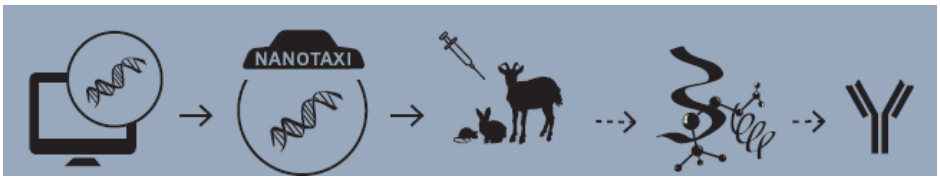
In-Cell-Art Announces Successful Completion of Research Collaboration with Virbac, a global independent pharmaceutical company exclusively dedicated to animal health.

Nantes – France, 13rd of October, 2016 – In-Cell-Art (ICA), a biotechnology company specializing in nanocarrier technologies named Nanotaxi® for unlocking the promise of nucleic acids to treat acquired or inherited diseases, announces today that ICA successfully completed a research service for Virbac, a global independent pharmaceutical company exclusively dedicated to animal health, with the aim of discovering unique antibodies via Nanotaxi® formulated DNA immunizations against a confidential target as part of Virbac's *in vitro* programme.

As part of Virbac's code of animal care and practice of the international 3Rs principles (Reduce, Refine, Replace: - Reduce the number of animals, Refine accommodation and usage conditions, Replace with alternative tests), a global initiative has been undertaken to significantly reduce the number of animals used in final batch release testing of veterinary vaccines. This effort involves the development of *in vitro* assays to replace some, if not all, current animal-based quality control tests.

Under this collaboration, ICA took in charge of the entire monoclonal antibody discovery work starting from DNA sequence optimization, then DNA synthesis, subcloning to ICA's proprietary plasmid, amplification, purification, quality control, Nanotaxi® production and formulation, and immunizations in chosen species of animals. The figure below is the schematic presentation of this antibody discovery program by ICA ("ICANTibodies™").



The immunizations being successfully completed, extracted RNA was sent to Creative Biolabs (New York, USA), ICA's partner for phage display library construction and biopanning, single clone validation, DNA sequencing and quality control in monoclonal format for the discovery of monoclonal antibodies, which

yielded a satisfactory number of monoclonal antibodies specific to the target for further evaluation at Virbac.

Bruno Pitard, head of Scientific Advisory Board and co-founder of In-Cell-Art, says “Nanotaxi® makes ICANtibodies™ unique compared to other genetic immunization-based antibodies discovery since Nanotaxi® dramatically increases expression of the gene-encoded antigen and hugely stimulates the innate immune system through unique delivery mechanism. The combination of these 2 properties allows the Nanotaxi® to generate powerful immune responses and antibody of interest even against extremely difficult targets such as complex of integral membrane proteins and proteins with high homology.”

Dong H. Chen, Chief Scientific Officer of Creative Biolabs says “this is a good example to demonstrate the power of combining ICA’s Nanotaxi®/DNA immunization and Creative Biolabs Magic™ Antibody Discovery Platform which allows us to provide one-stop service for our customers to discover unique monoclonal antibodies with high specificity and affinity to their targets”.

About In-Cell-Art

In-Cell-Art (ICA), which is headquartered in Nantes (France) is a biopharmaceutical company specializing in the preclinical and pharmaceutical development of nanocarriers named Nanotaxi ® for macromolecular drugs. Its founder and research team, which includes a Nobel Laureate, have designed new classes of vectors that are organized on a nanometric scale, which enables them to cross the cell barrier efficiently and safely. In-Cell-Art offers a range of reagents and biotechnology development services:

1. ICANtibodies™

In the absence of recombinant antigen, ICANtibodies™ allows, from an in silico DNA antigenic sequence, the production of the most ambitious functional antibodies against any natively expressed nuclear, cytoplasmic, secreted or membrane proteins. ICANtibodies™ has allowed, in less than 3 years, the production of more than 300 different functional antibodies. In-Cell-Art has worked with a number of pharmaceutical firms (Sanofi, GlaxoSmithKline, Geneuro etc.) and public research institutions and universities (Institut Cochin, Cancer Research UK, Institute of Neurology UK etc).

2. ICA Nanotaxi ®

・DNA Vaccine
ICA614 Nanotaxi®, an innovative DNA synthetic formulation, offers unique efficient and industrial features such as the dramatic enhancement of the immunogenicity of plasmid DNA-encoding tumours or pathogen-derived antigens, a reduction in the dose of plasmid DNA, as well as an excellent safety profile. ICA614 Nanotaxi® represents a crucial step in DNA vaccine development, and is currently being tested by major vaccine companies (Sanofi-Pasteur, Merial etc.).

・mRNA Vaccine
Some other ICA Nanotaxi® are also being assessed in $33.1 million RN-ARMORVAX consortium, co-funded by US Defense Advanced Research Projects Agency (DARPA). The consortium would validate the new application of ICA Nanotaxi® for mRNA-based vaccines for infectious diseases in collaboration with CureVac and Sanofi-Pasteur.

・mRNA Replacement Therapy
Some other ICA Nanotaxi® are also developed to improve the limited efficacy and stability of mRNA therapeutics, leading to the dramatic increase in therapeutic protein expression without DNA-encoded gene.

3. ICAFectin® transfection reagents

ICAFectin® transfection reagents are innovative breakthrough synthetic vectors for in vitro nucleic acid delivery. They are becoming the reagents of choice for efficient DNA and siRNA transfections as demonstrated by their increasing use in numerous studies published in high impact factor journals including Journal of Biological Chemistry, Nucleic Acids Research, PLOS ONE, PLOS Pathogen, Human Gene Therapy, Cell reports, EMBO Jand more.

In-Cell-Art is a privately held company, which was founded in 2005. It is a member of the Atlanpole Biotherapies high-tech cluster of biotechnology companies in western France.

About Creative Biolabs®

Creative Biolabs is a professional service provider in developing highly specific, high affinity monoclonal antibodies from all popular antibody production species (including rabbit, chicken, llama, camel, alpaca, cow, dog, mouse, rat, sheep, monkey, human, and most recently shark).

In addition to hybridoma production method in mouse, rat, hamster and guinea pig, Creative Biolabs has the unparalleled Magic™ immune phage display antibody library construction, screening and high-throughput sequencing platform, which is the most robust method to raise high-affinity monoclonal antibodies from all species in a huge number of up to thousands, especially powerful for challenging antigens such as haptens.

Also, its Native™ Antibody Discovery Platform that is based on single cell sorting allows discovery of high-affinity native monoclonal antibodies with all major antibody gene clusters from plasma and memory B cells of a wide range of species including rabbit and monkey.

For antigens that do not have immune response in animals or cannot be applied in animals, Creative Biolabs can screen multiple premade naïve and synthetic antibody libraries. Creative Biolabs has extensive experience in raising functional monoclonal antibodies against multiple-pass membrane proteins.

About Virbac

A LABORATORY THAT HAS ALWAYS BEEN DEDICATED TO ANIMAL HEALTH

Founded in 1968 by a French veterinarian, Virbac is an independent pharmaceutical laboratory dedicated to animal health, since its beginning. Currently the world's 8th largest animal health company, Virbac sells products in more than 100 countries, offering a comprehensive and practical range of products and services covering the majority of species and pathologies. Virbac innovation, based on both technological advances and listening to its customers, relies on reactive production facilities which meet the highest international quality standards. For nearly fifty years, these features have allowed the company to build a personalized relationship with veterinarians and farmers around the world. Through this

privileged partnership, in which social, health and environmental issues come together, Virbac contributes, day after day, to shape the future of animal health.

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