

# Redefining the role of CA 19-9 as a prognostic marker in Epithelial Ovarian Cancer

Eshwarya J Kaur, Upasana Baruah, Debabrata Barmon, Dimpy Begum  
Dr B Borooah Cancer Institute, Guwahati , A unit of DAE and TMH, Mumbai

## KNOWN

- Utility of Serum CA19-9 level is in diagnostic workup of mucinous tumors
- Marker of poor prognosis and unresectability in pancreato-biliary cancers

## LACUNAE

- Role in EOC- UNKNOWN
- Association with CA 125 AND CEA-UNKNOWN

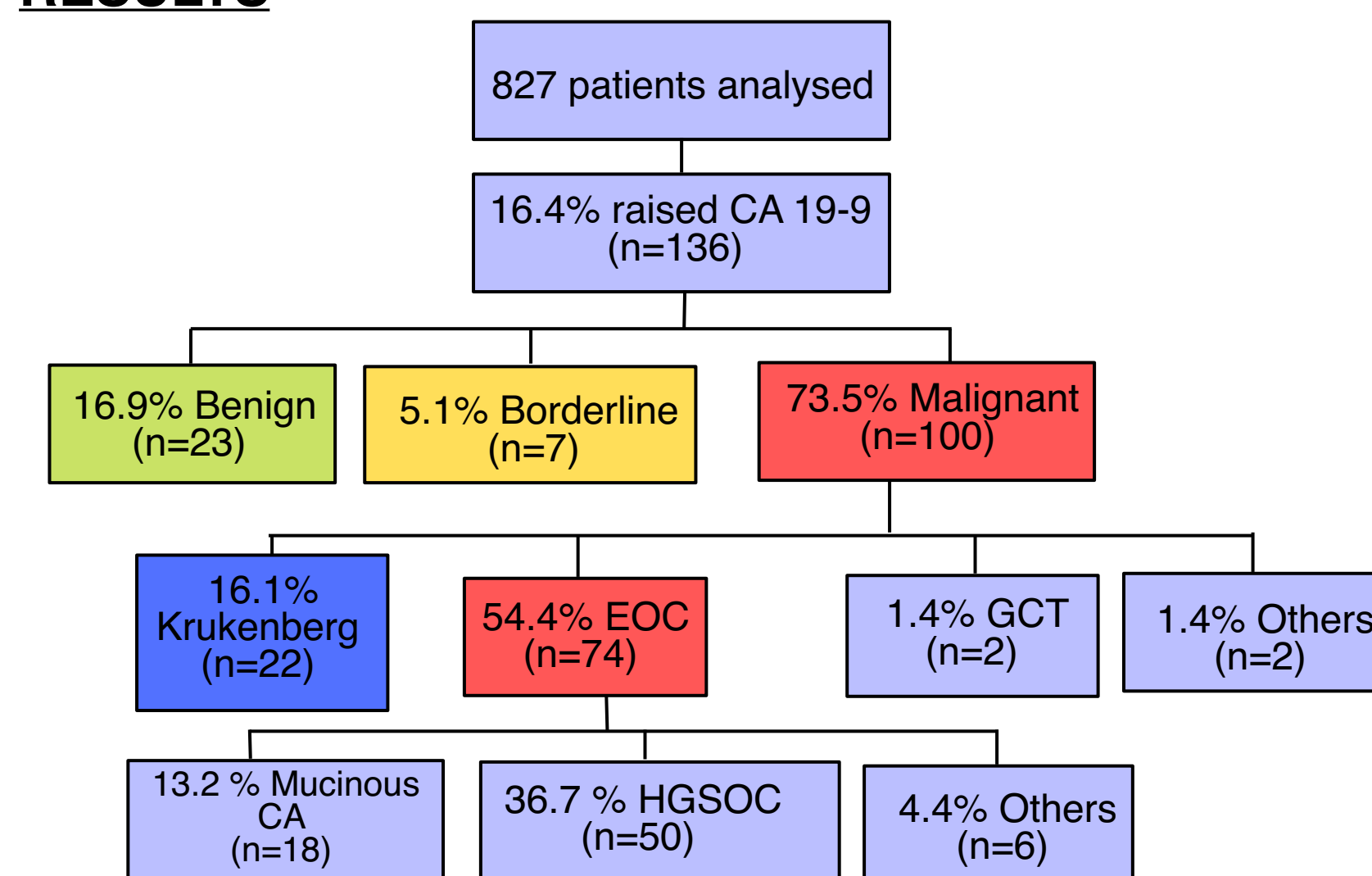
## OBJECTIVE

To prognosticate CA19 9 levels in EOC and co-relate with survival.

## METHODS

- Retrospective study
- Duration-September 2019 to December 2021.
- Definition of increased CA 19-9 levels > 37 mIU/mL were considered as cut off levels.
- Study done according to [REMARK guidelines](#)

## RESULTS



## PREDICTIVE

- Higher Risk of Malignancy (ROM) with raised levels of CA 19-9 (RR-2.78)

## DIAGNOSTIC- KRUKENBERG

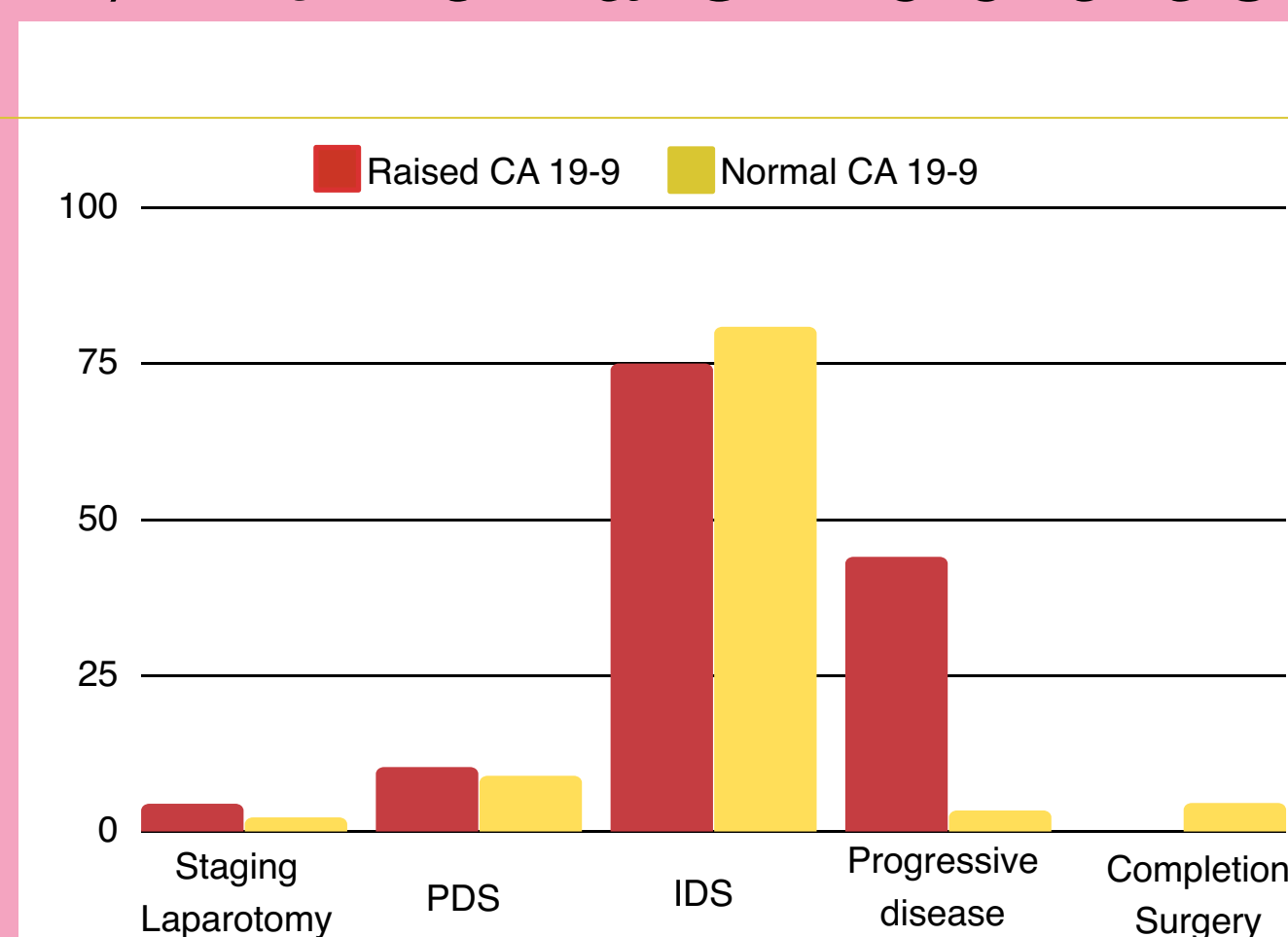
- 31.8% Krukenberg patients- Normal CEA levels with raised CA 19-9 levels
- Only 45.45% Krukenberg patients had CA 125:CEA ratio <25
- Higher chances of Krukenberg (68.2%) with concurrently raised CA 19-9 and CEA levels

## DIAGNOSTIC- EOC

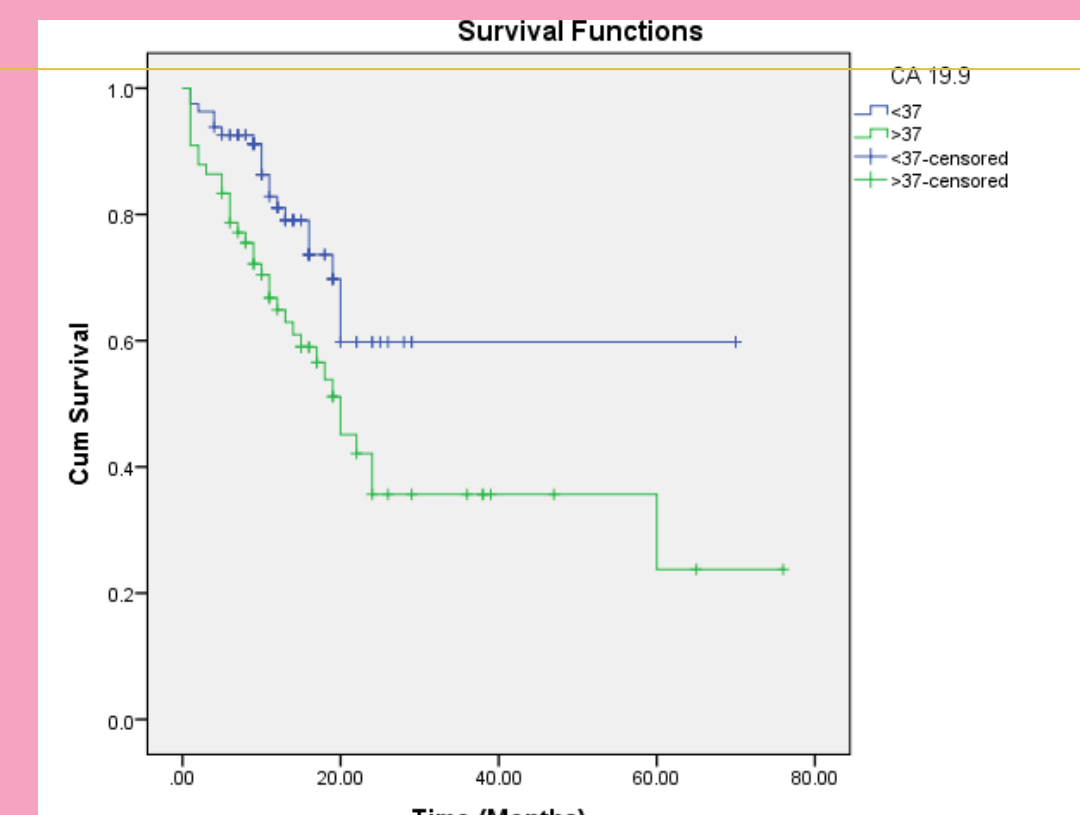
- Higher incidence of HGSOE than Mucinous CA with raised levels (36.7% vs 13.2%)
- Levels independent from CA 125 (Pearson's r = -.133)

## PROGNOSTIC

- 26.4% Patients with raised CA 19-9 had platinum refractory disease vs 14.7% with normal CA 19-9 levels



**Fig 1. Comparison of surgical outcomes**



**Fig 2. OS significantly lower, (p=0.008) in EOC with raised CA 19-9 levels.**

**FNP number 63P**



CA 19-9 LEVELS	Median RFS in months (95% CI)	Mean OS in months (95% CI)
< 37 U/ml	15.0 (11.083-18.917)	47.127 (37.862-56.392)
>37 U/ml	12.0 (7.406- 16.594)	32.816 (23.855- 41.776)

**Table1. Survival outcomes in patients with raised CA 19.9 levels**

## WHAT THIS RESEARCH ADDS?

- ➔ CA 19-9 LEVELS-PREDICTORS OF POOR OUTCOMES IN EOCs
- ➔ HIGHER ROM
- ➔ HIGHER RATES OF PROGRESSIVE DS
- ➔ HIGHER RATES OF PLATINUM RESISTANCE

- This novel finding is previously unreported in literature

## BIBLIOGRAPHY

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**Conflicts of interest- None to declare**