

# Endoscopic Treatment In Rectal Neuroendocrine Tumor -NET registry multicenter study

Young Kwan Cho<sup>1</sup>, Seong Hwan Kim<sup>1</sup>, Il Hyun Baek<sup>2</sup>, Seun Ja Park<sup>3</sup>,

1. Department of Internal Medicine, *Eulji University* College of Medicine, 2. Department of Internal Medicine Kyung Hee University School of Medicine 3. Department of Internal Medicine, *Kosin University* College of Medicine

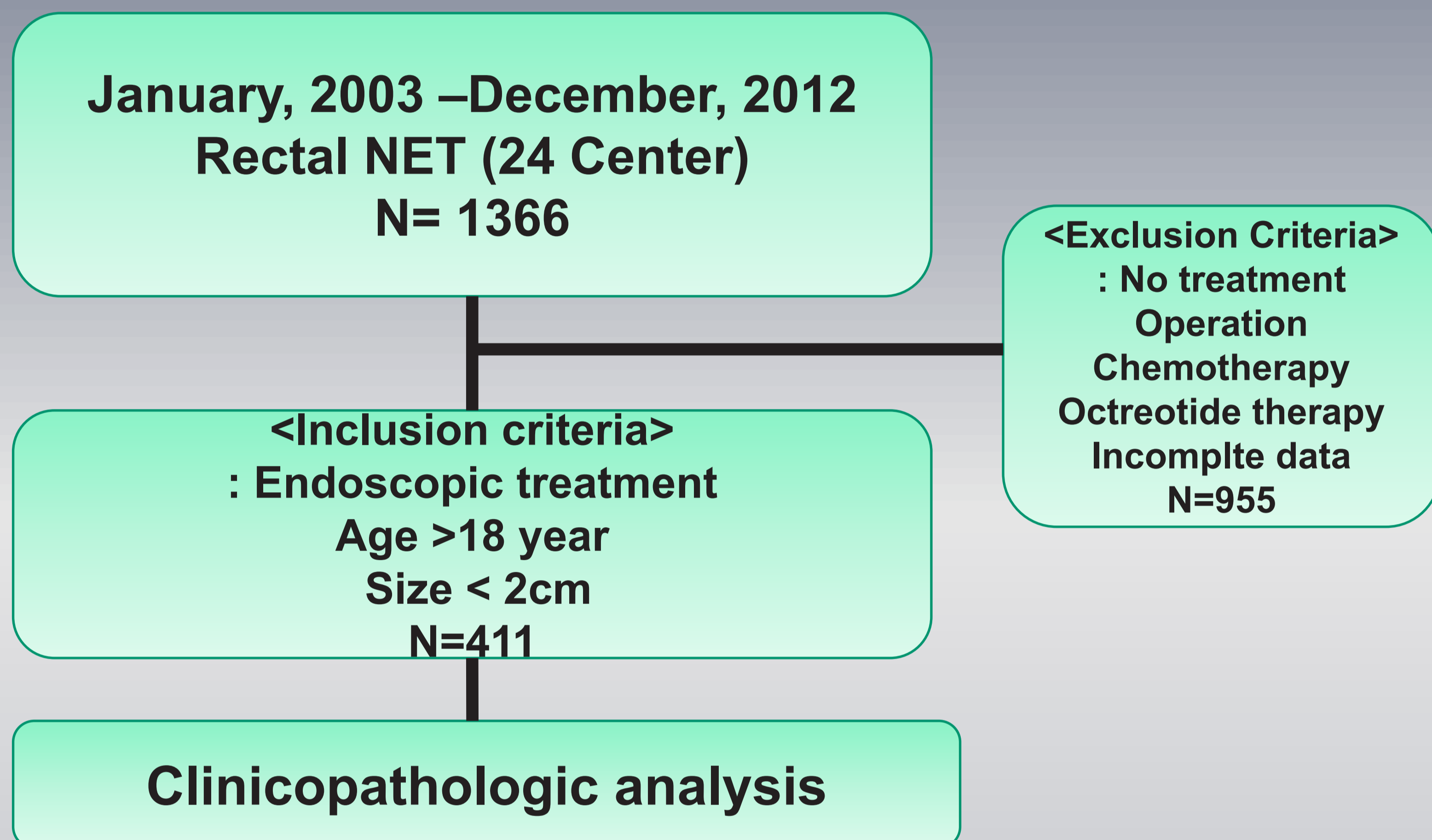
## Introduction

Rectal neuroendocrine tumor(NET) incidence is low. So previous studies of Endoscopic treatment in rectal NET have been small sample size studies.

## Aim & Method

The aim of this study was to investigate effectiveness of endoscopic treatment in rectal NET below 2cm.

### <Method>



We analyzed the clinicopathologic data and factors affecting incomplete resection. We used Ki-square, T-test,

## Result

Table 1. Baseline characteristics of Rectal NET

Characteristics	
Age (years)	49.6 ± 11.3
Sex (M:F)	238(57.9%): 173(42.1%)
Symptom (No:Yes)	352(85.6%): 59(14.4%)
Carcinoid syn (No:Yes)	398(96.8%): 13(3.2%)
Family history of NET (No:Yes)	407(99%): 4(1%)
Underlying disease (No:Yes)	356(86.6%): 55(13.4%)
Multiple lesion (No:Yes)	396(96.4%): 15(3.6%)
Elevated:Flat:Depressed	407(99%): 2(0.5%): 2(0.5%)
Lesion size (cm)	0.58 ± 0.32
WHO Classification(2000)	
Well differentiated tumor:	403(98.1%): 8(1.9%)
Well differentiated carcinoma	
Invasion of Depth	
Mucosa:Submucosa:Proper muscle	117(28.5%): 288(70.1%): 6(1.5%)
EMR:ESD	300(73%): 117(27%)
Complete resection:	344(73%): 117(27%)
Incomplete resection	
Lymphovascular invasion (No:Yes)	407(99%): 4(1%)
Additional treatment after Incomplete resection	5(1.5%)
Recurrence	8(1.9%)

Table 2. Baseline characteristics between Complete resection group and Incomplete resection group

	Complete resection	Incomplete resection	p-value
Age (year)	49.8 ± 11.2	48.5 ± 11.6	0.410
Gender (male)	200(58.1%)	38(56.7%)	0.829
Symptom	48(14%)	11(16.4%)	0.599
Carcinoid symptom	9(2.6%)	4(6%)	0.151
Underlying disease	48(14%)	7(10.4%)	0.441
Family history of NET	2(0.6%)	2(3.0%)	0.067
ECOG			0.571
0	325(94.5%)	66(98.5%)	
1	17(4.9%)	1(1.5%)	
2	1(0.3%)	0(0%)	
5	1(0.3%)	0(0%)	
Multiple lesion	10(2.9%)	5(7.5%)	0.069
Morphology			0.358
Elevated	341(99.1%)	66(98.5%)	
Flat	1(0.3%)	1(1.5%)	
Depressed	2(0.6%)	0(0%)	
Lesion size (cm)	0.57 ± 0.33	0.62 ± 0.26	0.252

Table 3. Binary logistic regression results for Predicting Incomplete resection

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)	
							Lower	Upper
Pathology(WHO2000)								
Neuroendocrine tumor	-1.156	.743	2.423	1	.120	.315	0.730	1.350
Morphology								
Elevated	19.561	28420.614	1.336	2	.513	312671501	.000	
Flat	21.203	28420.614	.000	1	.999	1615E+0.9	.000	
Lesion size								
0-1	19.526	23025.201	1.057	2	.589	31904456	.000	.
1-2	19.922	23205.201	.000	1	.999	448737126	.000	.
2	-21.203	23205.201	.000	1	.999	.000		
Depth of invasion								
Mucosa	-4.70	1.134	3.176	2	.204	.625	.068	5.772
Submucosa	.120	1.106	.172	1	.679	.128	.129	9.853
Lymphovascular invasion	-22.900	2069.467	.000	1	.999	.000	.000	.
Endoscopic treatment								
ESD	.659	.280	5.529	1	0.019	1.932	1.116	3.346
Recurrence	2.216	.743	8.886	1	0.003	9.167	2.136	39.342

Table 4. Multinomial logistic regression results for Predicting Incomplete resection

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)	
							Lower	Upper
Endoscopic treatment								
ESD	.646	.285	5.145	1	0.023	1.908	1.092	3.335
Recurrence	2.189	.751	8.488	1	0.004	8.925	2.047	38.912
Constant	-2.553	.411	38.543	1	.000	0.78		

## Conclusion

We suggest endoscopic treatment was effective in rectal neuroendocrine tumor below 2cm size. But further prospective study including complication result will be need.

