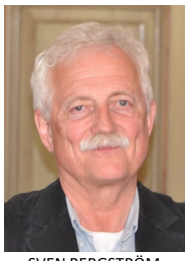
QureTechBio

DEVELOPS NEW ALTERNATIVES TO COMBAT ANTIBIOTIC RESISTANCE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Market need and potential

Antibiotic resistance is a global threat fully comparable to climate changes. Bacterial resistance cause around 33 000 deaths annually in the EU, with an immense economic burden. Without tools to control bacterial infections, modern health care will collapse. Thus, patients undergoing cancer treatment and advanced surgery susceptible to infections will be difficult or impossible to treat. Regulatory bodies now offer fast track and market exclusivity for novel treatments of bacterial infections.

Business idea

QureTech Bio develops a new class of antibacterial agents that target antimicrobial resistance either by a direct antimicrobial effect or by potentiating existing antibiotics. The company is currently managing three projects that can be divested through sales, out-licensing or partnering independent of each other.

• Healthcare associated infections including MRSA and VRE

New chemical entities (GmPcides) that can restore sensitivity and boost efficacy of market leading antibiotics such as vancomycin and gentamicin have been developed. The lead compounds are bactericidal to Gram-positive bacteria and have demonstrated effects in a difficult-to-treat *in vivo* model of urinary tract infection.

• Tuberculosis

The lead compounds can block development of drug resistance and reverse resistance in *Mycobacterium tuberculosis* to the frontline antibiotic product isoniazid. Restoring the efficacy of isoniazid for multidrug-resistant tuberculosis provides a great advantage as it offers an alternative to the demanding and toxic drugs currently used.

• Chlamydia infections

Highly selective virulence blockers have been developed that can be used to treat chlamydial infections without the use of any additional antibiotics and based on the mode of action there is no selection pressure for resistance development.

Advantages

- Robust and reliable chemical platform that allow all necessary fine tuning of properties important for drug development
- Novel family of small molecules with new mode of action
- Bactericidal effect on antibiotic-resistant bacteria
- Low likelihood of resistance development
- Well tolerated in human cell lines
- Target large and growing markets – large unmet medical need
- Possible Orphan Drug Designation for VRE

Competition

A recent analysis of the global clinical antibacterial pipeline identified 42 new antibiotics in development. The clinical pipeline is still dominated by derivatives of established classes and new drugs without pre-existing cross-resistance are limited and urgently needed. The fact that QureTech Bio's compounds can boost and maintain the efficacy of current antibiotics, can turn potential competitors into business opportunities.

Current status

QureTech Bio is currently focusing on the lead program, GmPcides for healthcare associated infections, and a candidate drug will be selected during Q3 2020. A drug development plan and a regulatory strategy is under development. Research activities in the three development programs are largely covered by academic grants.

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IPR
QureTech Bio has established a strong IPR portfolio based on separate patent applications for each of the three development programs.

Capital need
7-8 MSEK to cover patent costs, business development and progression of the lead program into preclinical development.

Partnership
We are currently seeking private and institutional investors and pharmaceutical partners with an interest in infectious diseases.

Management and Board
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Background
QureTech Bio's vision is to develop first-line drugs to combat infectious diseases and the occurrence of antibiotic resistance. QureTech Bio was founded in 2010 to commercialize world-leading research from groups based at Umeå University, Sweden, and Washington University, St Louis, USA.

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