



ASX Announcement

30 April 2020

Abscopal Responses Achieved in Prostate Cancer

- Further evidence of anti-cancer effect of Veyonda® in patients with end-stage prostate cancer
 - 4/15 (27%) of patients have abscopal response following DARRT (Veyonda and radiation) therapy
 - First known demonstration of abscopal response in a high proportion of end-stage prostate cancer patients following low-dose external beam radiotherapy
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SYDNEY, April 30, 2020: Noxopharm (ASX:NOX) today releases details of the radiographic review of its DARRT-1 clinical study and is pleased to report that it shows a major benefit from a combination of Veyonda® and low-dose radiotherapy.

The rationale behind DARRT is the use of a low dose of radiation to trigger an immune response to the cancer in one particular tumour, with Veyonda® then promoting a generalised spread of that immune response to tumours elsewhere in the body. An anti-cancer response in distant non-irradiated lesions is known as an **'abscopal response'** and has become a major new direction in oncology, offering the ability to achieve a significant anti-cancer effect with low, well-tolerated doses of radiation.

Dr Graham Kelly, Noxopharm CEO, said, "This is an exciting outcome that vindicates our belief in the anti-cancer properties of Veyonda®.

"There is growing interest in using combination targeted radiotherapy and immunotherapy drugs such as checkpoint inhibitors, with reports of some abscopal responses being obtained in certain cancers such as breast, lung and urological cancers and melanoma. But to our knowledge, this is the first time that anyone has been able to obtain a meaningful abscopal response rate in prostate cancer. Prostate cancer has developed a reputation as a cancer with poor immune responsiveness, but this DARRT-1 data suggests that this isn't the case. Today's result positions Veyonda® at the forefront of this emerging area of oncology and suggests that we have an exciting new prospective treatment for end-stage prostate cancer."

DARRT-1 patients were selected for having both soft tissue and bone secondary tumours. Radiation was delivered to one or two symptomatic lesions – be they soft tissue or bone lesions. Then all measurable lesions, both irradiated and non-irradiated, were followed up. To qualify as an abscopal response, the non-irradiated lesion(s) need to be outside the radiation field.

Radiation was delivered by low-dose external beam to one or two lesions at a dose of 20Gy for 5 days. Veyonda® was given daily for 10-14 days.



As previously reported (December 2, 2019), 15 men with measurable lesions had a CT scan at the 6-month study visit.

- 4/15 are determined to have had an abscopal response
- Of these, 1/4 received 800 mg Veyonda; 3/4 received 1200 mg Veyonda
- Response in non-irradiated lesions varied from approximately 50% shrinkage of the abscopal lesion to almost complete resolution.

Dr Gisela Mautner, Noxopharm Chief Medical Officer, said: “Abscopal responses are a very rare occurrence, so to see it in 4 of 15 patients is a remarkable result. Considering that this was an early phase study with only a short course of Veyonda®, these results become even more exciting.”

“Taking all the results together that we have seen in the DARRT-study, i.e. the pain reductions, the PSA responses and the responses in the tumour sizes, we can certainly say that many of the patients derived a great benefit from Veyonda®. This makes the next DARRT study even more urgent as there are many prostate cancer patients out there waiting for better treatment options and hoping to live longer.

The future

Noxopharm is developing the DARRT treatment regimen as a means of converting palliative therapy (mainly radiotherapy) into a therapy delivering a meaningful therapeutic outcome in patients with end-stage cancer. The Company is starting with end-stage prostate cancer. The DARRT regimen has been designed to be minimally intrusiveness and well-tolerated.

The Company plans to conduct its DARRT-2 study commencing early-2021. This will be a Phase 2, control arm, multi-national study with Veyonda® being administered for several cycles.

About DARRT-1

DARRT-1 is an open-label Phase 1b trial evaluating the safety and tolerability of the Company’s lead product candidate, Veyonda® (NOX66), in combination with low-dose palliative radiotherapy in 25 patients with late-stage metastatic castration-resistant prostate cancer (mCRPC) who had exhausted available standard treatment options. The primary objective of the study was to investigate the safety and tolerability of a combination of Veyonda® and a palliative dose of external beam radiotherapy and to confirm the appropriate dose of Veyonda® for the next stage of clinical trialing. To determine the optimal dose, the first 3 cohorts of 4-6 patients (known as the dose escalation part) were treated with either 400mg, 800mg and 1200mg of NOX66 in combination with radiotherapy. Following the approval by the Safety Steering Committee in November 2018, an expansion cohort of the study was recruited involving 11 patients who received 1200mg of Veyonda®. The patients were treated with Veyonda® for 14 days and low-dose radiation treatment given on 5 days (5 fractionated doses) to between 1-2 measurable lesions during the Veyonda® administration. Patients then were followed up after 6, 12 and 24 weeks. For more information, visit [ClinicalTrials.gov](https://clinicaltrials.gov), using identifier: NCT03307629

About the NOX66 DARRT program

The Company’s NOX66 DARRT (Direct and Abscopal Response to Radiotherapy) clinical program is testing the ability of Veyonda® to augment an immunological response to palliative (non-ablative) dosages of radiotherapy. The principle of NOX66 DARRT is to use low-dose radiation to trigger local inflammatory and immune responses in



a single irradiated tumour, with Veyonda[®] designed to boost that response and extend it to all tumours in the body via an ability to increase trafficking of the body's innate and adaptive immune cells. The clinical outcome being sought is shrinkage of both irradiated tumours (direct effect) and non-irradiated tumours (abscopal response), resulting in reduced pain, extended progression-free survival, and improved survival. The DARRT treatment regimen is being tested initially in late-stage prostate cancer, but given that the active ingredient in Veyonda[®], idronoxil, targets an oncogene common to most forms of cancer, the Company is confident that the NOX66 DARRT treatment principle should be applicable to most if not all forms of solid cancer including breast, lung, ovarian and colorectal cancers.

About Veyonda[®]

Veyonda[®] (NOX66) is a suppository dosage formulation of the experimental anti-cancer drug, idronoxil. Idronoxil is a first-in-class dual inhibitor of production of the key secondary pro-survival messenger, sphingosine-1-phosphate, and of the STING signaling pathway.

About Noxopharm

Noxopharm is a clinical-stage Australian drug development company with offices in Sydney and New York. The Company has a primary focus on the development of Veyonda[®] and is the major shareholder in Nyrada Inc, a spin-off company developing a pipeline of non-oncology drugs.

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Graham Kelly, CEO and Chairman of Noxopharm, has approved the release of this document to the market.

Forward Looking Statements

This announcement may contain forward-looking statements. You can identify these statements by the fact they use words such as “aim”, “anticipate”, “assume”, “believe”, “continue”, “could”, “estimate”, “expect”, “intend”, “may”, “plan”, “predict”, “project”, “plan”, “should”, “target”, “will” or “would” or the negative of such terms or other similar expressions. Forward-looking statements are based on estimates, projections and assumptions made by Noxopharm about circumstances and events that have not yet taken place. Although Noxopharm believes the forward-looking statements to be reasonable, they are not certain. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond the Company's control that could cause the actual results, performance or achievements to differ materially from those expressed or implied by the forward-looking statement.