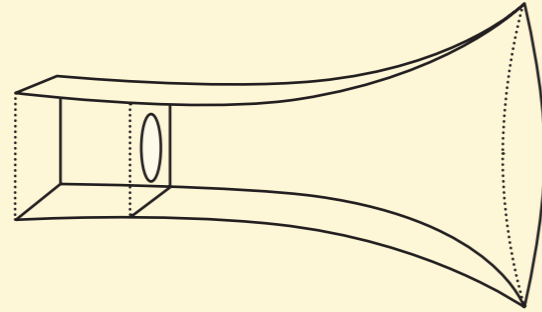
Don Smith



**THE DEVICE IN ITS UNOPENED STATE**



**1NHALER IN 3D STATE**



As small and compact as a business card, the 1nhaler is always at hand. One of many potential fields of application is the acute treatment of migraines.

**HANDY AND SUSTAINABLE**

The core of the single-dose inhaler is a breathable membrane to which a single dose of active ingredient powder is applied. The membrane is embedded between two business-card-sized pieces of cardboard that can be formed into a three-dimensional device when pressure is applied to the two outer edges. With a single breath, the ultra-fine powder penetrates directly into the lungs. "Both the membrane and the sustainable packaging are unique," Don Smith proudly explains.

The experts from Harro Höfliger helped him with the technical implementation of his invention. "During my research I met Alan Holmes, a long-standing sales employee of Harro Höfliger in Great Britain. He introduced me to the powder expert Marco Laackmann and his team. Their comprehensive expert knowledge – and even more important – their enthusiasm has pushed the project and made the inhaler's development possible."



Co-Managing Director Lisa McMyn has been helping Don Smith commercialize his invention since 2017.

**VISIONARY OUTLOOK**

In 2017, Don Smith founded 1nhaler Ltd in Edinburgh, Scotland and started developing the product. He brought in Lisa McMyn, a long time friend and colleague, as his Commercial Director to support him with her natural pragmatism and business acumen. "It is simple to have an idea," he explains. "But it is a challenge to make it work. Financing, establishing partnerships, running a business – this is where Lisa is doing an amazing job."

By developing the 1nhaler, Don Smith has fulfilled a personal dream. "I admire all people who work on solving important issues of mankind. Creative minds who care more about making things better than making a lot of money," Don Smith says and adds: "If the 1nhaler can make breathing easier for people, my work has been worth the effort."



1nhaler Ltd. Illustration: Vectorjuice/Freepik