

Incidence and trends of first basal cell carcinoma in France between 1980 and 2019: a population-based registry study

Registre
des Cancers
du Haut-Rhin



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BACKGROUND

Basal cell carcinoma (BCC) is the most common malignancy worldwide. In most countries, BCC are only partially or not at all registered and there is a lack of population-based incidence data.

This study assessed **current incidence rates and trends** in the only **two French districts** where BCC have been recorded for several decades.

METHODS

This population-based study used data from two French cancer registries (Doubs and Haut-Rhin, both located in the east of France).

First BCC diagnosed in the **Doubs** between **1980 and 2016** and in the **Haut-Rhin** between **1991 and 2019**, histologically confirmed, were included in the study.

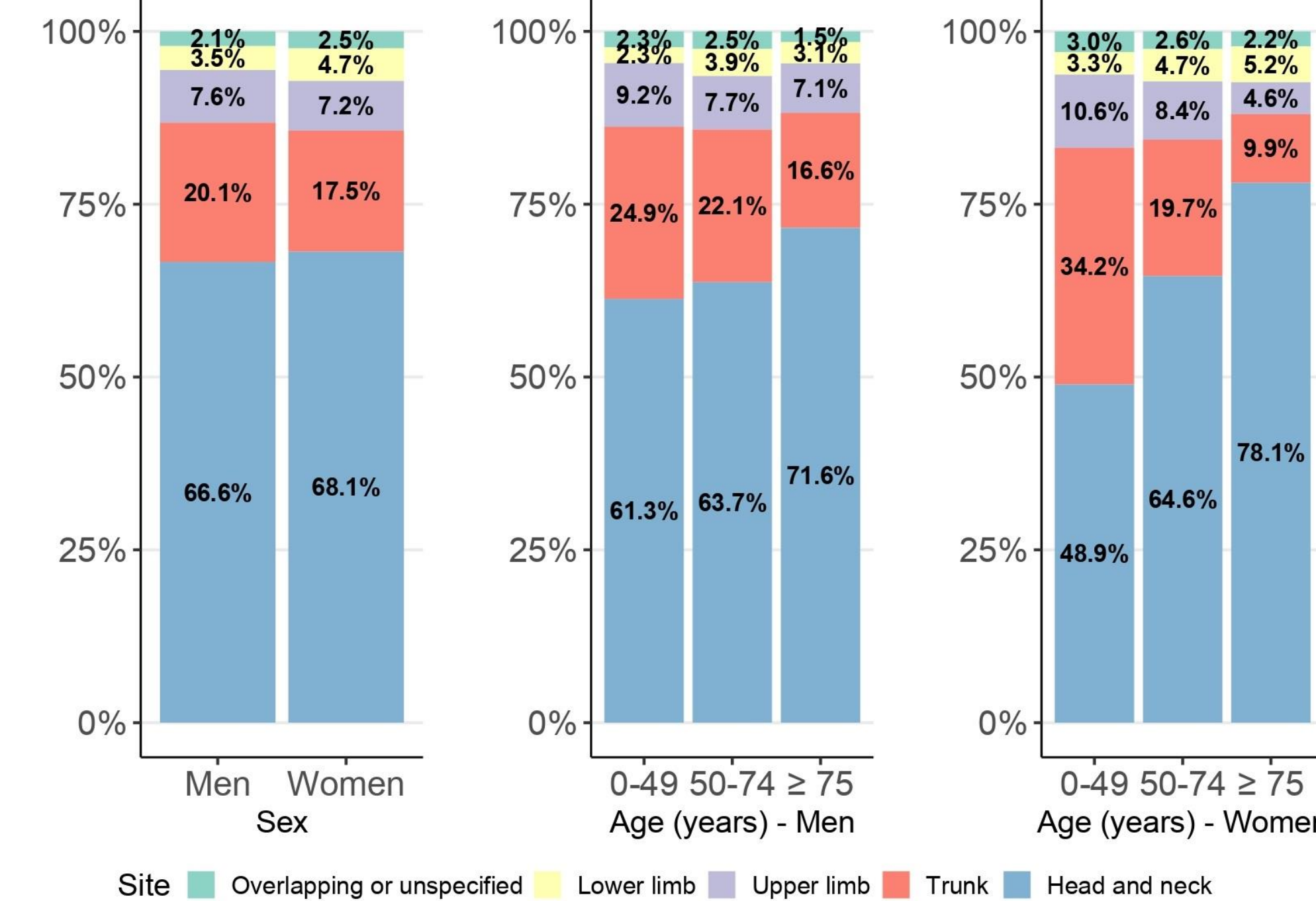
European age-standardised incidence rates (EASR) and the corresponding **95% confidence intervals (95%CI)** were calculated, using the 2013 European standard population.

EASR trends and joinpoints were calculated separately in each district for men and women using **Joinpoint Trend Analysis Software**. The **annual percent changes (APC)** were calculated.

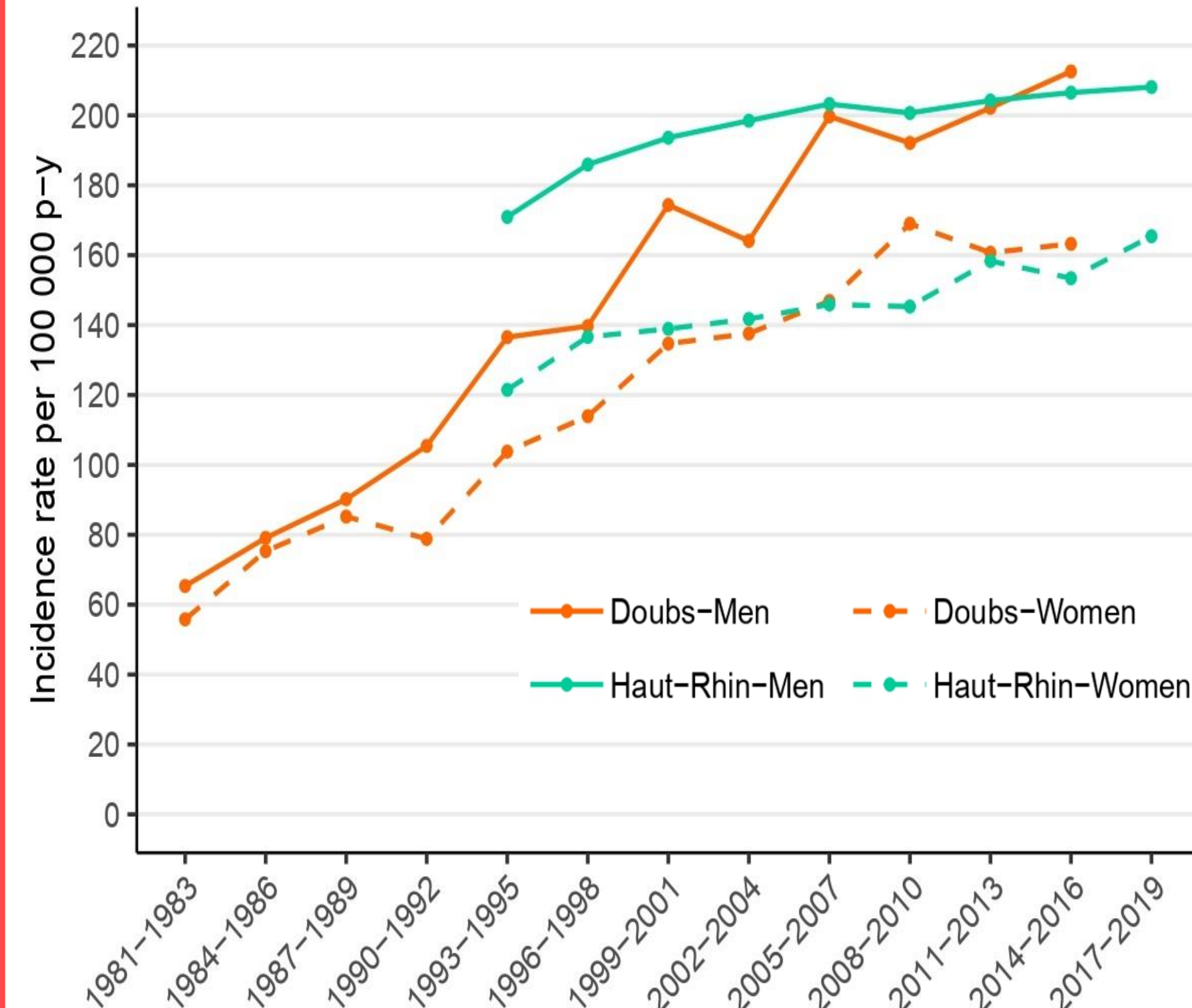
RESULTS

Patient and BCC characteristics

Overall, **49,065 patients** were diagnosed with a **first BCC** during the study period at a median age of 69 years [IQR 59-78]. BCC anatomic site differed by age and sex. The percentage of BCC localised in head and neck increased with age.

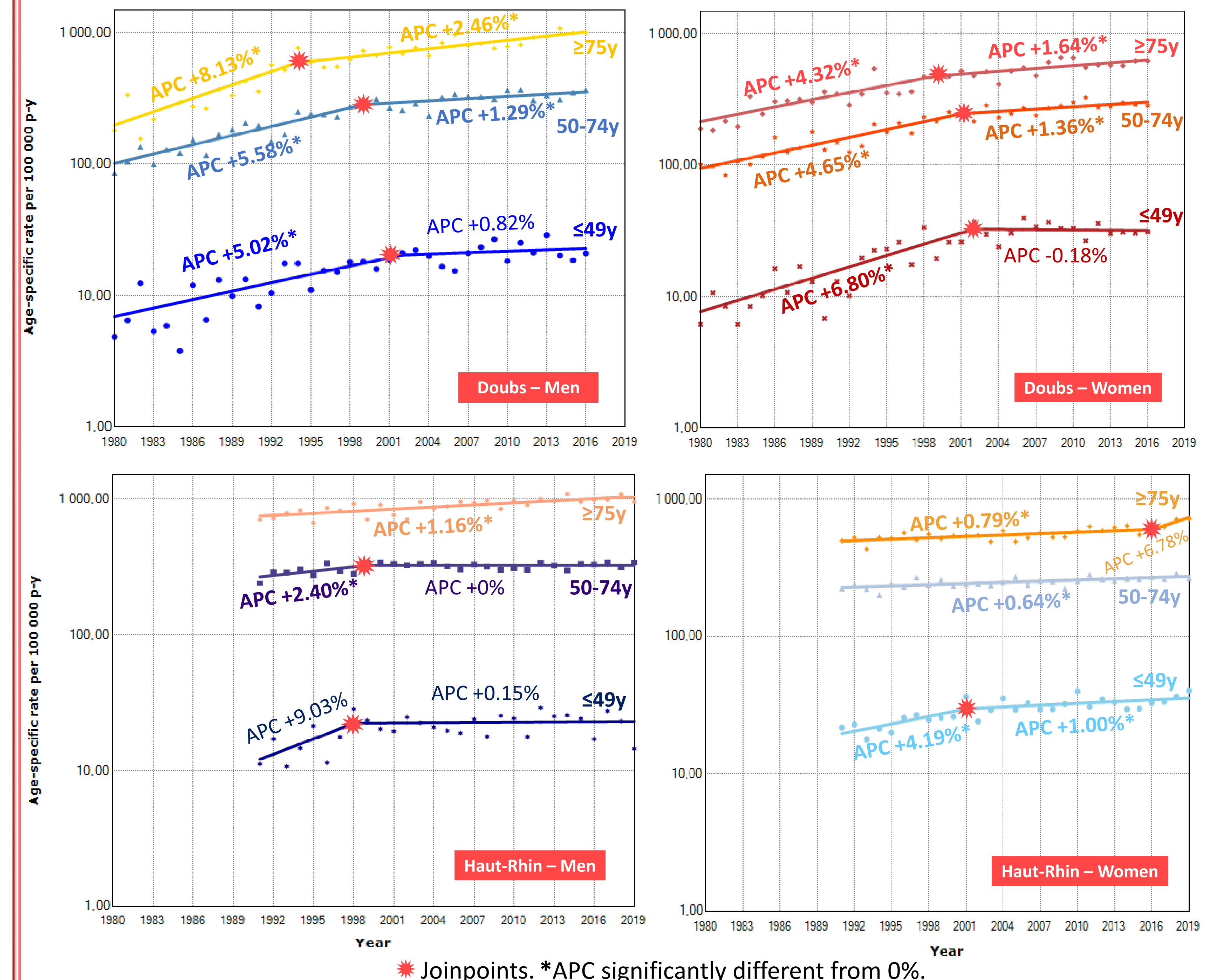


Incidence rates



Between 1981-1983 and 2014-2016 in the **Doubs**, the EASR of BCC increased from **59.87** [95%CI 54.50-65.24] to **183.13** per 100,000 p-y [176.27-189.99]. In the **Haut-Rhin**, the EASR increased from **139.16** [132.97-145.35] to **183.58** per 100,000 p-y [178.04-189.12] between 1993-1995 and 2017-2019. The incidence rates were **consistently higher in men** than in women over time.

Time trends - Joinpoint analysis



In the **Doubs**, in all age groups an increase in the incidence of BCC was followed by a period of lower increase or even stabilisation. Similar patterns were observed in the **Haut-Rhin** except in men above 75 years and in women aged 50-74 years (moderate but steady increase over the study period); a recent increase of incidence rate was observed in the oldest women, although not significant.

CONCLUSION

BCC incidence increased since 1980 and is still increasing to a lesser extent, particularly in men and in the elderly. A slowdown was observed around the year 2000, which may be the result of prevention policies. This study provides insight into the BCC burden in France and highlight the need to maintain effective prevention strategies as the incidence is still increasing.

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