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Contents

Summary	ii
Introduction	1
Human Mesenchymal Stem/Stromal Cells	2
Multiple Myeloma	3
Myeloma-hMSC Interactions	3
Myeloma Bone Disease	3
Dissemination of Myeloma Cells	4
Code-Automation as a Standard in Modern Biosciences	5
How Code Quality Improves Scientific Reproducibility	6
Python as a Programming Language	8
Data Science with Python	12
Aims	14
Chapter 1: Modelling Myeloma Dissemination <i>in vitro</i>	15
Abstract	15
Introduction	15
Methods	15
Results	15
Discussion	26
Chapter 2: Semi-Automating Data Analysis with <code>plotastic</code>	27
Abstract	27
Introduction	27
Statement of Need	29
Example	30
Overview	32
Discussion	34
Summarising Discussion	36
Time Lapse	36
Myeloma	36
Semi-Automated Analysis Improves Agility During Establishing new <i>in vitro</i> Methods	36
References	37
Appendices	42
A Chapter 1 Supplementary	42
A.1 Figures	42
A.2 Tables	60
A.3 Materials & Methods	64
B Documentation of <code>plotastic</code>	61
B.1 Class Diagram	62
B.2 Readme	64
B.3 Example Analysis “qpcr”	77
C Submission Forms & Documents	84

Contents

C.1	Author Contributions	84
C.2	Affidavit	91
C.3	Curriculum Vitae	93

Introduction

To provide a comprehensive background for the following chapters that focus on the interaction of human mesenchymal stromal cells (hMSCs) with multiple myeloma (MM) cells, this

Aims

This project defines these aims:

- Characterize the interaction between myeloma cells and mesenchymal stromal cells
- Aim 2
- Aim 3

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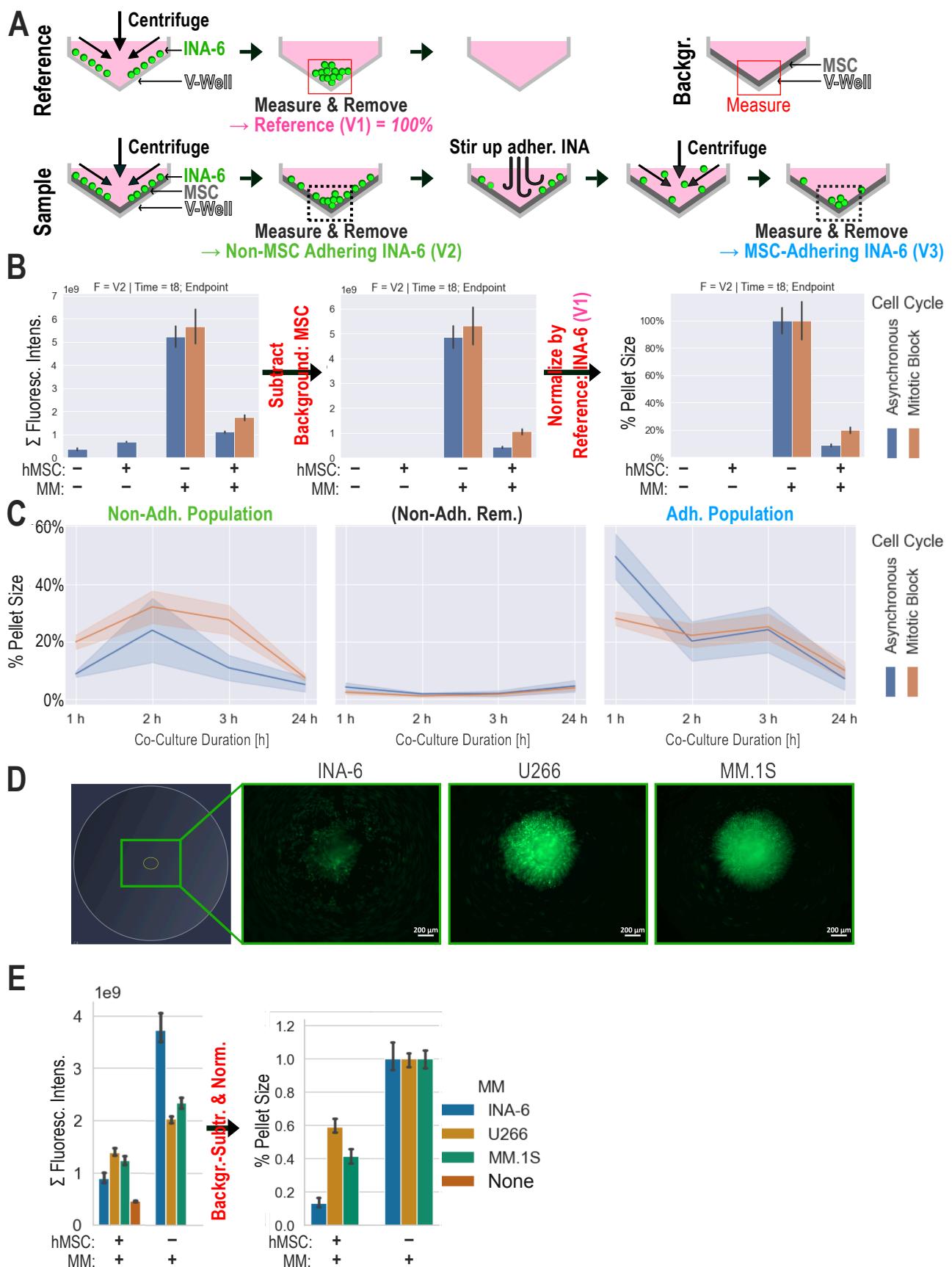
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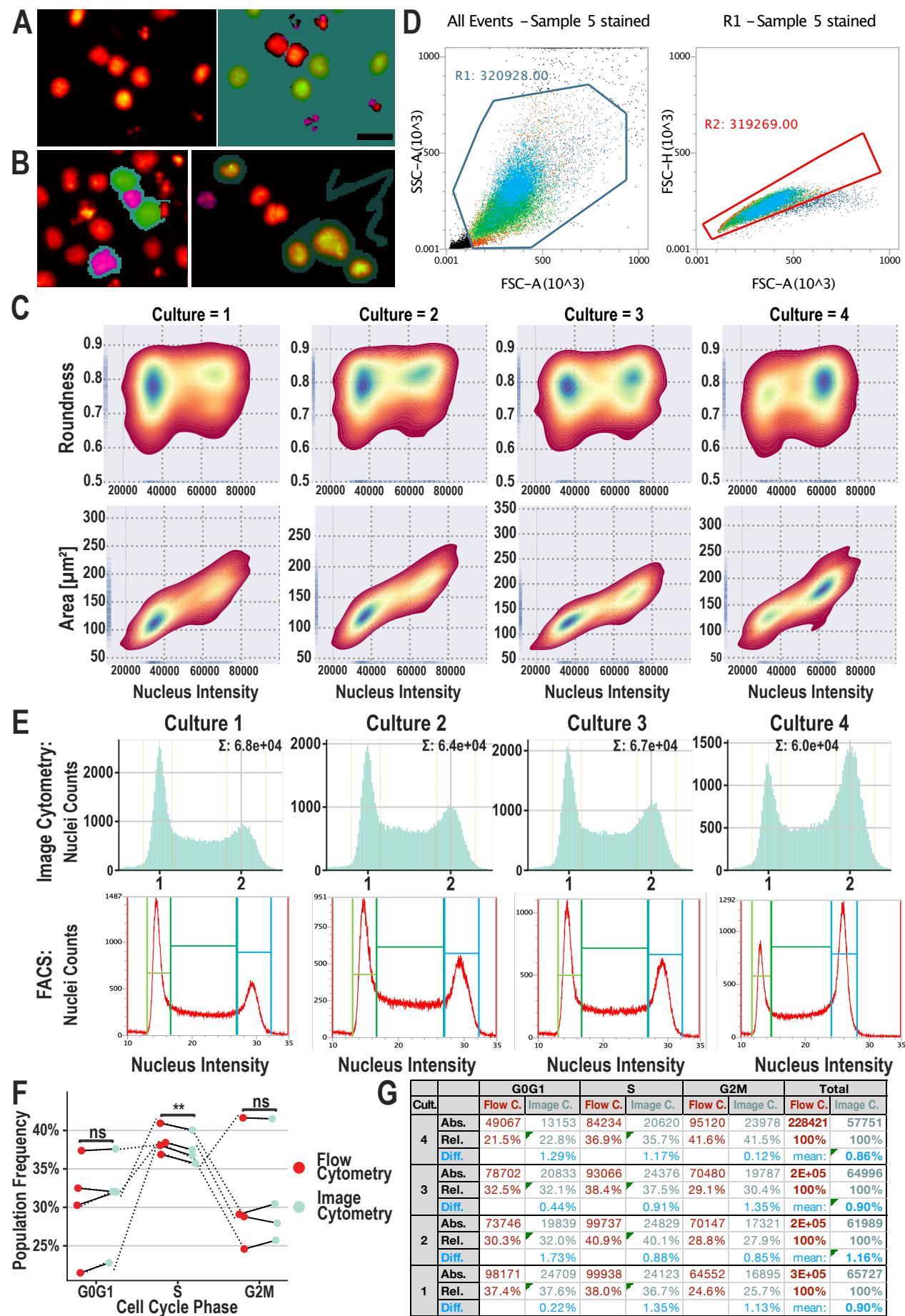
Appendices

A Chapter 1 Supplementary

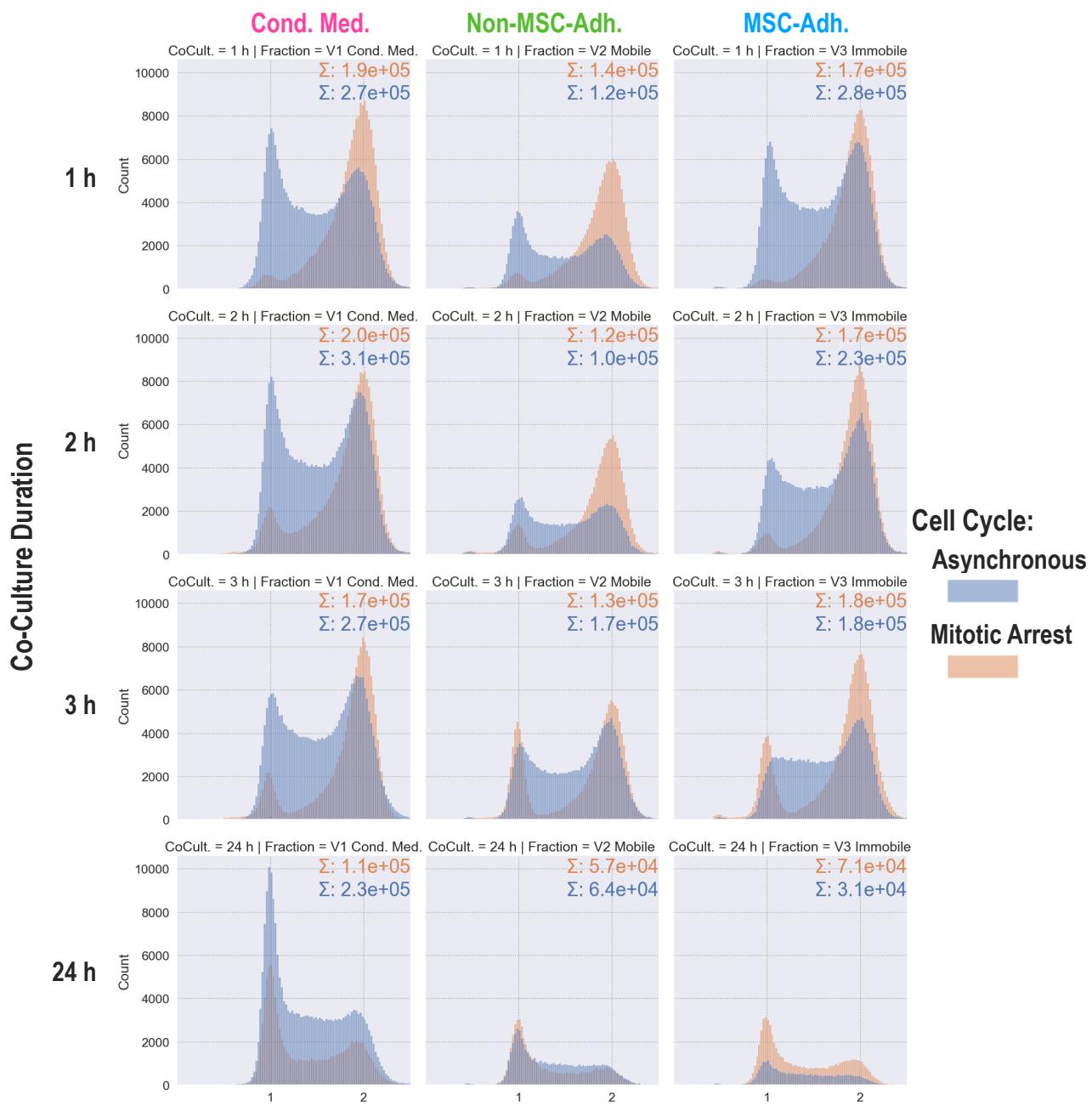
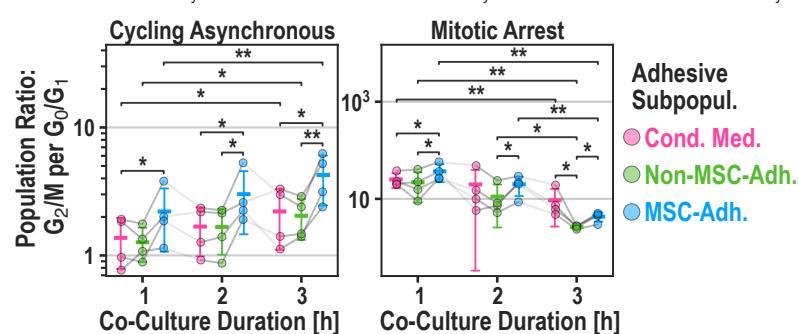
A.1 Figures



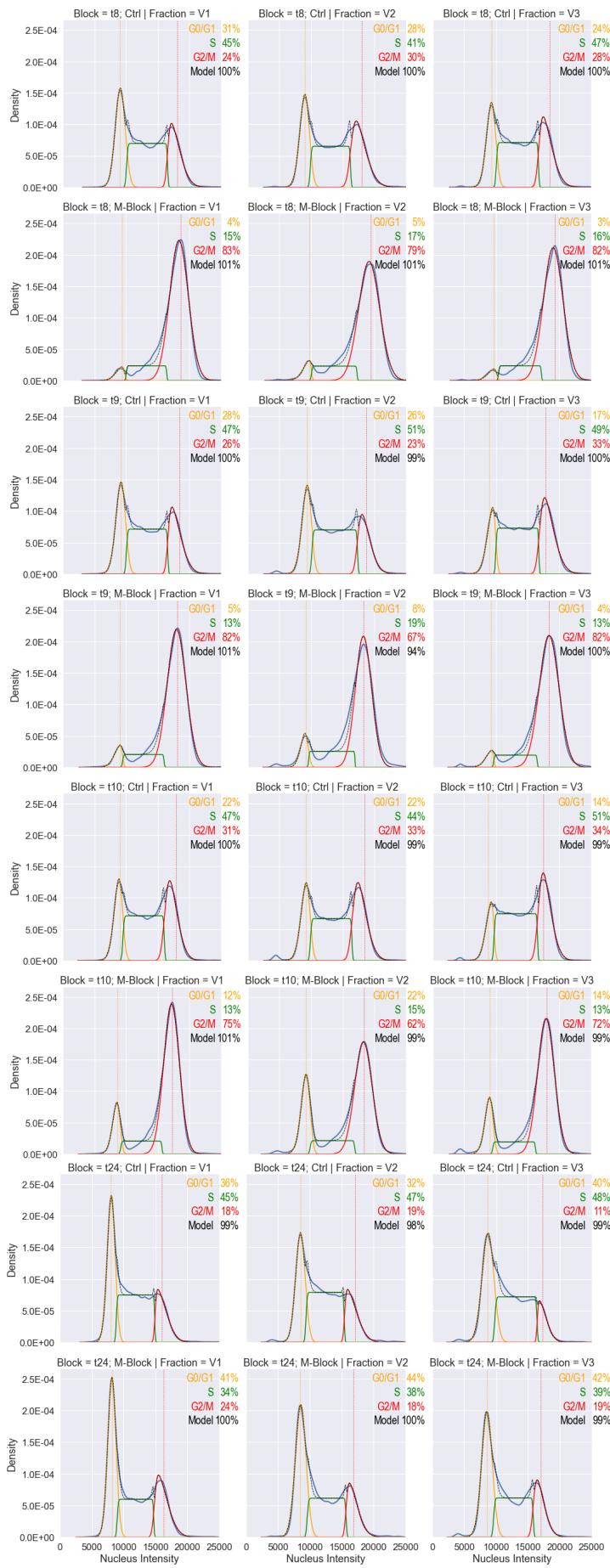
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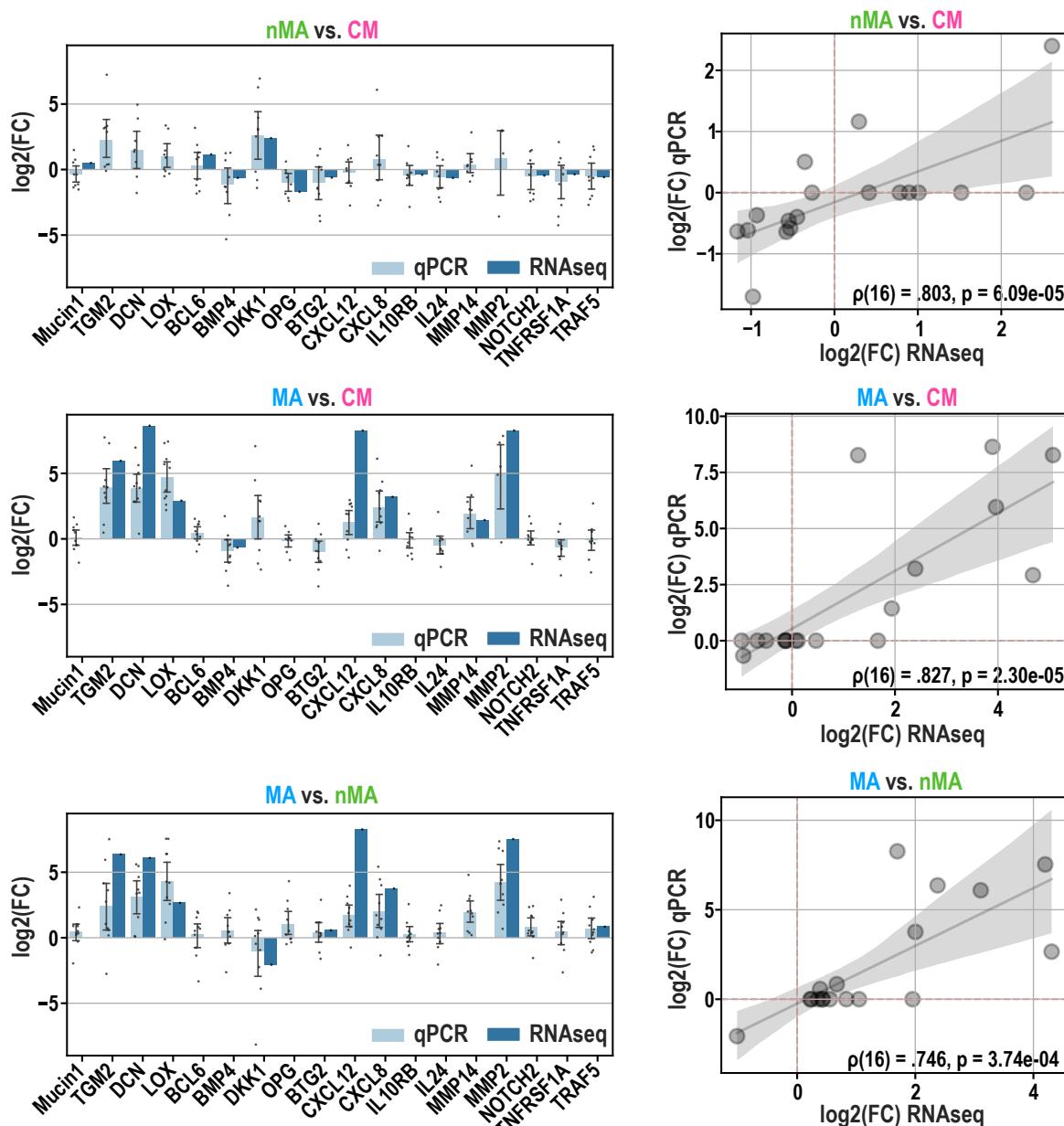
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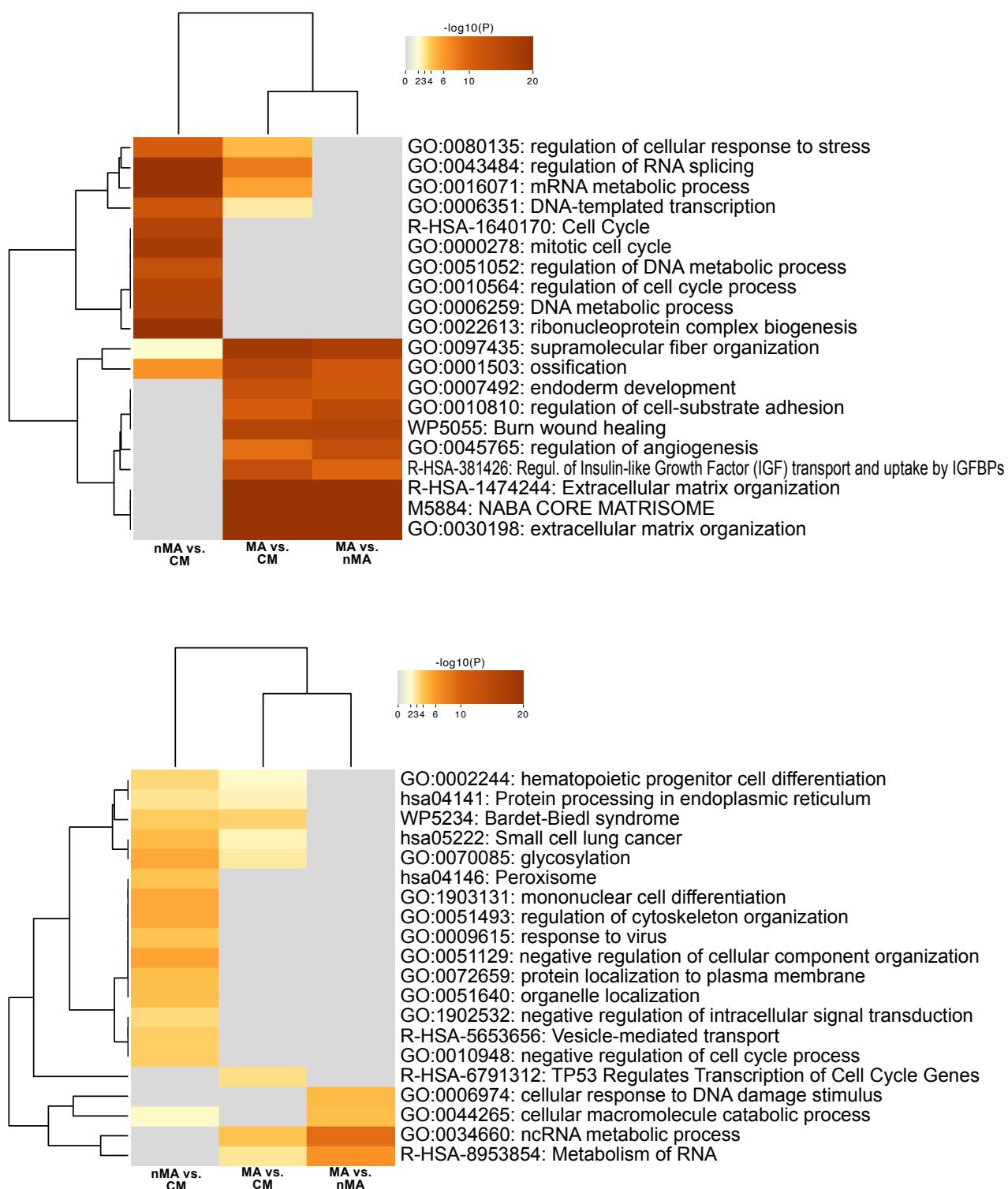
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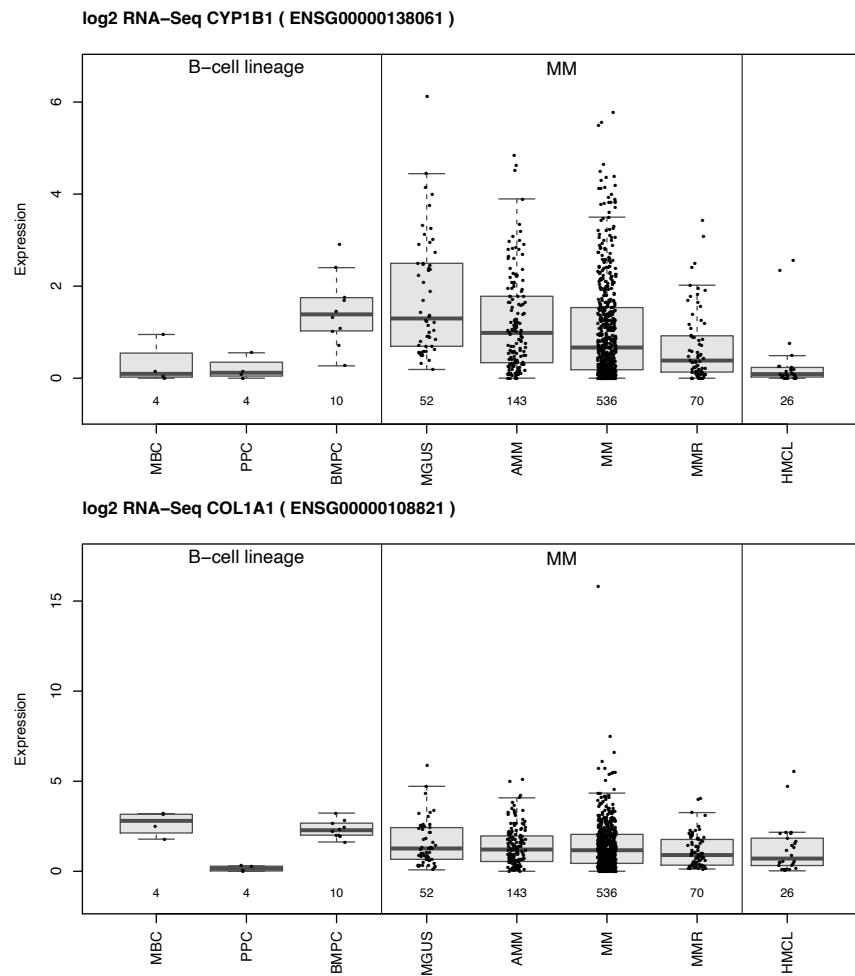
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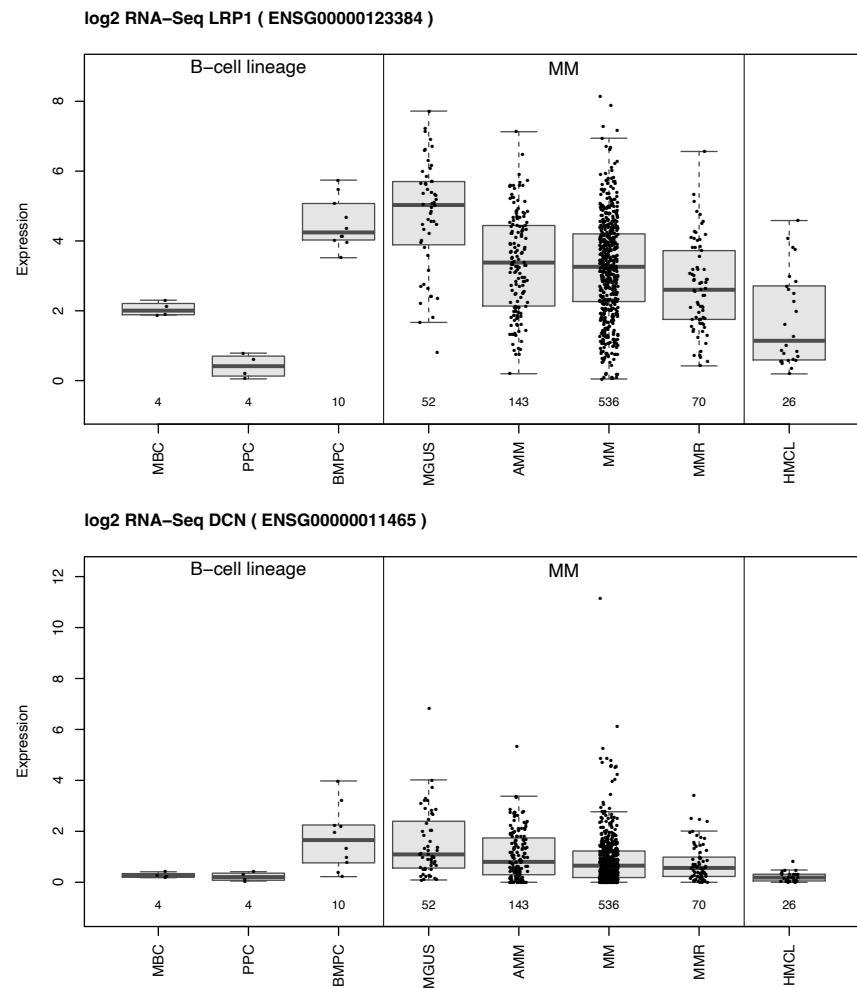
Appendix A Figure 5: Correlation of RNAseq with qPCR Left: Validation of RNAseq results (Fig. 3) with qPCR showing the log₂(foldchange expression) of 18 genes. For qPCR, Datapoints each represent one biological replicate ($n=10$), which is the mean of technical replicates ($n=3$). Bar height represents mean of biological replicates, error bars show standard deviation of biological replicates. Right: Correlation between qPCR and RNAseq in terms of log₂(mean foldchange expression per gene). Each dot represents one gene shown in the barplot to the left. Genes measured with qPCR that showed no differential expression in RNAseq were set to have a log₂(FC) = 0. Shaded area shows the confidence interval of linear regression. Correlation coefficient () was calculated using Spearman's rank. N = 18 genes. FC = fold change expression.



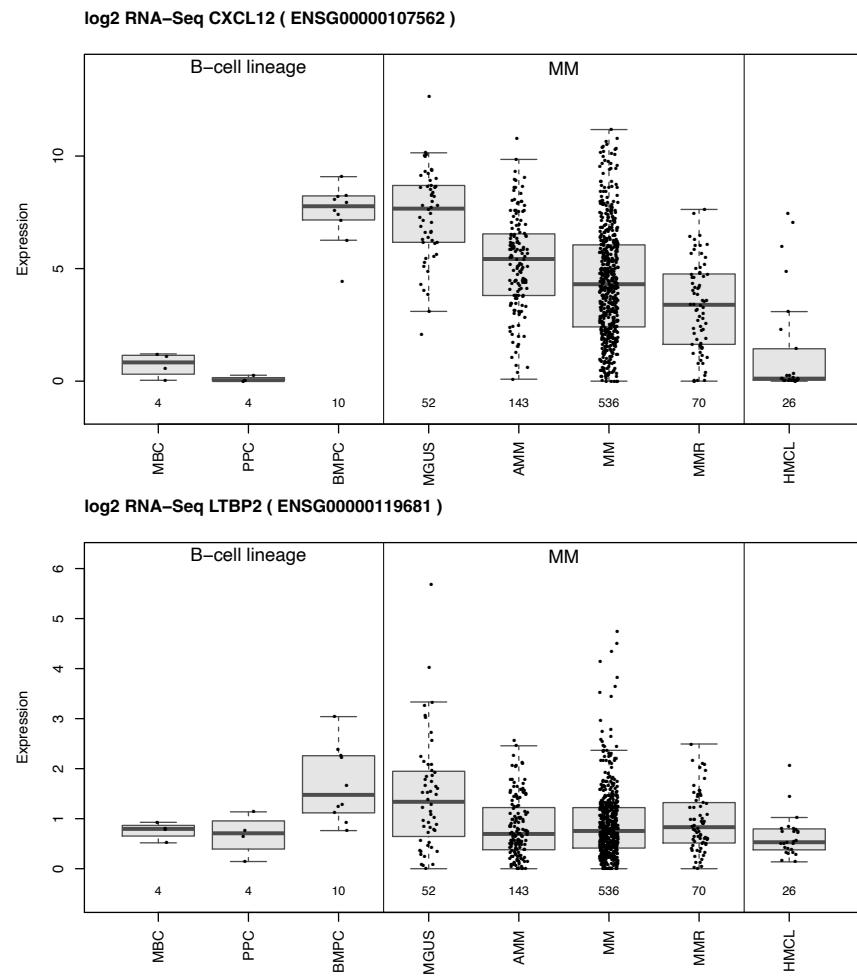
Appendix A Figure 6: Functional enrichment analysis by Metascape using genes that are differentially expressed between MSC-interacting subpopulations. Top: Upregulated genes. Bottom: Downregulated genes.



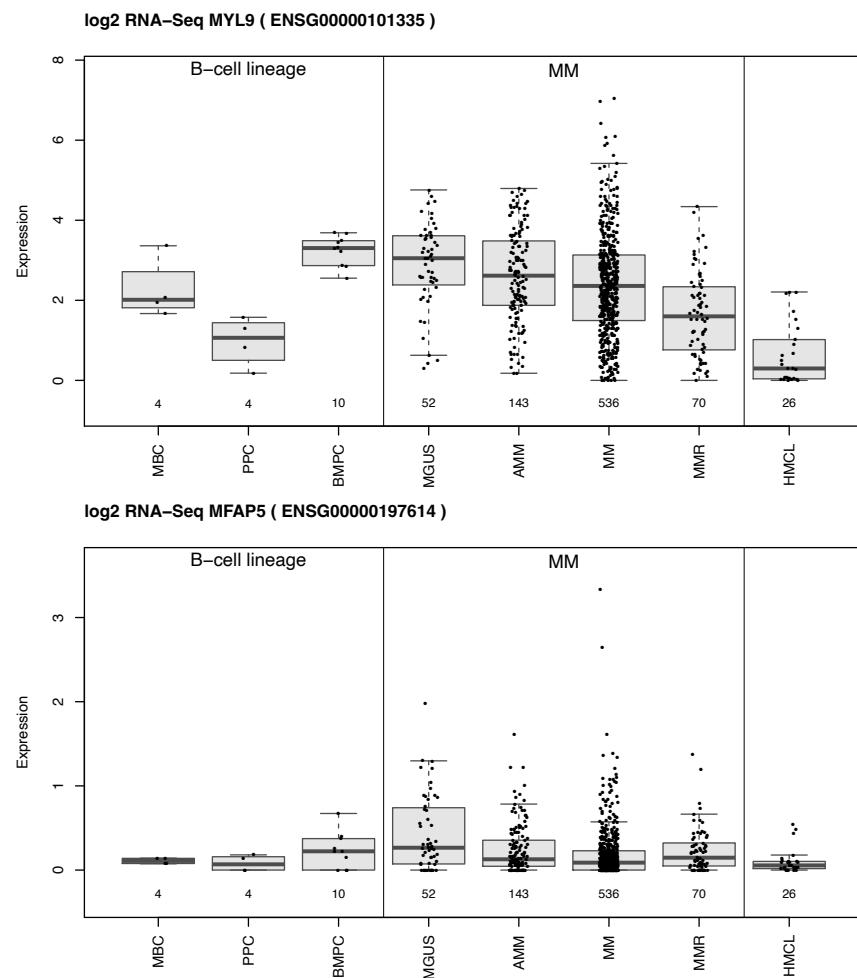
Supplementary Figure 7: Expression levels of adhesion genes that are downregulated and associated with survival ($p < 0.01$). Bone Marrow Plasma Cell (BMPC), Monoclonal Gammopathy of Undetermined Significance (MGUS), Smoldering Multiple Myeloma (sMM), Multiple Myeloma (MM), Multiple Myeloma Relapse (MMR).



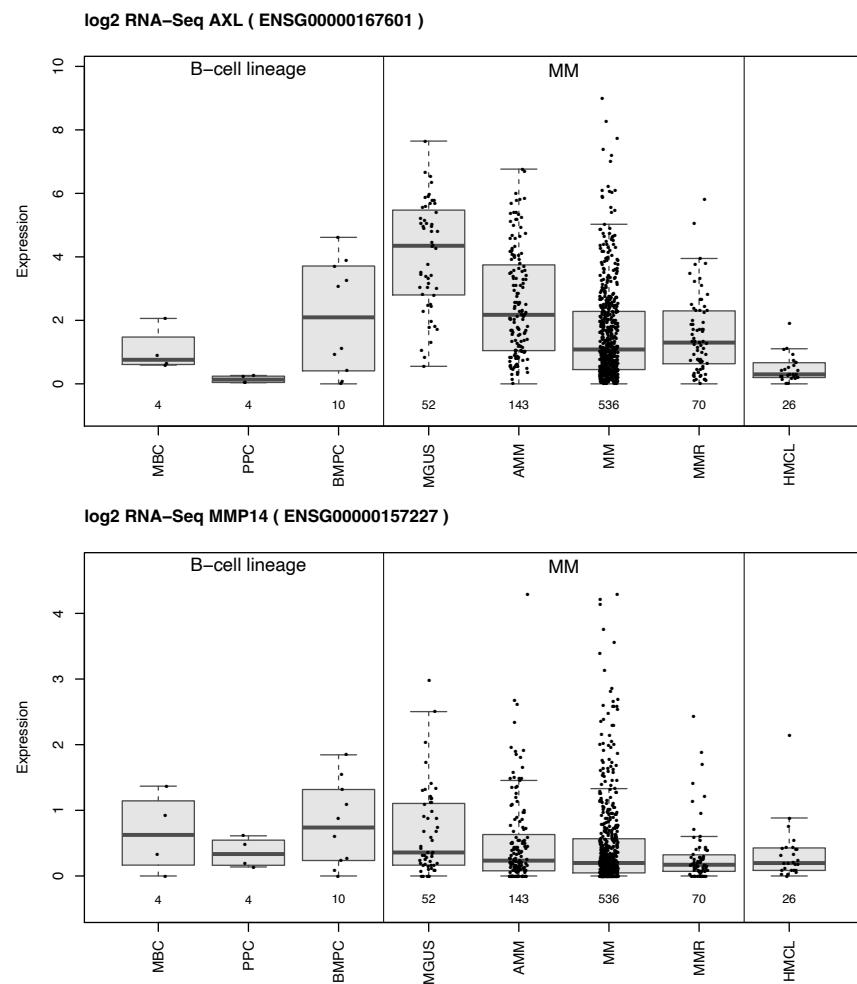
Supplementary Figure 7 (continued)



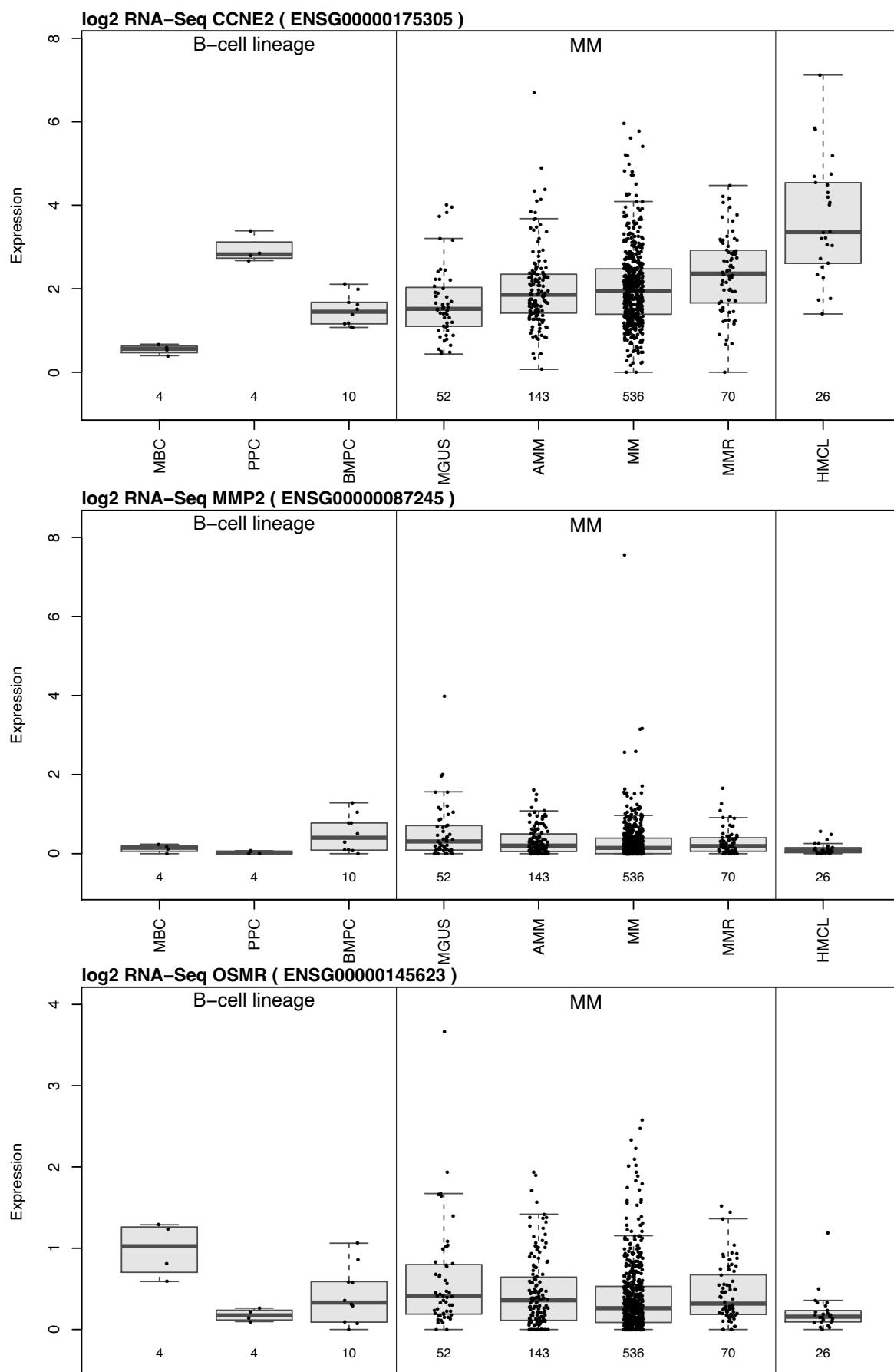
Supplementary Figure 7 (continued)



Supplementary Figure 7 (continued)



Supplementary Figure 7 (continued)



Appendix A Figure 8: Expression levels of adhesion genes that are not downregulated and associated with survival ($p < 0.01$). Bone Marrow Plasma Cell (BMPC), Monoclonal Gammopathy of Undetermined Significance (MGUS), Smoldering Multiple Myeloma (sMM), Multiple Myeloma (MM), Multiple Myeloma Relapse (MMR).

A.2 Tables

A.3 Materials & Methods

B Documentation of `plotastic`