

New use of pasireotide-LAR in breast cancer chemoprevention

A group of CSIC researchers has demonstrated that treatment with Pasireotide-LAR once a month in mice models that develop breast cancer increases latency and decreases the incidence of breast cancer. Reduction of the ductal epithelial area was observed. Results suggest that Pasireotide-LAR could be a valuable drug for breast cancer chemoprevention and potentiate pregnancy's protective effect against breast cancer.

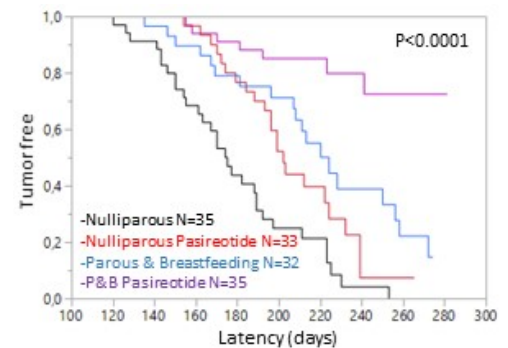
Pharmaceutical company is sought for further development and licensing of use.

An offer for Patent Licensing

Pasireotide-LAR and breast cancer chemoprevention

Breast cancer is the most common tumor in women and a significant cause of morbidity and mortality. Its incidence increases due to epidemiological changes in society, fundamentally aging of the population, and the first pregnancy is getting later and later, often after 35 years. Prevention strategies are needed. The drugs used in current chemoprevention, such as estrogen receptor modulators, have very annoying and potentially severe side effects, such as venous thrombosis or endometrial cancer. Breast amputation surgery continues to be offered as an effective prophylactic alternative. Chemoprevention strategies with fewer side effects and less aggression are needed.

We demonstrated treatment with Pasireotide-LAR once a month in two models of genetically modified mice that develop breast cancer increases latency and decreases the disease incidence. Furthermore, Pasireotide LAR increases the protective effect of pregnancy in *Brcal*/P53-deficient mice. These effects were associated with a decrease in epithelial proliferation and a decrease in the ductal epithelial area. This decrease in the ductal component was associated with low tumor susceptibility in mice.



Pasireotide-LAR potentiates the protective effect of pregnancy in the *Brcal*/P53 deficient mice. P&B: Parous and breastfeeding mice.

Main innovations and advantages

- Pasireotide LAR is more comfortable to administer than current chemoprevention drugs (daily intake). Pasireotide LAR would be administered once a month.
- Pasireotide LAR would have fewer side effects than current drugs; this would favor adherence to chemoprevention, in contrast to annoying side effects of current therapies, such as Tamoxifen.
- Pasireotide LAR could be given after breastfeeding **(i)** to enhance the protective effect of pregnancy against breast cancer; and **(ii)** to reduce the risk of post-pregnancy breast cancer in women over 30 and, above all, 35 years of age.

Patent Status

Priority patent application filed suitable for international extension

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