

BACKGROUND AND OBJECTIVE

- Cutaneous squamous cell carcinoma (CSCC) is a malignant neoplasm of epidermal keratinocytes and one of the most common tumors worldwide.¹ Most of the CSCC cases have high cure rates after surgical treatment. However, a small proportion is classified as high-risk due to increased aggressiveness, local recurrence and metastasis rates.² In the context of advanced disease, a considerable amount of patients cannot be properly treated with surgery or radiotherapy and are deemed eligible for systemic therapy.^{3,4}
- The aim of this study was to estimate the number of patients in Portugal with metastatic or recurrent CSCC who are eligible for treatment with systemic therapies.

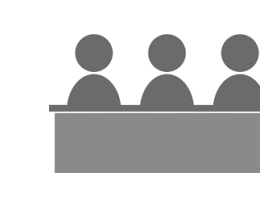
METHODS



A literature review was carried out to collect incidence and prevalence data about CSCC.



To complement the literature review, the national diagnosis related group (DRG) database for the year of 2017⁵ was used to identify and characterize CSCC patients who were hospitalized or subject to a DRG triggering outpatient intervention in Portuguese public hospitals.



Additionally, an expert panel representative of the national clinical practice was convened to gather supplementary epidemiological data via individual electronic questionnaires.

RESULTS

- In the published literature, there is a lack of current and comprehensive data on the incidence and prevalence of CSCC in Portugal. Based on the overall collected data (literature, DRG database and panel of experts), two scenarios were developed to estimate the number of patients with metastatic or recurrent CSCC potentially eligible for treatment with systemic therapies.
- The main scenario (Fig. 1) was based on the CSCC incidence rate estimated for Spain by a meta-analysis published in 2016⁶. Applying this rate to the Portuguese population⁷, a total of 3,732 CSCC patients is obtained.
- For the alternative scenario (Fig. 2) the data from the Portuguese DRG database was used as a starting point: 12,064 patients with non-melanoma skin cancer and 2,727 patients with CSCC were identified (*International Classification of Diseases, 10th revision, Clinical Modification* [ICD-10-CM] codes C44.XX and C44.X2, respectively). According to the South Regional Cancer Registry (ROR-Sul) the incidence of skin tumors (other than melanomas) is difficult to quantify as many cases are treated in private clinics⁸. To take these patients into account it was considered that about 30%⁹ of the overall patients in Portugal are treated outside the National Health Service, increasing the estimate to a total of 3,896 CSCC patients.
- Afterwards, to estimate the number of metastatic or recurrent CSCC patients who are eligible for systemic therapy it was essential to define the metastatic and recurrence rates as well as eligibility at each stage. Metastatic and recurrence rates of 3.5% and 6.7% were estimated. The estimates of eligibility for systemic therapy were 85% of metastatic patients, 4.6% of patients after a first recurrence, and 22.9% after a second or posterior recurrence.
- Ultimately, 178 and 185 patients with metastatic or recurrent CSCC and potentially eligible for treatment with systemic therapies were estimated through the main (Fig. 1) and the alternative scenarios (Fig. 2).

Figure 1. Estimation of the number of CSCC patients eligible for systemic therapy in Portugal – main scenario

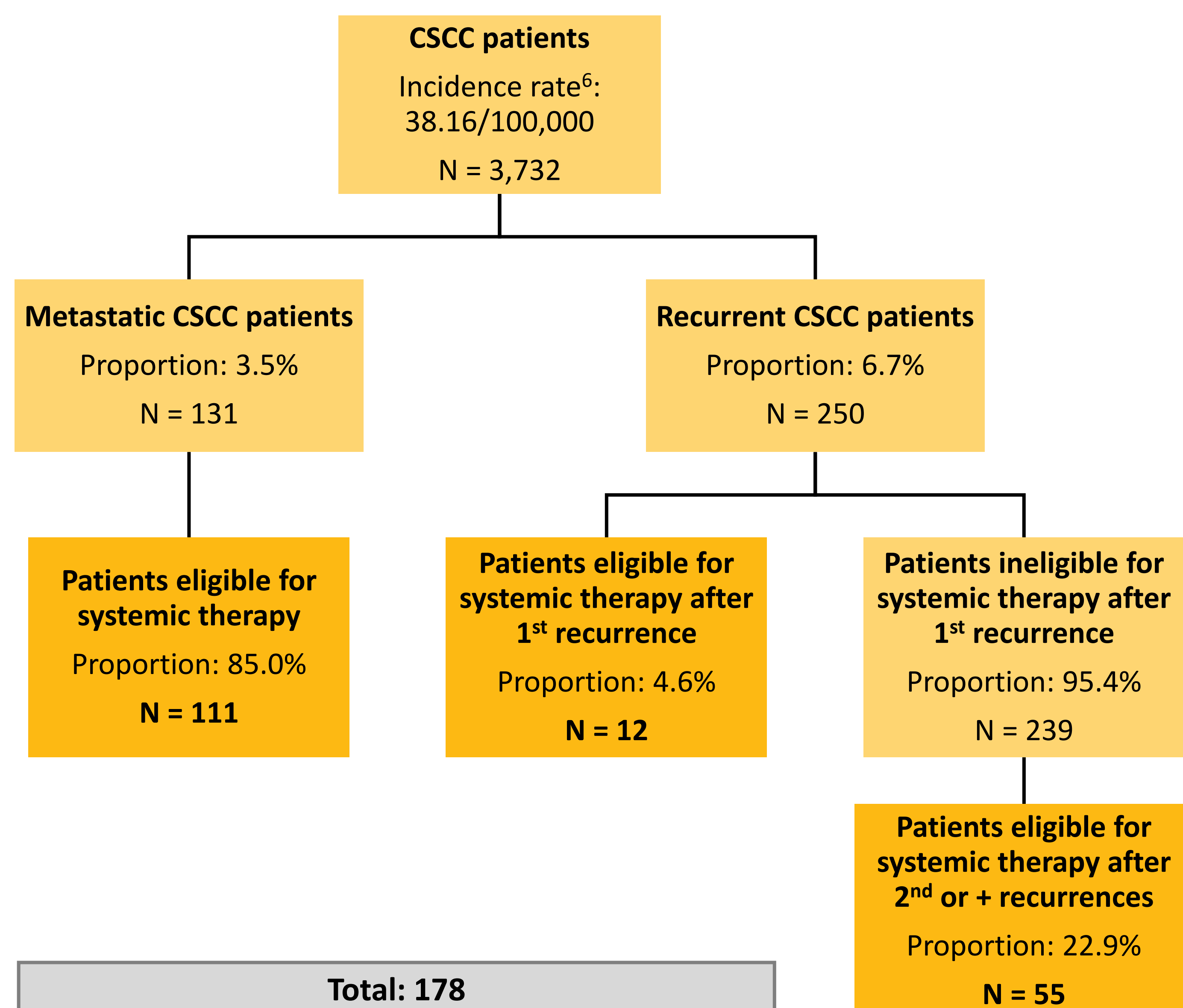
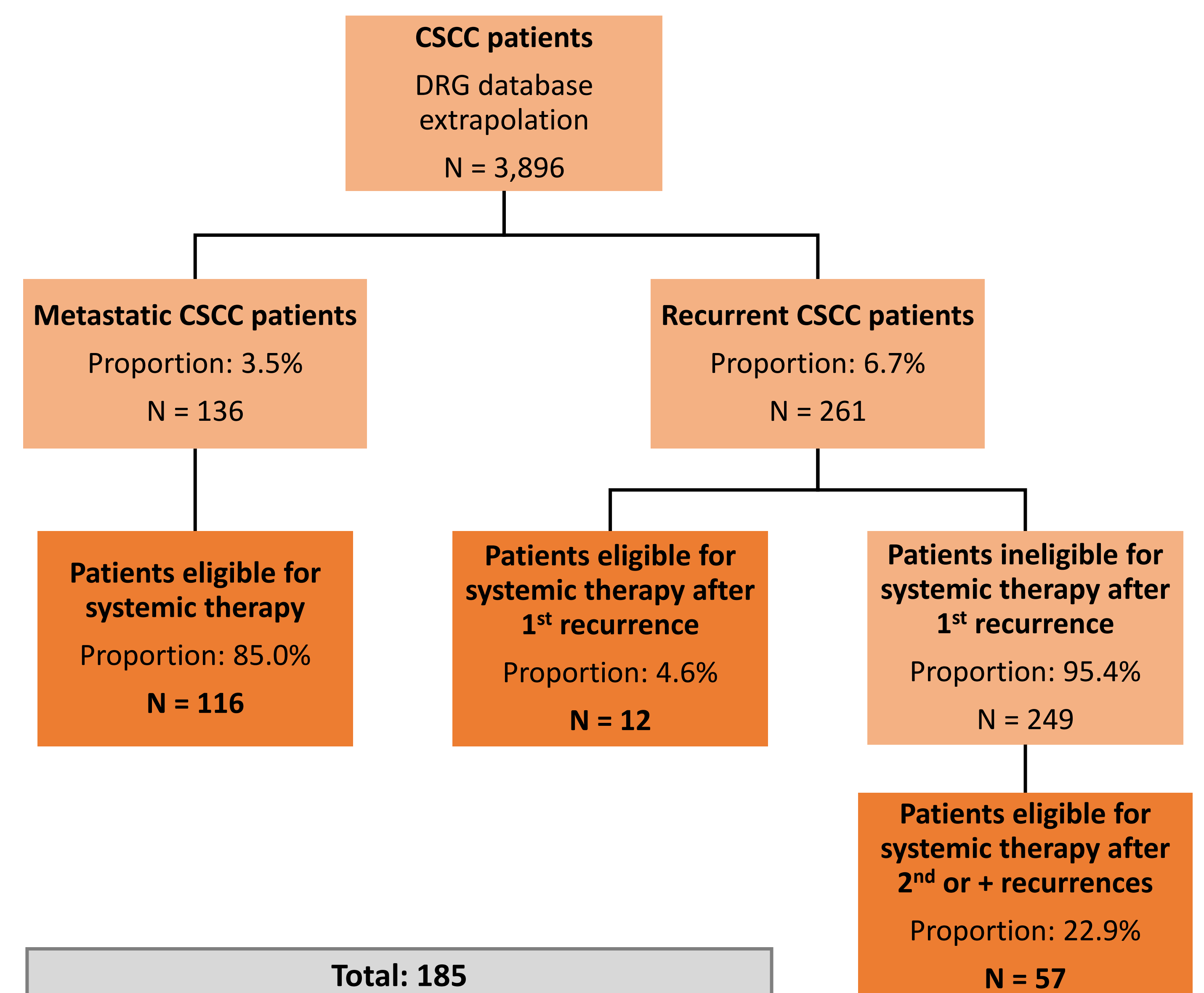


Figure 2. Estimation of the number of CSCC patients eligible for systemic therapy in Portugal – alternative scenario



CONCLUSIONS

- Given the limited published epidemiological data about CSCC in Portugal, complementary data sources were used in this study to characterize CSCC treatment in Portugal and estimate the number of patients with metastatic or recurrent disease that are eligible for systemic therapies.
- The two scenarios presented provided consistent estimates (< 5% variation) and anticipate that there are currently about 180 patients in Portugal that meet this definition.

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