CLINUVEL today announced its second Strategic Update, focusing on further details of the expansion and growth of the Group. A main goal of CLINUVEL’s growth is to integrate skills and functions in-house. Explore the Strategic Update II in detail below. This document provides all content released by CLINUVEL on 12 April on its Strategic Update II microsite, available via www.clinuvel.com.

CLINUVEL’s first Strategic Update, released on 29 October 2020, can be accessed here, with an executive summary provided here.

**Objectives**

The corporate objective is to establish a sustainable group with a constellation of prescriptive and healthcare products derived from melanocortins and associated pharmacological concepts by addressing populations who yet remain unserved.

CLINUVEL strives for vertical integration of all key functions to ensure operational and financial independence, and synergy within the Group of companies.

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**Pharmaceutical Division**

- **Research & Development**
  - CLINUVEL has focussed its R&D on melanocortins, associated hormones and peptides, polymers and technological expertise to be applied for human use.

- **DNA Repair Program**
  - It is estimated that, globally, two billion individuals are susceptible to accelerated photodamage, leading to an increased risk of various forms of skin cancer.

- **Strategy And Planning: DNA Repair Program**
  - CLINUVEL set out to provide evidence on the properties of afamelanotide to photoprotect skin and assist the repair of DNA damage.

- **CNS Arterial Stroke**
  - Scientific progress has demonstrated melanocortins as hormonal therapy to exert a positive effect on the central nervous system (CNS).

- **Further Clinical Use Of Afamelanotide**
  - SCENESSE® is being evaluated as the first systemically administered melanocortin for the pigment loss disorder, generalized vitiligo.

- **6th New Indication**
  - The selection of a CLINUVEL-sponsored indication usually takes two to three years from identification to confirmation and acknowledgement by experts in the field.

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**Healthcare Solutions Division**

Under the notion of Targeted Technology Translation (TTT), CLINUVEL aims to make technology, knowhow and expertise available for the greater benefit of broad populations.

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**CBM Division**

The CBM Division is responsible for composing unique narratives and engaging in long-term dialogue with new audiences.

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**Manufacturing Division**

The Manufacturing Division will focus on the manufacturing of innovative, controlled-release systemic and topical formulations.
CLINUVEL has focussed its R&D on melanocortins, associated hormones and peptides, polymers, and technological expertise to be applied for human use. At this stage, the Company is working to translate its technologies to products for specific patients and broader audiences.

**Following two decades of collecting safety data from the human use of systemically administered melanocortins, CLINUVEL is able to expand the therapeutic potential of melanocortins and, in particular, SCENESSE® (afamelanotide 16mg) in a number of genetic, metabolic, and life-threatening disorders.**

CLINUVEL’s lead product SCENESSE® is approved as a prescriptive pharmaceutical therapy for the prevention of phototoxicity in adult patients with erythropoietic protoporphyria (EPP) in Europe, the USA and Australia. Further details on SCENESSE® can be found [here](#).

Clinical trials are planned or underway in a number of acute and life-threatening disorders. Access details on our DNA Repair Program and CNS Program as part of this Strategic Update.

### Development Pipeline

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<th>Genetic Metabolic</th>
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**CLINUVEL’s Research, Development and Innovation Centre, VALLAURIX Laboratories in Singapore, is focussed on both prescriptive pharmaceutical solutions and OTC products.**

PRÉNUMBRA®, the second prescriptive, a non-solid afamelanotide formulation, was unveiled in 2020 as part of the life cycle management of the melanocortin molecule. This liquid formulation is intended to address patients with critical disorders who lack therapeutic alternatives.

CLINUVEL is expanding its pharmaceutical pipeline of melanocortins with CUV9900, phimelanotide and parvysmelanotide for systemic and topical use (transdermal), and these form the next generation of melanocortins.

**As part of its overall portfolio, CLINUVEL intends to launch a minimum of two pharmaceutical and four OTC product lines.**

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**CLINUVEL’s Expansive Cycle of Innovation**

Focus In Research & Development & Product Formulation

**Melanocortins**
- Medicinal Chemistry
- Pharmacodynamics
- Formulation development

**Polymers**
- Medicinal Chemistry
- Rheology
- Kinetics
- Bio-compatibility

**Manufacturing**
- Process development
- Scalability
- Method Transfer
- Process validation
- Quality, Regulatory

Formulation Development
- Parenteral • acute release
- targeted release
- Transdermal (topical)

1. Modelling
2. In-vitro
3. Pharmacokinetics/Bioavailability
4. Preclinical
5. Pharmacodynamics
6. Clinical

A Intellectual Property
B Knowhow
C Processes
Every day we are exposed to the full spectrum of light – both ultraviolet (UV) and High Energy Visible (HEV) light – which damage the DNA located within the nucleus of our skin cells. The human body has developed protective and reparative responses to photodamage, yet there are many groups of individuals who exhibit defective and inefficient DNA repair responses.

It is estimated that, globally, two billion individuals are susceptible to accelerated photodamage, leading to premature ageing and, ultimately, chronic skin damage with an increased risk to various forms of skin cancer. UV (including HEV) exposure is, worldwide, the external factor commonly acknowledged as the leading cause for developing skin cancers; three forms of carcinogenesis (basal cell, squamous cell and melanoma) dominate, and it is estimated in the western world that between 2 to 5 million new cases are diagnosed every year, although numbers for Asia, Latin America and Africa remain less accurate.

CLINUVEL has uniquely identified several untreated and unserved groups at the highest risk of skin cancers and photodamage, and is developing products and solutions for these populations, divided in three categories:

**Group A**

- Immune-suppressed and immune-compromised patients
  - i. Immune-suppressed patients (receiving long-term immune-suppressive drugs, cancer patients, auto-immune diseased, etc)
  - ii. Organ transplant recipients (receiving a mix of immune-suppressing therapies life long)
  - iii. Patients receiving immune-modulatory drugs (new class of therapies for auto-immune disorders and specific cancers)

**Group B**

- Genetically disadvantaged populations
  - iv. Red-hair-blue-eyes-freckled individuals of Anglo-Saxon descent (MC1-receptor defective)
  - v. Individuals with a history of, and predisposition to, frequent sunburns
  - vi. Individuals with a family history of skin cancers (Gorlin Syndrome, Actinic Neoplasia Syndrome, melanoma, actinosis, Dubreuilh Syndrome and others)
DNA Repair Program

CLINUVEL intends to serve these three groups and subsegments, further dividing in distinct therapeutic opportunities and commercial markets. CLINUVEL is the first company to focus and dedicate its resources to these segments to serve the various populations. With a methodological, planned and staged approach to address unserved need in these three populations, the Group is releasing communication and educational campaigns to reach the populations at risk, while raising awareness.

CLINUVEL’s communications and marketing output are aimed at providing information on specific physical and behavioural risks, needs and prospective solutions for the categorised populations. Online news will be disseminated through frequent and periodic educational campaigns to reach the widest possible relevant audiences. The Company’s competitive advantage is based on its technological and scientific expertise and knowhow established over four decades of devotion.

The Company has established a leading position in the medical and scientific community, and its standing in the field is expected to facilitate the launch of prescriptive and healthcare (non-prescriptive) products for the benefit of the three categories.

In comparison, few companies globally have established this particular footprint, and it is expected that CLINUVEL will be able to obtain a leading position in specialised care.

CLINUVEL’s DNA Repair Program is focussed on confirming the pharmacological properties of melanocortins, including its drug SCENESSE® (afamelanotide 16mg) to assist in the reparative process of UV-induced DNA damage.

Melanocortins, including afamelanotide, have been shown to maximise the biological function of skin cells following UV-radiation and exposure, as well as to repair subsequent DNA damage. CLINUVEL is publishing in its
DNA Repair Program

step wise approach the progress of its DNA Repair Program including the instruments, measures and methodologies to evaluate DNA damage, repair, and regeneration. Naturally, in protecting CLINUVEL’s knowhow and intellectual property, not all details of the programs are discussed.

Some of the methodologies rely on in-vitro data, others on preclinical and clinical data following standardised testing and simulated UV irradiation and exposure under environmental conditions.

CLINUVEL has explored and published many of its methodologies during the Scientific Communiqué series. The reader is referred to this series.

A significant focus of the DNA Repair Program is on patients with the most acute and highest need, born with the genetic condition xeroderma pigmentosum (XP), with healthy volunteers of fair skin complexion serving as control groups.

XP is a group of eight rare disorders causing extreme UV intolerance leading to skin cancers, defects in development and neural disease. Compared to the general population, XP patients have been shown to have a 1,000 to 10,000-fold increased risk of developing skin cancer(s). Some of the XP populations have a limited life span (median 30 years) due to the spread (metastasis) of cancerous cells. Thus far, there is no remedy, prevention or cure for XP.

In March 2021, CLINUVEL announced an expansion to its DNA Repair Program focussing on treating patients with XP variant (XP-V), as well as those with XP-C.

XP-V and XP-C comprise an estimated 20% and 40%, respectively, of the global XP patient population.

In XP-C patients the defect in a DNA repair mechanism (nucleotide excision repair or NER) is the cause of phototoxicity, UV intolerance and development of skin cancers. XP-V patients have a genetic defect leading to an inability to replicate damaged DNA (POLH gene), ultimately causing skin carcinogenesis. Both populations are, in extremis, prone to developing skin cancers following UV exposure.

Four studies have been announced in XP-C, XP-V and healthy volunteers, conducted by expert academics and physicians worldwide.

CUV150 and CUV151 are conducted simultaneously. CUV152 and CUV153 are planned to start in Q1 2022 and Q2 2022, respectively.

<table>
<thead>
<tr>
<th>Clinical trial</th>
<th>Phase</th>
<th>Target population</th>
<th>Participants</th>
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<tr>
<td>CUV151</td>
<td>Phase II</td>
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<tr>
<td>CUV152</td>
<td>Phase IIb</td>
<td>XP-C and XP-V</td>
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<tr>
<td>CUV153</td>
<td>Phase III</td>
<td>XP-V</td>
<td>n=6</td>
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Table 1: Clinical trials forming CLINUVEL’s current DNA Repair Program. The Program has been expanded to evaluate afamelanotide in XP-V patients.
DNA Repair Program

Treated groups will receive afamelanotide in various frequencies and doses for a duration of up to four months. Skin samples (biopsies) of UV-exposed skin areas will be taken for laboratory analyses of DNA damage before and after drug administration. Patients will be frequently monitored, including complete skin examinations before and during treatment. Quality of life questionnaires will assist in evaluating the possible impact of the treatment on patients’ wellbeing and daily functioning.

To date, the COVID pandemic has had an impact on the recruitment of XP patients in Europe, the United States and Latin America, since hospitals wish to minimise the risk to these patients. It is expected that treatment will start as the COVID numbers decrease.

The map below shows the known populations and clusters of XP patients.

If demonstrated to be safe and effective for XP, SCENESSE® would be the first drug worldwide for this group of unserved patients, and the first pharmaceutical therapy with proven evidence of impact on DNA regeneration.

CLINUVEL’s DNA Repair Program evaluates the widest range of populations at risk. Populations at highest risk of photodamage and skin cancers are XP patients, followed by EPP and immune-compromised patients. Healthy individuals at highest risk are those with a fair-skin complexion, Fitzpatrick skin type I and II, prone to burn and who prove melano-incompetent. CLINUVEL’s programs aim to launch complementary products (prescriptive and OTC) aiming to address all populations identified as high risk to photodamage and carcinogenesis.
Photoprotection First

The need to photoprotect patients and individuals at highest risk had been considered for decades, however until 2014 no prior therapeutic solution was found. With the introduction of SCENESSE® as a systemic photoprotective drug in Europe in 2014, in the United States in 2019, and Australia 2020 the basis of CLINUVEL’s long-term strategy was laid.

Systemic photoprotection by using afamelanotide indicates, the:

1. formation of a temporary physical skin barrier
2. attenuation of UVA, UVB and HEV exposure (radiation)
3. protection of the nucleus of cells ("supra-nuclear cap")
4. reduction of UV damage (radical oxygen species)
5. optimisation of the cellular response (MC1R signalling)
6. switch of the eumelanin:pheomelanin ratio in favour of protective eumelanin
7. increase of detoxifying properties (chelative function)
8. reduction of tissue-water following damage (extravasation, oedema)
9. optimisation of tissue response (NFκB)
10. optimisation of vascular (capillary) response in damaged tissues (MC1R-MC4R)

The first clinical and pharmacological focus has been to demonstrate the benefits of afamelanotide and melanocortins in photodermatoses (light-induced diseases) such as polymorphic light eruption and solar urticaria.

CLINUVEL successfully evaluated and validated systemic photoprotection as a medicinal therapy in the most severe group of patients suffering from light...
emitted along the visible (HEV) and invisible spectrum, those diagnosed with a genetic haem defect expressed as erythropoietic protoporphyria (EPP).

DNA REPAIR AS SECOND FOLLOW-ON

By identifying the most severely affected group of patients diagnosed with a defect in cellular DNA repair mechanisms, CLINUVEL set out to provide the final piece of evidence on the properties of afamelanotide as a hormonal therapy to photoprotect and assist the repair of single strand DNA defects caused by UV exposure (UVB induced DNA damage). The group of patients evaluated is diagnosed with the genetic disease xeroderma pigmentosum (XP).

Patients suffering from two variants – XP-C and XP-V – have been identified as potentially benefiting most from the systemically administered (through the blood circulation) afamelanotide therapy.

In administering afamelanotide to XP patients, the **DNA-reparative objectives** are not only to achieve the **10 criteria** as defined above under systemic photoprotection, but also to demonstrate

1. **reduction of photoproducts** (chemical bonds within a single DNA strand)
2. **reduction in cell death** (apoptosis of epidermal cells)
3. **increase in cellular response to initiate and accelerate repair** (proteins, complementation factors)
4. **increase in enzymatic activity**
5. **increase in melanogenic response** (skin pigmentation)
6. **decrease in UV-intolerance, and burn(s)**

The strategy has been to first focus on those most severely affected patients who express insufficient DNA repair. In parallel, CLINUVEL is expanding the use of melanocortins and associated technological knowhow and expertise in pharmaceuticals serving the groups at risk of photodamage (see three categories of populations in the DNA Repair Program section).
Scientific progress has demonstrated melanocortins as hormonal therapy to exert a positive effect on the central nervous system (CNS).

Melanocortins, including analogues of the naturally occurring alpha-melanocyte stimulating hormone (α-MSH), bind to melanocortin receptors (MC1R through MC5R) on cells throughout the body and exert their effects.

Advanced knowledge on the expression of MC1R and MC4R in the brain has enabled afamelanotide and derivative molecules to be used for specific disorders affecting brain function.

**NEUROPROTECTION**

Afamelanotide, an α-MSH analogue, and other hormones of the melanocortins family offer neuroprotection.

Afamelanotide is known to act as a potent anti-oxidative hormone. The drug possesses further therapeutic benefits, causing dilation of vessels, reduction of fluid formation, protection of nerve and brain tissue, and restoration of the Blood Brain Barrier (BBB; a critical barrier to protect the brain in the case of trauma and infections).

The BBB is a highly selective structure formed around the cells of blood vessels in the brain to protect it from pathogens (toxins) and other substances that can damage neurons, the principal cells of the brain. The BBB consists of various cells, but the barrier function comes mainly from astrocytes (end-feet) which wrap around the cells of blood vessels (endothelial cells).

In the event of damage (trauma) and diseases of the brain, such as stroke, the BBB becomes disrupted and rapidly starts to leak various toxins outside the circulation (extra-cellular space) negatively affecting neuronal networks, and therefore the primary functions of these cells, the conduction of signals.
CNS Program – Arterial Ischaemic Stroke (AIS)

In its healthy state, the BBB allows the transport of oxygen, water and glucose. *Melanocortins, including afamelanotide, are shown to protect critical brain cells, as well as the BBB in experimental and under pathological conditions.*

**STROKE (AIS)**

*Stroke is the second most common cause of death and a leading cause of disability worldwide, yet many stroke patients are ineligible for the current standard of care (clot removal and clot dissolution).*

Acute stroke most frequently occurs unexpectedly and without warning. There are two main reasons for AIS: a severe constriction of a blood vessel, and a clot lodged within the vessel. This causes an immediate lack of oxygen and glucose supply, leading to partial death of brain tissue. A stroke patient may lose sudden consciousness, and typically will experience loss of movement of one side of the body (such as the arms, legs or face).

Following a stroke, family and bystanders usually ensure that the patient is immediately transported to an emergency department of a hospital, where a brain scan (computed tomographic angiography; CTA) needs to confirm the diagnosis. Partial or full recovery of the patient depends on the size of the infarct (dead brain tissue) incurred, speed of treatment offered, and underlying general health.

A stroke affects the brain instantly, as blood flow stagnates or comes to a complete standstill due to the clot within the vessel. The lack of oxygen supply to the brain is called ischemia, and in general three zones of oxygen depletion are distinguished within the brain. The outer zone is called the oligemic zone, the middle zone the penumbra and the centre the ischaemic core (dead brain tissue).
CNS Program – Arterial Ischaemic Stroke (AIS)

The immediate objective is to restore the penumbra and oligemic areas of the brain which are found around the lodged clot within the brain vessel.

For more scientific detail, see Scientific Communiqué VII (November 2020) – The Cerebral Vascular System.

Unfortunately, the majority of stroke patients do not benefit from standard therapy (clot removal or clot dissolution) because the treatment is not offered within the internationally accepted critical treatment window of four and a half hours, or because the clot is lodged in the higher regions of the brain (M2 branch and higher).

**CLINUVEL’s CUV801 pilot study focusses on arterial ischaemic stroke (AIS) as the first CNS indication for afamelanotide.**

More than two decades of safety data captured in clinical trials, special access programs and post-authorisation use of SCENESSE® provide justification for expanding the use of the drug to evaluate its therapeutic benefit for patients with acute conditions.

The pilot AIS study, CUV801, is evaluating the safety of afamelanotide in six adult patients suffering acute strokes but who are ineligible for current standard of care due to the location of the clot (M2 levels and higher). The primary objective of the study is to assess the safety of afamelanotide in these patients, while the secondary objective is to assess whether the therapy affects the size of the penumbra (brain tissue at risk of cell dying off), by increasing blood flow, restoring oxygen supply to the brain, and reducing the amount of cerebral oedema (fluid) which is seen as a result of the stroke.

In general, CLINUVEL is interested in providing a therapeutic solution to those stroke patients who are not selected for standard clot removal or dissolution therapy.

During the CUV801 study, patients are assessed on parameters such as the amount of blood reaching the affected area of the brain, the size of the oligemic zone and penumbra (oxygen deprived zone at risk) and ischaemic core (infarct, dead brain area).

A qualitative and quantitative comparison will be made between brain scans, comprising images generated by CTA and magnetic resonance imaging (MRI) taken at various timepoints during the three month study.

As the clinical study progresses, patients’ neurological function (movement and mental activity of learning and understanding) are being assessed through standardised clinical observations and questionnaires. Since most stroke patients spend the first two weeks in a hospital or rehabilitation centre, patients will be evaluated and monitored while they remain hospitalized.

The university hospital in Melbourne conducting CUV801 is currently screening stroke patients for inclusion in this study.
SCENESSE® is being evaluated as the first systemically administered melanocortin for the pigment-loss disorder, generalized vitiligo.

Vitiligo affects an estimated 45 million individuals worldwide and is recognised as having a marked impact upon patients’ quality of life and sense of identity.

On 8 March 2021 the US Food and Drug Administration (FDA) hosted, for the first time in its history, a public meeting, Patient-Focused Drug Development for Vitiligo, to better understand the impact of this disorder on patients, and what a meaningful therapy may achieve in terms of the level and rate of repigmentation.

SCENESSE® has successfully been evaluated in Phase II studies as an adjunct therapy with narrowband UVB (NB-UVB) phototherapy. NB-UVB is not approved for use in vitiligo but is commonly used by dermatologists as the only therapy to which patients, in some degree, may respond.

The Company is engaging with the FDA on the SCENESSE® vitiligo program, with a discussion planned later in 2021 on the final protocol design for a Phase IIb/III trial. Details of the FDA update was provided in News Communiqué II.

The particular components of CLINUVEL’s vitiligo program were provided in Strategic Update I.
CLINUVEL’s research and development evolves and adapts to the data generated from the use of afamelanotide and global understanding of the potential of our technology to assist patients and broader audiences, as well as the willingness of decision makers to accept the introduction of a novel technology.

Similar to many innovative technologies, the relevant environment must be prepared to accept new concepts and disruptive chemical entities and therapies. For CLINUVEL this means ensuring acknowledgement and acceptance by thought leading clinicians and academics, but also by patients and regulatory authorities prior to the start of a novel clinical program.

The selection of a CLINUVEL-sponsored indication usually takes two to three years from identification to confirmation and acknowledgement by clinical and academic leaders in the field. The CLINUVEL team generally works with selected experts in clinical medicine and research when launching a new program. Occasionally, programs are sponsored by hospitals or individual physicians to initiate treatment, but these pilot studies are not financially supported by CLINUVEL, and data are generally not used for regulatory filings.

In the case of the sixth indication, CLINUVEL has worked with leading academics to develop and sponsor a program whereby CLINUVEL identified that there is an/a:

| i.      | identified high clinical need for treatment |
| ii.     | lack of alternative or effective treatments available or in development |
| iii.    | acknowledgment of the proposed treatment by the majority of selected research and clinical experts internationally |
| iv.     | consensus on the safety of afamelanotide use in the selected patient population |
| v.      | high cost to society from the diseased state of patients |
| vi.     | absence of current or foreseeable competition from other comparable treatments or melanocortins |
| vii.    | clear understanding whether substantial clinical value can be expected from the use of afamelanotide/melanocortins |
A Sixth Indication

These **nine selection criteria** are usually the driving factors for CLINUVEL’s decisions to make afamelanotide or its portfolio of melanocortins available for further clinical use.

Unless there is an in-house consensus, as well as agreement with respected leaders in clinical medicine and fundamental research, the decision to enter a field is not made. Only when ALL criteria are met, does CLINUVEL progress with the program.

Further work and efforts are underway to finalise a clinical program for a sixth clinical indication.

Having identified a potential "sixth" indication in 2014, the acute, debilitating, limiting and life-threatening nature of the indication required CLINUVEL to put in place a number of processes to assess the workability and viability of the clinical trial program.

Following the nine criteria described above, institutional agreements are currently being put in place. Intellectual property has been secured, and the clinical workability is being finalised with global experts in the medical fields.

Once all agreements with Ethics Committees, Institutional Review Boards and authorities are reached, CLINUVEL will be able to publish its sixth indication. This will mark the finalisation of seven years of internal and external discussions, contemplation and assessment before the new and exciting clinical phase can start.

In anticipation of US FDA’s authorisation of its first product (obtained in October 2019), the CLINUVEL team worked towards the expansion (technology translation) of its portfolio of melanocortins towards broader indications and populations. As part of CLINUVEL’s overall strategy, acute and life-threatening diseases could only be addressed once European and American marketing authorisations were to be received.

**The current pipeline of indications, follow-on products and Targeted Technology Translation (TTT) reflects the execution of a long-standing strategy. The foundation of CLINUVEL’s plan lies in the consistent attention to afamelanotide’s clinical safety, and systems put in place to monitor patients over the long-term. Without this Company-wide emphasis on safety, no further expansion would have been possible.**
In August 2020, CLINUVEL announced it had opened a new facility for its subsidiary in Singapore, the **Research, Development and Innovation Centre (VALLAURIX Laboratories)**. The dedicated VALLAURIX team are focused on delivering novel products, including over-the-counter (OTC) product lines and topical formulations. The development underway at VALLAURIX combines CLINUVEL’s unique understanding of melanocortins, associated hormones and peptides, polymers and specific knowhow and expertise with new insights, methodologies and experimental data.

Over nearly two decades of innovation in pharmaceuticals, CLINUVEL has established itself as a world leader in the use of melanocortins, specific hormones for human medicinal use.

**The Company is able to translate specific knowledge and technologies for the benefit of wider audiences. Under the notion of Targeted Technology Translation (TTT), CLINUVEL aims to make technologies, knowhow and expertise available for the greater benefit of broad populations, individuals at risk, and those who require preventive personal care.**

In the form of OTC products, specific populations, segments of society will be selected to receive information on the portfolio of products. Specifically, those populations at risk of incurring photodamage, solar burns, DNA-damage of skin and those with a predisposition to developing skin cancer(s) are the aim of the Company’s frequent and targeted information and news flow.

**A range of four product lines are in development and the first product line is in its manufacturing stage, whereby the emphasis of the first product line is given to photoprotection and DNA regeneration.**
As part of its approach, CLINUVEL seeks to build knowledge and expertise in-house to support its research and development programs. In 2020 the Company announced the establishment of its Communications, Branding and Marketing (CBM) Division, which will service both CLINUVEL and, potentially, third parties.

The CBM Division will engage in a dialogue and provide information globally to new audiences.

The Company develops and aims to launch both prescription drugs and non-prescription “pharmaceutamables” for wider audiences and is actively building teams and capacity to expand its reach.

In launching “pharmaceutamables” originating from pharmaceutical product(s) and relevant to all future users, consistency is required in communicating to larger audiences. The consistency will be found in messages, approach, technology, healthcare solutions in all company’s broadcasts.

As CLINUVEL launches new products, the CBM Division is responsible for composing narratives and engaging in long-term dialogue with new audiences. The Company understands the need to differentiate itself to succeed in an increasingly digital B2C world.

Today the CBM Division is near complete with 80% of its personnel recruited, and it is planned to see all positions filled by Q3 2021.
The CLINUVEL management team and Board had long formed and shared a vision to build a sustainable, diversified and fully integrated pharmaceutical company under one holding, where each subsidiary is eventually to operate under its own P&L.

In a recent Letter to Shareholders, CLINUVEL Chair Willem Blijdorp announced the Company has planned to add a fourth division to the Group: Manufacturing.

**The Manufacturing Division is being established to facilitate the manufacture of novel formulations and products.**

CLINUVEL retains extensive experience developing the novel SCENESSE® (afamelanotide 16mg) formulation, the first controlled-release, injectable, bioresorbable implant formulation containing a novel melanocortin drug. The Manufacturing Division will focus on the manufacturing of innovative, controlled-release systemic and topical formulations.

*Long-term, the Manufacturing Division's objective is to produce products for both CLINUVEL and third parties.*

In building in-house expertise in manufacturing, CLINUVEL aims in time to offer its services to other biopharmaceutical companies in both the clinical and commercial stages of their development.

A full-service Contract Development & Manufacturing Organisation (CDMO) will operate at maximum capacity and allow for modular expansion. With specific expertise built and retained in-house CLINUVEL will be able to offer its research, development and production to other companies and research groups within the biopharmaceutical sector.
CLINUVEL opened its integrated Research, Development & Innovation Centre, under the VALLAURIX subsidiary in Singapore in August 2020.

VALLAURIX contains several laboratories, whereby a laboratory for biological material and processing is being added. The combination of integrated laboratories to further experimental knowledge with manufacturing facilities operating under Good Manufacturing Practice aims to add value to the CLINUVEL Group.
Forward Looking Statements

This release contains forward-looking statements, which reflect the current beliefs and expectations of CLINUVEL’s management. Statements may involve a number of known and unknown risks that could cause our future results, performance, or achievements to differ significantly from those expressed or implied by such forward-looking statements. Important factors that could cause or contribute to such differences include risks relating to: our ability to develop and commercialise pharmaceutical products, the COVID-19 pandemic affecting the supply chain for a protracted period of time, including our ability to develop, manufacture, market and sell biopharmaceutical products; competition for our products, especially SCENESSE® (afamelanotide 16mg); our ability to achieve expected safety and efficacy results through our innovative R&D efforts; the effectiveness of our patents and other protections for innovative products, particularly in view of national and regional variations in patent laws; our potential exposure to product liability claims to the extent not covered by insurance; increased government scrutiny in either Australia, the U.S., Europe, China and Japan of our agreements with third parties and suppliers; our exposure to currency fluctuations and restrictions as well as credit risks; the effects of reforms in healthcare regulation and pharmaceutical pricing and reimbursement; that the Company may incur unexpected delays in the outsourced manufacturing of SCENESSE® which may lead to it being unable to supply its commercial markets and/or clinical trial programs; any failures to comply with any government payment system (i.e. Medicare) reporting and payment obligations; uncertainties surrounding the legislative and regulatory pathways for the registration and approval of biotechnology based products; decisions by regulatory authorities regarding approval of our products as well as their decisions regarding label claims; any failure to retain or attract key personnel and managerial talent; the impact of broader change within the pharmaceutical industry and related industries; potential changes to tax liabilities or legislation; environmental risks; and other factors that have been discussed in our 2020 Annual Report. Forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation, outside of those required under applicable laws or relevant listing rules of the Australian Securities Exchange, to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. More information on the forecasts and estimates is available on request. Past performance is not an indicator of future performance.

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