



**Positive Results from Phase 1 evaluating THR-149 for DME
Presented at major international Retina Conferences**

**Patient Enrolment Completed for THR-687 Phase 1 study
Data read out around year end 2019**

Total Cash & Investments at €60.5 million as of September 30, 2019

Highlights

Pipeline

- Positive data from Phase 1 study evaluating THR-149 (Plasma Kallikrein Inhibitor) for the treatment of DME were presented at major Retinal Conferences
 - THR-149 is well-tolerated and safe with no dose-limiting toxicities or drug-related serious adverse events reported
 - Rapid onset of action starting at Day 1 with increasing average improvement in Best Corrected Visual Acuity (BCVA) of up to 7.5 letters at Day 14 following a single injection of THR-149
 - Activity maintained up to 6.4 letters improvement at Day 90 following a single injection of THR-149
- Patient enrolment completed in Phase 1 safety study evaluating THR-687 (pan RGD integrin antagonist) for the treatment of DME
 - Data read out anticipated around year end of 2019

Financial

- Oxurion had cash, cash equivalents & investments of €60.5 million at the end of September 2019. This compares to €67.6 million at the end of June 2019.

Leuven, Belgium, October 18, 2019 – 7.30 AM CET – [Oxurion NV](#) (Euronext Brussels: OXUR), a biopharmaceutical company developing innovative treatments to preserve vision in patients with diabetic eye disease, today issues its business and financial update for the nine month period ending September 30, 2019.

Oxurion is continuing to progress the development of its innovative pipeline of drug candidates for diabetic eye disease, particularly Diabetic Macular Edema (DME).

The Oxurion clinical development pipeline consists of novel products with different mostly VEGF independent modes of action, which, together potentially give the Company access to a significant share of the large and fast-growing diabetic eye disease market.

Oxurion's clinical pipeline comprises of:

- a potent plasma kallikrein inhibitor (**THR-149**) which completed a Phase 1 multicenter, dose escalation study for the treatment of DME. Positive data showed that THR-149 is well-tolerated and safe with no dose-limiting toxicities or drug-related serious adverse events reported. The data also showed very promising efficacy results in relation to BVCA.
- a small molecule pan-RGD integrin antagonist (**THR-687**) being developed to treat a broad range of patients with diabetic eye disease. Phase 1 study with THR-687 completed patient enrolment in September 2019. Topline results from the Phase 1 study are expected around year end of 2019.
- a human placental growth factor (PlGF) neutralizing monoclonal antibody (**THR-317**). Following 2018 reported positive topline data from a Phase 1 study evaluating THR-317 for DME in monotherapy, Oxurion recently reported mixed topline results from an exploratory Phase 2a study THR-317 in combination with ranibizumab (Lucentis[®]) for DME.

Oxurion is also evaluating THR-317 in a small Phase 2a study in Idiopathic Macular Telangiectasia Type 1 (MacTel 1). Topline data from this study are expected for early 2020. At that moment, Oxurion will announce its final overall development plans with THR-317.

Patrik De Haes, M.D., CEO of Oxurion, commented:

“The positive topline results from a Phase 1 study evaluating THR-149, a potent plasma kallikrein inhibitor, showed that THR-149 delivers a rapid and sustained gain in BCVA. The study also confirmed THR-149 was well-tolerated and safe.”

“We are pleased with the feedback from the ophthalmology community to these exciting new data, especially since they potentially create a path towards a new and unique VEGF-independent therapy for treatment of DME. We are preparing for a follow-up Phase 2 clinical trial that will evaluate multiple doses of THR-149. This important study is expected to start in the first half of 2020.”

“We are also looking forward to reporting the topline data from our Phase 1 study with THR-687, a small molecule pan-RGD integrin antagonist for the treatment of DME around year end. Our current cash of €60.5 million will allow us to progress all of our ongoing and planned clinical and preclinical developments into 2021.”

Diabetic Eye Disease - A Significant and Growing area of medical need

Diabetic eye disease is caused by hyperglycemia (high blood glucose levels) associated with diabetes. If left unchecked hyperglycemia causes damage to the capillaries supplying blood, and hence oxygen, to the retina, the structure at the back of the eye responsible for vision.

Diabetic retinopathy (DR) is a serious, sight-threatening disease and the leading cause of vision loss among working-age adults. DR progresses from mild, non-proliferative to more severe or even proliferative stages (PDR). PDR, the more advanced stage of diabetic eye disease happens when the retina starts growing new fragile blood vessels, which often bleed into the vitreous leading to loss of vision.

It is estimated that there are 150 million diabetics with DR of which 50 million have vision threatening disease.

Diabetic macular edema (DME) is a severe complication of DR. DME is an accumulation of fluid in the macula – the part of the retina that controls detailed vision - due to leaking blood vessels. DME represents an area of major unmet medical need. The current standard of care, anti-

VEGFs, have shown to deliver sub-optimal results. More than 50% of patients have an unsatisfactory early visual response with anti-VEGF therapy, and in many cases, they fail to achieve a clinically meaningful visual improvement.

Oxurion Pipeline Update

THR-149 – a plasma kallikrein inhibitor for treatment of DME

Positive Phase 1 Results with THR-149 for the treatment of DME – Phase 2 program expected to start in H1 2020

THR-149 is a novel plasma kallikrein inhibitor being developed for the treatment of DME.

THR-149 acts through inhibition of the Plasma Kallikrein-Kinin (PKal-Kinin) system, which is considered a validated target for DME.

The Phase 1 study showed that THR-149:

- is well-tolerated and safe. No dose-limiting toxicities nor drug-related serious adverse events were reported at any of the dosages evaluated in the study.
- delivered promising results in relation to efficacy, in particular changes to the patient's Best Corrected Visual Acuity (BCVA). A rapid onset of action was observed from Day 1, with an increasing average improvement in BCVA of up to 7.5 letters at Day 14.

Importantly, this activity was maintained with an average improvement in BCVA of 6.5 letters at Day 90 following a single injection of THR-149.

Data from the Phase 1 study with THR-149 have been presented at a number of major Retina Conferences in Europe and the US: 19th Congress of European Society of Retina Specialists (*EURETINA*) in Paris (5 – 8 September), Retina Society Annual Meeting in London (11–15 September), and the American Academy of Ophthalmology Annual Meeting (AAO) in San Francisco (12 – 15 October).

The Company is currently preparing to start a Phase 2 development program, which will evaluate multiple doses of THR-149 in patients with DME. This study is expected to start in early 2020.

This novel drug candidate was generated using Bicycle Therapeutics' Bicycles® technology platform.

THR-687 – an integrin antagonist for treatment of DME

Oxurion is developing THR-687, a novel pan-RGD integrin antagonist, to preserve vision of a broad range of patients with diabetic eye disease. This wide-ranging potential is based on the hypothesis that integrin inhibition can address many of the processes that result in the pathological angiogenesis and vascular leakage that cause diabetic eye disease.

Oxurion is initially targeting THR-687 for the treatment of DME.

In September, Oxurion completed recruitment of a Phase 1 multicenter, dose escalation study evaluating the safety of a single intravitreal injection of THR-687 for the treatment of patients with DME. Twelve patients were enrolled in the study.

Initial results from this study are anticipated around year end 2019.

THR-317 – a Humanized mAb Against Human PIGF for the treatment of DME

THR-317 (anti-PIGF) is a recombinant humanized monoclonal antibody directed against the receptor-binding site of human placental growth factor (PIGF). THR-317 is being developed for the treatment of DME.

In 2018, positive Phase 1 data demonstrated the potential of THR-317 for treatment of diabetic macular edema in monotherapy. Topline results from that study showed strong safety data as well as first indications of clinical activity and durability of effect. Following those positive results, the Company initiated a Phase 2a exploratory proof of concept study evaluating THR-317 in combination with ranibizumab (Lucentis[®]) for treatment of DME.

In August 2019, the Company announced the topline results from an exploratory 70 patient Phase 2a study evaluating the efficacy and safety of intravitreal THR-317 administered in combination with ranibizumab (Lucentis[®]) a VEGF inhibitor, for the treatment of DME.

The study showed that the combination did not produce an increase in BCVA in the overall population at Month 3.

Certain improvement in mean BCVA at Month 3 could be observed with the combination therapy in 2 pre-specified subgroups of interest:

- o poor (or non) responders to prior anti-VEGF, and
- o patients with poor vision - baseline BCVA ≤65 letters

Topline data confirmed that THR-317 in combination with ranibizumab is safe and well-tolerated.

THR-317 clinical development plans in DME are currently under review.

Phase 2 clinical study evaluating THR-317 for treatment of MacTel1

Oxurion is recruiting patients in a Phase 2 multi-center study evaluating the efficacy and safety of intravitreal THR-317 for the treatment of Macular Telangiectasia Type 1 (MacTel 1). MacTel 1 is a rare disease that affects the macula and can lead to vision loss. There is currently no effective treatment for MacTel 1.

This Phase 2 study plans to enroll a maximum of 10 patients with macular edema caused by MacTel 1. Each patient will receive three 8mg intravitreal THR-317 injections over a period of 2 months. Efficacy and safety of the therapy will be assessed via functional and anatomic endpoints.

Initial results from this clinical study are anticipated by early 2020.

Financial Update

As of September 30, 2019, Oxurion had €60.5 million in cash, cash equivalents and investments. This compares with €67.6 million as of the end of June 2019.

Financial Calendar 2020

Full Year Results Fiscal Year 2019	March 12, 2020
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Annual Shareholders Meeting	May 5, 2020
Business Update Q1 Fiscal Year 2020	May 7, 2020
Half Year Results Fiscal Year 2020	September 17, 2020
Business Update Q3 Fiscal Year 2020	October 15, 2020