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## Objectives

- The aim of this study was to evaluate a population of patients with advanced ovarian and related cancers, treated with primary cytoreductive surgery or neoadjuvant chemotherapy and interval debulking surgery, and to determine if there was any relationship with optimal cytoreduction rates and overall survival in a gynaecologic oncology service over time.
- The increasing use of interval debulking has been associated with increased rates of optimal cytoreduction in other gynaecological services<sup>1</sup>.

## Methods

- We conducted a retrospective case note audit of 174 women receiving a diagnosis of ovarian cancer at FMC between 2007 and 2017 using consecutive sampling methods<sup>2</sup>.
- Demographic data, data about method of diagnosis, histopathology, management and outcomes was collated from patient case notes, multi-disciplinary team meeting minutes and OACIS (online patient record system).
- Data was analysed using IBM SPSS V24.
- This project has ethics approval from the SA Health Human Research Ethics Committee.

## Results

### Demographic Data

- Mean age at diagnosis was 62.26 years (SD= 16.5).
- 20% were nulliparous.
- 62.5% were obese or overweight.

### Diagnostic Data

- Histologically, the most common diagnosis was high grade serous carcinoma (64.9%), mucinous carcinomas (8.9%) endometrioid carcinoma (8.2%), with the remainder consisting of other rare subtypes.
- All patients had CA-125 testing, with 87% having a result >30.
- The majority of patients were stage IIIC/IV (68%).

### Treatment Data

- Optimal primary cytoreductive surgery was the primary treatment (68.8%), with the remainder completing neoadjuvant chemotherapy prior to interval debulking.

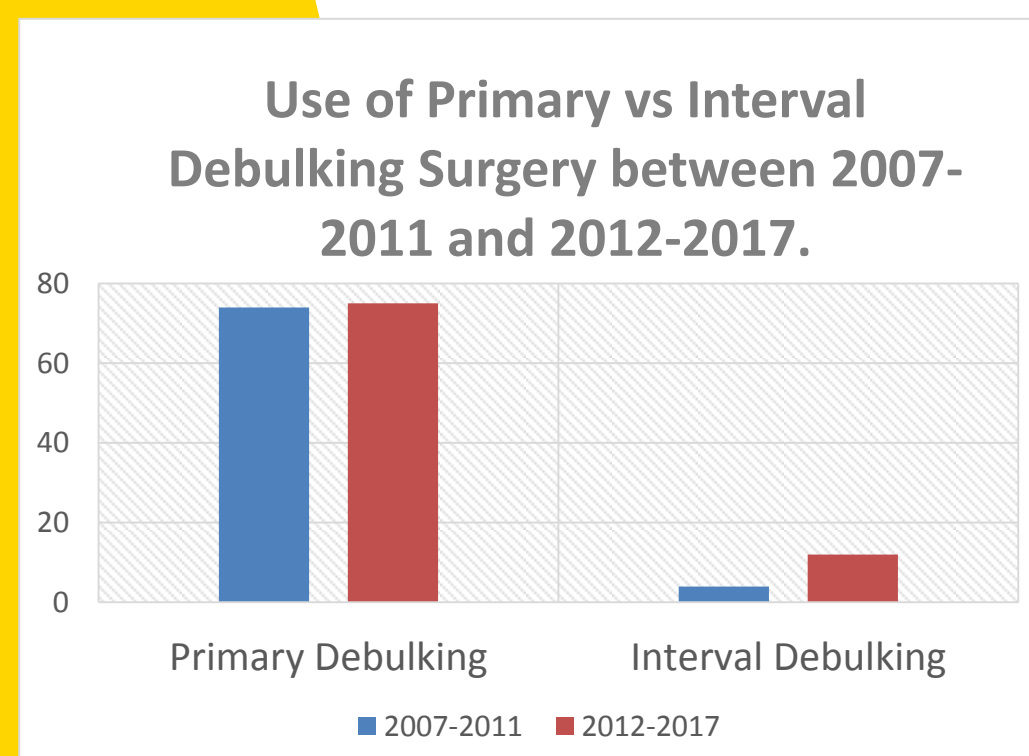
### Outcome Data

- The average time to recurrence was 21.2 months (SD=16.9). From 2012-2017, 46% had a documented recurrence, compared to 44% from 2007-2011.
- Significantly, a 62.5% increase in 5-year survival was observed between the periods 2007-2011 (35.1%) and 2012-2017 (56.1%).
- There was not statistical correlation between diagnosis in the earlier time period (2007-2011) and the later time period (2012-2017) and likelihood of being alive at time of study review ( $p=0.12$ )
- There was not statistical correlation between diagnosis in the earlier time period (2007-2011) and the later time period (2012-2017) and likelihood of being alive at 5 years ( $p=0.94$ ). This calculation excluded cases who were still alive, but 5-year survival had not been reached yet.

Table 1. 5 year survival data

	2007-2011	2012-2017
Alive at 5 years	34 (47.9%)	25 (47.2%)
Deceased within 5 years	37 (52.1%)	28 (52.8)
	71	53

Figure 1. Use of Primary vs Interval Debulking



## Conclusion

- Overall, cure rates over 10 years were 43%, marginally improved compared to global data, with improvements in 5 year survival rate.
- This data allows us to examine trends over time to ensure optimal patient results and address areas of improvement. It illustrates an emerging area of the use of neoadjuvant chemotherapy, and future research will aim to evaluate these outcomes within our centre

## References

- Nicklin et al. (2017) The Shift Toward Neo-adjuvant Chemotherapy and Interval Debulking Surgery for Management of Advanced Ovarian and Related Cancer in a Population Based Setting: Impact on Clinical Outcomes. *ANZJOG*. 57: 651-658.
- Yasin, N. & Rigby, A. Impact of Perioperative Blood Transfusion (POBT) and Ovarian Cancer (OC) survival- A systematic Review. ASGO 2018 Annual Scientific Meeting. Taupo, New Zealand (4-7<sup>th</sup> July 2018).