OVERVIEW

- SME founded in 2009 - Headquartered in Vevey (CH) + Affiliates in France (R&D) and China

- Development of novel generation of **Long Synthetic Peptide-based therapeutic vaccines** in combination with **immunomodulatory drugs**

- Focus on large market opportunities with **MAJOR** global patient unmet medical needs:
  1) **Cancer**: Survivin, Midkine and CBX-1
  2) **Infectious diseases**: Hepatitis C genotype 1 – 6

- **Strong IP Position**: 4 licensed patents + 2 pending patents

- **Seed Investment**: 3 million € + Founders money + 15 years academic investment

- **Strategic Academic Partners**

![Partnership Logos]
**EXECUTIVE TEAM**

**Dr Ahmed Bouzidi, PhD, MBA – CEO**
- Successful entrepreneur in Europe and China
- Board member of EBE-Biopharma
- Member of the R&D Task Force of Vaccines Europe

**Mr Serge Grisard, Msc, MBA, EVP Corporate Development**
- 18 years experience in Healthcare product development, Commercialization and PPPs
- Global management at Siemens Medical, Pfizer, Astra-Zeneca, and a range of private start-ups

**Pr Giampietro Corradin, PhD – CTO**
- Worldwide expert in LSP-based vaccines (30 years experience)
- Development of several vaccine candidates

**Dr Jérôme Kerzerho, PhD – Director R&D**
- Expert in immunology
- Discovered the tumor antigens Midkine
- Identified new clinically relevant T cell epitopes in Survivin and Midkine tumor antigens

**SCIENTIFIC ASSOCIATES**

**Pr Eric Tartour, MD, PhD – Immuno-Oncology**
- Director of the cancer immunomonitoring department of HEGP (Paris)
- Director of an Inserm team dedicated to cancer immunotherapy
- Clinical development of several cancer immunotherapies

**Pr Pedro Romero, MD, PhD – Immuno-Oncology**
- Worldwide Oncology expert at Ludwig institute
- Elucidation of the immunological mechanisms of cancer therapeutic vaccines
- Laureate of the Robert-Wenner award in 2001 (best Swiss researcher)

**Dr Bernard Maillère, PhD, Eng. – Immunology**
- Director of the department of immunochemistry of cellular immune response at the CEA (FR)
- Developed the Predictive platform of Vaxeal

**Pr François Spertini, MD, PhD – Virology**
- Expert in vaccine clinical development
- Focused on the development of novel vaccine strategies in the field of hepatitis C, tuberculosis, Malaria and allergy
ADVANCED PROPRIETARY TECHNOLOGY PLATFORMS FOR...

- A rapid identification of relevant T cell epitopes to be incorporated in a vaccine
- The design, formulation and validation of the vaccine candidates
- Pre-clinical proof of concept studies
- The evaluation of synergistic combination of the formulated vaccines with immunomodulatory agents
- The immunomonitoring of clinical trials
## VAXEAL - PIPELINE

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>INDICATION</th>
<th>LEAD OPTIMIZATION</th>
<th>PRE-CLINICAL P-o-C</th>
<th>PHASE I (I/II)</th>
<th>PARTNERS</th>
<th>MARKET POTENTIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survivin (SVX-1) (1)</td>
<td>Prostate, Renal and Pancreas cancers, Metastatic melanoma</td>
<td></td>
<td></td>
<td>Q1 2014</td>
<td></td>
<td>&gt; €5bn/ year</td>
</tr>
<tr>
<td>Midkine (MDX-1) (2)</td>
<td>NSCLC, Colorectal, Breast and Ovarian cancers</td>
<td></td>
<td></td>
<td>Q3 2014</td>
<td>INSERM-Ludwig</td>
<td>&gt; €5bn/ year</td>
</tr>
<tr>
<td>CBX-1 (3)</td>
<td>Multiple Cancers</td>
<td></td>
<td></td>
<td>Q1 2015</td>
<td></td>
<td>&gt; €5bn/ year</td>
</tr>
<tr>
<td>Combo (1+2+3)</td>
<td>Multiple Cancers</td>
<td></td>
<td></td>
<td>Q3 2016</td>
<td></td>
<td>&gt; €5bn/ year</td>
</tr>
<tr>
<td>Core/NS3</td>
<td>Hepatitis C gen.1/6</td>
<td></td>
<td></td>
<td>Q1 2014</td>
<td>CMC</td>
<td>&gt; €5bn/ year</td>
</tr>
</tbody>
</table>
VAXEAL

ONCOLOGY PROGRAM
MAIN ISSUES IN TRADITIONAL CANCER VACCINE-BASED APPROACHES

**Weak Immunogenicity**
- As vaccine target of self or dispensable antigens
- Short peptide based-vaccines induce T cell anergy as they are presented by non APC

**Restricted efficacy** to certain cancer indications or patients HLA types

**Tumor-mediated immunosuppressive mechanisms**
- Treg induction
- Overexpression of costimulatory inhibitory molecules (PD-L1...)
- Tumor-mediated angiogenesis

**Difficulty in achieving the right balance of CD4+ and CD8+ T cells** - Short peptides-, protein- and DNA-based vaccines mainly induce either CD4+ or CD8+ T cells

**Safety and Cost** of Vaccines created from living organisms

**Limited longevity of the elicited anti-tumoral responses** leading to impaired protection against tumor relapses

**Need to optimize traditional therapeutic cancer vaccine design to increase their clinical efficacy**
VAXEAL - BREAKTHROUGH STRATEGY OF THERAPEUTIC CANCER VACCINE

Vaxeal developed an **innovative combined strategy of cancer vaccine** enabling to overcome the limitations to current vaccine approaches

<table>
<thead>
<tr>
<th>COMPONENTS OF VAXEAL’S CANCER THERAPEUTIC VACCINES</th>
<th>ADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Synthetic Peptides (LSP)-based vaccine encompassing:</td>
<td>Generate long-term and high affinity CD4+ and CD8+ anti-tumoral T cell responses in all of the cancer patients irrespective of their HLA types</td>
</tr>
<tr>
<td>✔ Multiple promiscuous CD4+ and CD8+ T epitopes</td>
<td></td>
</tr>
<tr>
<td>✔ Derived from broadly overexpressed tumor antigens playing vital functions</td>
<td>Limit tumor immune escape thanks to the tumor restricted expression profile and vital functions of the tumor antigen target</td>
</tr>
<tr>
<td>Optimized formulation with potent clinical-approved immune-adjuvant</td>
<td>Improve the polarization and longevity of the induce T cell responses</td>
</tr>
<tr>
<td>Synergistic combination with clinical-approved advanced immunomodulatory drugs</td>
<td>Overcome tumour-mediated immunosuppression</td>
</tr>
<tr>
<td>✔ Low doses chemotherapy</td>
<td>✔ Anti-angiogenic drugs -&gt; <em>For hypervascular tumors</em></td>
</tr>
<tr>
<td>✔ Others advanced immunomodulatory drugs</td>
<td></td>
</tr>
</tbody>
</table>
# VAXEAL CANCER VACCINE - COMPETITIVE ADVANTAGES

<table>
<thead>
<tr>
<th>Vaxeeal Therapeutic Vaccines</th>
<th>LSPs</th>
<th>Short Peptides</th>
<th>Recombinant Proteins</th>
<th>Vector delivery (e.g. DNA plasmid, viral vector,..)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunogenicity</td>
<td>★★★</td>
<td>★★★</td>
<td>-</td>
<td>★★★</td>
</tr>
<tr>
<td>Specificity</td>
<td>★★★</td>
<td>★★★</td>
<td>★</td>
<td>★★★</td>
</tr>
<tr>
<td>Applicability a broad target population/cancers</td>
<td>★★★</td>
<td>★★</td>
<td>-</td>
<td>★★★</td>
</tr>
<tr>
<td>Induction of long-lasting protection against relapse</td>
<td>★★★</td>
<td>★★</td>
<td>★</td>
<td>★★</td>
</tr>
<tr>
<td>Overcome of tumor-induced immunosuppressive mechanisms (T cell exhaustion)</td>
<td>★★★</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Safety</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Ease of production and purification</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Stability</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>Protein dependent</td>
</tr>
<tr>
<td>Clinical efficacy</td>
<td>★★★</td>
<td>★★</td>
<td>-</td>
<td>★★★</td>
</tr>
</tbody>
</table>

- Nul, ★ Poor, ★★ Moderate, ★★★★ Optimal
VAXEAL

THANK YOU

For more information...

Website: www.vaxeal-group.com
Contact: abouzidi@vaxeal.net