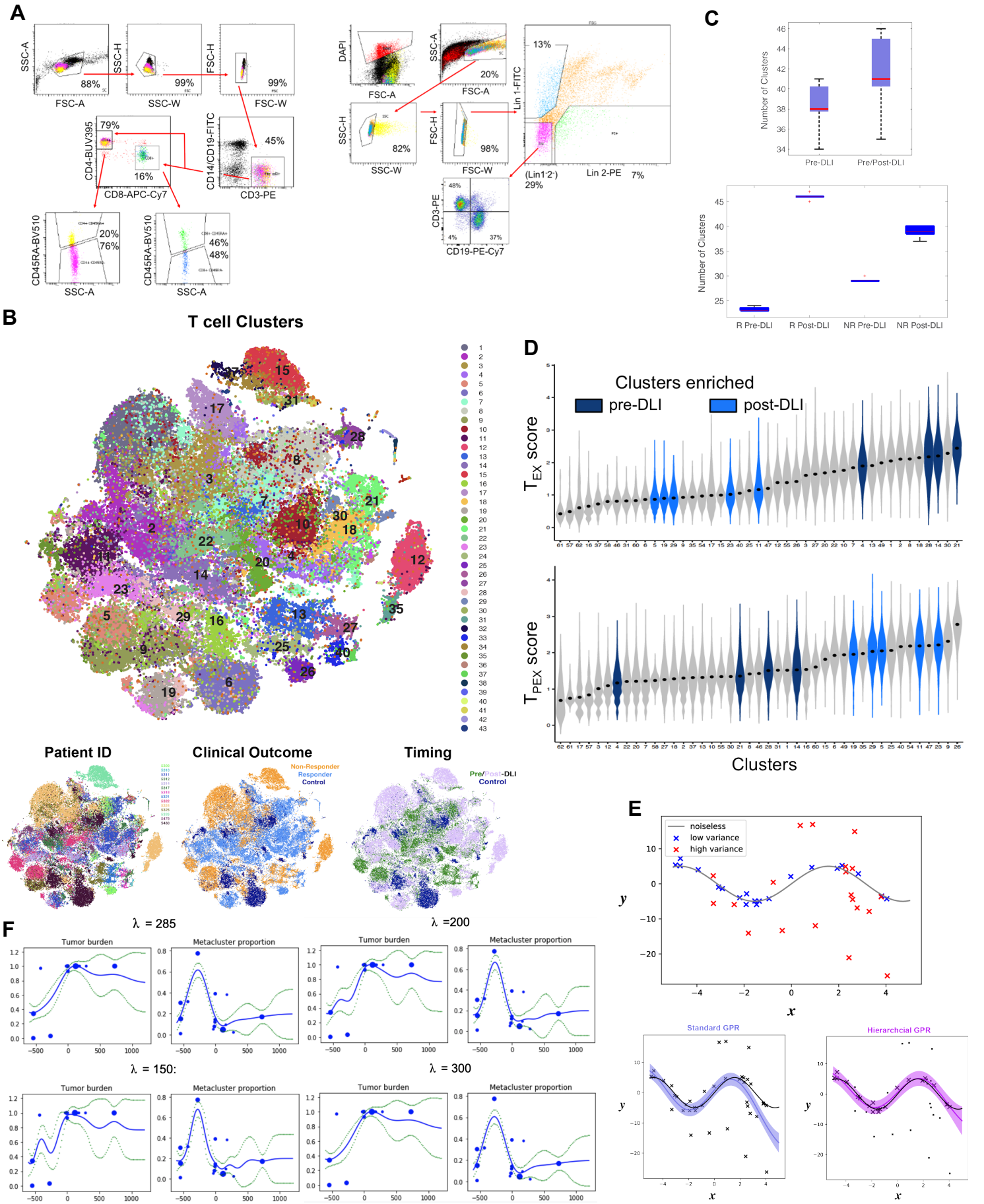
A
SSC-A
FSC-A
88%
SSC-H
SSC-W
99%
FSC-H
FSC-W
99%
CD4-BUV395
CD8-APC-Cy7
79%
16%
CD14/CD19-FITC
CD3-PE
45%
CD45RA-BV510
SSC-A
20%
76%
46%
48%
DAPI
FSC-A
SSC-A
20%
SSC-H
SSC-W
82%
FSC-H
FSC-W
98%
Lin 1-FITC
13%
(Lin1-2-)
29%
Lin 2-PE
7%
CD3-PE
CD19-PE-Cy7
48%
4%
37%
C
Number of Clusters
Pre-DLI
Pre/Post-DLI
R Pre-DLI
R Post-DLI
NR Pre-DLI
NR Post-DLI
B
T cell Clusters
Patient ID
Clinical Outcome
Non-Responder
Responder
Control
Timing
Pre/Post-DLI
Control
D
Clusters enriched
pre-DLI
post-DLI
T_{EX} score
T_{PEX} score
Clusters
E
noiseless
low variance
high variance
y
x
Standard GPR
Hierarchcial GPR
F
λ = 285
λ =200
λ = 150:
λ = 300
Tumor burden
Metacluster proportion