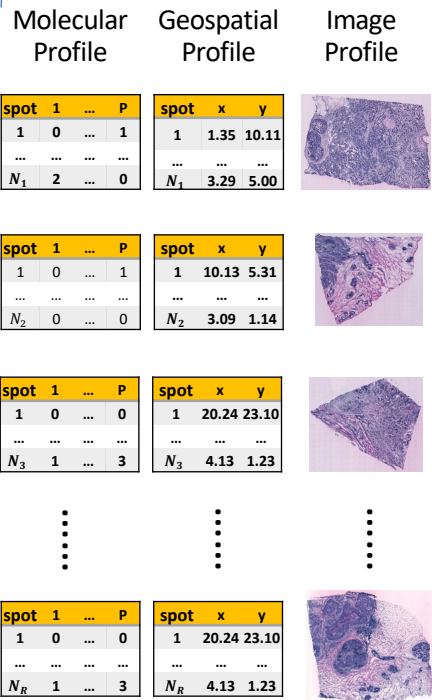
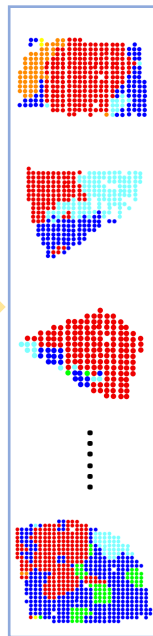


Multi-Sample Spatial Transcriptomics Data



Spatial
Domain
Identification



Spot aggregation

Region	Gene			
	1	2	...	P
1	5	30	...	33
2	127	0	...	45
3	14	3	...	38
...
J	72	8	...	10

Region	Domain Type	Color
1	Invasive cancer	red
2	Connective tissue	blue
3	Immune infiltrate	yellow
...
J	Invasive cancer	red

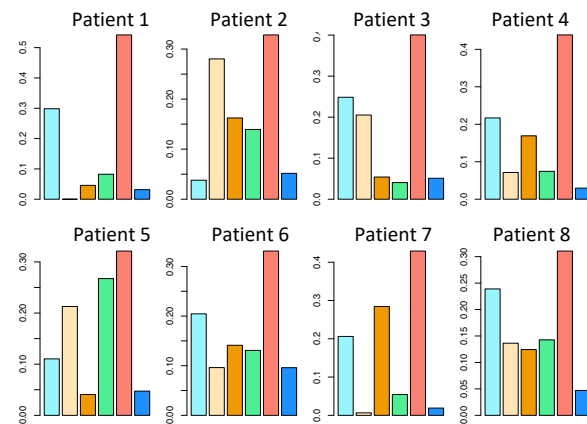
Reference

Bulk RNA-seq

Gene	Patient			
	1	2	...	P
1	10212	890	...	2913
2	53016	1430	...	2120
3	40108	687	...	1632
...
N	25042	342	...	2543

Deconvolution

Spatial Domain Composition



Multi_Sample ST data
Spatial domain
identification

Bulk RNA-seq data
deconvolution on
spatial-domain scale