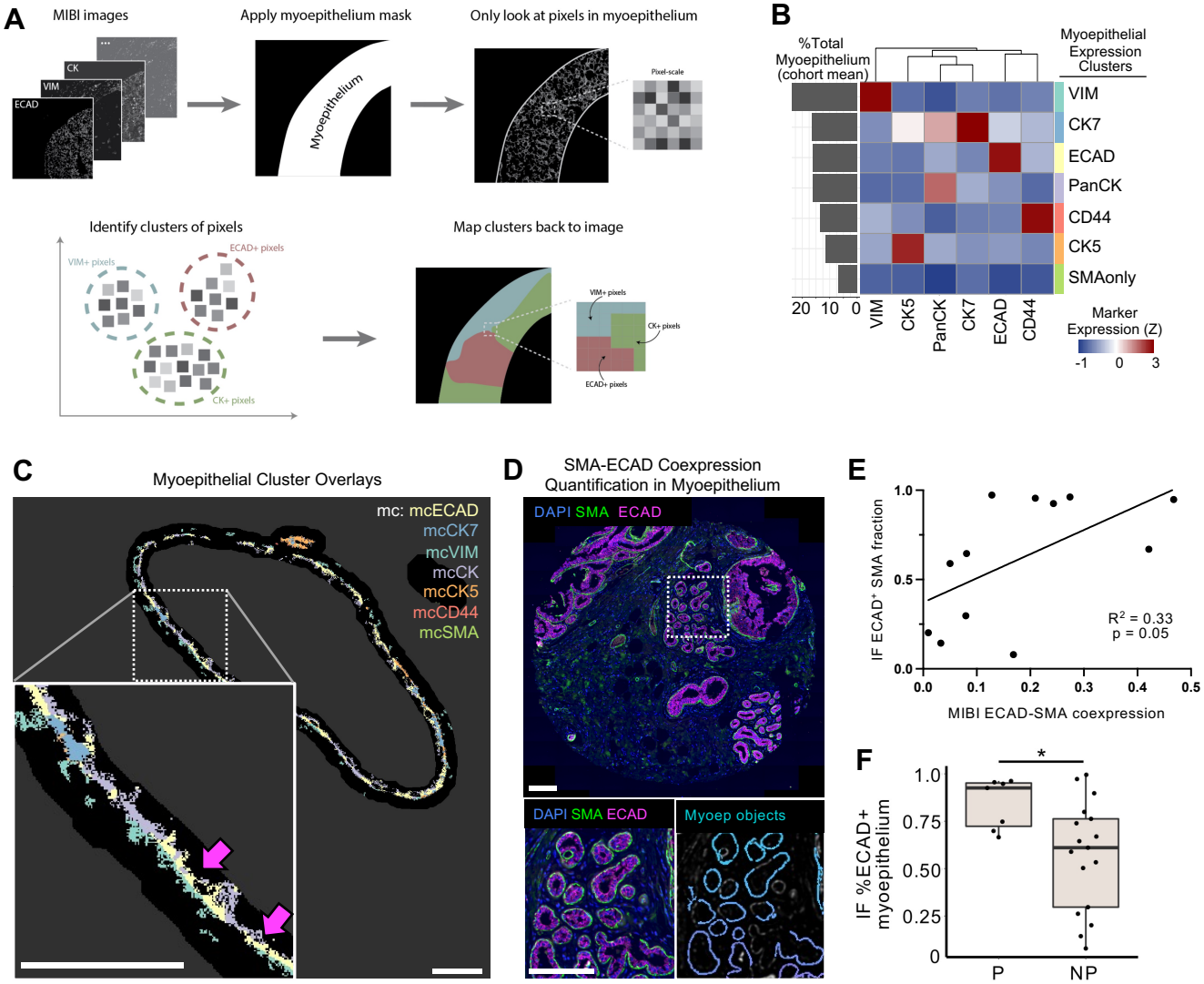
A
MIBI images
CK
VIM
ECAD
Apply myoepithelium mask
Myoepithelium
Only look at pixels in myoepithelium
Pixel-scale
Identify clusters of pixels
VIM+ pixels
ECAD+ pixels
CK+ pixels
Map clusters back to image
VIM+ pixels
CK+ pixels
ECAD+ pixels
B
%Total Myoepithelium (cohort mean)
Myoepithelial Expression Clusters
VIM
CK7
ECAD
PanCK
CD44
CK5
SMAonly
20 10 0
VIM
CK5
PanCK
CK7
ECAD
CD44
Marker Expression (Z)
-1 0 3
C
Myoepithelial Cluster Overlays
mc: mcECAD
mcCK7
mcVIM
mcCK
mcCK5
mcCD44
mcSMA
D
SMA-ECAD Coexpression Quantification in Myoepithelium
DAPI SMA ECAD
DAPI SMA ECAD
Myoep objects
E
IF ECAD+ SMA fraction
1.0
0.5
0.0
0.0 0.1 0.2 0.3 0.4 0.5
MIBI ECAD-SMA coexpression
R2 = 0.33
p = 0.05
F
IF %ECAD+ myoepithelium
1.0
0.75
0.50
0.25
0
*
P
NP