

Abstract 8055#: Operability changes in NSCLC patients after neoadjuvant chemotherapy and anti-PD-1/PD-L1

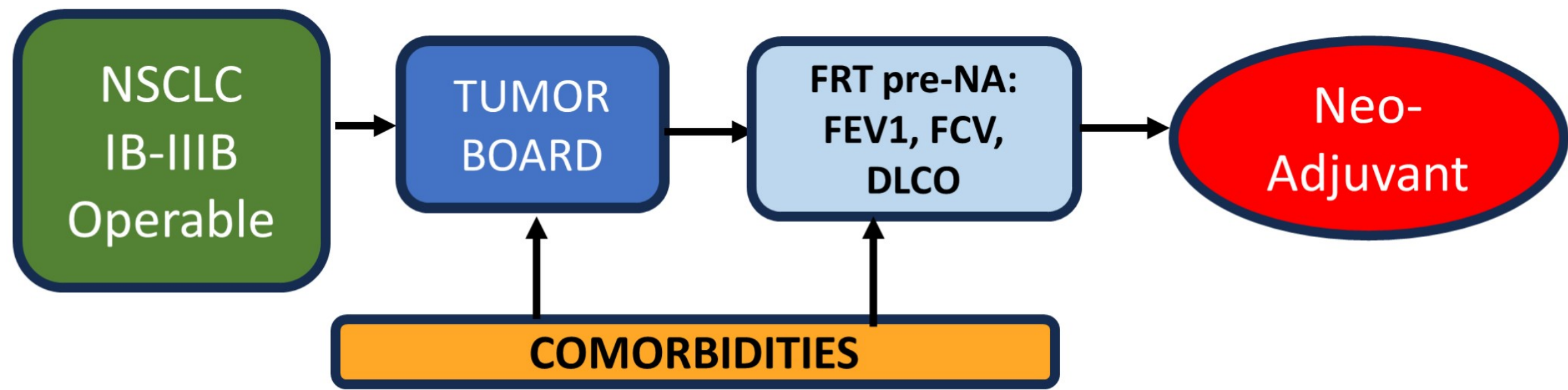
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Background:

- **Neoadjuvant (NA)** treatment for non-small cell lung cancer (NSCLC) has evolved with the emergence of chemotherapy (CT) and immunotherapy (IO) combinations
- However, limited data exist on the impact of these treatments on respiratory function

Methods:

- We conducted a **multicenter study** of NSCLC pts who underwent NA (CT or CT-IO) and pre- and post-NA respiratory tests from Jan 2021 to Dec 2023.
- Clinical, pathological and surgical variables were also collected (*Figure 1*).
- DLCO (Diffusing Capacity for Carbon Monoxide), FEV1 (Forced Espiratory Volumein first second) and FVC (Forced Vital Capacity) pre- and post-NA in CT/CT-IO subgroups were compared.
- A regression univariate analysis with variables influencing DLCO, FEV1 and FVC variations was also performed



ffigure 1. Scheme of patients flow and iinformation collected from clinical records (FRT: Functional Respiratory Test)

Results:

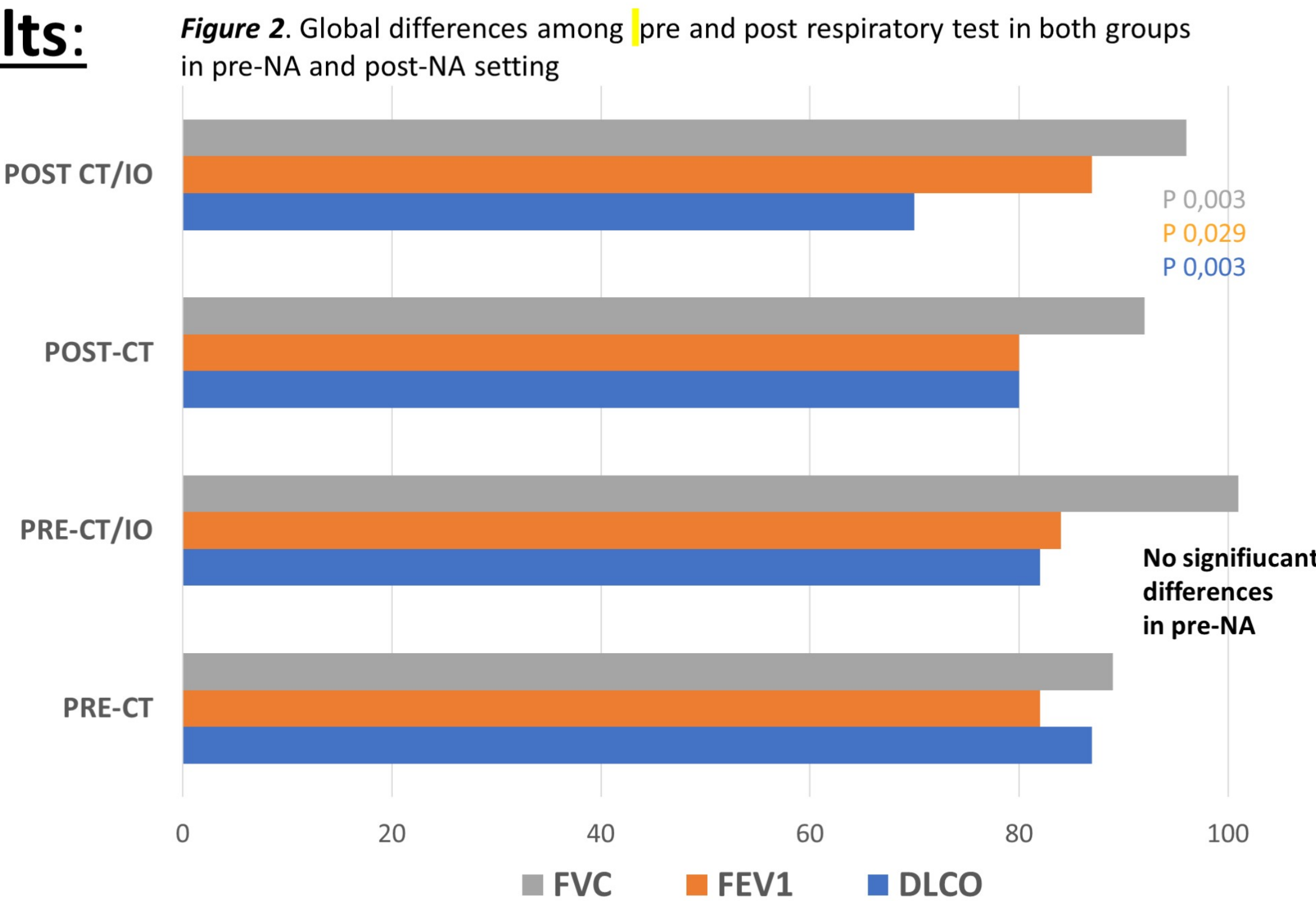
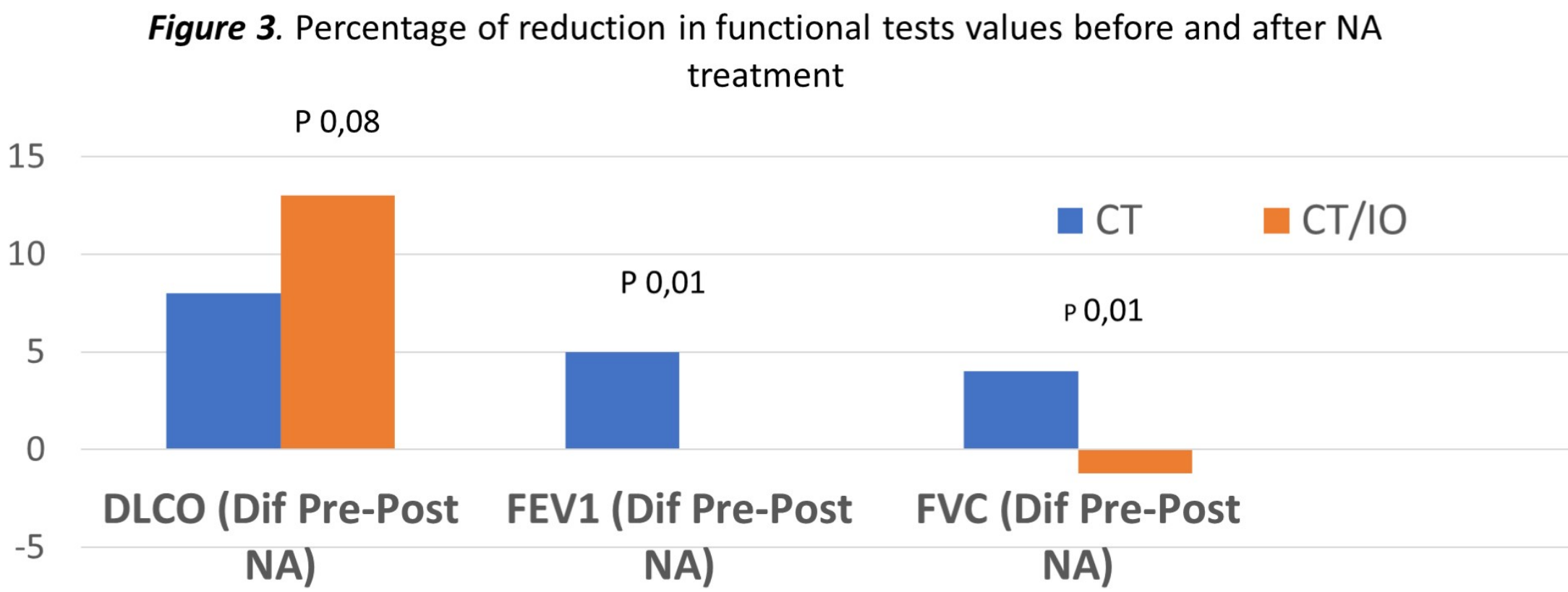
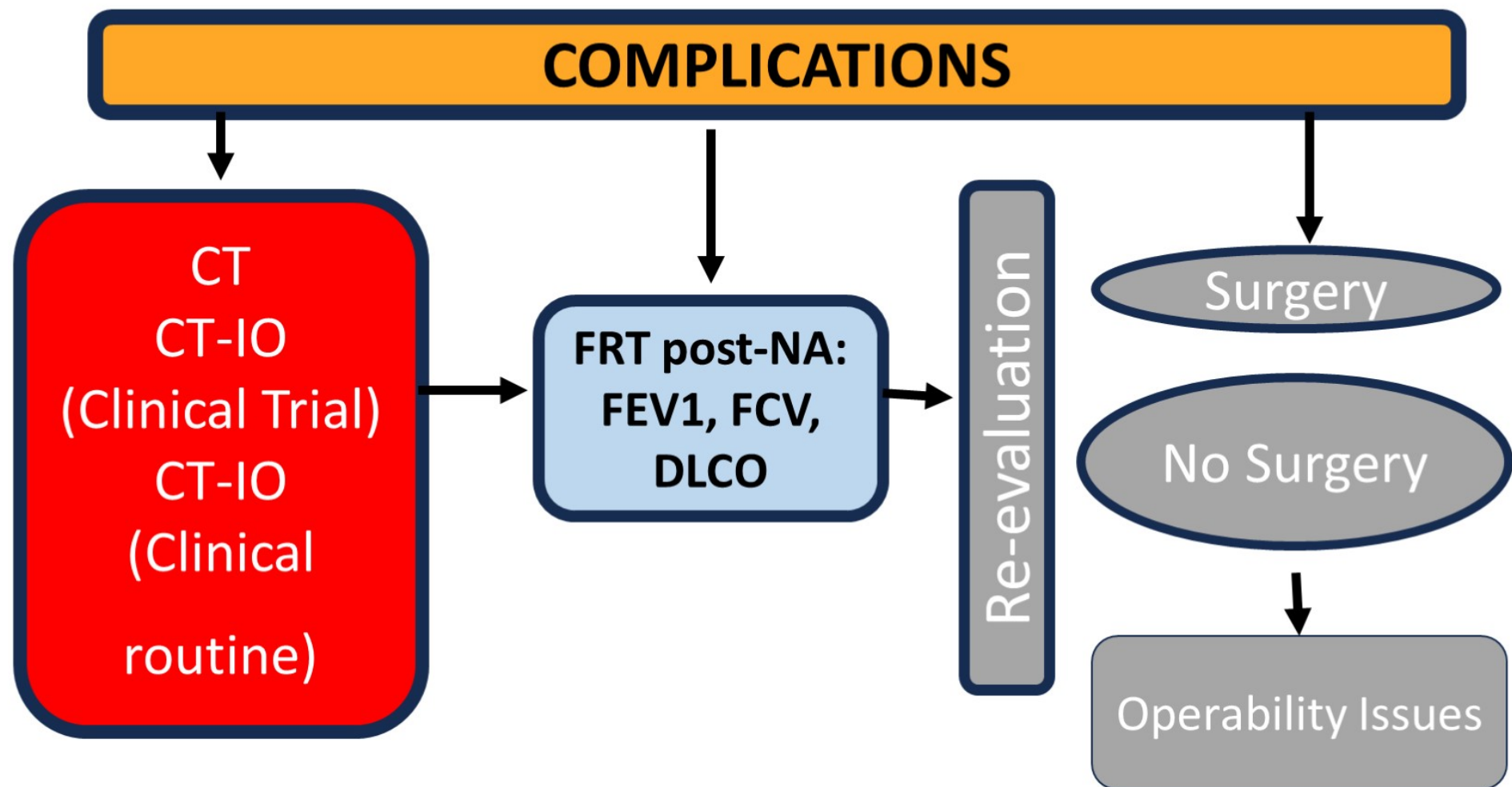


Table 1.. Baseline patients characteristics

Variable	N 159 (%)
Age (median)	70
Gender	
Men	107 (67,3)
Women	52 (32,7)
ECOG at diagnosis	
0	98 (61,6)
1	59 (37,1)
2	2 (1,2)
Comorbidities	
CPDO	43 (27)
Cerebrovascular	10 (6,2)
Cardiovascular	17 (10,6)
Renal	6 (3,7)
Liver	7 (4,4)
Neuromuscular	2 (1,2)
Autoimmune	12 (7,5)
Smoking status	
Never	11 (6,9)
Former	86 (54)
Current	62 (38,9)
TNM at diagnosis (8th IASLC classification)	
IB	1 (0,6)
IIA	33 (20,6)
IIB	113 (71)
IIIA	11 (6,9)
IIIB	11 (6,9)
Pathology	
Squamous	80 (50,3)
Adenocarcinoma	70 (44,5)
NOS	9 (5,2)
PDL1 expression	
<1	23 (38)
1-49	19 (31)
>50	19 (30)
NGS	
K-RAS	11 (44)
EGFR	7 (28)
ROS-1	2 (8)
MET	1 (4)
HER2	1 (4)
BRAF	1 (4)
OTHERS (TP53)	2 (8)

Table 2.. Comparative analysis of surgical events between both groups

Variable	CT N 39 (%)	CT-IO N 117 (%)	P
Surgery			
No	6 (15,4)	12 (10,4)	0,39
Yes	33 (84,6)	103 (89,6)	
Downstaging	20 (51)	72 (62,1)	0,23
Pathological responses			
CPR	6 (18,1)	53 (51,4)	0,006
MPR	4(12,1)	36 (34,9)	
VATS-thoracotomy conversion	6 (17,6)	7 (6,7)	0,08
ICU admission	2 (6,1)	6 (5,8)	1,00
Complications after surgery			
Respiratory	5(15,2)	23 (22,1)	0,38
Cardiovascular	2 (6,1)	5 (4,8)	0,67
Others	1 (3)	6 (5,8)	1,00
Re-operation within 90 days	1 (3)	5 (4,8)	1,00
Re-admission within 90 days	2 (6,1)	6 (5,8)	1,00
Inoperability rate	3 (7,7)	6 (5,2)	0,69
Exitus			
No	30 (76,9)	108 (92,3)	0,017
Yes	9 (23,1)	9 (7,7)	

Conclusions:

Significant differences in post-NA functional variables were observed between CT-IO and CT subgroups, including lower DLCO and higher FEV1/FVC in the CT-IO group. Prospective validation is essential to confirm these findings.