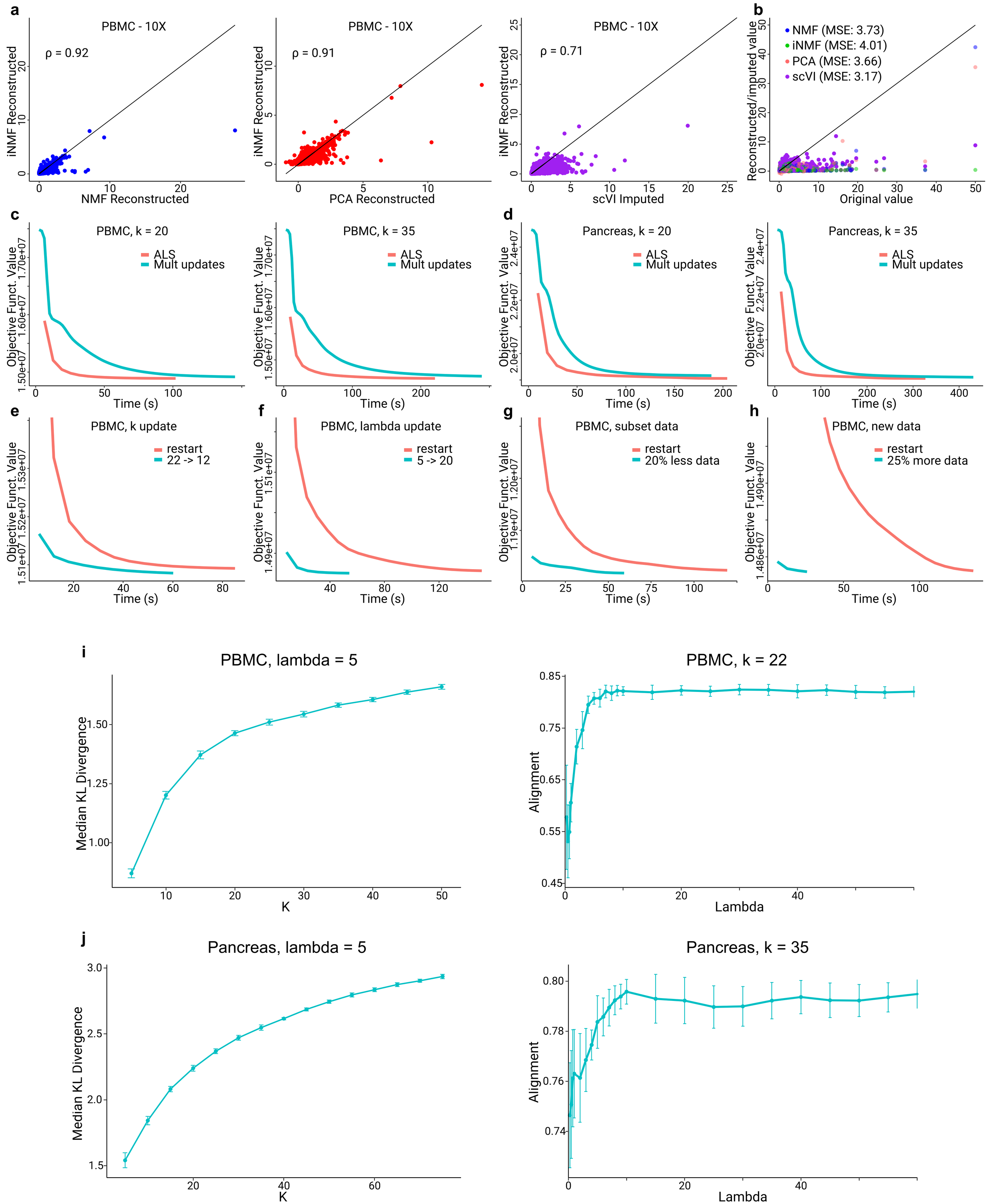
a
PBMC - 10X
ρ = 0.92
iNMF Reconstructed
NMF Reconstructed
PBMC - 10X
ρ = 0.91
iNMF Reconstructed
PCA Reconstructed
PBMC - 10X
ρ = 0.71
iNMF Reconstructed
scVI Imputed
b
NMF (MSE: 3.73)
iNMF (MSE: 4.01)
PCA (MSE: 3.66)
scVI (MSE: 3.17)
Reconstructed/imputed value
Original value
c
PBMC, k = 20
ALS
Mult updates
Objective Funct. Value
Time (s)
PBMC, k = 35
ALS
Mult updates
d
Pancreas, k = 20
ALS
Mult updates
Pancreas, k = 35
ALS
Mult updates
e
PBMC, k update
restart
22 -> 12
f
PBMC, lambda update
restart
5 -> 20
g
PBMC, subset data
restart
20% less data
h
PBMC, new data
restart
25% more data
i
PBMC, lambda = 5
Median KL Divergence
K
PBMC, k = 22
Alignment
Lambda
j
Pancreas, lambda = 5
Median KL Divergence
K
Pancreas, k = 35
Alignment
Lambda