

# **COMPLETENESS OF HISTOPATHOLOGICAL REPORTING IN BREAST CANCER: RESULTS FROM FOUR SOUTH AFRICAN BREAST CENTRES**

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## **INTRODUCTION**

Quality pathology reporting is essential for appropriate breast cancer management. We used current EUSOMA standards and audited the reporting practices of a clinical cohort from four independent South African academic breast centres.

## **MATERIALS & METHODS**

We included 1850 consecutive patients with histologically confirmed invasive breast cancer who presented to our units between July 2015 to September 2017 as part of the SABCHO study. Patients were recruited at two units in Gauteng Province (CHBAH & CMJAH) and two units in KwaZulu Natal (IALCH/Ngwelezana & GH). We compared our available records against EUSOMA quality standards.

A core biopsy report was considered complete if it included: histological type, grade, ER, PR and HER-2. Equivocal HER-2 cases on IHC required additional FISH testing, Ki67 was regarded as optional. Excisional surgical specimen reports additionally required pathological stage, size of invasive component, peritumoral lymphovascular invasion and distance to nearest radial margin for completeness, a repeat IHC was required if the surgical specimen was more than six months from initial biopsy date. EUSOMA requires > 95% completeness as a minimum standard but the ideal target is > 98%.

Ethical clearance was obtained on 25/10/2017 from the ethics committee of the University of the Witwatersrand - Certificate No. M170989.

## **RESULTS**

For core biopsies completeness was 90.2% at CHBAH, 91.6% at CMJAH, 43% at IALCH and 63.5% at GH. Overall completeness for the cohort was 75%. Completeness of reports on surgical specimens was 89.66% at CHBAH, 86.78% at CMJAH, 37.96% at IALCH and 70.76% at GH with an overall completeness for the cohort of 74.27%. Grading was absent for 54% of Durban patients. Intrinsic subtyping based on IHC showed significant differences between Gauteng and KZN sites with luminal A subtype in 17.6% in Gauteng compared to 26.2% in KZN.

## **CONCLUSION**

Histopathological reporting requires improvement throughout our sites and all centres fell short of the required 95% to achieve the minimum EUSOMA standards. CMJAH (91.6%) and CHBAH (90.2%) came closest for the core biopsy specimen. The completeness of the surgical specimen was 0.73% less than that of the core biopsy for the entire cohort. Significant cross-centre differences in tumour grading and intrinsic subtypes require further attention but are unlikely due to biological differences in the source populations. A national consensus on reporting standards would benefit breast care in South Africa.