**Novel antimicrobials**
- to combat antibiotic resistant Gram-positive bacteria

**Challenges:**
Emergence of resistance against currently used antimicrobials to treat bacterial skin infections and eradicate MRSA from carriers

**Solution:** A novel antimicrobial (JBC 1847) with low rates of resistance development

- Skin-infections with (multi-resistant) *Staphylococcus aureus*
- Healthy carriers of Methicillin Resistant *S. aureus* (MRSA)

**Technology Description**
The inventors have a collection of 51 novel compounds synthesized at University of Copenhagen, all with antimicrobial activity. Compound JBC1847 is currently our lead candidate, yet we have eight “close-to-lead” compound. In vivo data in mice MRSA skin infection model have shown JBC 1847 to be highly superior to *Fucidin®* (LEO Pharma) in reducing the load of MRSA in wounds, while in vitro data has shown a resistance development rate more than 50-times lower than fusidic acid.

In addition to *S. aureus*, the novel compounds also shows high activity against other skin pathogens, e.g. *C. acnes*, the causative agents of severe acne.

JBC 1847 has also been proven as an highly efficient inhibitor of bacterial biofilm and bactericidal activity against bacteria (*S. epidermidis, S. aureus, C. acnes*) embedded in preformed biofilm.

**Intellectual Property Rights**
PCT application filed April 2020

**Current State**
- In vitro: High in vivo activity documented against 11 different bacterial species, including strains highly resistant to conventional antibiotics
- In vivo: High efficacy in skin models
- Next step: Regulatory toxicological studies (in vivo) to further document safety of JBC 1847 (photosensitising and allergic response)

**Wound care (dressing) market, by region (USD billion)**

**JBC 1847 as Business case – Selling points**
- **Superior** to *Fucidin®* in reducing *S. aureus* bacterial load
- Due to the **low resistance rate**, the expected antibiotic markets for JBC 1847 includes both wound treatment (patients) and eradication of *S. aureus* (healthy carries)
- Estimated price 1500 USD/kg

**Team**
- Associate Prof. Rikke H. Olsen
  - Scientific officer
- Associate Prof. Jørn B. Christensen
  - Technology officer
- PhD student Søren W. Svenningsen
  - Research and development

**Business opportunity and Call to action**
- Establish University SPIN-OUT company – Open position for experienced biotech CEO
- Industrial partner to complete all mandatory pre-clinical assessments to allow the invention to enter Clinical Phase 1
- Business developer