

Perlen Packaging revolutionizes the powder inhaler

With the world's first single-dose disposable powder inhaler, Perlen Packaging aims to enter new areas of application for its packaging products.

Respiratory diseases are clearly on the increase, not least in view of rising environmental irritants. Many of the medications that are taken in response are inhaled. Since the inhaler was invented back in the 1950s, these medications have been packaged in multi-dose devices. Too complex, thought Dr. Klaus-Dieter Beller, a pharmacologist and an engineer in medicinal technology. So he invented – and patented – the first single-dose inhaler.

Perlen Packaging took over the patent. And in 2017 it presented the industry with the "BLISTair", the world's first disposable inhaler for single-dose administrations. The BLISTair consists of two thermoformed barrier films to protect the medicinal agent. The two films both envelop the powdery agent and form the inhaler through their double funnel shape. The inhaler is extremely intuitive to use: the user simply pulls on a tab to open the powder enclosure. And after inhalation, the BLISTair is simply disposed of.

"The benefits of the BLISTair aren't just the single dose," says Matteo Trisoglio, Business Development Manager at Perlen Packaging. "We can design the films to change the flow of the contents and administer substances tracheally or pulmonarily. On top of this, its production costs are much lower than those of multiple-dose devices."

The cost benefits also make the BLISTair a viable option for asthma or chronic lung disease therapies for wider parts of the population in the emerging markets. The BLISTair also offers sizeable application potential for short-term therapies, such as against the common cold. And its indications include immunizations, fighting infections and easing pain.

The BLISTair's revolutionary administration system has already earned it three packaging awards. The first customer applications are also under way. "We don't expect substantial revenues from it for a few years yet, as the procedures for getting new products approved are very extensive in the pharmaceuticals sector," says Wolfgang Grimm, Head of the Packaging Division. "But the BLISTair is another example of Perlen Packaging's strong innovation credentials."

From left: Wolfgang Grimm, Johannes Giessler and Matteo Trisoglio of Perlen Packaging.