

# Defence Therapeutics Signs Collaboration Agreement with Orano to Develop the Next Generation of Targeted Radio-Immunotherapy for Cancer

Vancouver, British Columbia--(Newsfile Corp. - March 14, 2023) - Defence Therapeutics Inc. (CSE: DTC) (FSE: DTC) (OTC Pink: DTCFF) ("**Defence**" or the "**Company**"), is pleased to announce that it has signed a Collaboration Agreement with Orano Support SAS on behalf of Orano SA ("Orano"), a world-renowned multinational company, headquartered in Chatillon, France, to develop the next generation of radio-immunoconjugates for radio-immunotherapy using Defence's intracellular targeting technology.

The novel concept is to develop new targeted radiotherapies by combining the ability of biological molecules (e.g. an antibody) to target cancer cells with the use of radioactive elements as a means to destroy them, in combination with Defence's intracellular targeting technology to increase the efficacy.

Under the Agreement, Defence will develop the first radio-immuno-conjugates therapy based on Auger electron emitter by combining Defence's intracellular targeting expertise and radiochemistry expertise provided by Orano. Auger electron emitter radionuclide, such as Indium<sup>111</sup> will be used. This type of radioactive element needs to be very close to DNA for inducing DNA Damage and cell death. Defence's intracellular targeting technology could be the ultimate solution to improve the therapeutic efficacy of Auger electron radionuclide. The best results should lead to an optimize product from which a GLP tox studies will then be planned accordingly.

With existing antibody-conjugate drugs, a clinical issue with radio-immuno-conjugates to improve is their low intracellular drug delivery to cancer cells, which may cause resistance and recurrence. With the radio-immuno-conjugates using Auger emitters such as <sup>111</sup>In is that their efficacies are dependent to their proximity to the DNA. Combining Defence's Accum<sup>TM</sup> technology to the radio-immuno-conjugate is expected to amplify the therapeutic index of the drug while minimizing side effects observed in patients undergoing the therapy. Defence's Accum<sup>TM</sup> platform has been developed and tested *in vitro* and *in vivo* in animals to enhance the intranuclear drug delivery on multiple FDA approved antibody-conjugates or new conjugates under development.

"We have a long-standing knowledge and experience working and developing our Accum<sup>TM</sup> platform technology, including in the antibody-conjugate therapeutics field, and we definitely believe that Orano, with its international expertise, represents a strong collaborator for the development of the next generation of radio-immuno-conjugates using Defence's intracellular targeting technology to increase the efficacy in targeting tumoral cancer cells," said Sebastien Plouffe, Chief Executive Officer of Defence Therapeutics. "We look forward to the continued advancement of our Accum<sup>TM</sup>-expanding pipeline," he added.

According to The Insight Partners, the [Radiopharmaceuticals Market](https://www.theinsightpartners.com/reports/radiopharmaceuticals-market) is projected to reach US\$ 13.818 billion by 2028 from US\$ 7.55 billion in 2021; it is expected to grow at a CAGR of 9.0% during 2021-2028. And the global cancer immunotherapy market is expected to reach USD 196.45 billion by 2030, registering CAGR of 7.2% during the forecast period, according to a report by Grand View Research, Inc.

<https://www.theinsightpartners.com/reports/radiopharmaceuticals-market>.

<https://www.grandviewresearch.com/industry-analysis/cancer-immunotherapy-market>.

**About Defence:**

Defence Therapeutics is a publicly-traded biotechnology company working on engineering the next generation vaccines and ADC products using its proprietary platform. The core of Defence Therapeutics platform is the ACCUM™ technology, which enables precision delivery of vaccine antigens or ADCs in their intact form to target cells by inducing their entrapment escape. As a result, increased efficacy and potency can be reached against catastrophic illness such as cancer and infectious diseases.

For further information:

Sebastien Plouffe, President, CEO and Director

P: (514) 947-2272

[Splouffe@defencetherapeutics.com](mailto:Splouffe@defencetherapeutics.com)

[www.defencetherapeutics.com](http://www.defencetherapeutics.com)

## **About Orano:**

As a recognized international operator in the field of nuclear materials, Orano delivers solutions to address present and future global energy and health challenges. Its expertise and mastery of cutting-edge technologies enable Orano to offer its customers high value-added products and services throughout the entire fuel cycle. Every day, the Orano group's 17,000 employees draw on their skills, unwavering dedication to safety and constant quest for innovation, with the commitment to develop know-how in the transformation and control of nuclear materials, for the climate and for a healthy and resource-efficient world, now and tomorrow.

Orano, giving nuclear energy its full value. Orano looks continuously at opportunities to value material derived from its core nuclear energy activities in a sustainable approach. Nuclear medicine therapy is one of the currently explored strand realized with the production of lead-212 (a rare radioisotope used for targeted alpha therapy) and clinical studies underway. Orano aims to further strengthen its development in the medical field and complete its pipeline with new promising radioisotopes.

Further information can be found at: <https://www.orano.group>.

## **Cautionary Statement Regarding "Forward-Looking" Information**

This release includes certain statements that may be deemed "forward-looking statements." All statements in this release, other than statements of historical facts, that address events or developments that the Company expects to occur, are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential" and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include regulatory actions, market prices, and continued availability of capital and financing, and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Forward-looking statements are based on the beliefs, estimates and opinions of the Company's management on the date the statements are made. Except as required by applicable securities laws, the Company undertakes no obligation to update these forward-looking statements in the event that management's beliefs, estimates or opinions, or other factors, should change.

Neither the CSE nor its market regulator, as that term is defined in the policies of the CSE, accepts responsibility for the adequacy or accuracy of this release.



To view the source version of this press release, please visit <https://www.newsfilecorp.com/release/158230>