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Background

- Breast cancer is the most common malignant tumor and a leading cause of cancer deaths in women worldwide. According to Yangon General Hospital, Medical Oncology data, it is also the commonest cancer in female patients.
- Among the 4 subtypes of breast cancer, triple negative breast cancer (TNBC) is aggressive in nature and associated with higher morbidity and mortality. As its prognosis is notorious and it lacks targetable IHC receptor, its management only relies on systemic conventional chemotherapy regimens. Therefore, newer treatment evaluations are necessary.
- In TNBC, AR positivity is about 25%-75%. Although AR positivity in TNBC constitute a relatively small proportion, this patient would get potentially benefit from AR targeted therapy because AR expression has predictive and prognostic value. There is encouraging data and concepts in the use of targeted therapy in AR positive TNBC.

Objectives

- The objectives of this study are
- To know the occurrence of TNBC cases at Medical Oncology Department, YGH,
 - To access the androgen receptor status in TNBC cases.

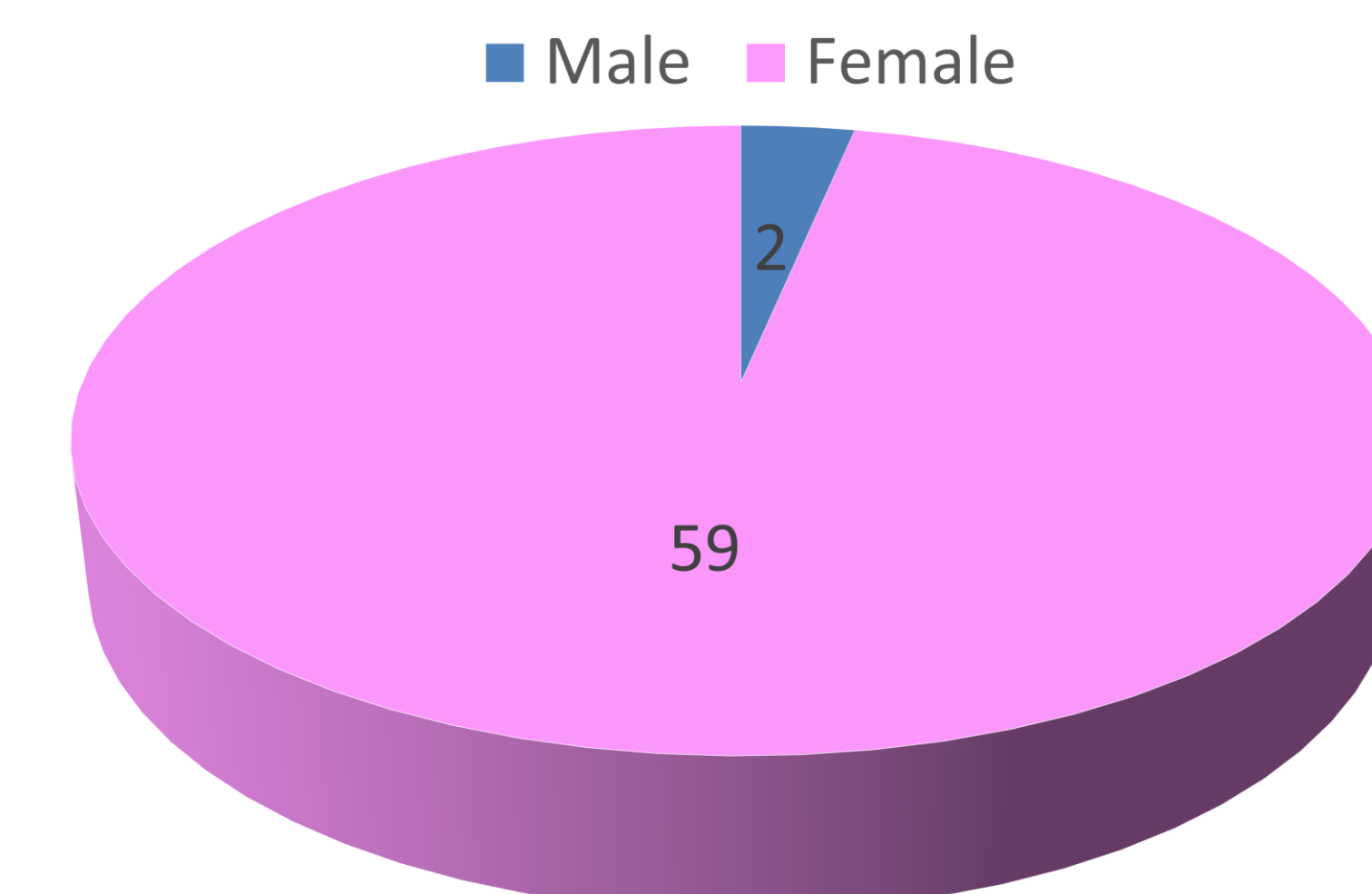
Methodology

- Hospital-based, prospective descriptive study. We descriptively collect all TNBC cases attending to Medical Oncology Department, YGH, from January 2019 to December 2019. All TNBC cases, excluding those with pregnancy and hypersensitivity to bicalutamide. Then, their specimens were tested for androgen receptor status by peroxidase anti-peroxidase method at Pathology Department, YGH.

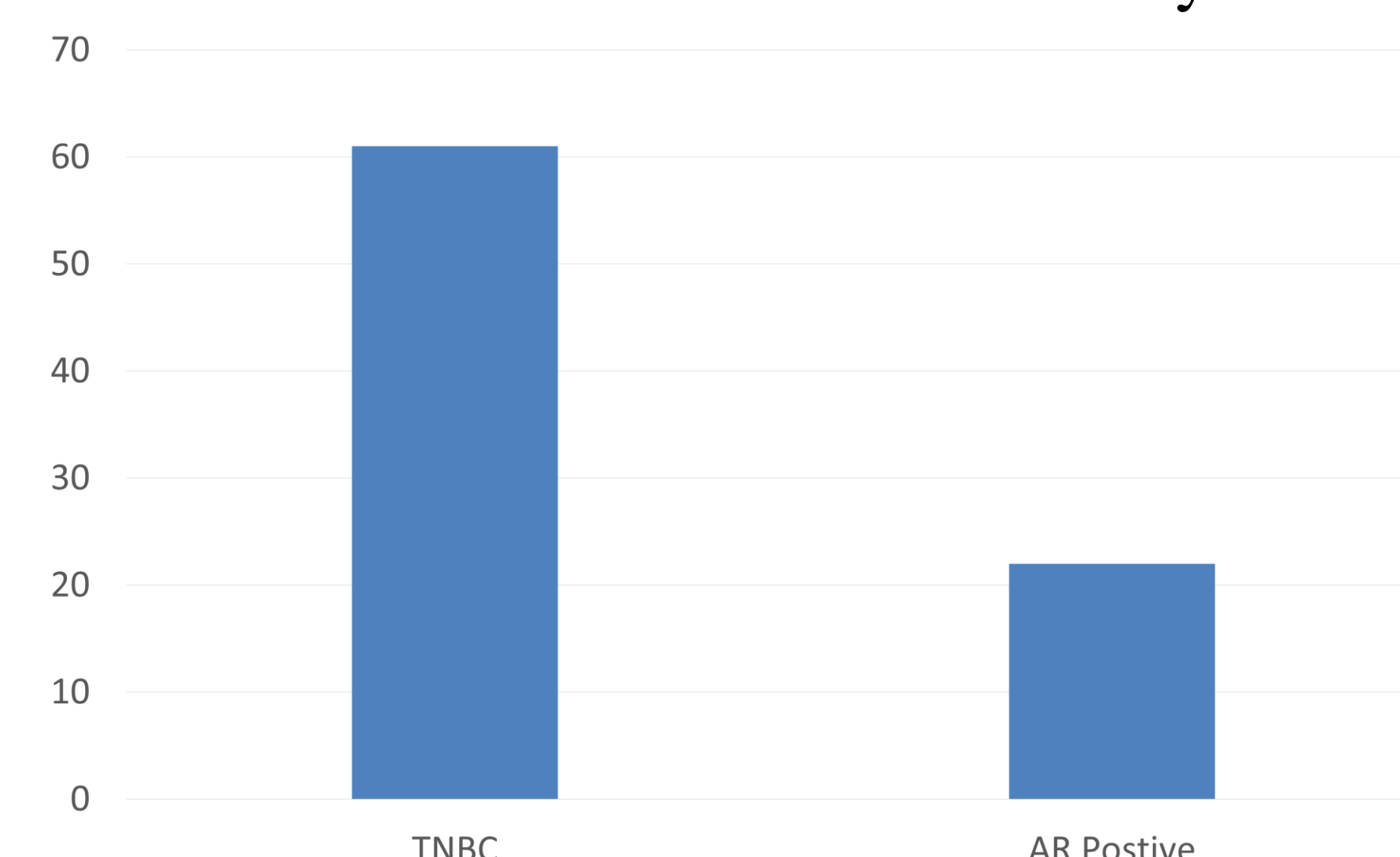
Results

- Gender
Male : 3.3 %
Female : 96.7 %
- Age
youngest - 33 years
oldest - 73 years
mean – 51.23 years
- Histology
Invasive Ductal Carcinoma-56,
Invasive Lobular Carcinoma-2,
Other – 3
- Staging
36.1% of patients were stage I & II, 42.6% of patients were stage III and 1.3% of patients were stage IV & recurrence.
- : There were total of 808 breast cancer patients attending to Medical Oncology Department during study period. Among 515 patients whose specimens were available to test for Immunohistochemistry (IHC), 88 patients were found to have TNBC subtype. Among them, 61 TNBC cases were eligible to take part in this study and 22 patients (36.1%) were androgen receptor positive and 39 patients (63.9%) were androgen receptor negative.

Contribution of Gender



Ratio of TNBC and AR Positivity



Co-relation between AR Status & Stage

Histology		AR		Total
		AR positive	AR negative	
Stage I and II	Count	7	15	22
	% within staging	31.80%	68.20%	100.00%
Stage III	Count	10	16	26
	% within staging	38.50%	61.50%	100.00%
Stage IV and Recurrence	Count	5	8	13
	% within staging	38.50%	61.50%	100.00%
Total	Count	22	39	61
	% within staging	36.10%	63.90%	100.00%

Co-relation between AR Status & Histology

Histology		AR		Total
		AR positive	AR negative	
IDC	Count	20	36	56
	% within histology	35.7%	64.3%	100.0%
ILC	Count	1	1	2
	% within histology	50.0%	50.0%	100.0%
Other	Count	1	2	3
	% within histology	33.3%	66.7%	100.00%
Total	Count	22	39	61
	% within histology	36.1%	63.9%	100.0%

Conclusion

- Although the risk of breast cancer being increased with age, many younger patients are included in this study, reflecting that the trend is changing. As most patients present at late stage, it points out that our population have limited knowledge about breast cancer. Much more health education, screening procedure and interventions for breast cancer awareness are needed to improve the knowledge, attitude and practice of our population. This study finds out that androgen receptor negativity (64%) is much more than that of positivity (36%), younger patients are included in androgen receptor positive subgroup and not much significant association is seen among androgen receptor status and histology and stage. This is the very first study giving fundamental knowledge regarding androgen receptor status in TNBC in Myanmar.

Acknowledgement

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Disclosure

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