

## Masterthesis:

**Masterstudiengang:** BWM

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**Abgabedatum:**

**Praxis** × **Theorie**

## Ausgangslage und Problemstellung

The German TissUse GmbH and Chinese investors are planning to establish a Sino-German joint venture company, „TissUse CN“. The business model of TissUse CN targets the implementation of a new disruptive HUMIMIC® XX/XY platform technology, also commonly called “You-on-a-chip” platform, to first in history establish an approach reaching unmatched precision in personalized medicine and implement that approach into the healthcare system in China. The potential of this innovation is based on the establishment of TissUse CN’s capability to emulate patient’s individual pathophysiology on a miniaturized chip on the background of a patient’s organism.

The newly established company is aiming for a fast growth with the ultimate goal to execute an initial public offering (IPO) after about 6 years of operation. A businessplan sets specific key performance indicators (KPI’s) for TissUse CN. The businessplan is used as a point of reference for this master thesis.

The aim of this master thesis is to look into IPO opportunities at different stock exchanges for an innovative biotechnology company like TissUse CN and identify the best marketplace for the company to execute their envisioned IPO.

## Lösungsansätze

The research started with a general overview of stock exchanges globally and defined 5 specific locations which would suit best. Those marketplaces are the Nasdaq Stock Exchange, the Euronext Stock Exchange, the Shenzhen and the Shanghai Stock Exchange, as well as the Hong Kong Stock Exchange. The relevance for a China-based company was taken into account. The five marketplaces were analysed regarding their specific placement environment, and it was researched if a specific segment for a biotechnology company exists. In a next step, peer companies were identified at all of the selected stock exchanges to analyse what it takes to execute a successful IPO. The peer companies were categorised by their market capitalisation at the time of their IPO. They were further divided into groups regarding their research field. The five self-defined groups are therapeutic products, medical devices, life science equipment, pre-clinical CRO/CMO and in-vitro diagnostic.

A goal was to find a small number of best-fitting peers for further analysis regarding their research, their market capitalisation, as well as their revenue per employee during the time of their IPO and their post-IPO performance.

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### Ergebnisse

The peer-grouping process was rather difficult as TissUse CN's innovation platform is quite unique. Companies often match only a part of TissUse CN's hybrid business model. Possible peers were found through the research and presented in figures according to their market capitalisation and innovation potential. For Shanghai, 9 peers were identified. At the Shenzhen Stock Exchange there were 6 peers. In Hong Kong, 35 peers could be found. On the Euronext stock exchange, 20 possible peers were displayed and at the Nasdaq market, a total number of 39 peers were found. The research into the peer companies revealed the different market environments at each stock exchange.

All five marketplaces provide a suitable environment for a company like TissUse CN to execute their IPO. Nasdaq provides a great environment for companies which are operating globally. Innovation potential is rated high even when revenues are comparatively low. Euronext is hosting many radical innovation companies with rather low value. The high-tech segment is less attractive. The Hong Kong stock exchange is home to large corporations with huge market caps while the other two Chinese stock exchanges are still a new ground for innovative biotech companies but provide more and more attractive incentives for an IPO.

Three top peers were identified due to their best match with TissUse CN's business approach and technology background. On the basis of their performance, it can be recommended to execute the envisioned IPO at the Star Market of the Shanghai Stock Exchange.

### Fazit und Ausblick

This Thesis is working with envision target KPI's of TissUse CN in about 6 years from now. Those KPI's have been developed with the current knowledge in 2021 and the analysis of the current market environment. It has to be kept in mind that radical innovations often face hurdles during execution which means that there is a risk that the business plan in its current shape can not be implemented as expected.

When the management decides on a stock exchange to go through with the envisioned IPO, the individual market requirements of each marketplace should be taken into account and the business plan should align. As mentioned before, when looking at the selected peer companies, an IPO at SSE Star Market is promising and value-adding for TissUse CN and their business approach. The IPO can build a strong basis for an even faster company growth and could be used to invest into the unicorn-strategy to reach the goal of becoming a company which is valued more than 1 billion USD. In the final steps of reaching this goal, a second public offering presents a great opportunity to increase the company value and expand the reach to an international level. This strategy can either be carried out as a joint project with TissUse GmbH and an offering of shares at Nasdaq or with a second public offering by TissUse CN at Hong Kong Stock Exchange. For a second offering at Nasdaq, a joint global expansion strategy together with TissUse GmbH should be considered. If that is not the case in this certain period of time, TissUse CN has a great opportunity at the Hong Kong Stock Exchange. With their unique and innovative business model, the company will strive. An offering at HKEX will allow them to expand the international publicity and grow tremendously. The possibility of developing own products after a successful period of precision medicine research would be a unique selling point which would raise the company value even more.