



**KCP1052**

서울아산병원 3년차 어지수

# Patient information

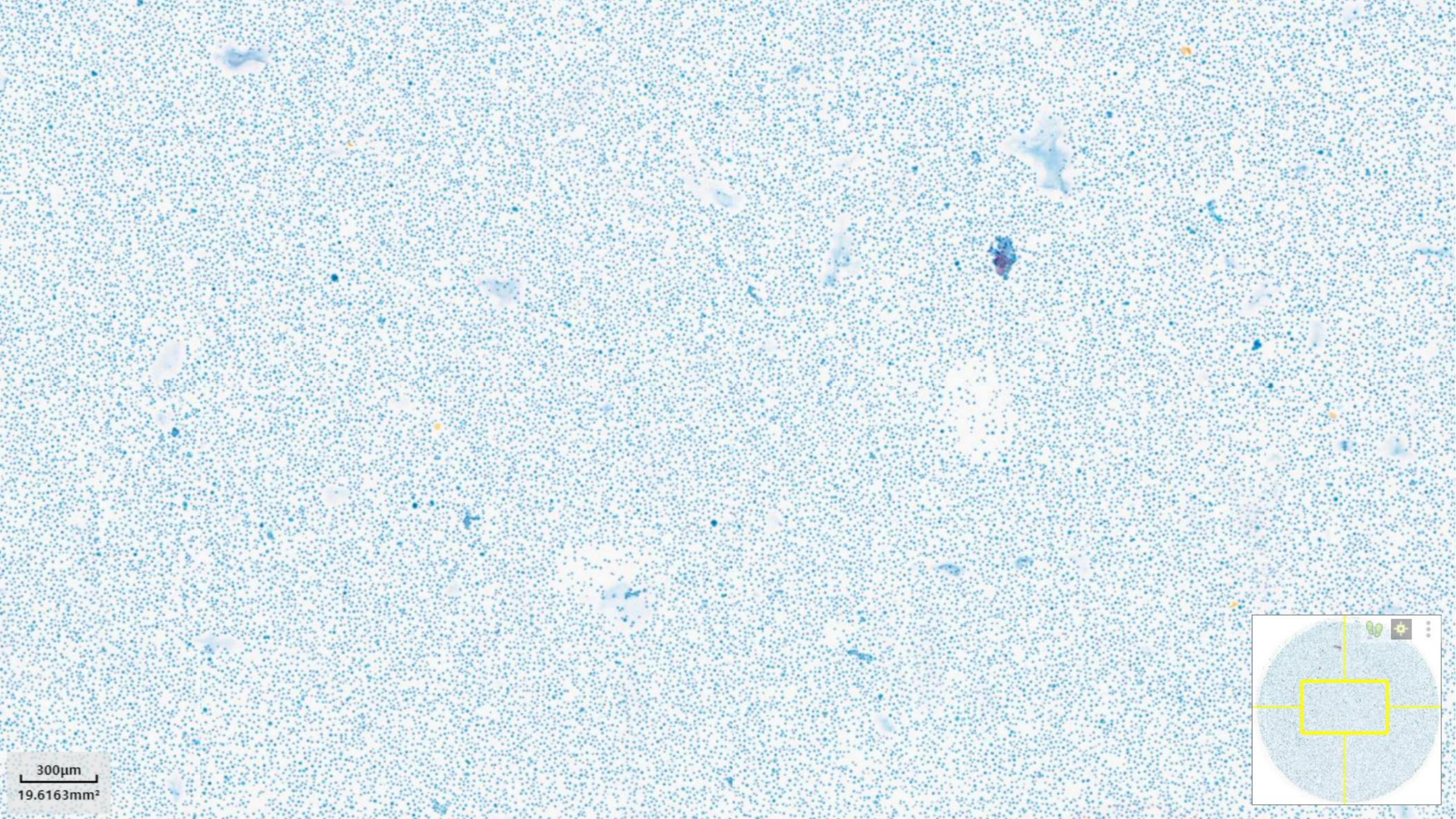
72/M

C.C. : cough and dyspnea (onset : 3DA)

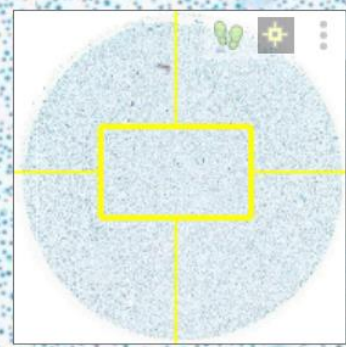
Radiological examination :

- 종격동 전측 및 중간부에 연부조직음영 종괴
- 양측 흉수 및 심낭삼출 소견

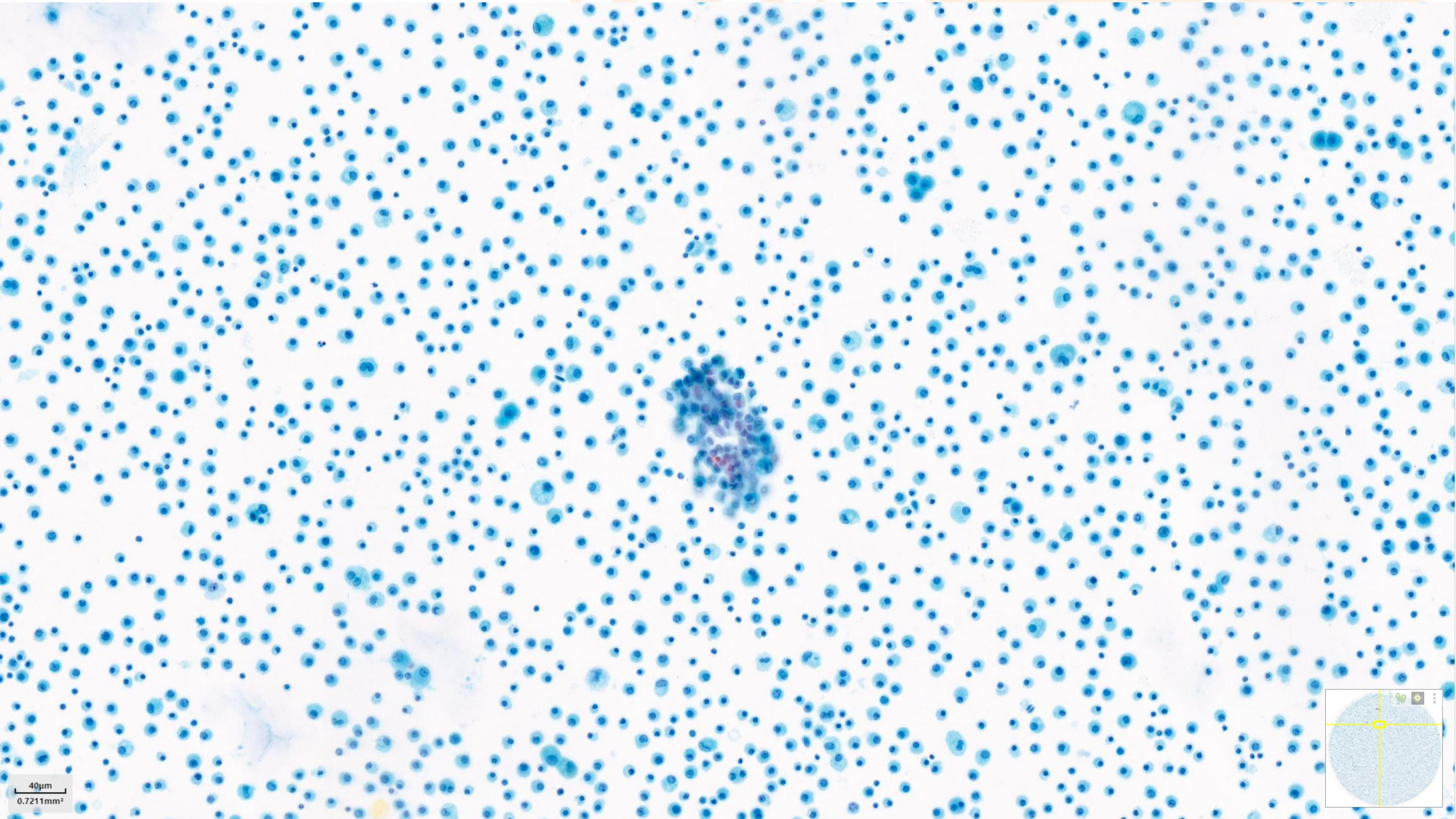




300µm  
19.6163mm<sup>2</sup>

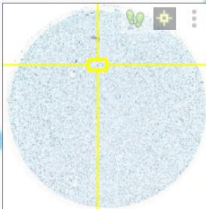




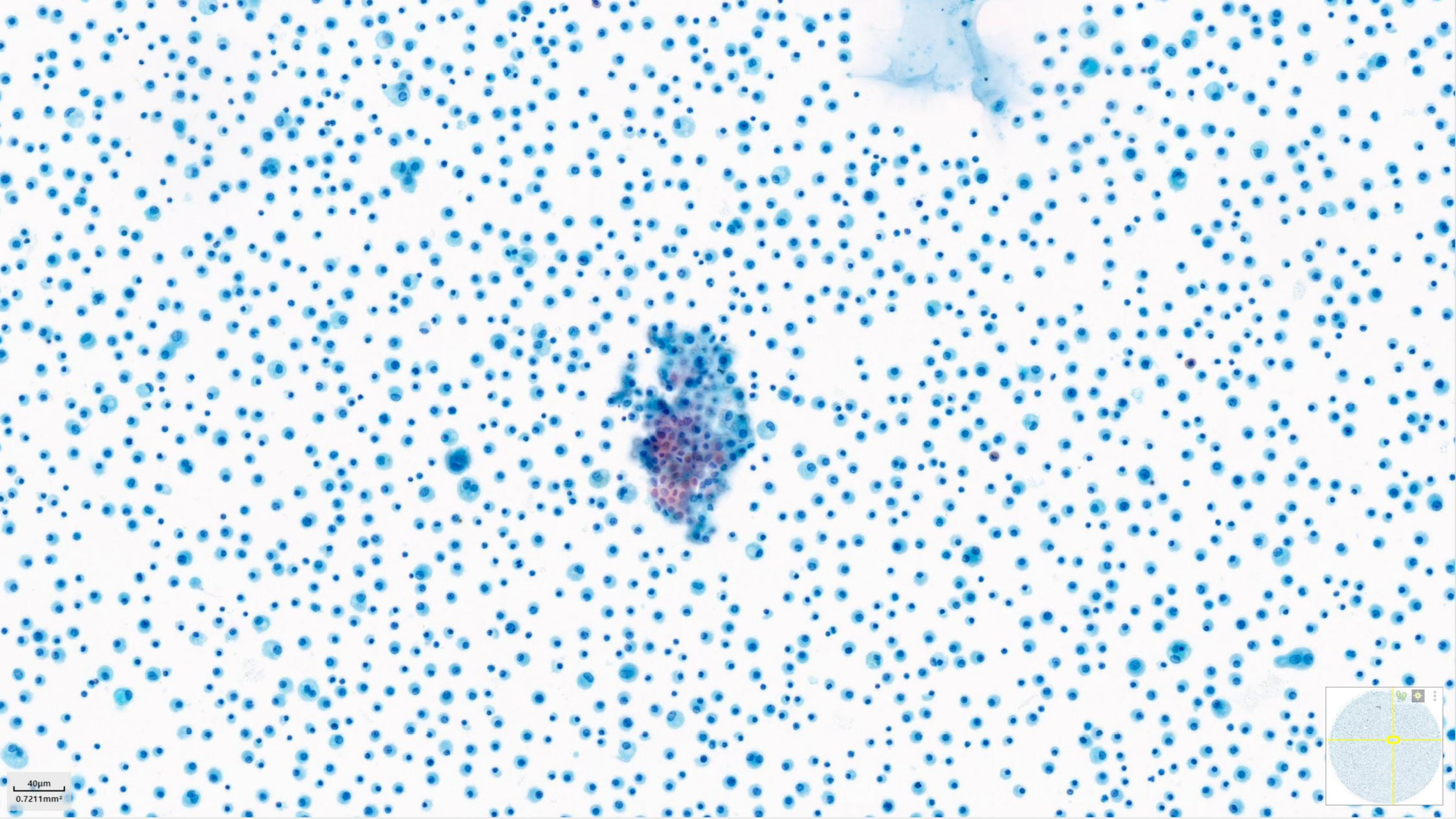


40µm

0.7211mm<sup>2</sup>

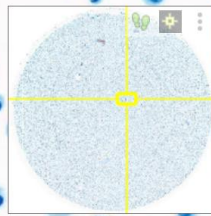




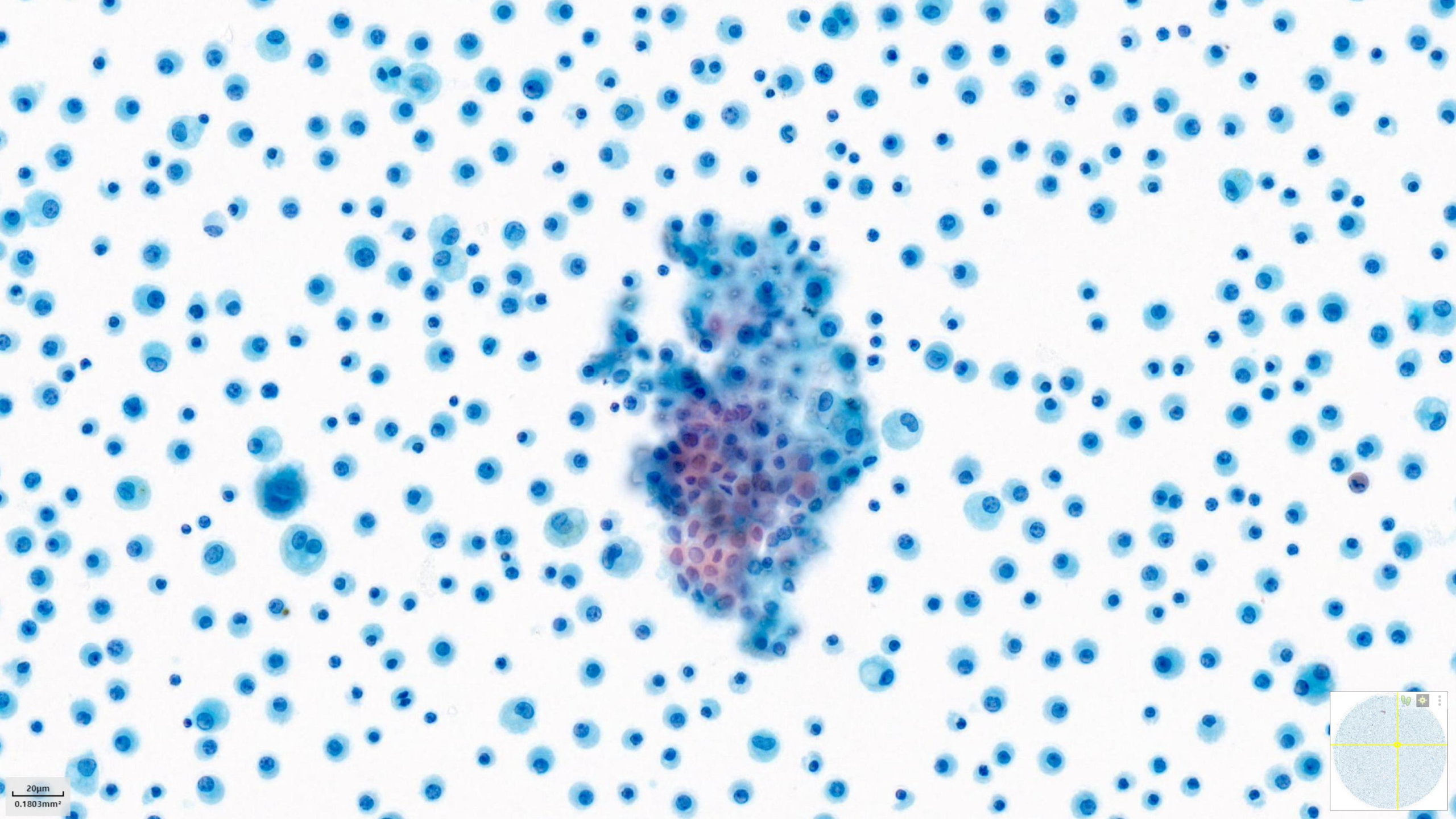


40µm

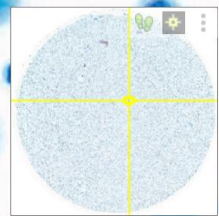
0.7211mm<sup>2</sup>



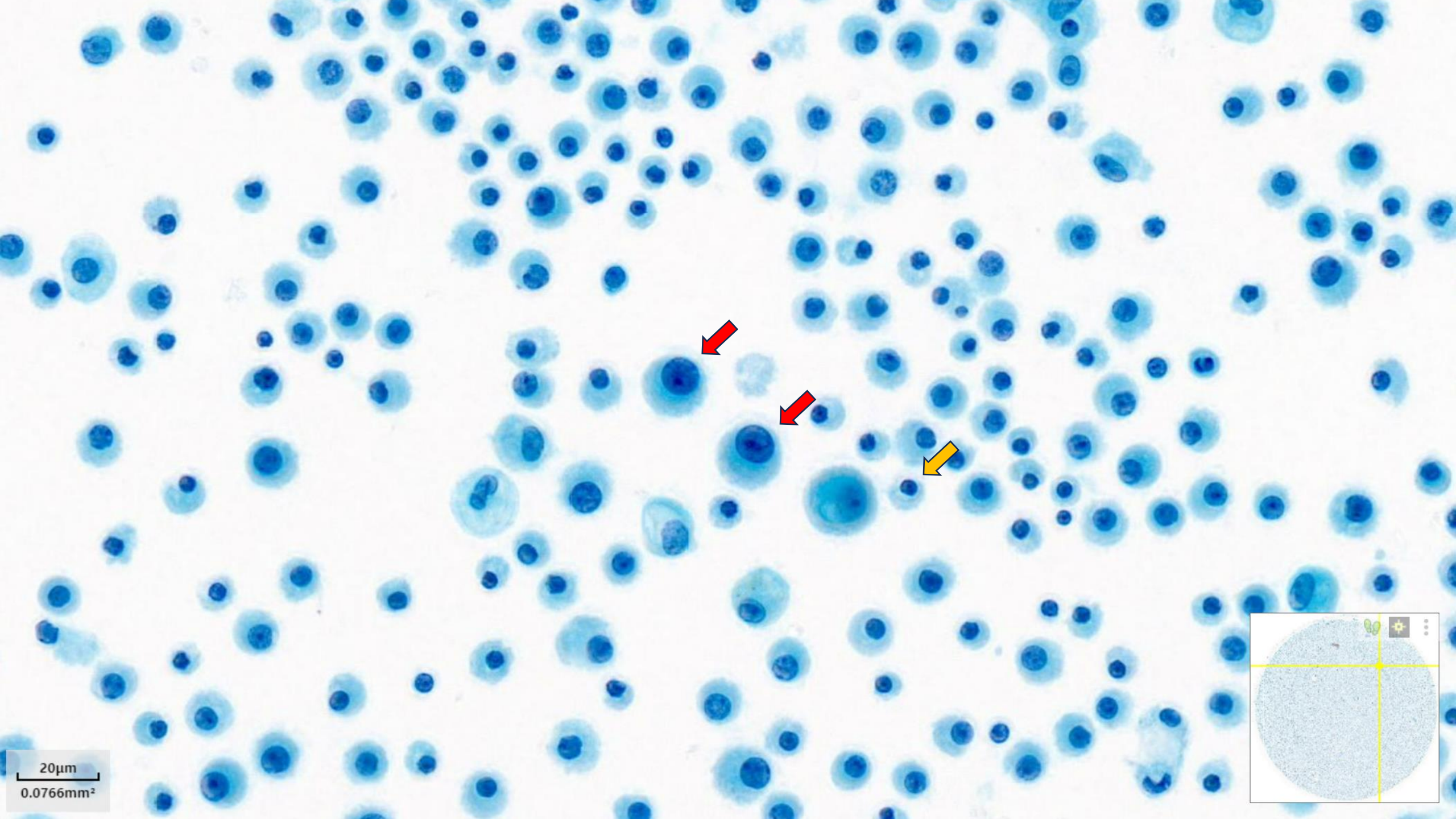




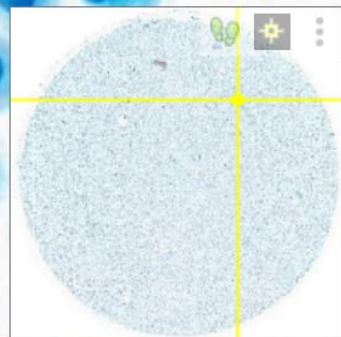
20µm  
0.1803mm<sup>2</sup>



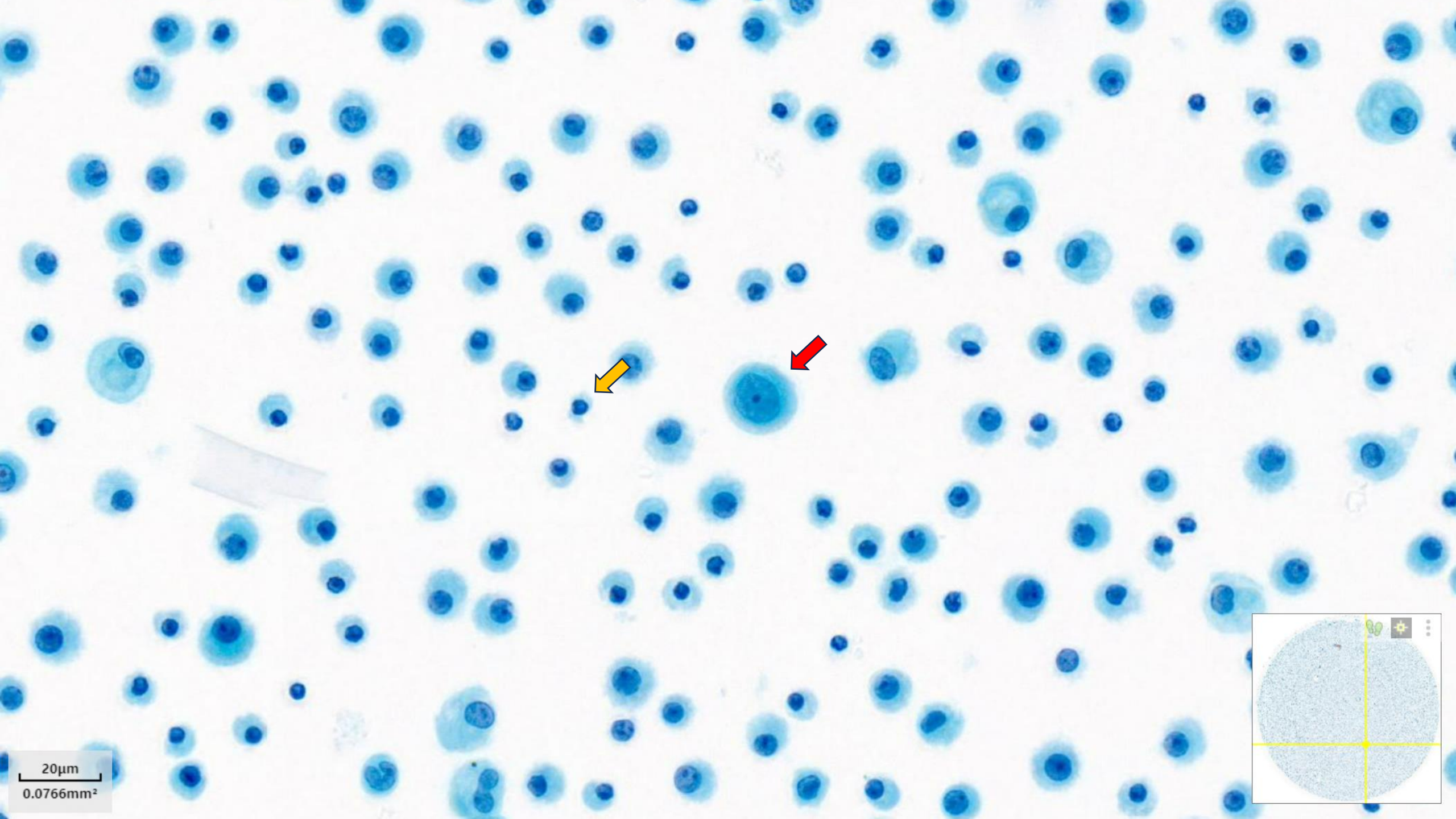




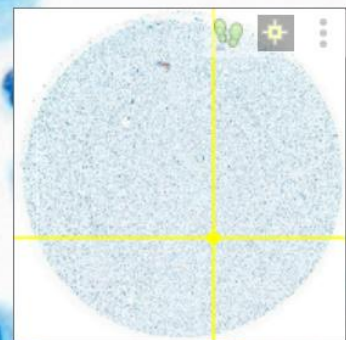
20µm  
0.0766mm<sup>2</sup>



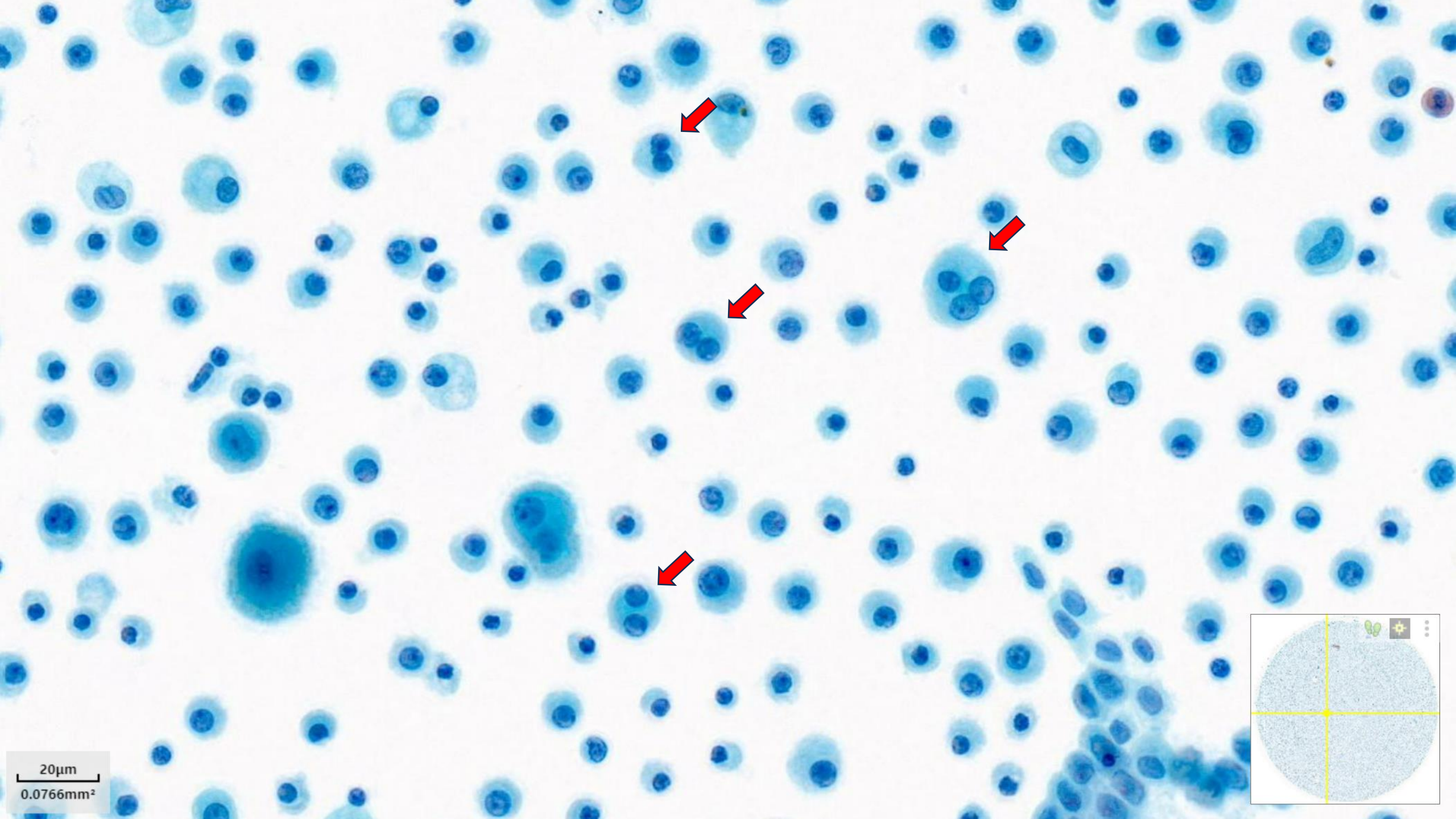




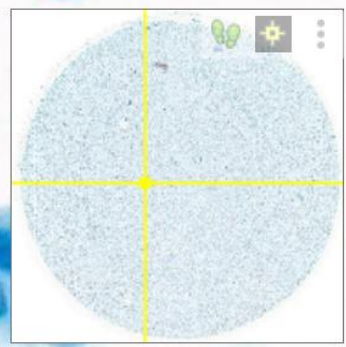
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0.0766mm<sup>2</sup>



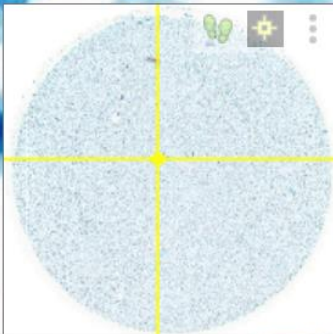
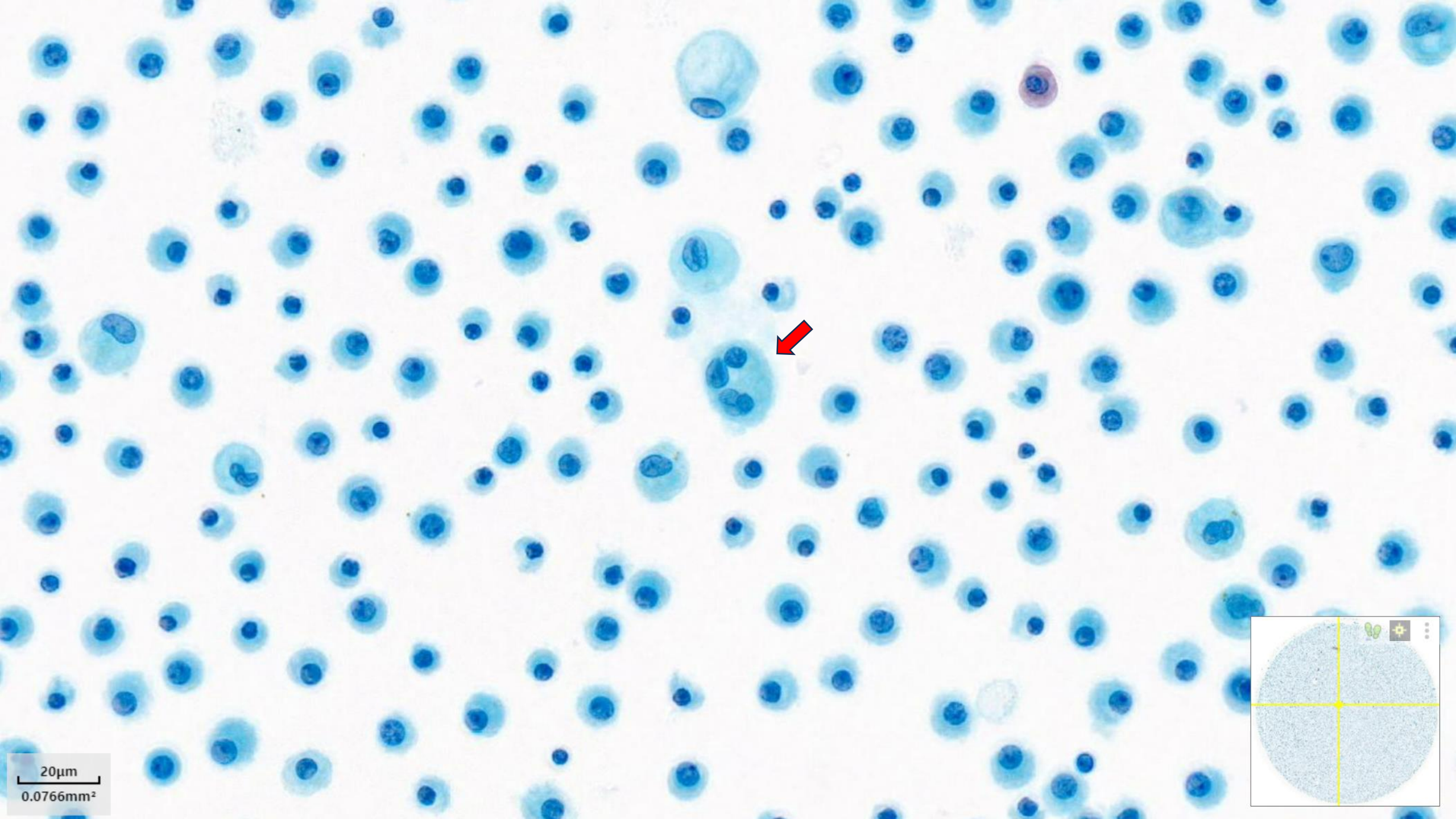




20µm  
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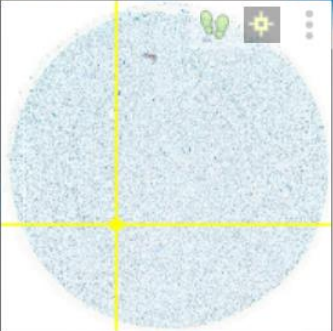
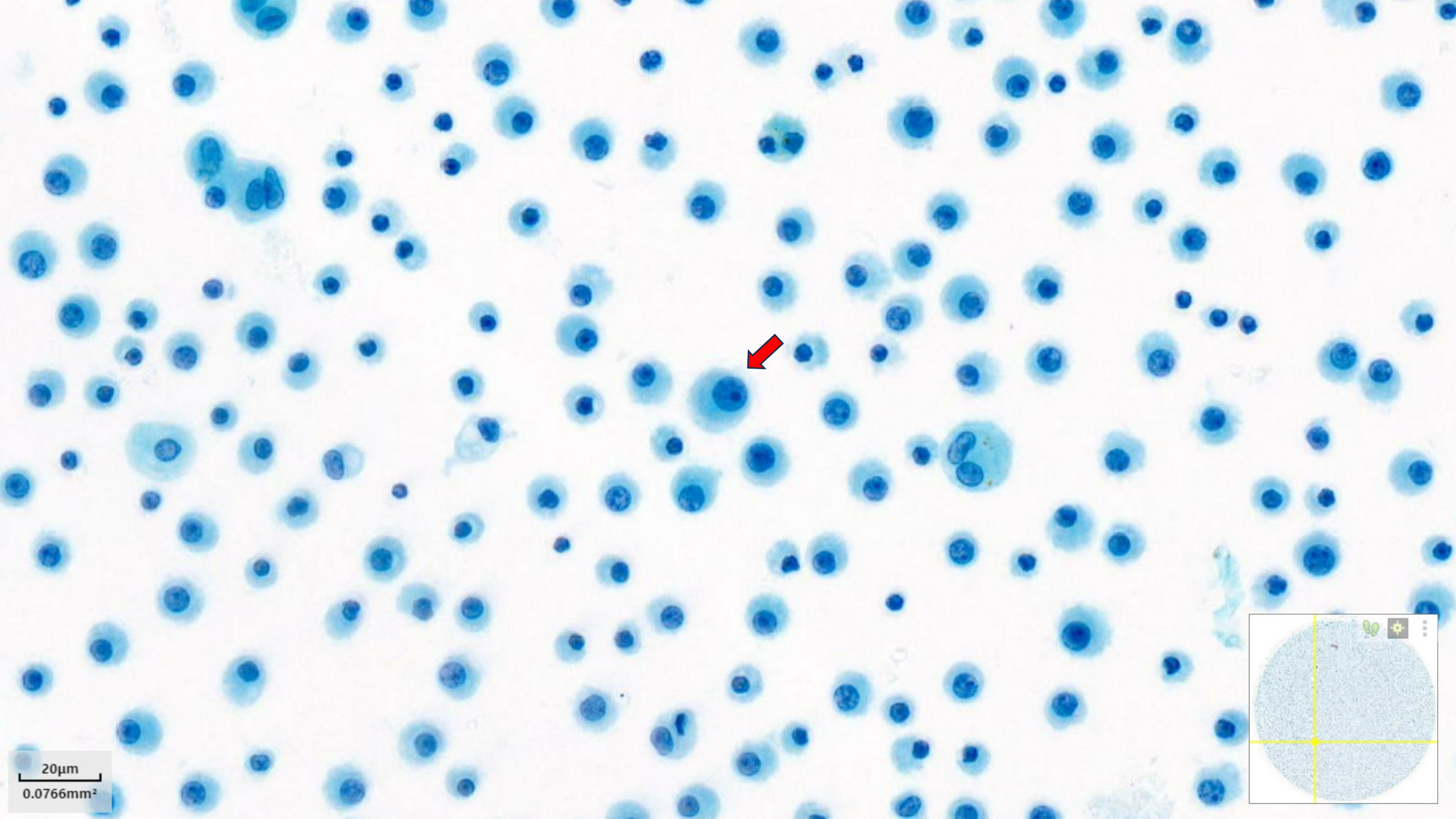






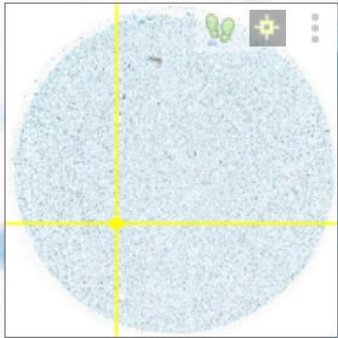
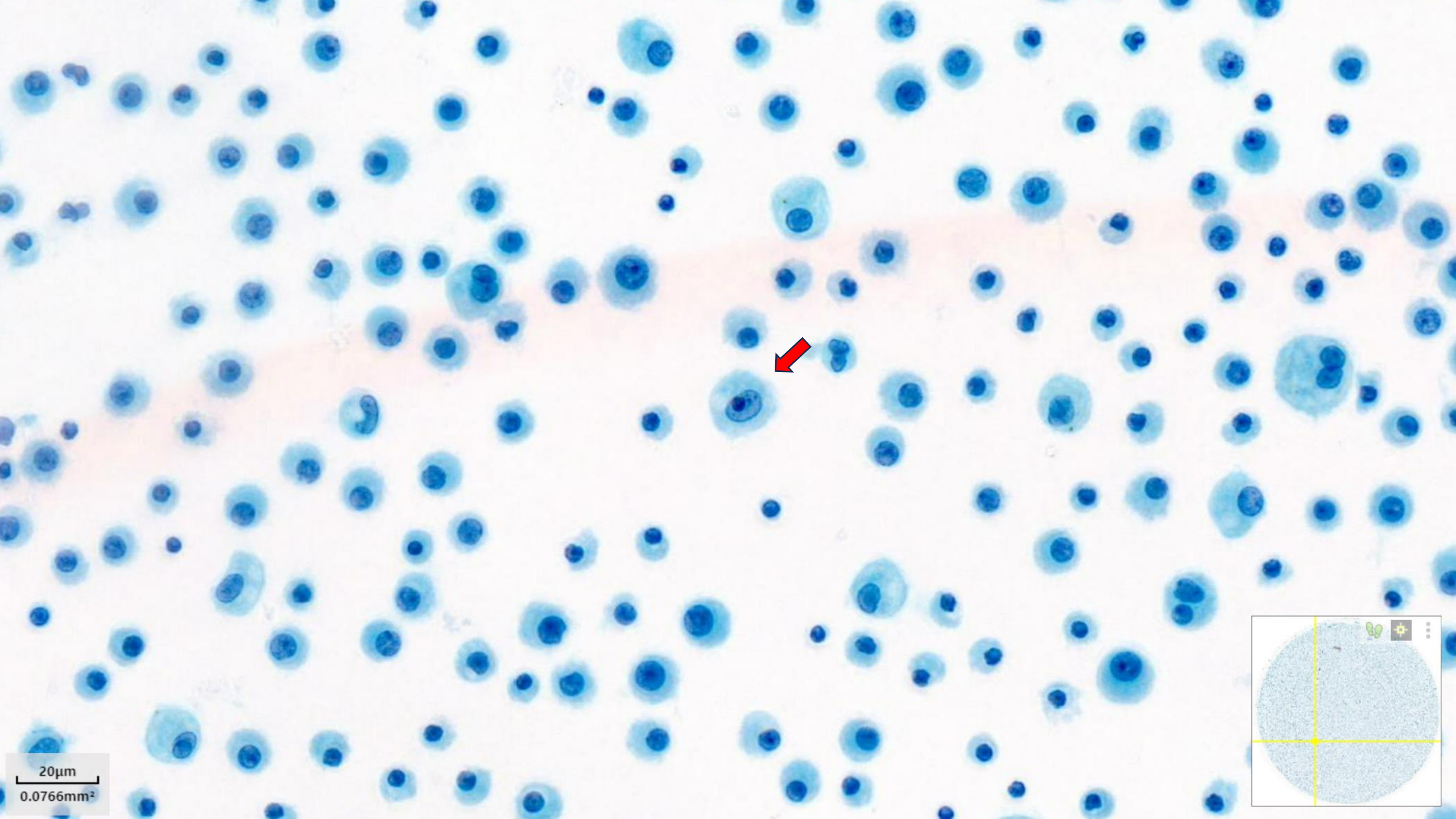
20µm  
0.0766mm<sup>2</sup>





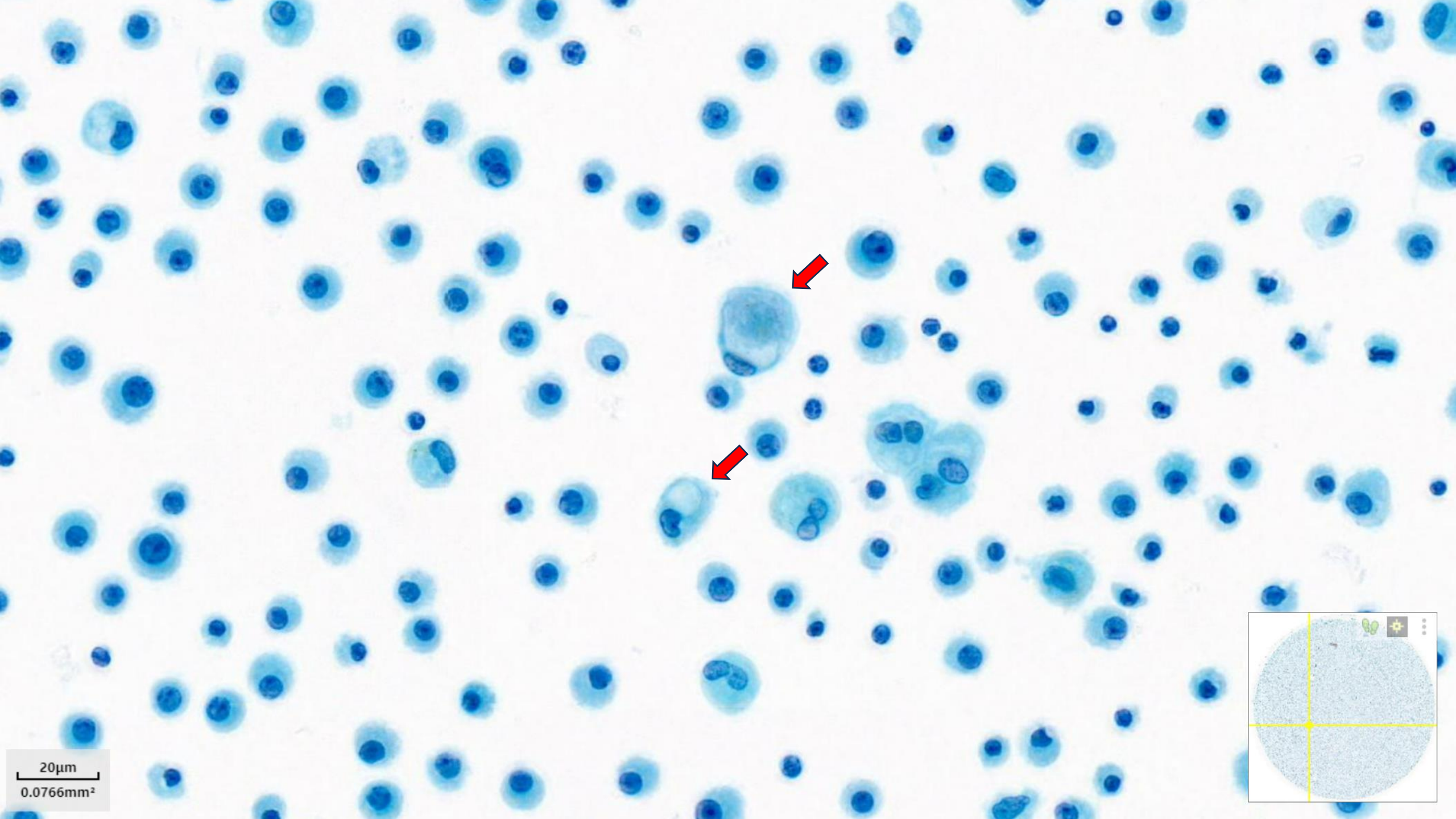
20µm  
0.0766mm<sup>2</sup>



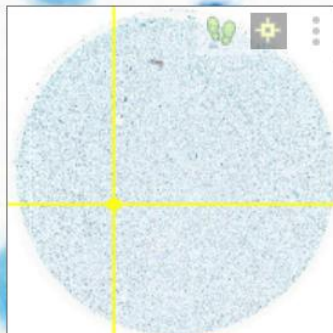


20µm  
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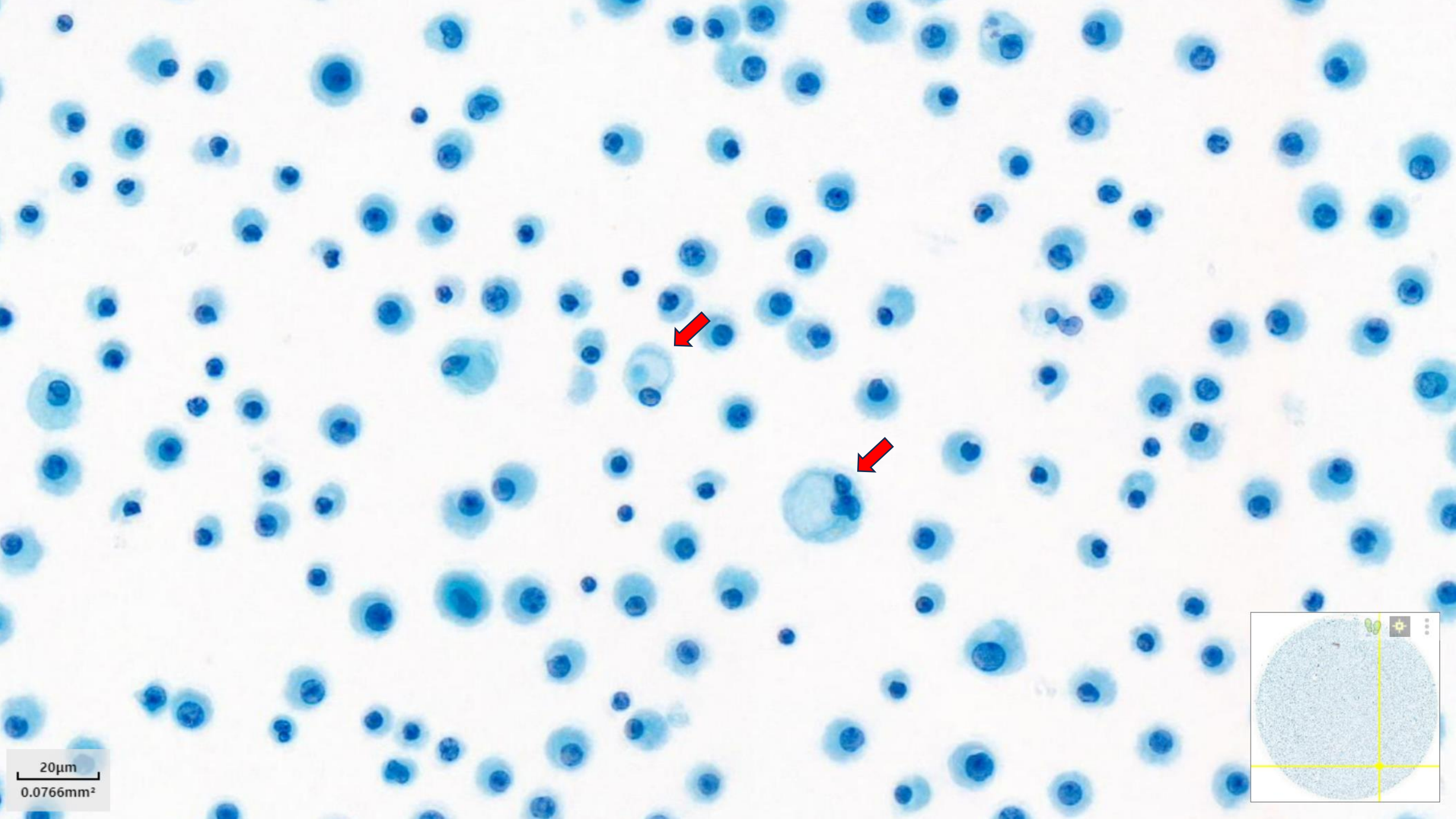




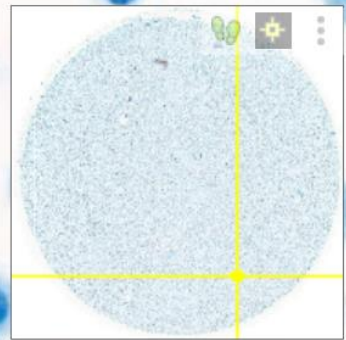
20µm  
0.0766mm<sup>2</sup>



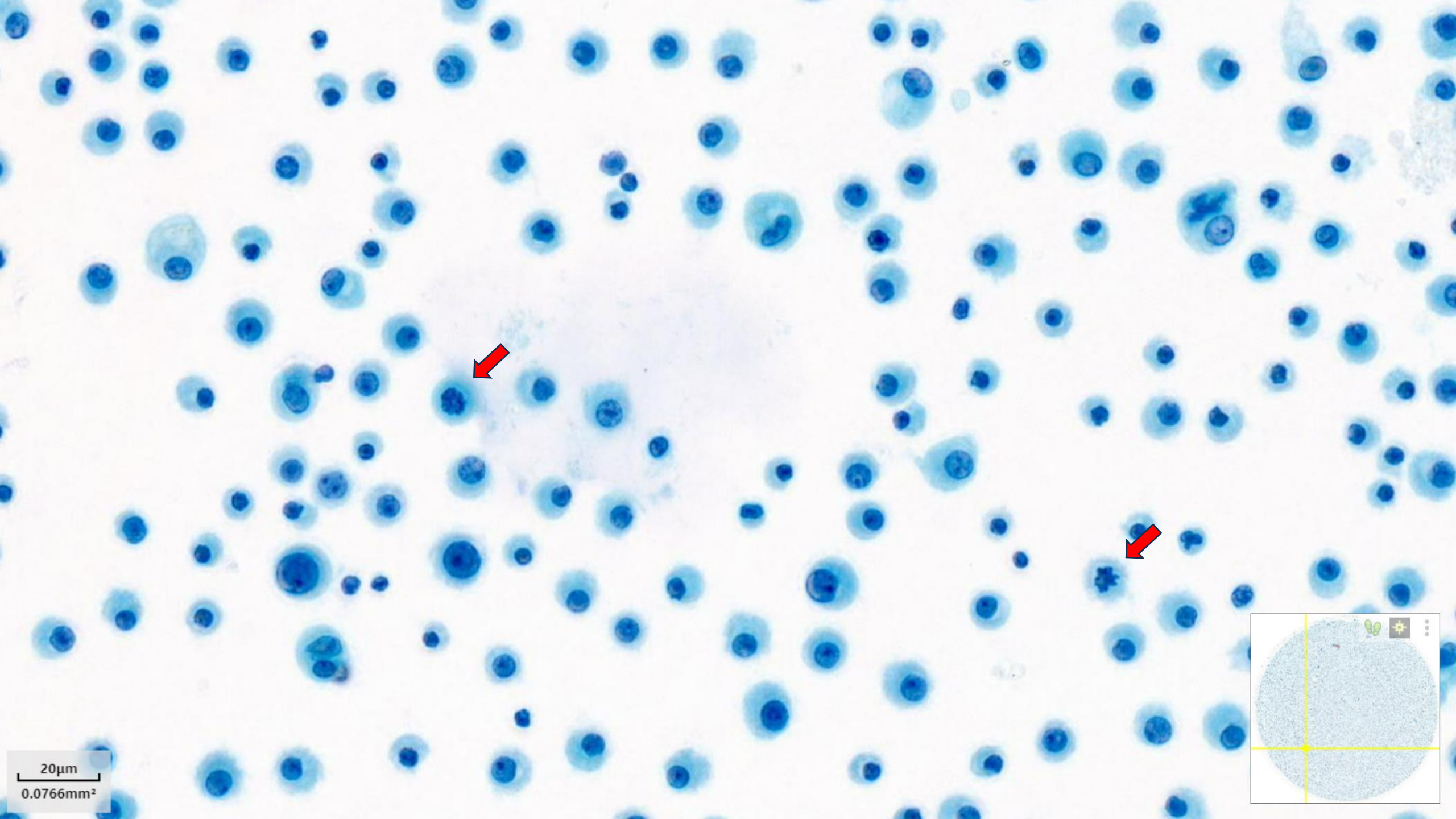




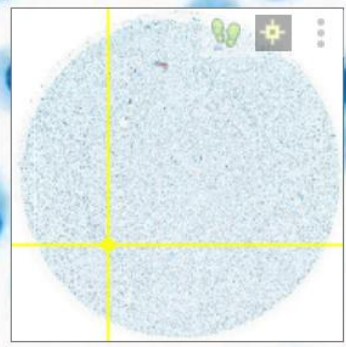
20µm  
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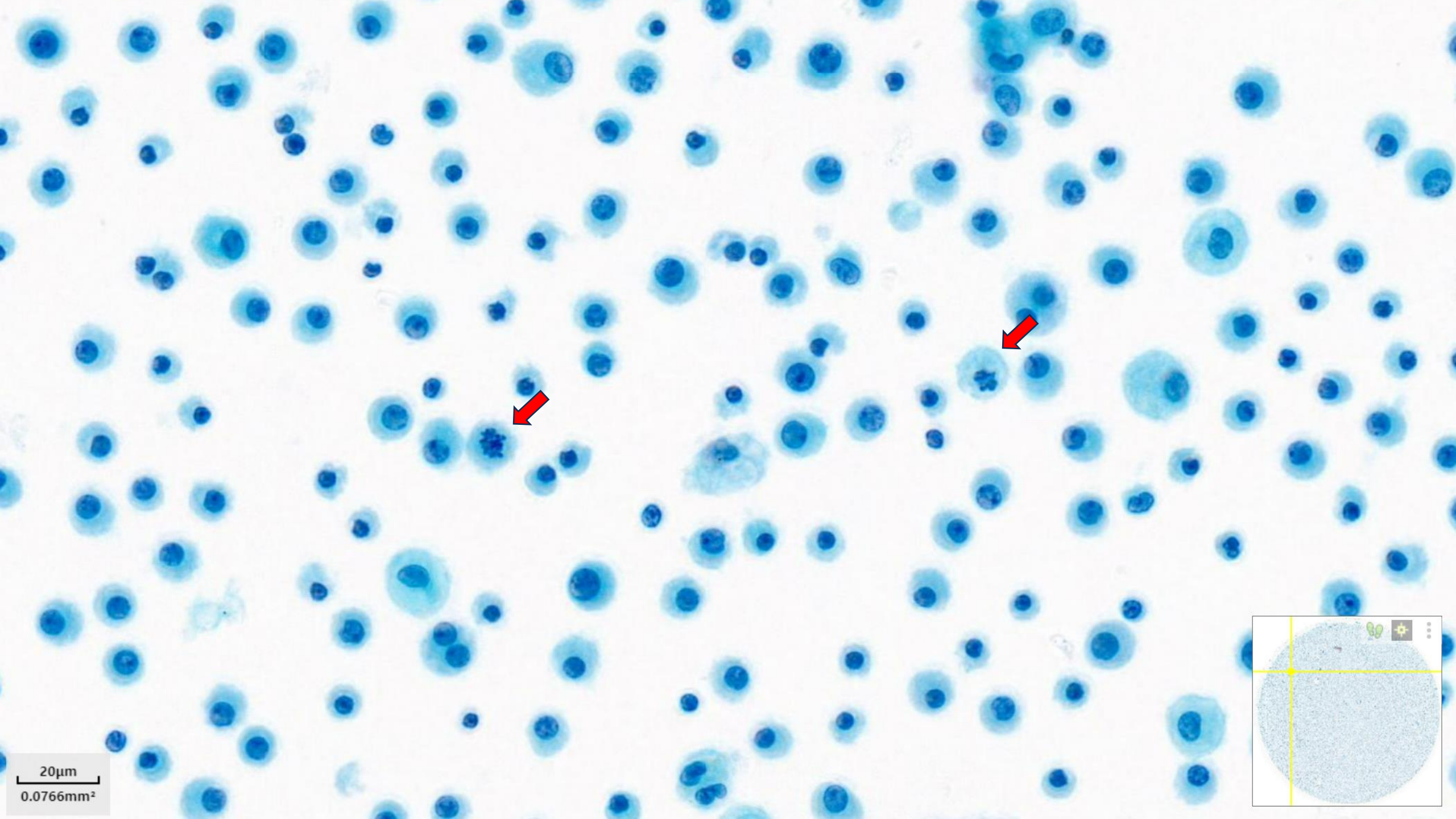




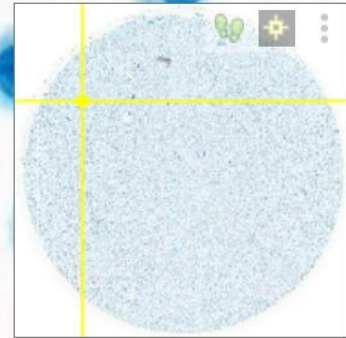
20µm  
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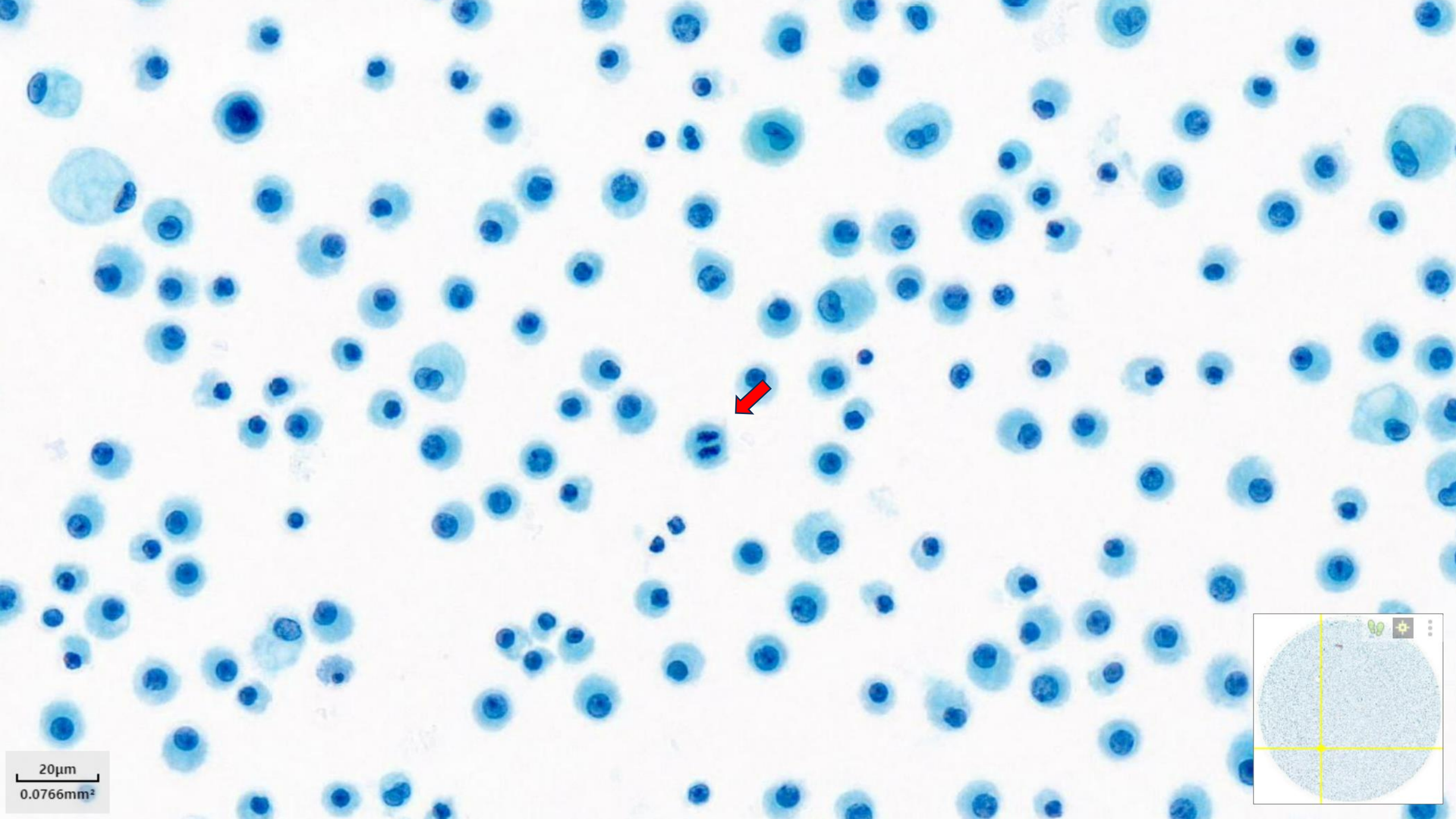




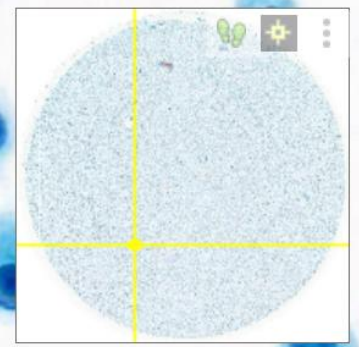
20µm  
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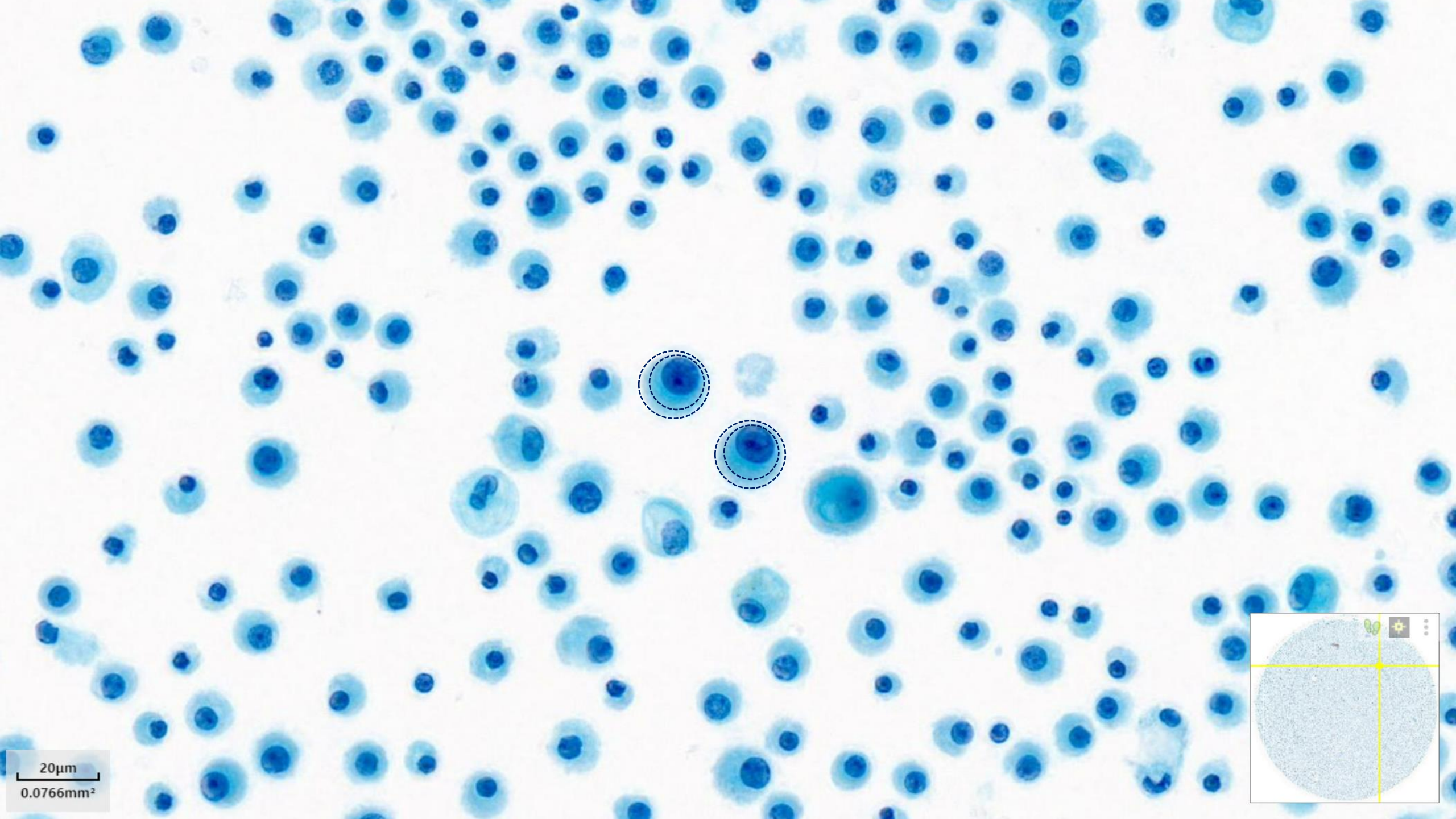




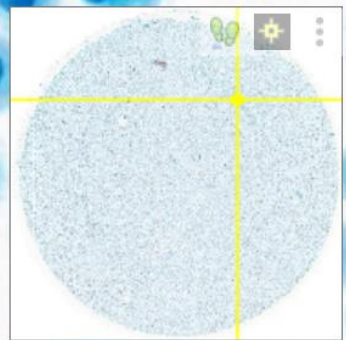
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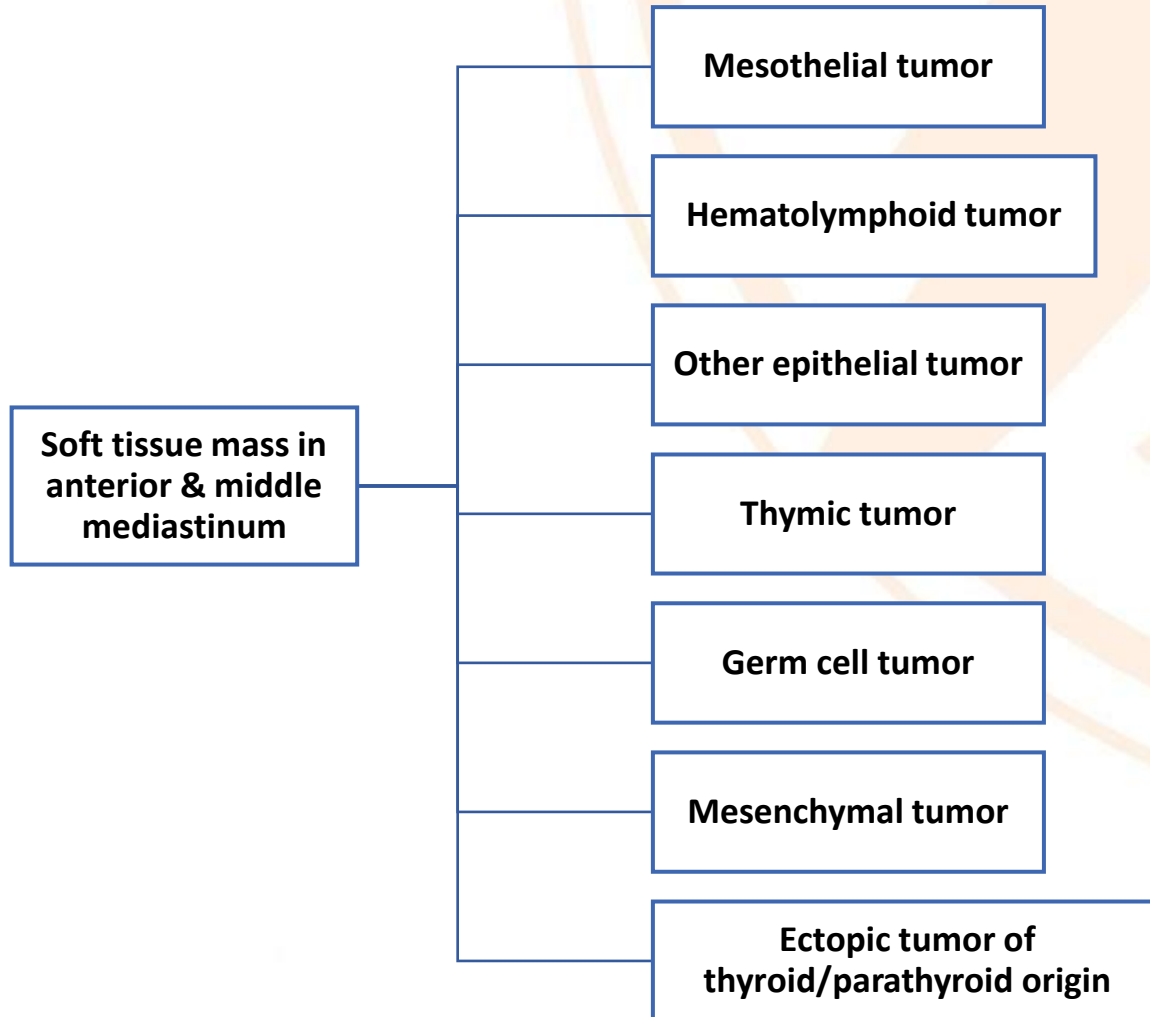


# Cytopathologic feature

- High cellularity
- Some cohesive cell clusters in background of single cells
- Monotonous round cells with eccentric nuclei
- Frequent binucleation and multinucleation
- Prominent nucleoli
- Intracytoplasmic vacuoles
- 2-tone cytoplasm
- Frequent mitosis (upto 5/10HPFs)

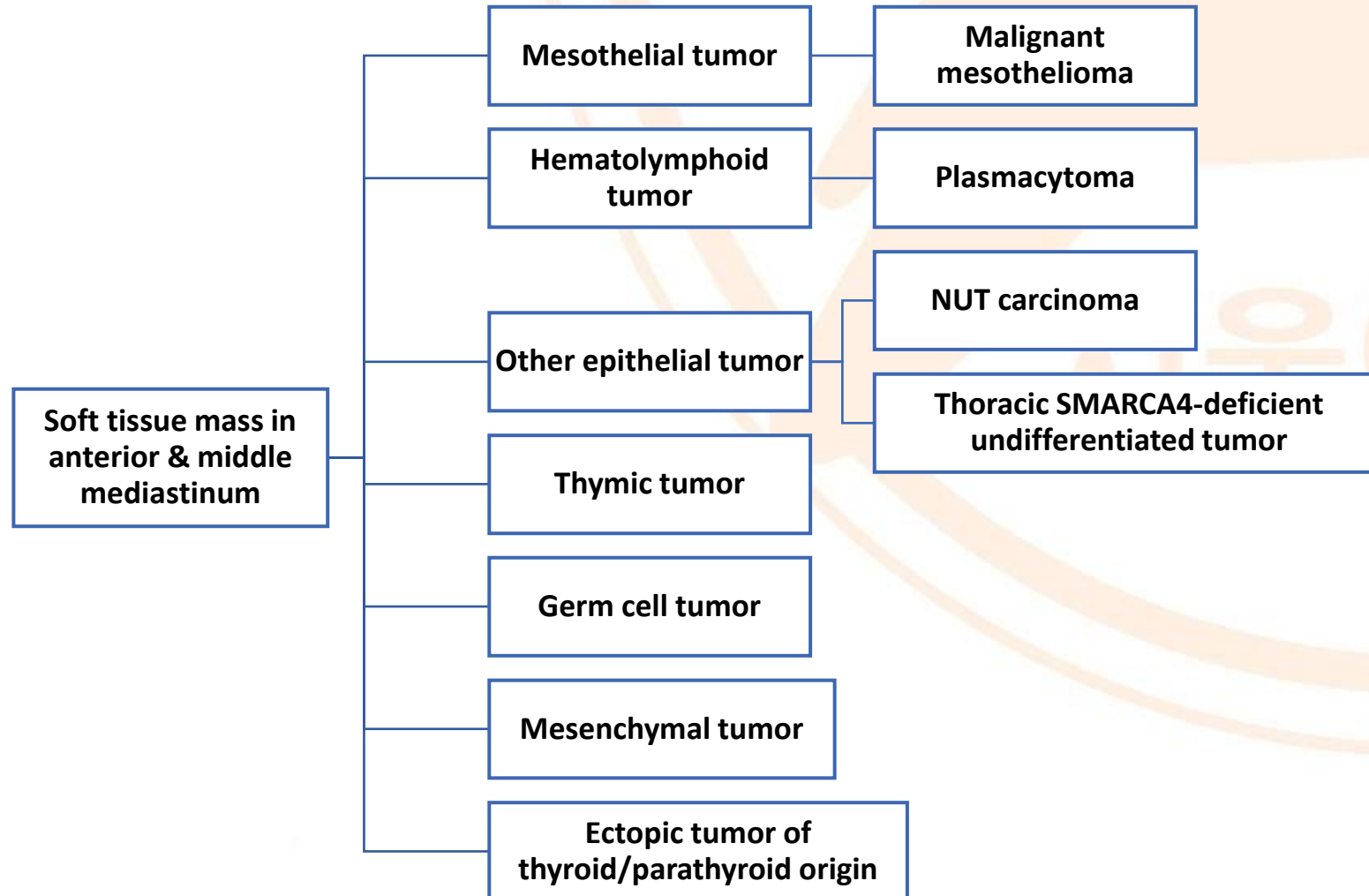


# Differential diagnosis





# Differential diagnosis





# Differential diagnosis

## Malignant

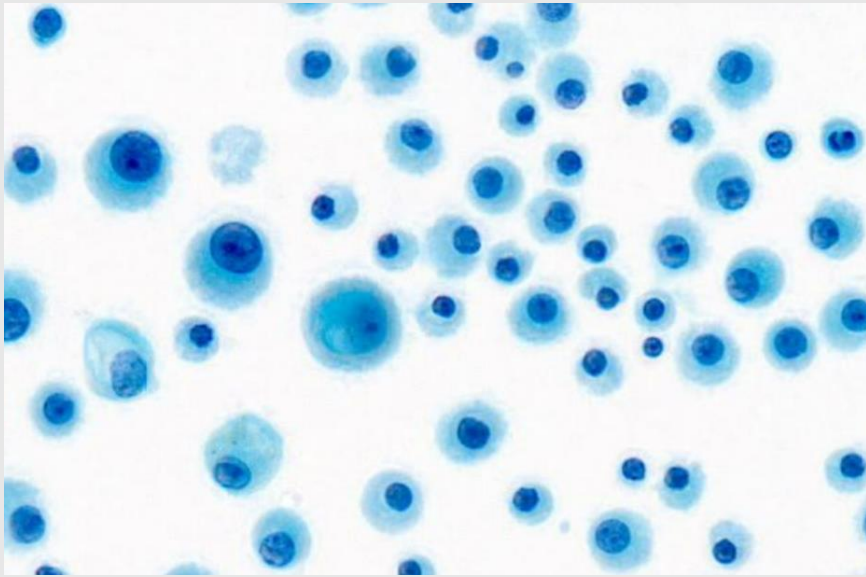
- Plasmacytoma
- Malignant mesothelioma
- Thoracic SMARCA4-deficient undifferentiated tumor
- NUT carcinoma

## Benign

- Reactive mesothelial hyperplasia

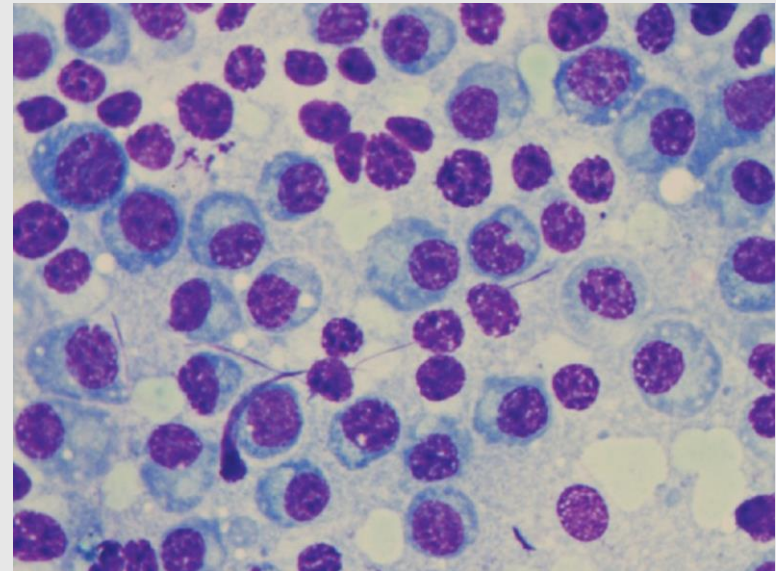


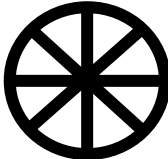
## KCP1052



High cellularity  
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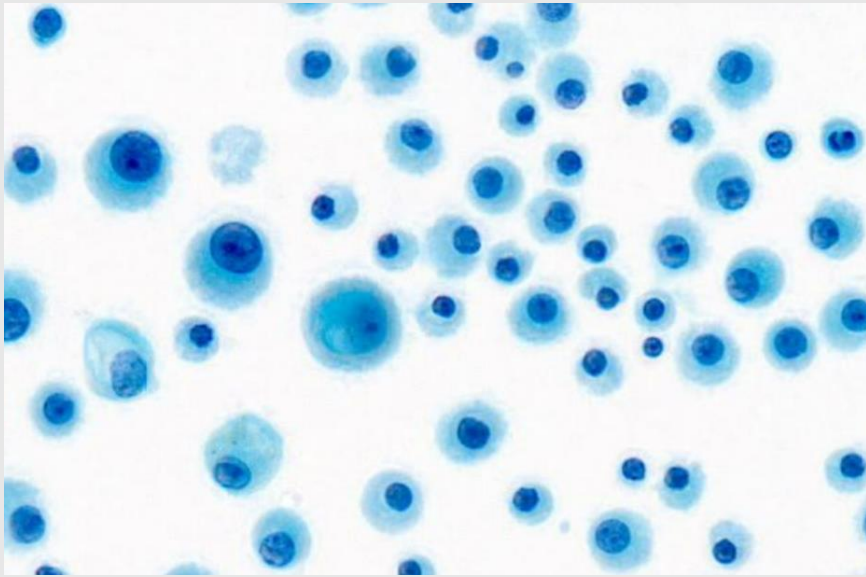
## Plasmacytoma



Highly cellular  
Round or ovoid cells  
Eccentric nuclei  
“spoked wheel” chromatin pattern   
Cytoplasmic perinuclear hof  
Binucleate and multinucleated cells may be seen

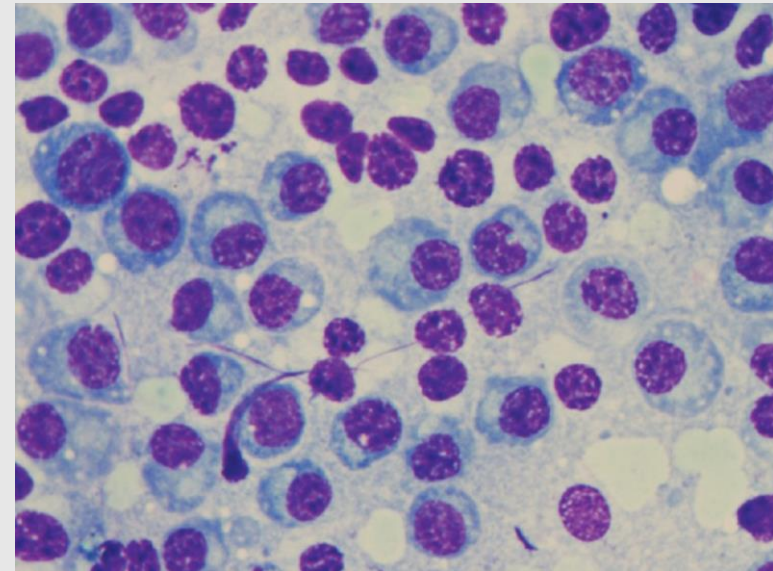


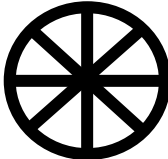
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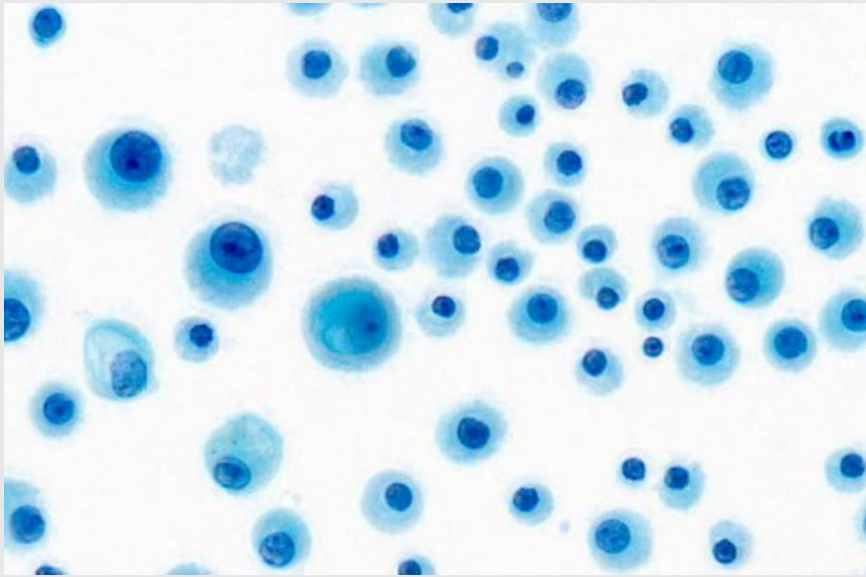
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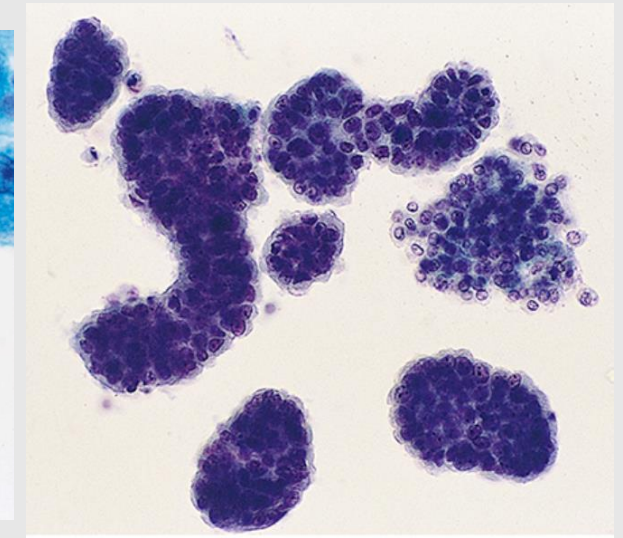
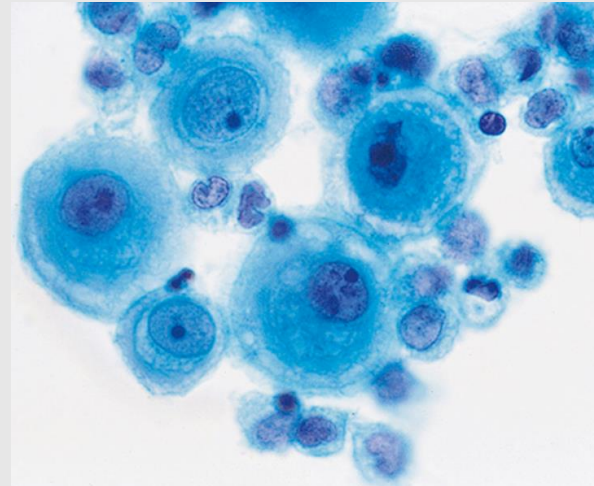
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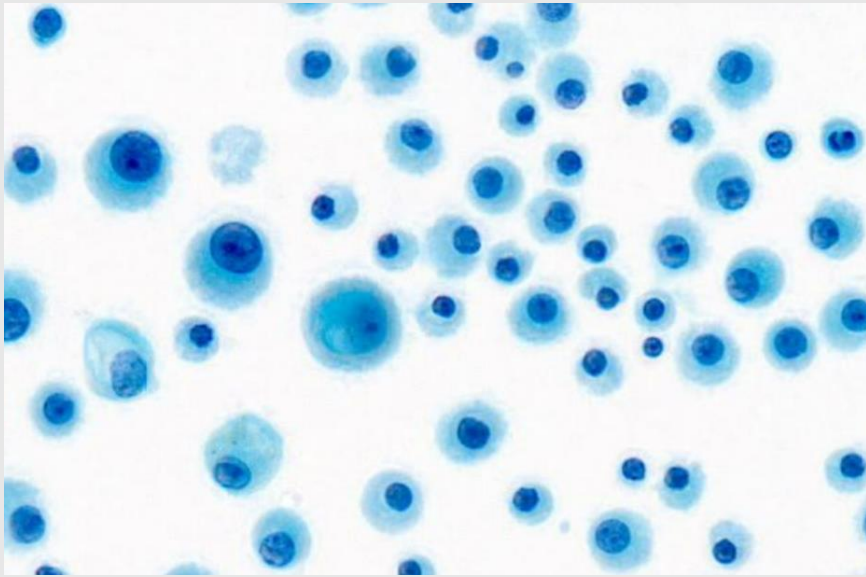
## Malignant mesothelioma



Highly cellular  
Large clusters with scalloped borders, 3D morular groups, or numerous single cells  
Bland cytologic features that recapitulate normal mesothelial cells  
Round to oval nuclei  
Prominent nucleoli  
Binucleation and multinucleation  
Vacuolated or dense cytoplasm with peripheral halo

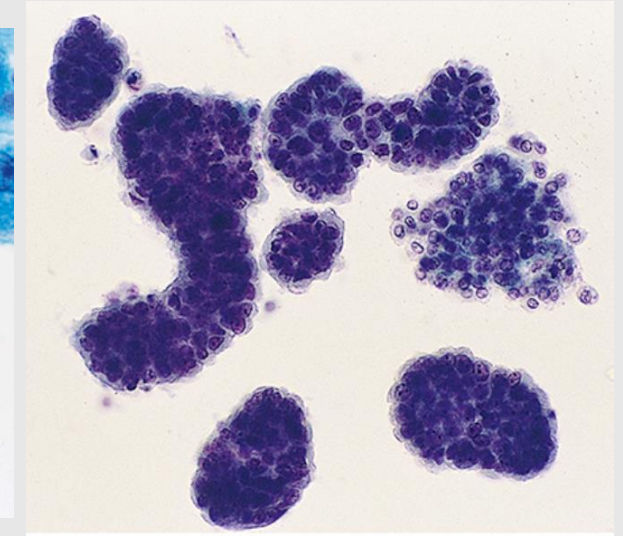
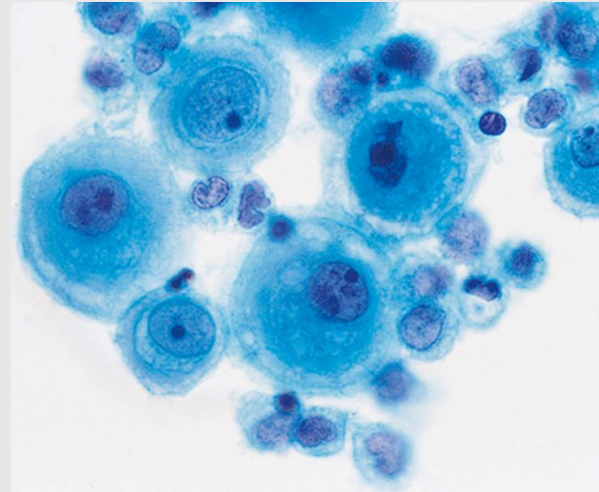


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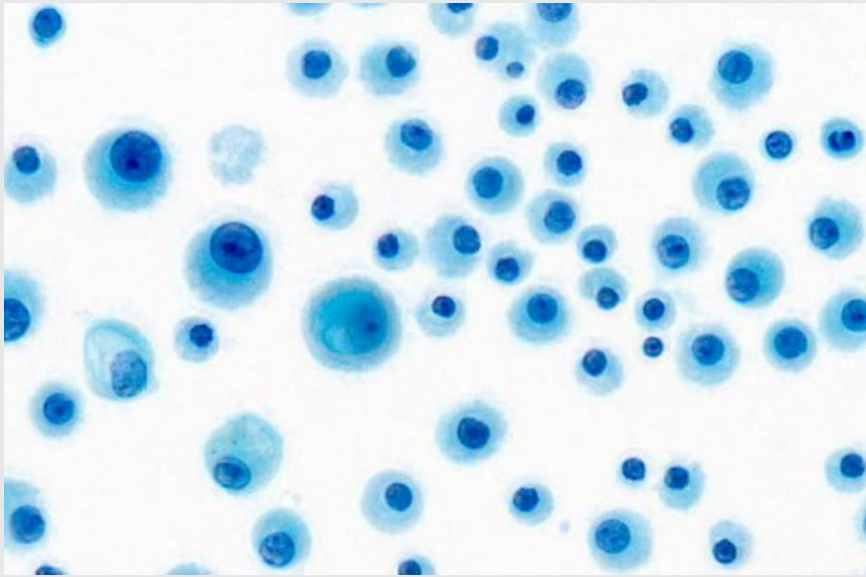
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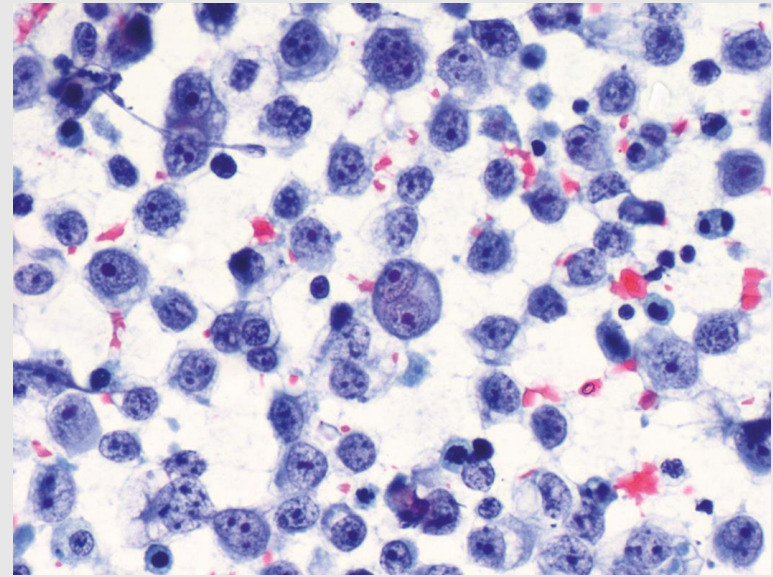
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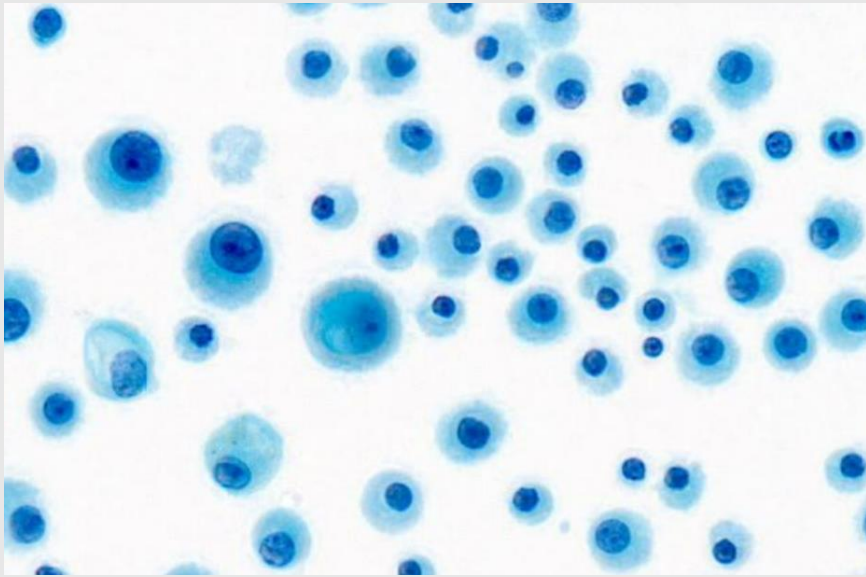
Thoracic SMARCA4-deficient undifferentiated tumor



Cellular in a necrotic background  
Singly or in loosely cohesive groups  
Round to ovoid or polygonal cells  
Despite overall monomorphism, isolated pleomorphic cells are common  
Eccentric nuclei  
Prominent nucleoli  
Rhabdoid cytoplasm may be seen; plasmacytoid and clear cell morphology may also be present  
High mitotic activity

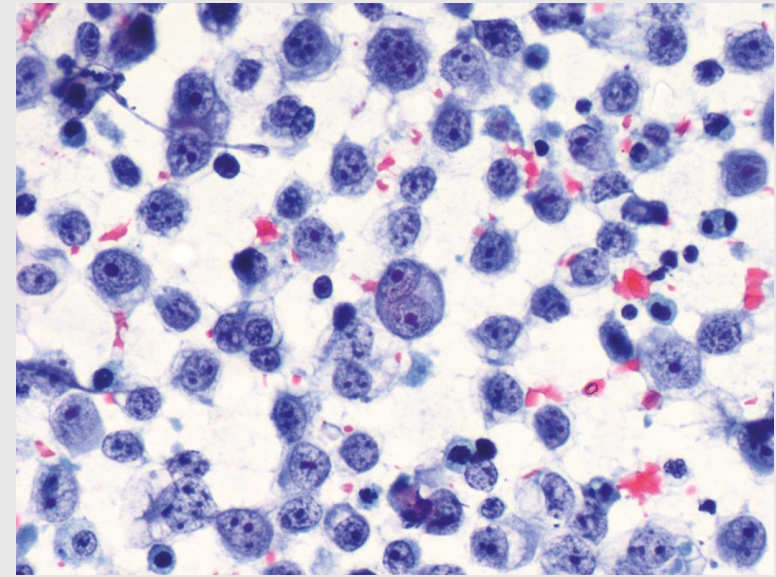


KCP1052



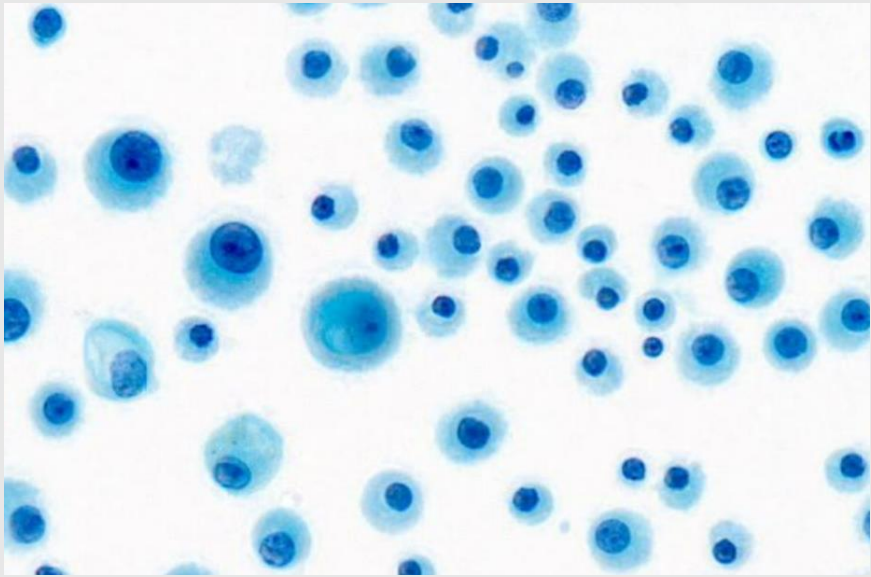
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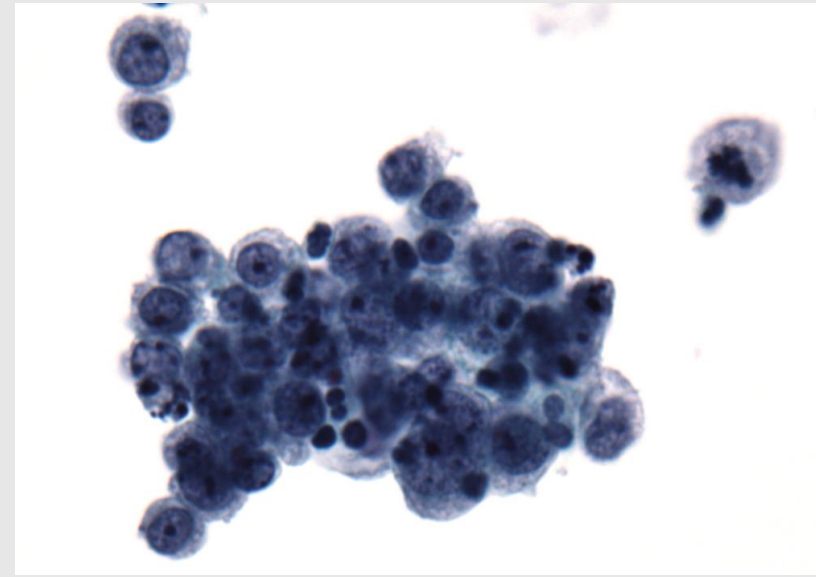
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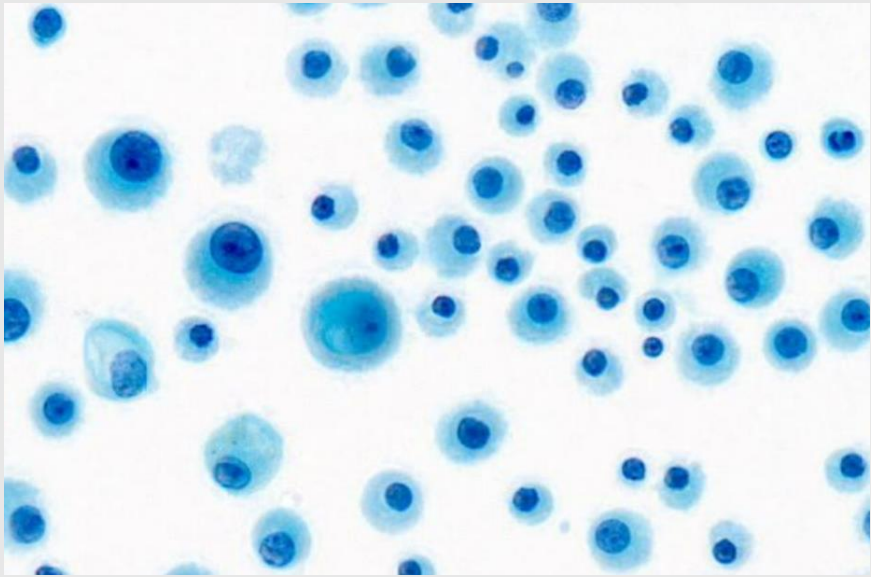
## NUT carcinoma



Discohesive clusters and solitary cells  
Monotonous round cells  
Irregular nuclear contour  
Granular to vesicular chromatin  
Prominent nucleoli  
pale to dense eosinophilic cytoplasm and may be vacuolated  
Mitotic figures, necrotic debris, and crush artifacts are common

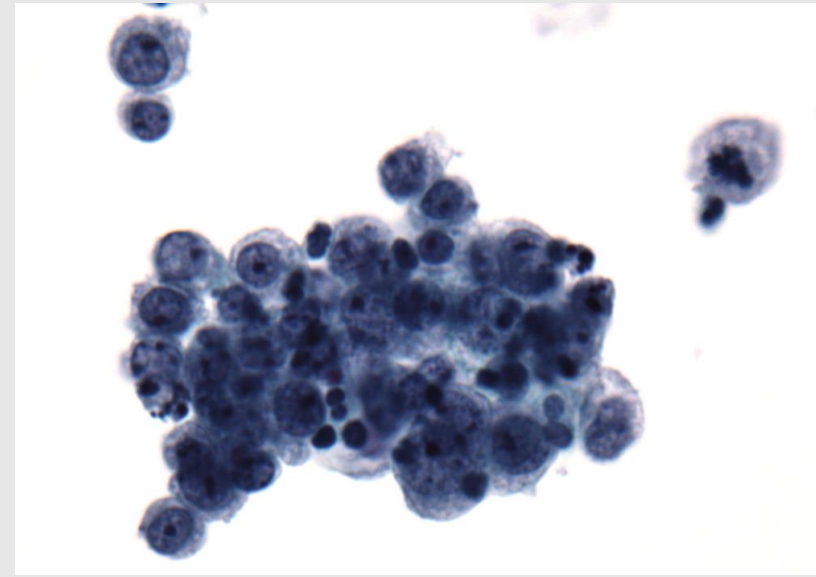


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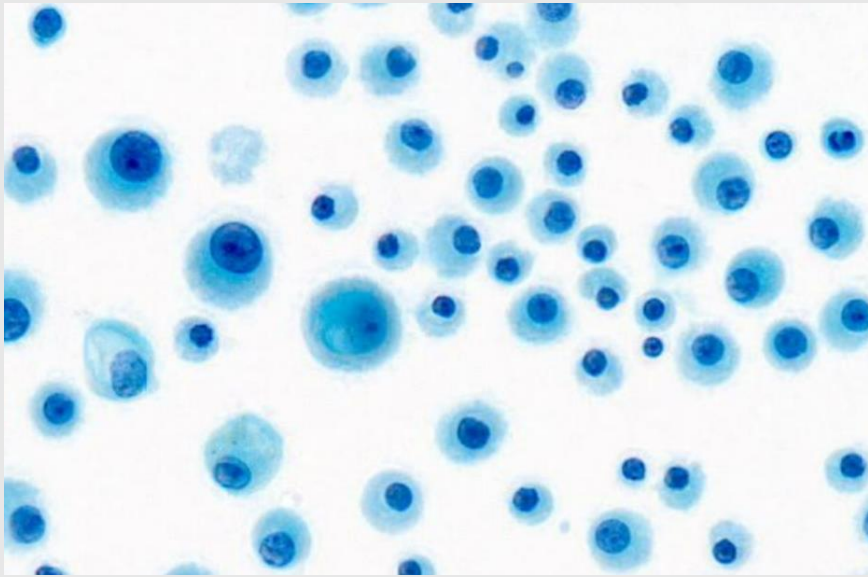
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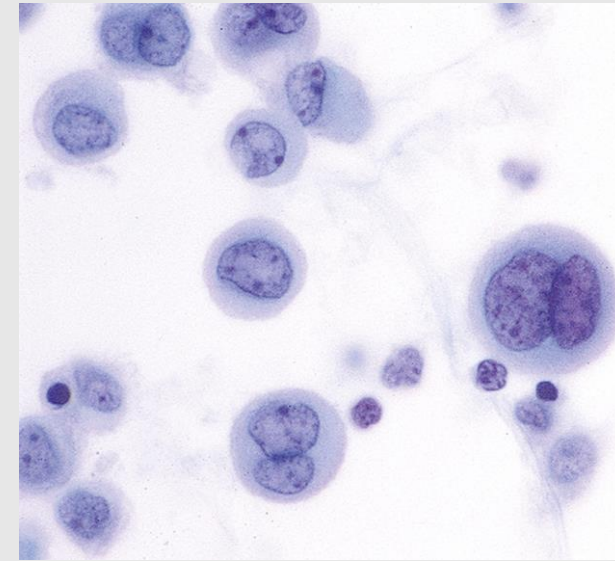
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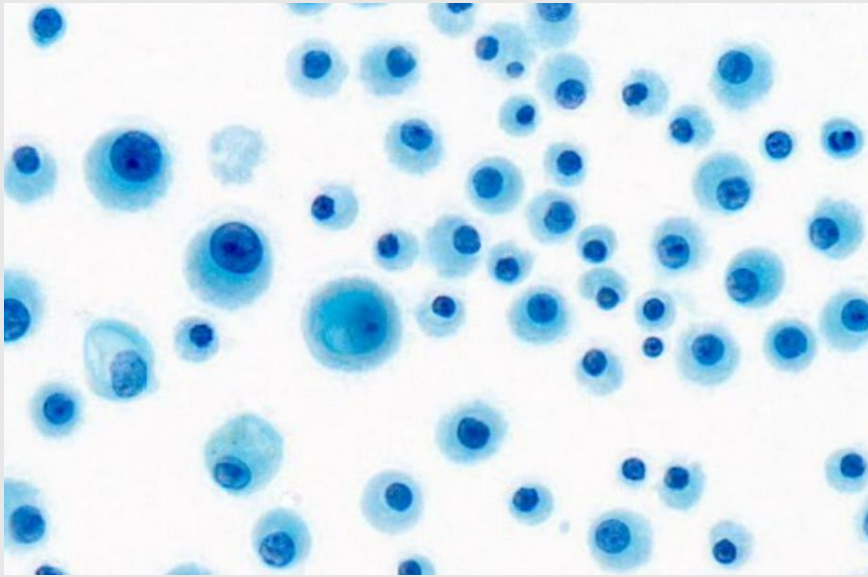
## Reactive mesothelial hyperplasia



Highly cellular  
3D clusters, acinar groups, papillary fragments, and cell balls with cytologic features similar to background mesothelial cells  
Variation in nuclear size  
Irregular chromatin distribution  
Irregular nuclear contours  
Prominent nucleoli  
Occasional multinucleated giant mesothelial cells  
Occasional mitosis

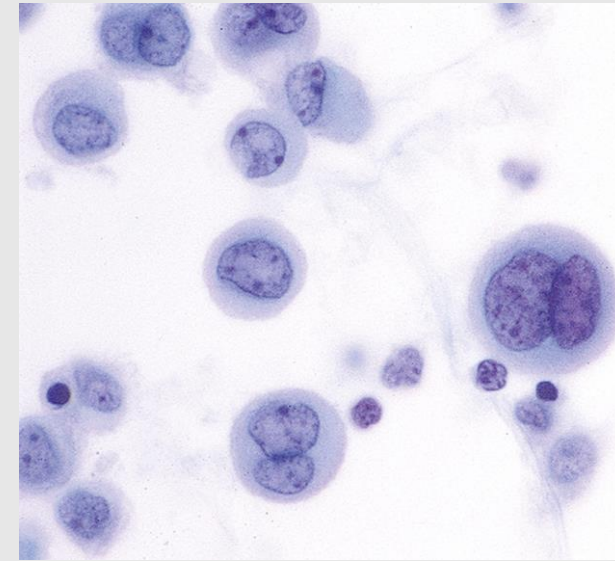


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Occasional mitosis

# Differential diagnosis

## Malignant

- Plasmacytoma
- Malignant mesothelioma
- Thoracic SMARCA4-deficient undifferentiated tumor
- NUT carcinoma

## Benign

- Reactive mesothelial hyperplasia



# Final diagnosis

- Plasmacytoma



# Reference

WHO classification of tumours online

Mody, D. R., Thrall, M. J., & Krishnamurthy, S. (2022). *Diagnostic Pathology: Cytopathology* (3rd ed.).

Cibas, E. S., & Ducatman, B. S. (2020). *Cytology* (5th ed.).

Gochhait D, Dey P, Verma N. *Cytology of plasma cell rich effusion in cases of plasma cell neoplasm.* Journal of Cytology. 2016 Jul-Sep;33(3):150-153. DOI: 10.4103/0970-9371.177147. PMID: 27756988; PMCID: PMC4995873.



✿ *Thank you*