

RefleXion and Telix Pharmaceuticals Announce Strategic Collaboration for Treatment of High-Risk Cancers

HAYWARD, Calif., and MELBOURNE, Australia, July 8, 2020 – [RefleXion Medical](#), a therapeutic oncology company pioneering biology-guided radiotherapy* ([BgRT](#)) as a new modality for treating all stages of cancer, and [Telix Pharmaceuticals Limited](#) (ASX: TLX), a radiopharmaceutical company developing molecularly-targeted radiation ([MTR](#)) products, today announced a strategic collaboration to investigate the clinical utility of combining the companies' technologies to improve treatment for high-risk or recurrent prostate and aggressive kidney cancers.

Under the agreement, the parties will evaluate several new positron emission tomography (PET) tracers, including ^{68}Ga -PSMA-11 for prostate cancer and ^{89}Zr -Girentuximab for kidney cancer¹, to evaluate their potential in guiding BgRT to treat disease.

"The Telix tracers show considerable potential for detecting metastatic disease," said Phuoc Tran, M.D., Ph.D., professor of radiation oncology and molecular radiation sciences, oncology and urology at the [Johns Hopkins School of Medicine](#). "Combining them with RefleXion's BgRT, which is designed to treat metastatic disease, could bring us a step closer to improving outcomes for these cancer types."

[BgRT](#) uses biological emissions from a patient's cancer cells created by injecting a small amount of a targeting molecule carrying a positron-emitting radioisotope known as a PET tracer to guide external-beam radiotherapy (EBRT). As the PET tracer binds to the tumor cells, it produces emissions that signal the cancer's location. The RefleXion™ X1 machine detects these emissions using PET detectors and responds in real-time to direct BgRT to each tumor and destroy it, even in moving tumors. The most commonly used PET tracer is ^{18}F -fluorodeoxyglucose (FDG), which can detect many different cancer types. However, its performance in certain tumor types and organs remains limited, particularly for kidney and prostate cancers. Telix's new PET tracers are designed to target specific cancer types and are expected to be more accurate in this clinical setting.

"Telix's cancer-specific PET tracers may provide a more complete and robust signal to guide BgRT for difficult-to-treat cancers of the prostate and kidney," said [Thorsten Melcher, Ph.D.](#), chief business officer at RefleXion. "This collaboration is an important step in providing proof-of-concept that PET-based tumor emissions can guide our BgRT using different tracers and in different cancer types."

Prostate specific membrane antigen (PSMA) imaging with ^{68}Ga -PSMA-11 is suited for imaging high-risk or recurrent prostate cancer due to its ability to detect the spread of cancer outside the prostate bed. PSMA imaging is emerging as a potential new standard of care for detecting and

staging prostate cancer, subject to approval by regulators². For renal cancer applications, Telix's ⁸⁹Zr-Girentuximab, the first zirconium-labeled PET tracer in late-stage clinical development, targets carbonic anhydrase IX (CA9), an antigen that may differentiate renal cancer, including metastases, from benign disease.

"The use of Telix's cancer-specific PET tracers may enable us to guide RefleXion's BgRT in patients with more advanced forms of prostate and kidney cancer," said [Christian Behrenbruch, Ph.D.](#), CEO at Telix. "This collaboration also allows us to leverage the investment we've made in these tracers by expanding both their indications and overall procedure volumes."

About RefleXion Medical

[RefleXion](#) is a privately-held therapeutic oncology company developing the first biology-guided radiotherapy (BgRT) machine, a significant change in strategy from single tumor therapy to the ability to one day treat multiple tumors in the same treatment session in cancers that have metastasized. Currently, the RefleXion machine is cleared for the delivery of stereotactic body radiotherapy (SBRT), stereotactic radiosurgery (SRS) and intensity modulated radiotherapy (IMRT), all different techniques of EBRT. The company is also developing BgRT, which incorporates positron-emission tomography (PET) data to enable tumors to continuously signal their location. The BgRT technology will synchronize these data with the linear accelerator to direct radiotherapy to tumors with sub-second latency.

About Telix Pharmaceuticals Limited

[Telix](#) is a clinical-stage biopharmaceutical company focused on the development of diagnostic and therapeutic products using Molecularly Targeted Radiation (MTR). Telix is headquartered in Melbourne, Australia, with international operations in Belgium, Japan and the United States. Telix is developing a portfolio of clinical-stage oncology products that address a significant unmet medical need in prostate, renal and brain cancer. Telix is listed on the Australian Securities Exchange (ASX: TLX). For more information, visit www.telixpharma.com.

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*The RefleXion X1 BgRT capability requires 510(k) clearance; this feature is not available for sale.

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¹ ⁶⁸Ga-PSMA-11 and ⁸⁹Zr-Girentuximab are available for investigational use under an FDA Investigational New Drug (IND) application. Neither imaging agent has a marketing authorization in any jurisdiction.

² Trabulsi EJ, et al. Optimum Imaging Strategies for Advanced Prostate Cancer; ASCO Guideline. J Clin Oncol 38: 1963 – 1996 (published online January 15, 2020).