Every year there are 53,000 new cases of breast cancer in France. The tumour is hormone-sensitive in around two thirds of all cases. Restoring the quality of life of these patients is key to their well-being.

The innocuousness and harmlessness of a purified cytoplasm of pollen (PCP) obtained from selected pollen grains by a patented procedure, free of allergens, has been demonstrated in numerous studies. The effectiveness of the mixture of purified cytoplasm of pollens (PCP) in the treatment of VMS was demonstrated in a randomised, double-blind, controlled study against a placebo. It is effective in the case of vasomotor symptoms (VMS) during the peri- and post-menopause, especially in women with and after breast cancer.

PCP contains no phytoestrogens nor hormones. It therefore has no hormonal effects, does not activate the oestrogen receptors and does not stimulate the proliferation of cancer cells. No oestrogenic effect could be demonstrated in a further assay in which the capacity of the PCP to bind to the oestrogen receptors was tested using MCF7 and 293T cells. Blood tests on FSH, oestrogens, testosterone and SHBG in further studies showed no change in concentrations in female patients who were treated with PCP.

The vasomotor symptoms are reinforced and/or intensified by Tamoxifen. Tamoxifen is broken down by the cytochrome P450 2D6 to form 4-hydroxytamoxifen and other active metabolites. Anti-depressants (Fluoxetine and Paroxetine) and selective serotonin reuptake inhibitors (SSRI) have been prescribed to mitigate Tamoxifen-induced VMS. However, SSRI are powerful CYP2D6 inhibitors and can reduce the effectiveness of Tamoxifen. In contrary, there are no pharmacological interactions between the pollen extract and the CYP2D6 enzyme system. No inhibition of the enzymes was found at up to five times the daily dosage.

These PCP appear to be a non-oestrogenic alternative to hormone therapy for women with VMS, even for women with and after breast cancer.