## **Supporting Information S1:**

Title: A Case Study and Methodology for OpenSWATH Parameter Optimization Using the ProCan90 Data Set and 45,810 Computational Analysis Runs

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## Notebooks.zip

- analysis\_report.html
  The primary analysis python notebook supporting this work
- analysis\_report\_with\_d\_scores.html
  A replication of the analysis\_report.ipynb notebook, but with all m\_score metrics, plots and rank weighting replaced with d\_scores. NOTE: FDR filtering still uses m\_scores
- data-description.html
  A short notebook which is used to provide an overview of the result files captured from the large scale AWS Batch run
- manual-chrom-validation.html
  Some example chromatograms and peak groups found by each of the three parameter sets.
- ovarian\_analysis.html
  The analysis notebook for the ovarian dataset we used to validate our newly suggested parameter sets
- navarro\_plots\_and\_comments.html
  Comments and plots from our LFQBench run on HYE110 and HYE124 with our newly suggested parameter sets
- comments\_plots/
  Some of the plots captured from LFQBench on HYE110 and HYE124 with our newly suggested parameter sets

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## aws\_scripts.zip

The complete set of python scripts used to run our parallel OpenSWATH instances through AWS Batch