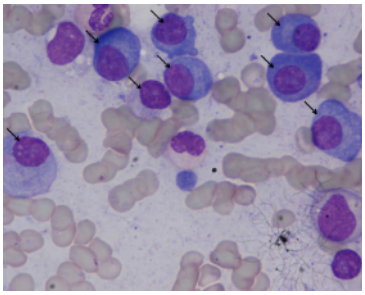
MiMM_SBILab Dataset: Microscopic Images of Multiple Myeloma (MiMM_SBILab)



Summary

Microscopic images were captured from bone marrow aspirate slides of patients diagnosed with multiple myeloma as per the standard guidelines. Slides were stained using Jenner- Giemsa stain. Images were captured at 1000x magnication using Nikon Eclipse-200 microscope equipped with a digital camera. Images were captured in raw BMP format with a size of 2560x1920 pixels. In all, this dataset consists of 85 images. All these 85 images were stain normalized using our in-house methodology before being used for segmentation. These stain normalized images have been provided as the annotated dataset with plasma cells marked in all image slides contained in a presentation for the ready reference of readers.

Additional Notes

This collection has also been uploaded to the Harvard Blood Cancer Dataverse website. Please refer to DOI 10.7910/DVN/XCX7ST for more information.

Additional Publications using this dataset:

- Ritu Gupta, Pramit Mallick, Rahul Duggal, Anubha Gupta, and Ojaswa Sharma, "Stain Color Normalization and Segmentation of Plasma Cells in Microscopic Images as a Prelude to Development of Computer Assisted Automated Disease Diagnostic Tool in Multiple Myeloma," 16th International Myeloma Workshop (IMW), India, March 2017

Data Access

Data Access

Click the **Download** button to browse and download the data from Box.

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Detailed Description

Detailed Description

Image Statistics	
Modalities	Pathology
Number of Participants	5
Number of Studies	5
Number of Images	85
Images Size (GB)	1.27

Citations & Data Usage Policy

Citations & Data Usage Policy

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Data Citation

Gupta, R., & Gupta, A. (2019). **MiMM_SBILab Dataset: Microscopic Images of Multiple Myeloma [Data set].** The Cancer Imaging Archive. https://doi.org/10.7937/tcia.2019.pnn6aypl

Publication Citation

- Gupta, A., Duggal, R., Gehlot, S., Gupta, R., Mangal, A., Kumar, L., Thakkar, N., & Satpathy, D. (2020). **GCTI-SN: Geometry-inspired chemical and tissue invariant stain normalization of microscopic medical images.** Medical Image Analysis, 65, 101788. https://doi.org/10.1016/j.media.2020.101788
- Gupta, A., Mallick, P., Sharma, O., Gupta, R., & Duggal, R. (2018). **PCSeg: Color model driven probabilistic multiphase level set based tool for plasma cell segmentation in multiple myeloma.** PLOS ONE, 13(12), e0207908. https://doi.org/10.1371/journal.pone.0207908

TCIA Citation

Clark, K., Vendt, B., Smith, K., Freymann, J., Kirby, J., Koppel, P., Moore, S., Phillips, S., Maffitt, D., Pringle, M., Tarbox, L., & Prior, F. (2013). **The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository.** Journal of Digital Imaging, 26(6), 1045–1057. https://doi.org/10.1007/s10278-013-9622-7

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Versions

Version 1 (Current): Updated 2019/03/25

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