The Belgian laboratory SMI scores points by significantly improving the stability of its synthetic absorbable surgical ligatures in reels for veterinary use. This advantage, appreciated by professionals, is achieved by using a special preservation liquid. In addition to the economic aspect of the reel packaging, this innovation now offers other advantages: significantly increased safety of use and a longer period of use after opening.

SMI is

- a company founded almost 35 years ago
- by a veterinarian, Dr Raimund Schmitz
- located in Saint-Vith, in the German-speaking community of Belgium, and specialising in human and veterinary surgical ligatures.

SMI was the first Belgian company to manufacture surgical ligatures.

Initially active in the veterinary market, SMI has since established itself in the human medicine sector. It offers surgeons more than 1,700 combinations of surgical sutures, all meeting the highest quality standards.

SMI has the most complete range of products for veterinary surgery on the market. It includes, among others, suture material specially designed for canine, rural, equine, orthopaedic and ophthalmic surgery. This range is constantly enriched with new products, developed in collaboration with university clinics.

Attaching great importance to the reliability and safety of its products, SMI manufactures its surgical sutures in compliance with the most stringent CE standards and subjects them to rigorous quality control.

This excellence is recognised internationally: SMI, located in eastern Belgium, near the border with Germany and the Grand Duchy of Luxembourg, currently distributes its products in more than 100 countries. The company's reputation has earned it a *Royal Export Award from* the Belgian Foreign Trade Office.

The suture material, monofilament or multifilament, can be short cut with needle in foils, but also in cassettes. These cassettes are available in various lengths of sutures, up to 100 metres.

The advantages of this form of packaging in cassettes are well known: with a cassette, the veterinarian can take precisely the quantity of suture he needs for the operation. This presentation is therefore very economical.

The downside of absorbable synthetic sutures in cassettes is that once the cassette is started, the contents must be used within a limited time.

"An absorbable surgical suture is indeed degraded by hydrolysis. During the manufacturing process, the thread is placed in a reel. It is then sterilised and dried. Finally, a special gas is injected into the cassette to help preserve it against hydrolyse. When you take the thread out of the reel, an equivalent volume of air inevitably enters and this small quantity can be sufficient to trigger the hydrolysis of the thread," recalls Dr. Raimund Schmitz, founder of the SMI firm. "*It must then be used within two to three months, maximum four if it is a monofilament. This period is further reduced when the ambient temperature is high - in summer for example - because the heat accelerates the degradation process.*"

In the past, some veterinarians have suffered from this phenomenon.

To correct this constraint of rapid use, SMI has developed a special preservation liquid that protects the *thread from degradation.*

The added value of this liquid is that it guarantees much better stability of the product. As its characteristics are better preserved, the thread can be used for longer after the initial opening of the cassette.
The use-by date after the first use is extended to six months for a monofilament, and to no less than 12 months for a braided thread.

But the advantages of this new feature do not end there.

The preservation liquid also **prevents the growth of micro-organisms** and therefore helps to keep the suture sterile. It also makes the thread smoother, so it is even easier to pass through the tissue.

An innovation shown on three products in the SMI catalogue

The unique combination of advantages described above, already appreciated by many veterinarians, is shown in the following absorbable sutures:

- **SURGICRYL PGA**: a violet polyglycolic acid multifilament with a resorption time of 50 to 70 days
- **SURGICRYL PDO**: a polydioxanone monofilament, violet, with a resorption time of 180 to 210 days
- **SURGICRYL MONOFAST**: a polyglucaprone 25 monofilament, violet or colourless, with a resorption time of 90 to 120 days

Metric 1.5 USP 4/0 or Metric 8 USP 6 are available in 15, 25, 50 and 100 metre reel lengths.