



### Market need and potential

The health care in Europe are losing competence, since many experts in anaerobic bacteria are reaching retiring age. This might jeopardize the patient security! We need to maintain the skills needed and to make sure that our younger colleagues get proper education. The programs at Universities have very limited teaching on anaerobes, leaving the duty to maintain vital knowledge to the clinical labs. Very few external courses are present.

Anaerobes are susceptible to oxygen. Mistakes in sampling of specimens for analysis can cause errors leading to delayed or wrong treatment decisions, that may result in morbidity and mortality. Antibiotic resistance among anaerobes is increasing.

Anaerobic bacteria belong to the human normal micro-flora. Under certain conditions like trauma, previous surgery or underlying diseases, they may cause severe infections requiring rapid diagnosis and treatment. Studies have shown that about 5 % of all positive blood cultures contain anaerobes, representing 2000 cases/year of anaerobe sepsis in Sweden, of which many are in need of intensive care.

### Business idea

diANox will meet this increasing medical and educational need by offering a combination of online-and practical courses for different medical staff groups (nurses, clinicians and lab-personnel). The courses will be put together in close contact with the target groups to enable that they get the special design required for each profession. The education programs will be initiated on the Swedish market with further expansion to the European market in the next step. Initial discussions with The Swedish Institute of Standards displayed a great interest for standardizing procedures at

clinical anaerobe laboratories within Europe. The end-users of the education programs will be well equipped to keep up the patient security.

### Competition

A market analysis demonstrated that no online education programs on anaerobic bacteria and related infections can be found. At present, only a handful of courses in clinical anaerobic bacteriology are arranged around the world.

The Swedish professional association for biomedical scientists (IBL) is currently arranging further training in all laboratory disciplines, and co-operation with diANox for education on anaerobic bacteriology has been discussed.

### Advantages

- The online education program can be used repeatedly at any time desired.
- The online program may be combined with practical trainings.
- With better diagnostics, the patients time spent at the hospital can be reduced. If a severely ill patient spends only one day less at the intensive care unit (ICU), about 40 000 SEK/patient/day can be saved.
- More training will make the working situation more interesting and satisfactory, thereby creating confidence in the professional role.
- By support from diANox the end-users will spend less time searching for useful information on the topic and the information delivered is regularly updated with recently published research data.

### Current status

diANox has been supported by Umeå Biotech Incubator (UBI) until October 2019. A pilot course (classroom) took place in March 2019 with positive results and feedback. The first online course is now launched, but there is a need for additional marketing/sales staff to reach a broad market.

Advisory board is under construction with representatives from Sweden and Europe.

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### Website

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### IPR

Registered in EU (2018).

### Capital need

2-5 MSEK 2020-02-01-2020-12-31. To launch the first education program, develop a broader product portfolio and recruit personnel for sale and marketing, and a clinician for support on clinical issues to participants during and after the courses.

### Partnership

diANox is looking for strategic partnerships with interest in clinical bacteriology and related products, and is also on the lookout for funding from private or institutional investors.

### Management / Board

Maria Hedberg  
CEO, PhD, Associate Professor Umeå University.

Professor Sheila Patrick  
Scientific advisor, Prof. Emerita. Queens University Belfast, UK.

Margareta Granlund  
Clinical advisor, MD, PhD, Senior Consultant. Umeå University Hospital, Department of Clinical Microbiology.

Henrik Andersson  
Management consultant, marketing and sales.