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## BACKGROUND

- Among non-melanoma skin cancer (NMSC), basal cell carcinoma (BCC) and cutaneous squamous cell carcinoma (cSCC) represent the most frequent forms, often regarded as low-grade, prognostically favorable, and easy-to-treat malignancies, given the relatively low rate of metastatic disease.
- A major part of the NMSC-related morbidity and mortality however results from locally advanced (Ia) manifestations of BCC and SCC, that are difficult to treat and have a high impact on the prognosis and quality of life for affected patients.
- Scientific progress and development of improved treatment strategies are currently hampered by insufficient standards of staging and classification, e.g. by the current TNM staging system. Furthermore, institutions often use different measures for reporting stages and outcomes, which limits interpretability between studies.
- Acknowledging existing classifications for clinical and pathological prognostic factors, we developed an evaluation model for advanced BCC and cSCC.

## THE EURO-NMSC REGISTRY

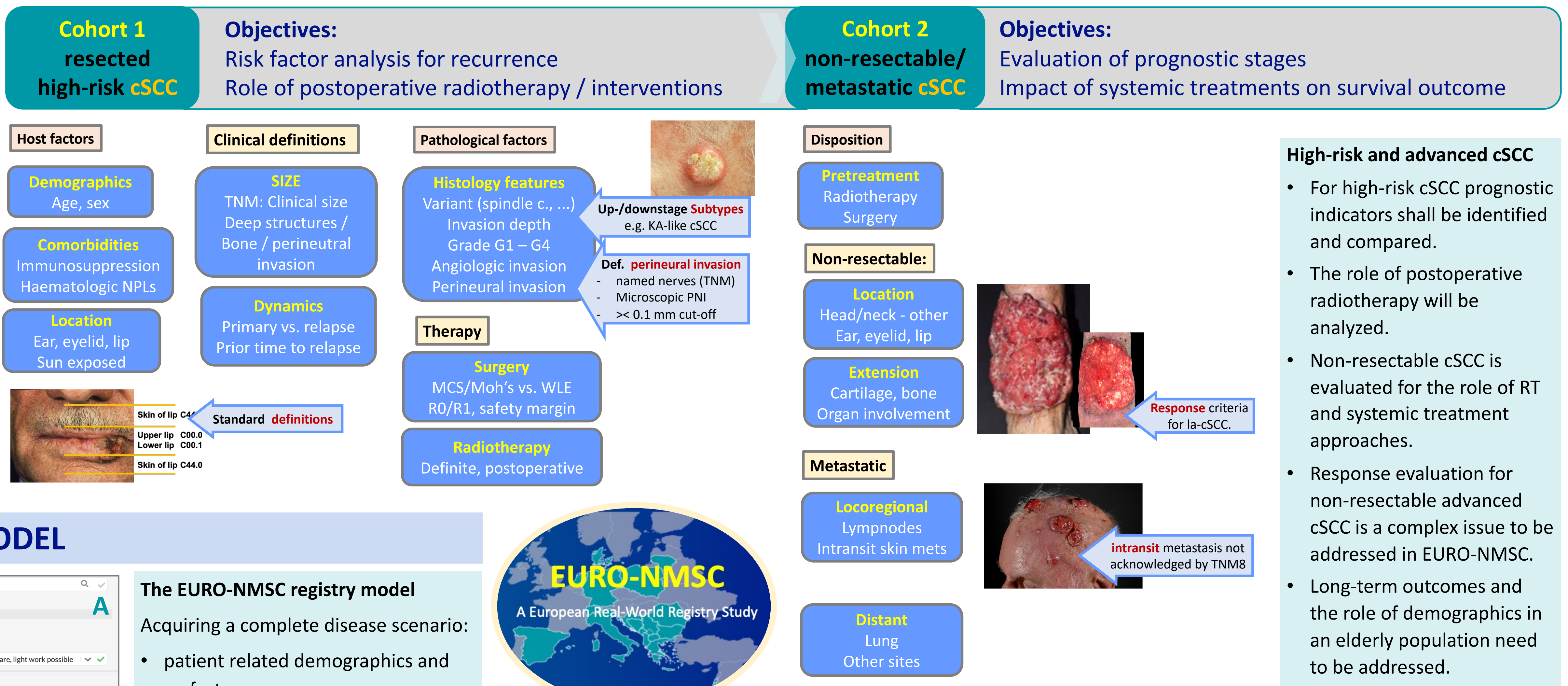
- The EURO-NMSC initiative of the EUMelaReg consortium has implemented a comprehensive platform for registration and evaluation of advanced non-melanoma skin cancer (NMSC) across Europe.
- We have created a foundation data model, that implements both established and newly developed standards for describing and quantifying the burden of disease for advanced NMSC.
- Participating sites collect clinical data from medical records and other real-world resources. Inclusion criteria specify the minimum requirements for a given case to be eligible for registration in NMSC-Registry forms.
- Cases are currently evaluated further in the EURO-NMSC study plan. Standard procedures are implemented to ensure quality, integrity and validity of the data and created variables as well as archiving of statistical programs, description of available data, and validation results.

### The EURO-NMSC validation study

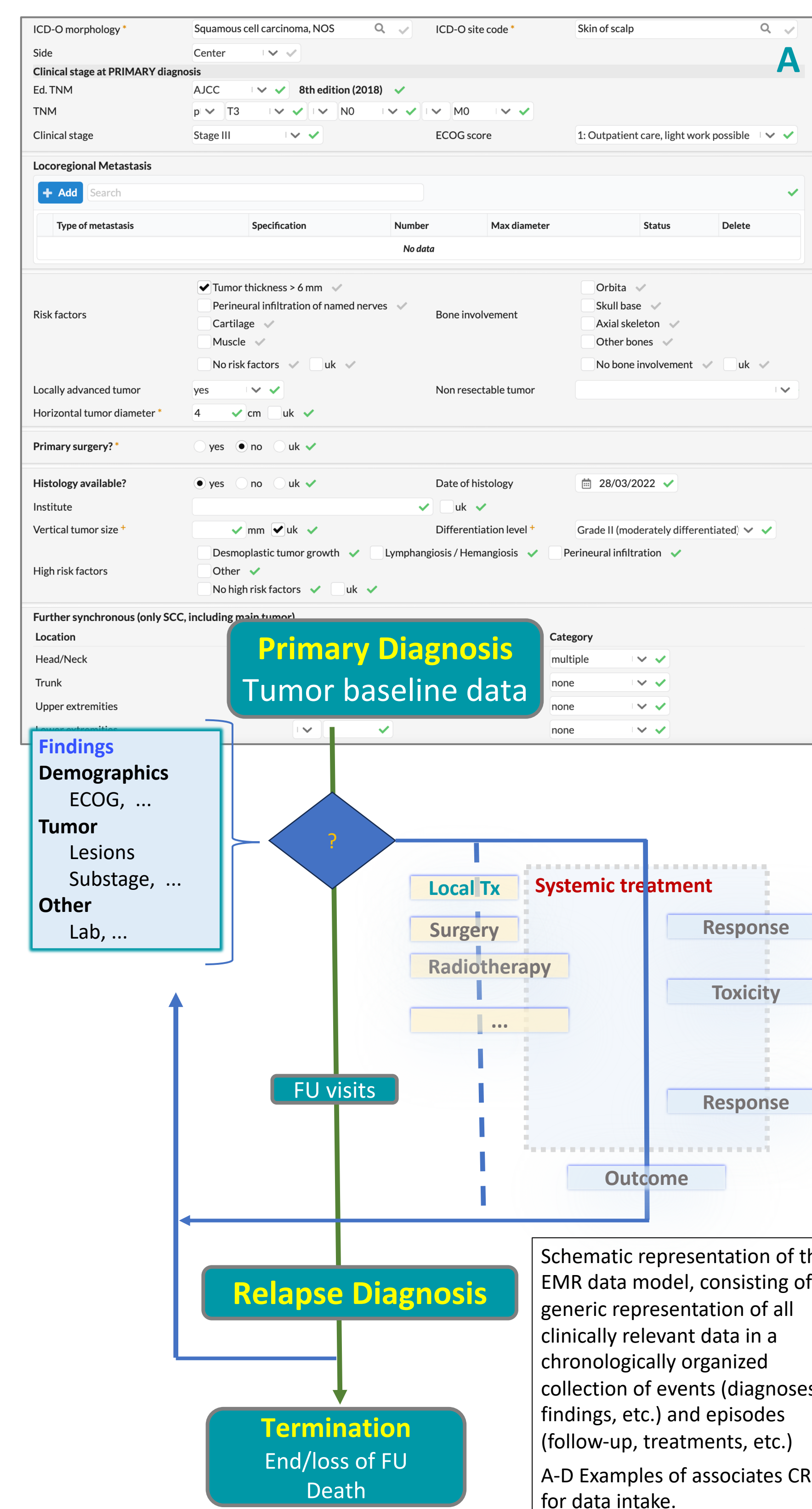
currently collecting data for three major cohorts to be evaluated:

- high-risk resected cSCC stratified for postoperative radiotherapy (target n=400)
- non-resectable and metastatic cSCC stratified for ICI vs. other modalities (target n=500)
- non-resectable and metastatic BCC stratified for line of treatment and use of sonic hedgehog inhibitors (HHI), ICI, or other modalities (target n=400)

Data are being collected and quality-controlled until the respected target sample size is available with a minimum of 2 years of follow-up after the respective index diagnosis.



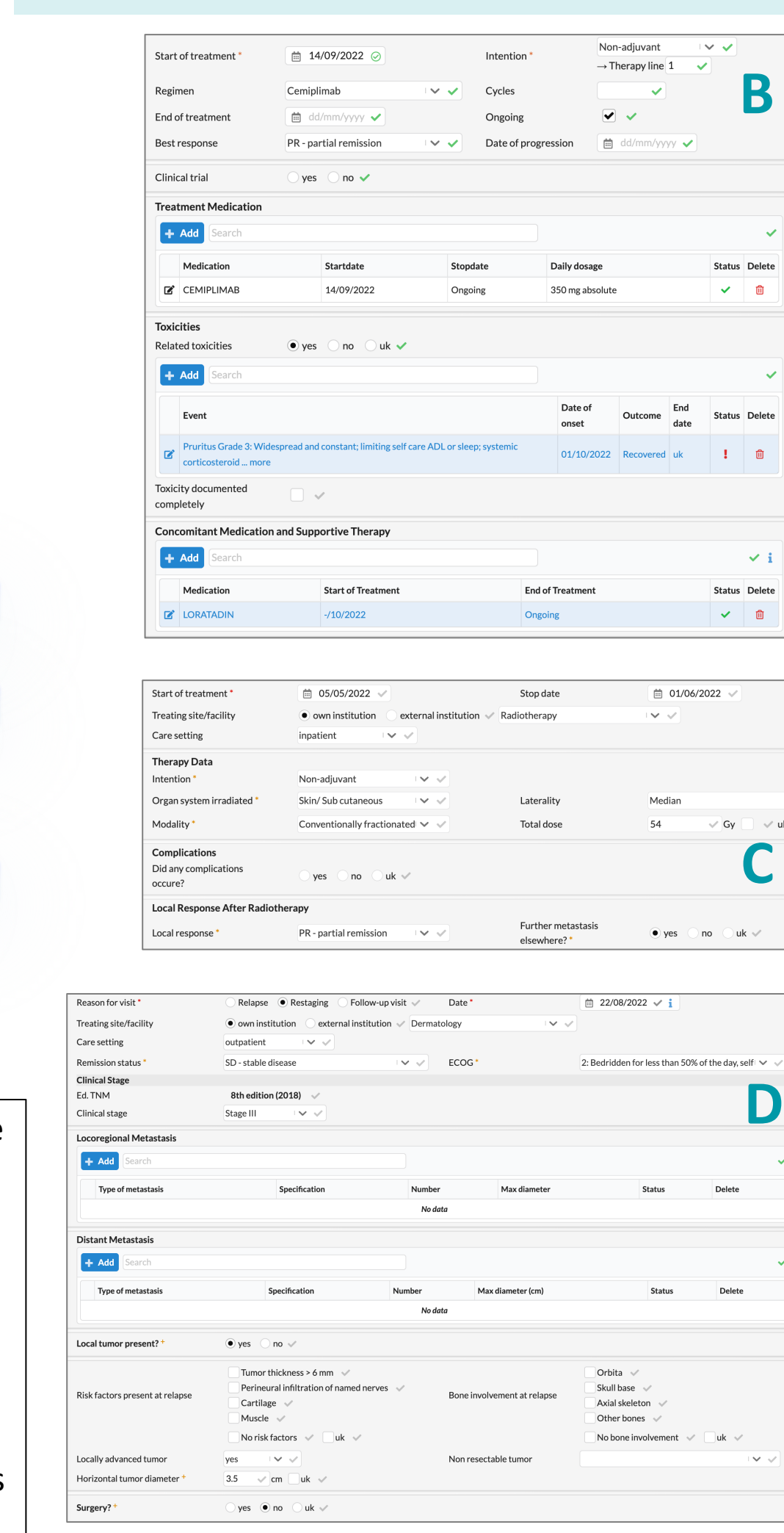
## MODEL



### The EURO-NMSC registry model

Acquiring a complete disease scenario:

- patient related demographics and co-factors
- disease-related variables, including various potential determinants of prognosis, treatment outcome etc.
- the event-episode model of treatment and disease related course over time
- outcome parameters including remission and survival status



### Cohort 2 non-resectable/metastatic BCC

**Objectives:** Evaluation and proposal of prognostic stages (BCC-TNM) Impact of RT ± systemic treatments on survival outcome

**EADO Stage IIB:** High-number BCC: Gorlin Syndrome w/o Gorlin S. Multiple IIA BCC



Response & outcome criteria for Stage IIB/Gorlin S

**EADO Stage IIIA:** Locally advanced DTT-BCC outside critical areas



Resectability y/n – meaningful? Functional & aesthetic outcome Radiotherapy Neoadjuvant approach

**EADO Stage IIIB:** Locally advanced DTT-BCC in critical areas



Validate the 'H Zone'

**EADO Stage IIIC:** Extremely advanced DTT-BCC



**EADO Stage IV:** Metastatic BCC



Rates, patterns & predictive determinants of metastatic BCC

- For la-BCC several factors determine the extent, treatment options, and outcome of patients.
- Current TNM stages for NMSC (C44) do not adequately address the prognostic risk factors in BCC.
- The European Association of Dermatological Oncology (EADO) has proposed new standards for classifying laBCC according to risk and treatment difficulties.
- The following secondary endpoints will be evaluated: e.g. tumor characteristics, treatment patterns in routine practice, Overall Survival (OS), Time to Progression (TTP), Time to next treatment (TTNT), disease free survival (DFS), Overall response rate (ORR).

## SUMMARY

- There is a high medical need for patients with advanced BCC and cSCC, that need to be recognized as specific entities in all aspects from cancer registries to evidence based treatment guidelines.
- The EURO-NMSC initiative has implemented a generic model for registration of all relevant aspects of these cases.
- Existing classifications, guidelines, scores and models (AJCC, UICC, ICD-O, EADO, BWH etc.) shall be acknowledged and critically validated.

- First patient inclusions started in June 2023. Data are currently closely monitored, including demographics, clinical characteristics, treatment details, and clinical course information.
- The EURO-NMSC initiative will hopefully contribute to improved strategies for advanced NMSC worldwide.

Centers interested in collaboration may contact: [office@eumelareg.org](mailto:office@eumelareg.org)  
This project is financially supported by Regeneron Pharmaceuticals Inc.  
The study is registered at [clinicaltrials.gov](https://clinicaltrials.gov) under NCT05741073

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