

## **Urodelia & 4P-Pharma announce a business development partnership in Animal Health for Apa.vac<sup>®</sup> anticancer therapeutic vaccine**

**Urodelia, a Toulouse (France) biotech company specialized in personalised anti-cancer therapeutic vaccine, and 4P-Pharma, a Lille (France) biotech company specialised in human and animal drug development, are pleased to announce that they established a business development partnership. As an exclusive partner, 4P-Pharma will seek strategic opportunities in Animal Health for the licensing-out of Urodelia's Apa.vac<sup>®</sup> anticancer therapeutic vaccine.**

Urodelia has developed the Apa.vac<sup>®</sup> kit to treat several cancers in dogs and in cats, with particularly striking results.

Apa.vac<sup>®</sup> is based on cancer specific immune response stimulation using hydroxyapatite properties. Urodelia's team recently obtained impressive results: Apa.vac<sup>®</sup> in combination with a chemotherapy doubles the median survival time without side effects in 300 dogs with B-lymphoma compared to a conventional chemotherapy. In a subgroup of dogs with B-DLBCL lymphoma at stage Va, the survival rate was up to 5.6-fold increase with the co-treatment Apa.vac<sup>®</sup>-chemotherapy compared to the conventional chemotherapy. Apa.vac<sup>®</sup> treatment also proved particularly promising in 10 dogs with osteosarcoma significantly prolonging the survival rates with (median survival: 531 days) or without (median survival: 270 days) amputation compared to the amputation alone (median survival: 150 days) and amputation combined with chemotherapy (median survival: 360 days). The anticancer therapeutic vaccine was also safe and efficient to treat other cancer indications (i.e. oral melanoma and rare tumors) in other species (i.e. cats and horses).

Through the development of one of its own therapeutic for animal health, 4P-Pharma developed strategic relationships with animal health actors. The Lille biotech company will leverage these relationships and introduce Urodelia's Apa.vac<sup>®</sup> personalised anticancer vaccine to pharma veterinary companies. This exclusive partnership with 4P-Pharma is set to accelerate the licensing-out of the personalized anticancer vaccine for animal health, and comes at a decisive moment to support Urodelia's growth for the development of Apa.vac<sup>®</sup> to treat human cancer.

"We are very excited to form this business development collaboration with Urodelia, especially as 4P-Pharma's focus in animal health therapeutic development is well aligned with Urodelia's strategy for the market access of Apa.vac<sup>®</sup> to treat dog's B-lymphoma and osteosarcoma.", said Revital Rattenbach, President of 4P-Pharma.

"The connection between 4P-Pharma and Urodelia represents a great opportunity to develop the treatment of cancer in animals. In addition, the licensing of this technology in the veterinary sector allows us to build a bridge to human health," added Nicole Rouquet, President of Urodelia.

## About Apa.vac®

Apa.vac® is a personalized anticancer therapeutic vaccine which was specifically developed to best meet the complexity of cancer development. The concept of Apa.vac® technology is based on the purification of tumor proteins from a biopsy of animal's cancer in order to prepare a vaccine specific to a patient by using a chromatography column containing hydroxyapatite powder. The powder loaded with these proteins constitutes the vaccine. Apa.vac® is a kit for the preparation of personalized vaccine by the veterinarian in the clinic in only 2 hours. The technology is robust, repeatable and simple to use.

## About Urodelia

Founded in 2003, Urodelia is a company specializing in calcium phosphates for biomedical use. Its research turns to the development of new cancer treatments and more specifically, the strengthening of the immune defenses of patients. Since its creation, Urodelia has developed strong partnerships worldwide, demonstrating the safety and efficacy of an autologous immuno-oncology treatment, Apa.vac®. Urodelia is led by scientists and doctors to develop alternative cancer treatments. The technology developed by Urodelia now belongs to the therapeutic arsenal available to fight against cancer. With no toxic residues or side effects, this biotherapy is respectful of the environment and patients as well as their entourage.

<http://www.urodelia.com/en/>

<https://www.linkedin.com/company/urodeliaimmunotherapy/>

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## About 4P-Pharma

4P-Pharma is a Lille (France) biotech company specialized in the development of therapeutic molecules addressing unmet medical needs for human and animal health. 4P-Pharma's strategy aims to reduce the risks and costs of the development of early-stage molecules from partners such as academic institutions, small biotechs and TTOs. Under a co-development agreement, we confirm a drug's therapeutic potential through a technical due diligence program in our laboratories. If the outcome is positive, we continue the development of the project up to the clinical stage, through in-licensing or joint-venture deal with our partner. This way, we fill the gap between discovery and drug development. Since our creation in 2014, we brought two molecules from discovery to advanced developmental stage (until clinic). In addition of the human development, one of these molecules has been developed for the treatment of osteoarthritis in animal health.

[www.4p-pharma.com](http://www.4p-pharma.com)

[www.linkedin.com/company/4p-pharma](http://www.linkedin.com/company/4p-pharma)

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