

Impact of the plasma cell quantification method on the International Myeloma Working Group diagnostic criteria for MGUS/SMM

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Supplementary Data

Supplemental Table 1. Detailed parameter settings for digital analysis of whole-slide images in QuPath.

Setup parameters

Detection image	Optical density sum
Requested pixel size	0.5 μm

Nucleus Parameters

Background radius	8 μm
Use opening by reconstruction	Enabled
Median filter radius	0 μm
Sigma	1.5 μm
Minimum area	5 μm^2
Maximum area	400 μm^2

Intensity parameters

Threshold	0.03-0.20 (manually adjusted for each sample)
Max background intensity	2
Split by shape	Enabled
Exclude DAB (membrane staining)	Disabled

Cell parameters

Cell expansion	5 μm
Include cell nucleus	Enabled

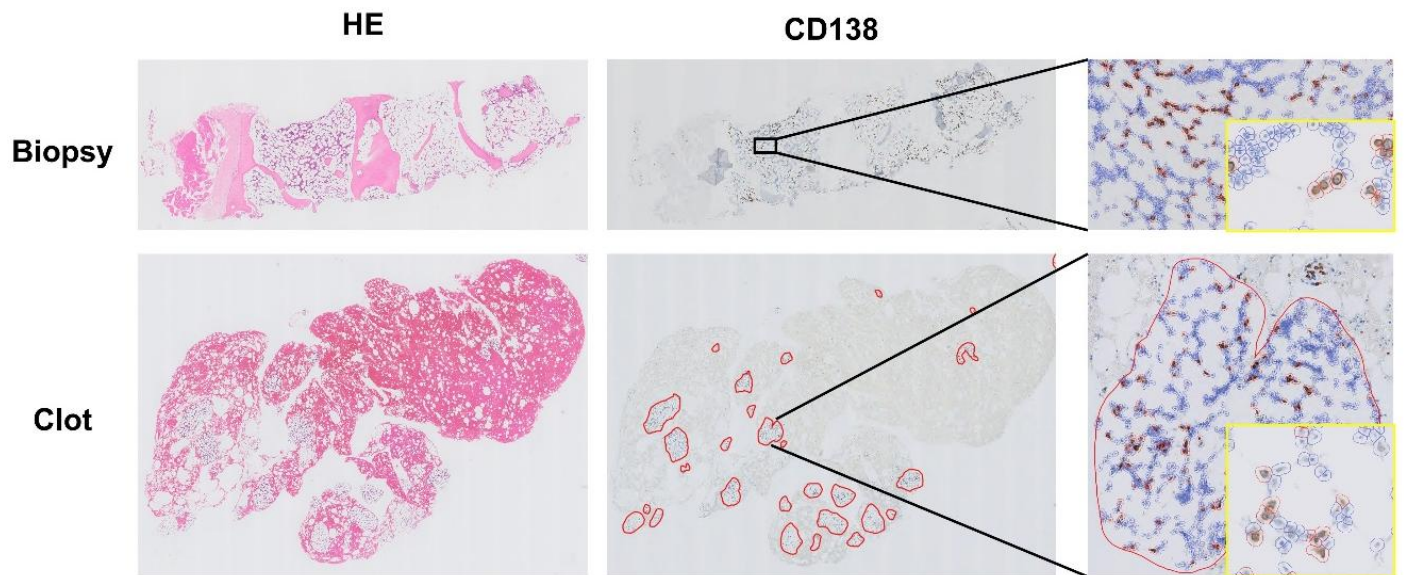
General parameters

Smooth boundaries	Disabled
Make measurements	Enabled

Intensity threshold parameters

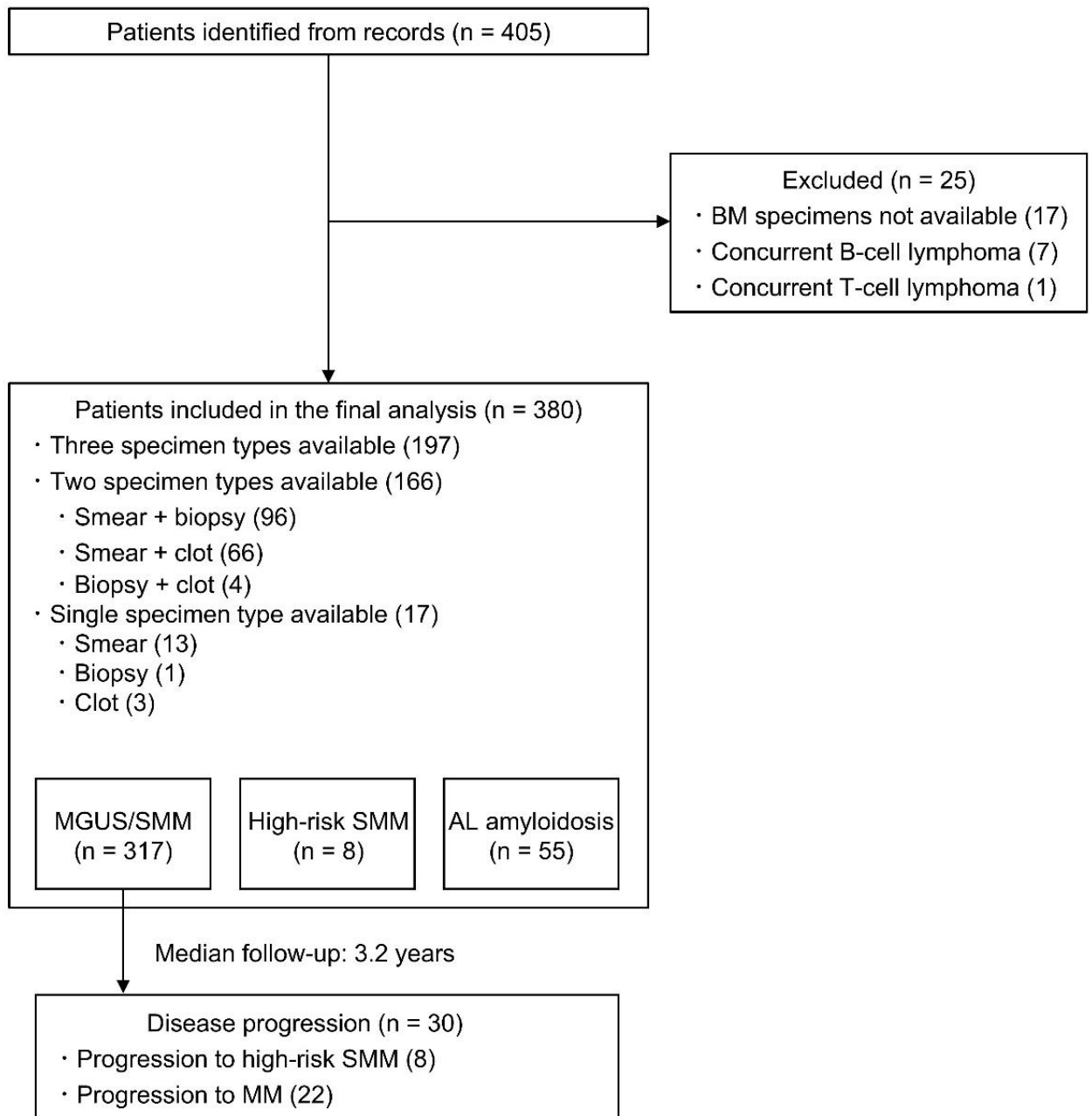
Score compartment	Cell: DAB OD max
Threshold 1+	0.10-0.50 (manually adjusted for each sample)
Single threshold	Enabled

Supplemental Figure 1. Digital cell detection in QuPath.



Abbreviations: HE; hematoxylin-eosin staining.

Supplemental Figure 2. Flow-chart of patient selection.



Abbreviations: BM; bone marrow, MGUS; monoclonal gammopathy of undetermined significance, SMM; smoldering multiple myeloma.