

CUSTOMER CASE

Dyne Healthcare Analytics

Worldwide online registry for Cholangiocarcinoma relies on the Healthcare Analytics solution by Dynelytics

“First of all, I’d like to congratulate the team for the support and to say I loved the picture upload system. It is beautiful. Thanks a lot!” [Dr. Michelle de Oliveira](#),
[Chair of the Scientific Committee](#)



Perihilar Cholangiocarcinoma International Registry

Cholangiocarcinoma is a malignant tumor of the bile ducts (drain bile from the liver into the small intestine). Most patients with such tumor present with jaundice due to obstruction of the biliary tree. In case of prolonged biliary obstruction, hepatocellular dysfunction, progressive malnutrition, coagulopathy, pruritus, renal dysfunction, and cholangitis may occur. Perihilar cholangiocarcinoma is one of the most challenging diseases with poor overall survival.

Newly developed staging system to improve therapy

The major barrier to compare results among centers and identify the best therapies according the type and extent of the disease is the lack of a reliable staging system.

A group of leading medical doctors from Zürich, Nagoya, Baltimore, Rochester, and Berlin designed a new system reporting on the size of the tumor, extent of the disease as well as other factors. Once this new staging system was developed, the group of experts commissioned Dynelytics to create an online system to collect and manage data of persons with Perihilar Cholangiocarcinoma. The availability of such a

registry with standardized and multicentre data will make it possible to identify the critical criteria which will be used to guide therapy.

The board and the scientific committee are both chaired by experts working at the University Hospital of Zürich: Prof. Dr. Pierre-A. Clavien and Dr. Michelle de Oliveira.

Goals of the Perihilar Cholangiocarcinoma International Registry (CholangioCa Registry) are:

- To maintain a worldwide registry including patients undergoing resection or liver transplantation
- To develop a relevant staging system based on standardize registry data report
- To correlate tumor characteristics with resectability, survival and prognosis
- To identify criteria for guiding therapy including surgery and liver transplantation.

All hospitals worldwide operating on patients with perihilar cholangiocarcinoma are eligible. Participants in these hospitals can enter data directly online. Data entry can be carried out with all usual browsers and no additional software is requi-

Online access to medical pictures helps to better understand the course of disease.



CUSTOMER CASE

Dyne Healthcare Analytics

red. The only requirement is online registration by the participant physician and/or hospital. Then, a login and password will be provided by the data center at the University Hospital Zürich.

Confidentiality for patient data will remain highly secured. Data are collected on demographics, symptoms, laboratory results, imaging work-up, interventional therapy, surgery, complications, pathology data and survival.

Healthcare Analytics portal by Dynelytics

The technical part of the CholangioCa Registry was designed by Dynelytics. The solution consists of professional data collection software and a tailored environment to manage and analyse the entered data. The applied standard software "IBM SPSS Data Collection Interviewer Web" makes it possible, for example, to reopen and complete data sheets that have only been partially filled out and enables authorised persons to view and process their respective open case files.

Of note, two questionnaires are available: one for patient inclusion (General Form) and a second one for following-up after hospital discharge (Follow-up Form). Patient follow-up should be updated at least every 6 months. In case of missing data, a reminder will be automatically sent to the responsible physician/hospital.

Dynelytics implemented an HTML interface as web portal for the management of registered users, patients, questionnaires and open cases. The web portal controls access to the different activities and data through an individual login and password and via roles assigned to authorised users. Data concerning other users cannot be seen. The CholangioCa Registry is hosted

securely on Dynelytics' servers in Switzerland, in the DyneCloud. Sponsors and users have no responsibilities concerning installation and operation of the software.

The registry allows Dr. Michelle de Oliveira from University Hospital Zürich, the hospital in charge, to download and analyse all entered cases with SPSS statistical software. The international scope of the registry is especially helpful for medical research since there are very few newly diagnosed cases of this dangerous cancer per country and year.

Using pictures to better understand the patients

On special request, Dynelytics programmed within the web portal a solution for uploading up to 7 pictures per patient (from MRI, computerised tomography, cholangiography, surgery). It is even possible, within the uploading process, to mark and highlight interesting parts of the pictures.

If a doctor clicks on the list of visits on the PDF symbol shown, she or he will see a PDF of the form of that very visit with all relevant patient data and uploaded pictures.

Dr. Michelle de Oliveira was impressed: "First of all, I'd like to congratulate the team for the support and to say I loved the picture upload system. It is beautiful. Thanks a lot!"

In the future, the Healthcare Analytics solution shall also include online statistics and benchmarking functions to compare and visualise the data of all entered patients. ●

MORE INFO

➔ Healthcare Analytics Solutions

Dynelytics' contact person for Healthcare Analytics Solutions:

Dr. Daniel Schloeth
d.schloeth@dynelytics.com