Glycostem is focused on the development of first-, second- and third-generation stem cell-derived Natural Killer cells (NK cells) as a therapeutic asset in the fight against cancer. During 2020 Glycostem will start with the first-of-its-kind pivotal phase II trial in acute myeloid leukemia (AML) with in-house manufactured non-modified NK cells (oNKord®). This is the first off-the-shelf immuno-oncology product to head for product approval worldwide and the first of a series of trials to follow.

NK cells are the new star in the domain of cellular immunotherapy, due to their tightly regulated ‘natural killing’ of cancer cells and the fact that no serious side effects or complications arise from their use. They play an important role in control and even cure of both solid and hematological malignancies and thus have to potential to impact the lives and future of many cancer patients and their families. Over the last decade Glycostem has extensively studied the role of NK cells in cancer treatment and pioneered, developed and optimized its in-house NK cell production processes and products to the fullest. A growing number of commercial and academic partners have chosen Glycostem because of their expertise on NK cells and their production.
oNKord® - non-manipulated NK cells

oNKord® is Glycostem’s first generation allogenic NK cell therapy for hematological indications and solid tumors. Based on umbilical cord blood (UCB) derived CD34+ stem cells oNKord® has many advantages, like:
- oNKord® is allogenic and off-the-shelf, readily available with minimum waiting time
- Safe: since oNKord® does not cause Cytokine Release Syndrome (CRS) and feeder cells are not required
- Cost-effective: thanks to optimized Cytotoxicity (less cells are needed) and a closed in-house manufacturing system in batches

Glycostem has invested many resources to achieve:
- Feeder-cell free cell expansion process; easier regulatory approval process saving time and quicker access to treatment for patients
- Closed system; contamination physically impossible and operating a very cost-effective level (class C/D vs open system class A/B)

Next generations - CAR-NK and TCR-NK cells

Chimeric Antigen Receptor (CAR)-engineered NK cells are today one of the most attractive and innovative pre-clinical candidates in cellular immunotherapy because of their dedicated functionality, tumor targeting, prolonged persistence and fewer side effects compared to current CAR-T treatments. Having invested in the non-manipulated NK cells Glycostem has a wealth of information and experience leading up to this second-generation product.

Closed system transduction, two in-licensed and highly interesting and specific targets are the building blocks to releasing pre-clinical data mid-2021 are on target. Glycostem is also researching T-cell receptor expression on NK cells for which proof of feasibility is available.

GMP licensed manufacturing platform

Our proprietary processes and closed in-house production system for allogeneic cellular products allows us to select and significantly increase the number of NK and CAR-NK cells (up to 50,000-fold in one production run from starting material) without the need for feeder cells. Glycostem obtained its GMP license in June 2019.

Glycostem has invested many resources to achieve:
- A manufacturing system for non-manipulated and manipulated NK cells; high synergy at cost effective levels
- Ongoing upscaling of our manufacturing process allowing a significant increase of the number to be treated patients from one unit of umbilical cord blood (UCB)

<table>
<thead>
<tr>
<th>1 unit of UCB</th>
<th>Cell yield</th>
<th>oNKord®</th>
<th>CAR-NK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now</td>
<td>20 to 25 billion NK cells</td>
<td>5 to 8 patients</td>
<td>25 to 40 patients</td>
</tr>
<tr>
<td>2 years’ time</td>
<td>60 to 70 billion NK cells</td>
<td>15 to 20 patients</td>
<td>75 to 110 patients</td>
</tr>
</tbody>
</table>

Glycostems GMP’s licensed and fully closed manufacturing process
Clinical strategy

Glycostem is targeting initiation of oNKord® clinical trial in AML (WiNK study) patient for November 2020. The trial will take place in 5 European countries with the possible addition of a US trial center for the pivotal part of the trial.

Treatment of solid tumors using oNKord® is high on our priority list and in collaboration with Amsterdam University Medical Center we are planning trial starting in 2021.

Shortly thereafter, we will focus on our unique CAR-NK products for pre-clinical testing and expect to initiate phase I trials by early 2022. As a third-generation product Glycostem is working on TCR-NK products which may be around one year after the phase I CAR-NK trial. Above sequence is finely timed allowing Glycostem to develop increasingly complex forms of cancer treatment while building operational experience and conducting the data necessary for worldwide submissions.

Pipeline

<table>
<thead>
<tr>
<th>Indication</th>
<th>Preclinical</th>
<th>IMPD</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Commercial rights</th>
<th>Next expected milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NK oNKord® Orphan drug designation by FDA and EMA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute myeloid leukemia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td>Conditional approval by mid 2023</td>
</tr>
<tr>
<td>Multiple myeloma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td></td>
</tr>
<tr>
<td>Solid cancer (new pre-conditioning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td>Enter phase I by 2H 2020</td>
</tr>
<tr>
<td>Solid cancer (post-surgical removal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td>Enter phase I by 2H 2022</td>
</tr>
<tr>
<td><strong>CAR-NK Candidates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td></td>
</tr>
<tr>
<td>Leukemia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td>Enter phase I by Q2 2022</td>
</tr>
<tr>
<td>Head and neck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Glycostem</td>
<td></td>
</tr>
<tr>
<td>Glioblastoma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Inno.n</td>
<td></td>
</tr>
<tr>
<td><strong>TRC-NK Candidate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undisclosed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Zelluna</td>
<td></td>
</tr>
</tbody>
</table>
Management

Our organization is guided by a highly experienced and specialized Management Team and supported by a Scientific Advisory Board that includes renowned experts in the field of innovative cancer therapeutics.

Troels Jordansen, CEO
20+ years’ experience with cellular therapies and public listed company management

Jan Spanholtz, PhD, CSO
15+ years’ background in stem cell biology, immunology, translational research and process development

Volker Huppert, Dipl.-Ing., CDO
20+ years of NK cell and closed system manufacturing experience

Didier Haguenauer, MD, CMO
25+ years of setting up and managing clinical trials for large pharma and biotech

Hans Henskens, PhD, CQC/QP
15+ years of experiences in pharmaceutical and cellular therapy with quality and manufacturing

Finance

Glycostem is funded up to and including the WiNK trial. Last year more than $25 million was raised in equity, deal flow and soft government loans.

IP

Thanks to its nine patent families, longstanding technical expertise and resources, as well as Orphan Drug Designation, Glycostem has secured a leadership position in the global NK cell market.

Press release

3rd June ’20
Glycostem digitizes its manufacturing process

19th Nov ’19
Glycostem and Zelluna to co-develop multiple TCR-NK products

12th Sep ’19
Glycostem signs global CAR-NK product co-development deal

11th Sep ’19
Glycostem out-license oNKord® for Korea and Japan

9th Sep ’19
Glycostem raises €14 million in equity

Sep ’19
Glycostem raises €5 million for clinical trials

25th June ’19
Glycostem receives GMP license