



BACKGROUND

 PNET are rare tumors that often present at an advanced stage.

 Surgical resection is the mainstay of treatment.

 Neoadjuvant Therapy for PNET has not been widely implemented but may be beneficial.

Study Aim:

- Evaluate Response Rate of NAT in patients with advanced PNET

METHODS

- Retrospective review of PNET patients
- treated with NAT
- Single tertiary cancer center
- 1/2009 to 8/2023
- Demographic & clinicopathologic characteristics
- Tumor response rates

SEROLOGIC RADIOLOGIC PATHOLOGIC

≥ 30% reduction of Chromogranin A (CgA)

RESIST v1.1 criteria

Tumor downgrading on surgical pathology after NAT (e.g. G2 -> G1)

≥ 30% reduction in functional hormone level (e.g. insulin in insulinoma)

Primary Endpoint

- Overall Response Rate to NAT

Secondary Endpoints

- Progression Free Survival (PFS)
- Overall Survival (OS)

RESULTS

Cohort Characteristics	N = 34 (%)
Median Age, yrs (IQR)	56 (45-63)
Sex	
Male	15 (44%)
Female	19 (56%)
Race	
White	31 (91%)
Black	2 (6%)
Other	1 (3%)
Ethnicity	
Non-Hispanic	32 (94%)
Hispanic	2 (6%)
Tumor Grade	
Grade 1	8 (23%)
Grade 2	21 (62%)
Grade 3	5 (15%)
Surgical Procedure to address primary tumor	
Distal Pancreatectomy	21 (62%)
Pancreatoduodenectomy	9 (26%)
Total Pancreatectomy	4 (12%)
Median largest primary tumor Size, cm (IQR)	5.0 (3.4-8.0)
Primary Tumor Margin Status	
R0	23 (68%)
R1	11 (32%)
Nodal Metastasis	
N0	11 (32%)
N1	23 (68%)
Distant Metastasis	
M0	9 (26%)
M1	25 (74%)
Liver	20 (59%)
Multiple sites	5 (15%)

Table 1. Demographic and clinicopathologic characteristics of the cohort.

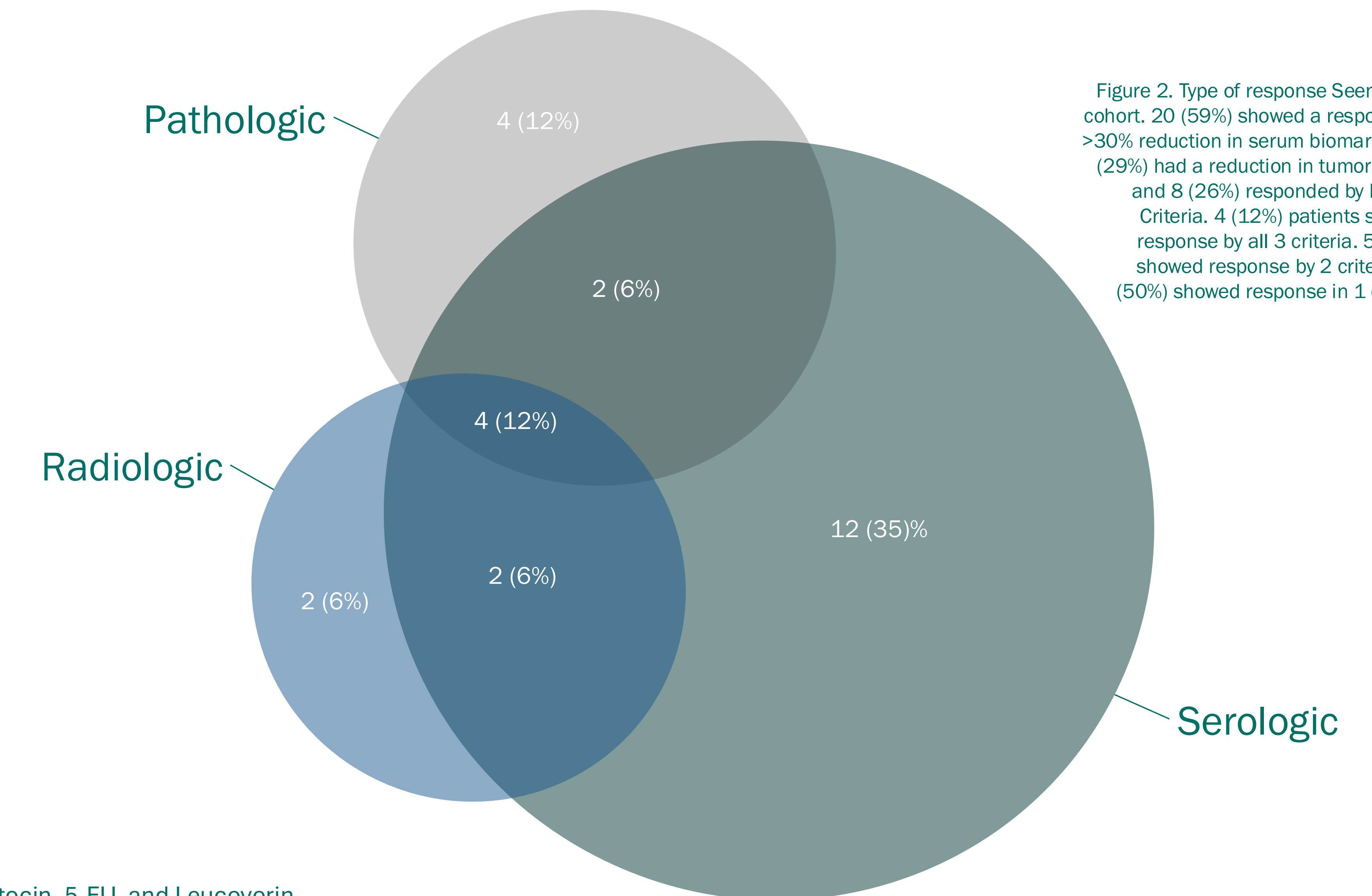


Figure 2. Type of response Seen in the cohort. 20 (59%) showed a response by >30% reduction in serum biomarker, 10 (29%) had a reduction in tumor grade, and 8 (26%) responded by RESIST Criteria. 4 (12%) patients showed response by all 3 criteria. 5 (15%) showed response by 2 criteria. 17 (50%) showed response in 1 criteria only.

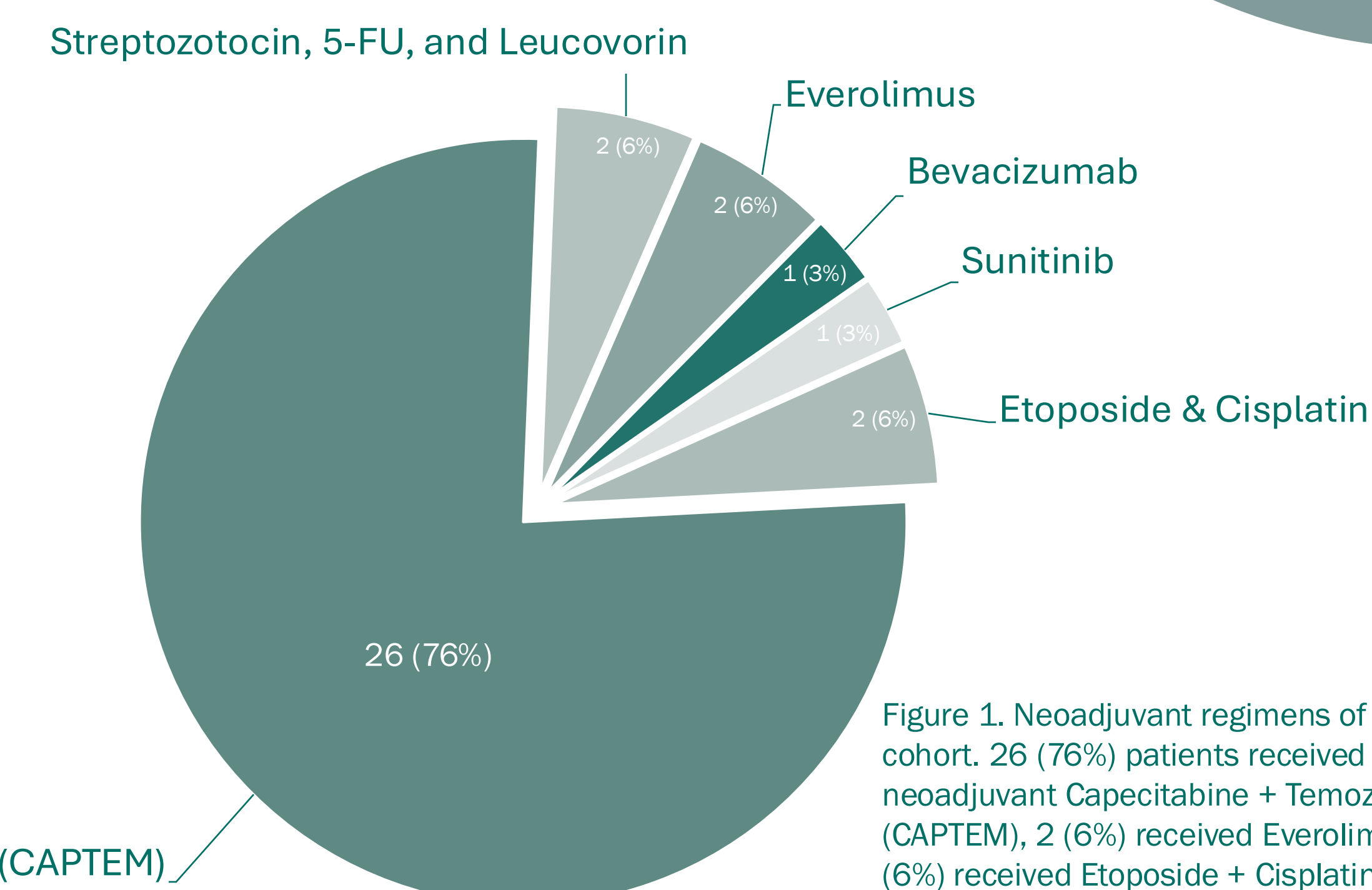


Figure 1. Neoadjuvant regimens of the cohort. 26 (76%) patients received neoadjuvant Capecitabine + Temozolomide (CAPTEM), 2 (6%) received Everolimus, 2 (6%) received Etoposide + Cisplatin, 2 (6%) received Streptozotocin + 5-FU + Leucovorin, 1 (3%) received Sunitinib, and 1 (3%) received Bevacizumab.

	N=34 (%)
Follow Up, months (IQR)	42 (18-99)
Progression Free Survival, months (IQR)	33 (5-43)
Post-Resection Death	3 (9%)
Objective Response Rate (ORR)	26 (76%)
Disease Control Rate (DCR)	30 (88%)

Table 2. Cohort Response & Outcomes

CONCLUSIONS

NAT was associated with an ORR of 76% and DCR of 88% in patients with PNET

15% (4 patients) Exceptional Responders - received CAPTEM.

NAT allowed for surgical resection and provided durable PFS and OS.

Further investigation of the impact of varying clinicopathologic characteristics or NAT duration to achieve response is warranted

ACKNOWLEDGEMENTS

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