

**SECONDARY ANTI-ODOUR DRESSING WITH CINNAMON  
CLASS I MEDICAL DEVICE**



**Triple action :**



**Bad smell adsorption**



**Emission of pleasant spice odour**



**Absorption of exudates**

**FOR PATIENT, CAREGIVERS AND PATIENT FAMILY COMFORT**

## MALODOROUS WOUNDS ISSUES:

- In Europe, more than **3 millions patients are affected by chronic wounds\*** (infected bedsores, ulcers, tumoral wounds and diabetic foot)
- **It is commonly admitted that around 10% of chronic wounds are malodorant\*\***

Malodorous wounds have many consequences during patient's end of life:

- Dramatic psychological damages and isolation
- Difficult daily care for the caregivers and the family



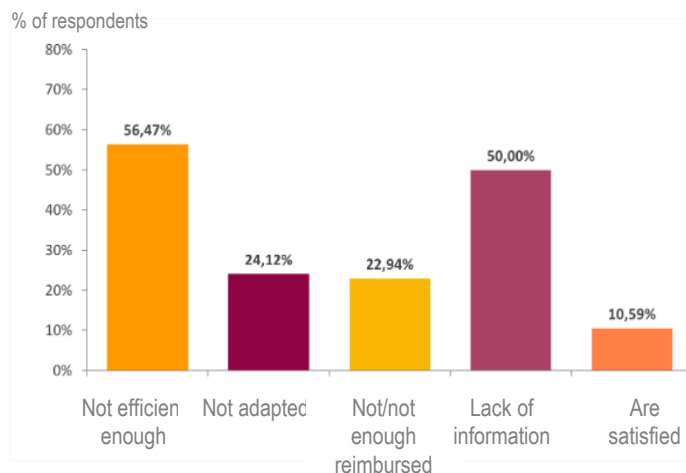
## A MEDICAL UNMET NEED

Currently, solutions available on the market are not satisfactory:

- Antibiotics treatments induce bacterial resistance
- Activated charcoal dressings are not efficient enough on bad smells reduction

A survey performed with 170 French nurses frequently confronted with patients affected by malodorous wounds highlighted that :

- **90% of the respondents were not satisfied by on-market solutions**
- **57% reported that on-market solutions are not efficient enough on bad smells reduction**

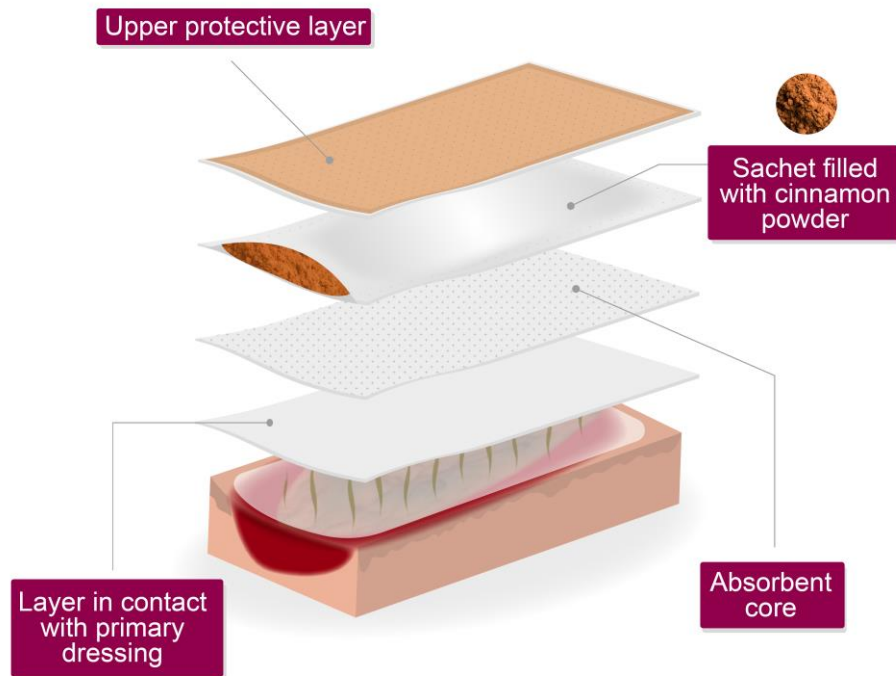


This disastrous observation goes far beyond the French situation since dissatisfaction with existing solutions can be found in large international studies (Gethin 2014)

To face this public health issue and develop a new solution, several scientific and medical teams joined forces with CEMAG Care in 2017, in particular:

- The Institut Curie, a major cancer research and treatment center
- The Paris Higher School of Physics and Industrial Chemistry, bringing together 300 teacher-researchers in 11 units associated with CNRS or INSERM
- Chimie Paristech, a research center specialized in materials engineering

The results of this collaboration led to the **development of CINESTEAM<sup>®</sup> a patented anti-odor device.**



## CINESTEAM<sup>®</sup> is :

- A non-adhesive secondary dressing eliminating bad smells and absorbing exudates
- Non-occlusive and conformable, making it easy to use
- A CE mark medical device compliant with safety and performance European essential requirements
- Available in 11x19 cm size

*Read carefully the instructions before use .*

## PROOF OF CONCEPT AND EFFICACY STUDIES OF CINESTEAM®

Different **spices** were evaluated in several well-recognized laboratories (ESPCI Paris, Chimie Paris and Institut Curie) in order to select **the most efficient on bad odours reduction**.

Cinnamon efficacy has been demonstrated by studies of **odours feeling** (sensory perception ) **and chemical analysis** making possible to qualify, quantify and well characterize the odours (chromatographic analysis in particular).

**Sensory perception studies** were conducted by Institut Curie on different types of *in vitro* wounds models (mix of malodorous chemical agents, cheese, tumoral necrosis biopsies).

The results of these studies demonstrated that:

- Cinnamon has a very efficient bad odours adsorption capacity (natural property)
- Cinnamon emits a pleasant smell, which is not the case of activated charcoal
- Compared to activated charcoal, the use of cinnamon powder significantly improves odour perception



Cinnamon dressing prototypes containing twice less cinnamon quantity than Cinesteam® final design, have been prepared at Institut Curie. They have been used on 6 patients with malodorous tumoral wounds (Thuleau 2017). The patients were asked to assess reduction of odours prior and after applying cinnamon dressing.

**Conclusion: 83% of patients felt a complete disappearance of odours**, which was confirmed by caregivers and patient family.

**Thanks to cinnamon, residual odour is modified and the patient is not reminded of his/her condition and his/her illness.**

\* Communiqué de presse-31 Juin 2016-SFFPC (Société française Plaies et Cicatrisations)-Plaies chroniques et complexes

\*\* <https://palli-science.com/guide-pratique-des-soins-palliatifs/19662-plaies-malodorantes>

Fromantin I., Hurgon A., Dugay J., et al. Odeurs, plaies et curcuma : Hypothèses et pratique clinique. *Revue francophone internationale de recherche infirmière*, mars 2015, n°1, pp 23-30.

Thuleau A, Duguay J., Semetey V., Fromantin I. Traitement des plaies malodorantes par un dispositif médical aux épices. *Revue francophone de cicatrisation* ; 2017; 1:51.

Extrait du brevet "Dispositif pour l'adsorption d'odeurs" (Ref : WO 2018/020141)

Gethin G, Grocott P, Probst S, Clarke E. Current practice in the management of wound odor : an international survey. *International Journal of Nursing studies*; 2014; 51(6):865-874





Legal mentions :

Cinesteam® is a secondary anti-odour absorbent dressing manufactured by CEMAG Care.

Cinesteam® is intended to be used for the management of malodorous wounds.

This Class I Medical Device is compliant with the European Essential Requirements.

Read carefully the instructions before use. Ask your doctor, pharmacist or nurse for more information.

[www.cinesteamcare.fr](http://www.cinesteamcare.fr)

[contact@cinesteamcare.com](mailto:contact@cinesteamcare.com)