

Data management



published datasets

data model



database

80m cells

1500 samples

>100 proteins



source code

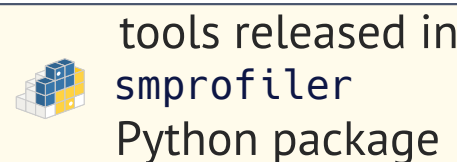
data collection

data curation and ETL

preprocessing images

cell segmentation and marker quantification

efficient/normalized dataset archiving



tools released in
smprofiler
Python package



cloud resources



Infrastructure-as-Code



API framework



client web application



quantitative analysis



cell-level spatial metrics



workload autoscaling



GNN framework



ML framework

threshold determination / gating

identification/classification of cell phenotypes

exploratory data analysis

metrics computation

metric computation in realtime

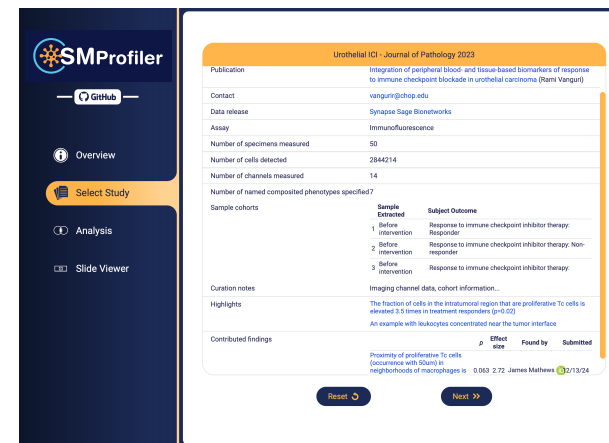
model training

evaluating models/features

Analysis



study overview



feature matrix stats

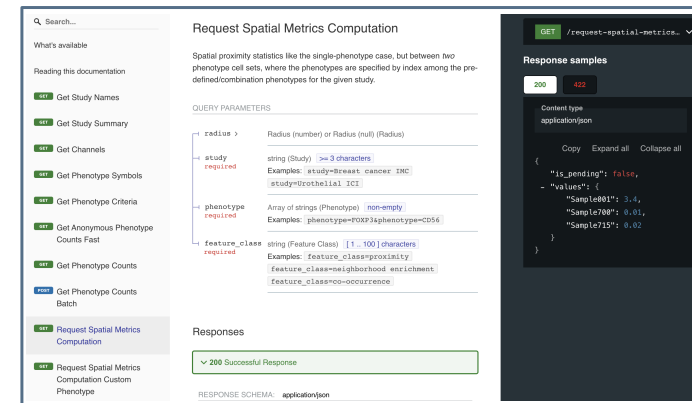
The average value of the proximity score for phenotype(s) CD38+, CD15+ is 1.43 times higher in cohort 3 than in cohort 1. (p=0.015, t-test)

Submit significant result

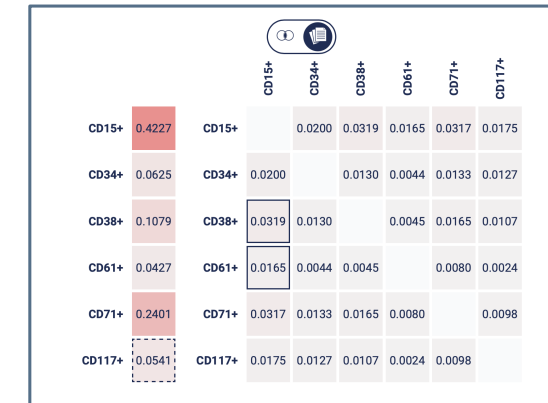
Copy to Clipboard Download CSV

T1 Sample	T1 Cohort	T1 Cells	T1 CD38+, CD15+	T1 cell-to-cell proximity	T1 CD61+, CD15+
59	3	92539	2115	neighborhood enrichment	permutation bootstrapped p-value, for number of occurrences of cells of second phenotype as graph-neighbor of first (computed with Squidpy)
61	3	68153	2545	co-occurrence	821
68	3	105169	1941	cell-to-cell proximity	1660
66	3	43876	2696		821
31	1	48499	2217		1660
34	1	77142	2714		2328
60	3	67540	4488		300
64	3	62816	2094		953
33	1	20121	797		422

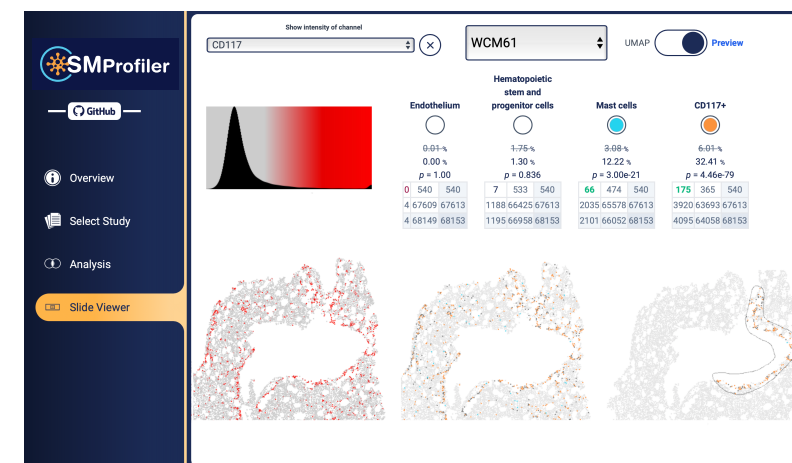
API service



heatmaps



virtual slide viewer



record significant results

ORCID Submit results

Once you submit your results, they will be reviewed by the SPT team.

After your results are approved they will appear on the main page, with attribution.

You will be taken to the ORCID website, where you will be asked to authenticate.

Submit Cancel

Interpretation and results

identify salient results

refine statements

statistical assessment

determine significance for treatment/outcomes

publication

attribution with ORCID researcher profiles