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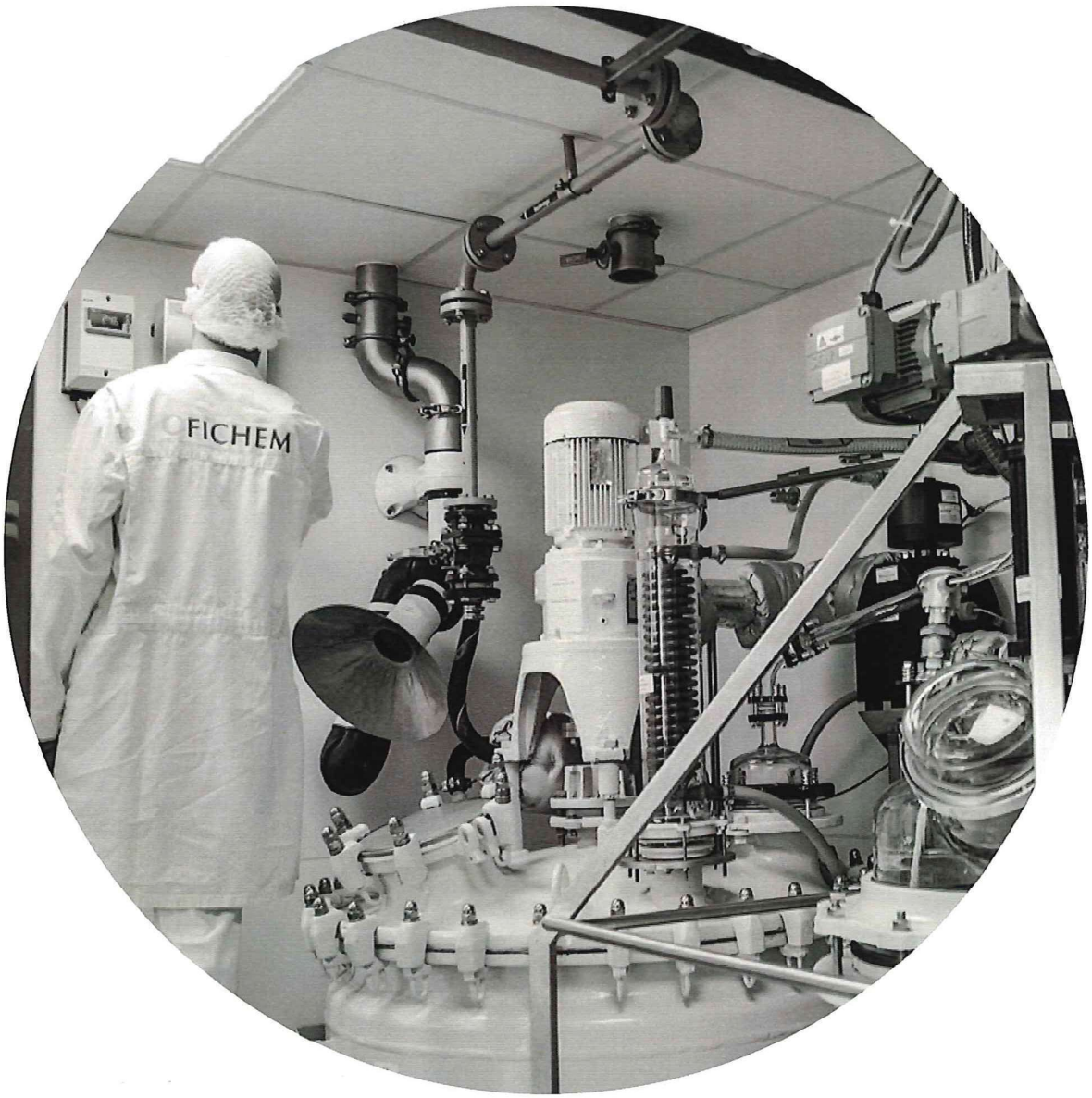

Laboratorium Ofichem B.V. • Heembadweg 5 • 9561 CZ Ter Apel • The Netherlands
Phone: +31 599 583433 • info@ofichem.com • www.ofichem.com

R&D OFICHEM

Dr. Andrew Hegle
Entheon Biomedical Corp.

Date: *May 4, 2021*
From: *Mickel Hansen*
No. pages: *7 (incl. this page)*
Subject: *DMT*

Dear Dr. Hegle, Dear Andrew,

Thank you for the opportunity to offer our services to you and Entheon Biomedical.
Please find herewith our quotation for the GMP production of 50 gram DMT for clinical phase I purposes.

We are confident that we can provide you with our best R&D services and hope that the proposal meets your expectations. If any questions remain, please do not hesitate to contact us. We are looking forward to working with you on this project.

With kind regards,

R&D Ofichem

(Signed) *"Dr. Mickel J. Hansen"*

Dr. Mickel J. Hansen
Manager R&D

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Background and Expertise

Lab Ofichem was founded in 1975 and has over 40 years experience with organic synthesis, analytical chemistry, drug development and API manufacturing. Since 2005, we are producing in compliance with Good Manufacturing Practice guidelines and nowadays we offer an end-to-end package, from synthetic route scouting, process optimization, small, middle and large scale GMP production up to final documentation preparation and approval by the relevant authorities. Our customers are working with Lab Ofichem as their preferred CDMO because of our extensive synthetic background and the ability to directly implement the developed chemistry in the relevant GMP production environment. Our Quality Assurance and Regulatory Affairs departments ensure that all activities are in compliance with ISO:9001 and ICH Q7 GMP guidelines. As part of Lab Ofichem, R&D Ofichem, offers the experience, knowledge and drive to, in close collaboration with our customers, develop customized syntheses, production processes and analytical methods. We have state-of-the-art synthetic and analytical labs available which, in combination with our modern FDA-approved GMP production facilities assure the best conditions to bring our end-to-end API development service to customers around the globe.

Customer Relation

As Lab Ofichem, we are known for our long-term partnership with customers around the world, realized by a reliable development strategy, open communication and pro-active attitude. We are proud of our service and will do the best to build and maintain a sustainable relationship. Open communication to and involvement of our customers throughout the development process is key to guarantee a reliable and cost-effective product and process development. Working with us will provide you with expertise and experience in API manufacturing, fully equipped synthetic and analytical laboratories, a reliable development and production line and foremost a skilled R&D project team which will do the utmost to be creative, take responsibility and communicate and inform you about the project and budget advancement.

Executive Summary

Entheon Biomedical has requested R&D Ofichem, as part of Lab Ofichem, to provide a project proposal and project budget for the cGMP production and analysis, including analytical validation, of DMT for clinical phase I studies. Process development and analytical development and validation together with stability studies have been requested and are part of this proposal.

Background and Literature precedence

Based on extensive literature available for the synthesis of tryptamine derivatives, we propose to perform investigative laboratory experiments to confirm the synthetic route as depicted in Figure 1. In parallel, we will perform analytical development work to develop a set of sufficient release specifications to guarantee the quality of the final API. Where necessary, analytical validation will be performed in line with ICH guidelines for early clinical studies. R&D Ofichem expects to design the respective production process in such a way that production can take place in one of our small scale production suites in dedicated glass reactors and utilities. Since timing is of crucial importance we will perform limited robustness testing and laboratory work before GMP production. At least two batches will be produced to also allow the use of GMP product for the necessary stability studies.

[*Redacted: Proposed Synthetic Process*]

Analysis will be performed according to the relevant specifications with limited analytical validation necessary for clinical phase I application. We anticipate on method development, verification and validation of the analytical methods described in Table 1 to be able to use the analytical methods for the formal product release.

Table 1: Required Specifications

Analysis	Specification
Appearance	Conform
Identification - IR spectrum - HPLC	Confirms to reference spectrum Retention time confirms to reference
Assay (HPLC)	98.0-102.0%
Related substances (HPLC)	Known impurities NMT 0.15% Unknown impurities NMT 0.10% Total impurities NMT 2.0%
Loss on drying	NMT 0.5%
Elemental Impurities	Conform to ICH Q3D
Residual Solvents	Conform to ICH Q3C

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R&D activities and cGMP Production

To allow the cGMP production of DMT , R&D Ofichem will perform the following R&D activities to assess the feasibility of the proposed synthesis route.

- R&D Chemistry: Synthesis development including limited screening of the potential synthesis routes based on a literature screening. Optimization experiments for all reaction steps and purifications to allow the implementation in our FDA-approved, cGMP production facility in Ter Apel, The Netherlands.
- R&D Analysis: Development and validation of a limited set of analytical methods in accordance to the anticipated use in clinical phase I studies., including, if applicable, validation of the verified methods to allow validated release testing of the desired product.. Conform ICH guidelines, elemental impurities and residual solvents will be part of our analytical development work.
- Production and stability studies: Not less than two GMP production batches will be produced. Supplier identification, formal starting material and product analysis and release including a stability study with long term (25°C/60%, 24 months) and accelerated testing (40°C/75%, 6 months) in compliance with the regulatory requirements.

Deliverables

- Production of DMT in a GMP environment with a suitable analytical package for use in clinical phase I studies.
- Analytical verification and/or validation of all analytical methods.
- Supplier qualification and starting material release.
- 50 gram of product for clinical trials and additional product for the anticipated stability study.
- Stability study with material from the GMP production batches at long term and accelerated conditions.
- Weekly/biweekly update on project status (TC/email)

Offer

R&D Ofichem proposes to perform the process development and validation including all starting materials, solvents and analytical standards for the price of € 98,520.

Lead time of the project will be 3-5 months from starting date until product release. The project can be initiated within 6 weeks after signing of the quotation.

R&D Ofichem will provide Entheon with a weekly / biweekly update about the project status (TC or email). During the project, the project can be discontinued at any-time by both parties. All costs made up to discontinuation will be calculated accordingly and invoiced to the customer.

Payment Conditions

[*Redacted: Commercially Sensitive Payment Terms*]

Contact person during the Project

Dr. Mickel J. Hansen
Manager R&D
Email: [*Redacted: Email*]
Phone: [*Redacted: Phone Number*]

For acceptation of the offer including terms and conditions

Company:	Entheon Biomedical
Name/Function:	Timothy Ko/CEO
Date:	5/4/2021
Paraph:	(Signed) *"Timothy Ko"*

Terms and conditions

- The client (Entheon Biomedical) acknowledges that the development of the process is experimental and that a positive outcome cannot be guaranteed. For the avoidance of doubt, it shall not be considered a breach of this agreement by Laboratorium Ofichem B.V. If Laboratorium Ofichem b.v. does not succeed in developing a process, so long Laboratorium Ofichem has diligently attempted to achieve the objective of the programme, using its professional skill, judgement and resources.
- The entire business is transacted subject to our General Terms and Conditions, registered with the Chamber of Commerce. The Terms and Conditions are available on www.ofichem.com. By acceptation of our offer the client declares to have taken notice of the general terms and conditions and declares to accept the applicability of these terms and conditions.

[*Redacted: Pricing/Cost Overview*]

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