

# Supplementary material

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## 1 Ablation study

### 1.1 Bandwidth.

Bandwidth	Scott	0.05	0.1	0.5	1.0
Spatial-FID	<b>0.357</b>	1.41	0.538	0.908	1.433

Table 4: Ablation study results on the bandwidth of KDE

### 1.2 Number of components

Table 5: Ablation study results on the component number of GMM

Component number	BIC	4	6	8	10
Spatial-FID	<b>0.039</b>	0.507	0.464	0.365	0.567

## 2 Samples

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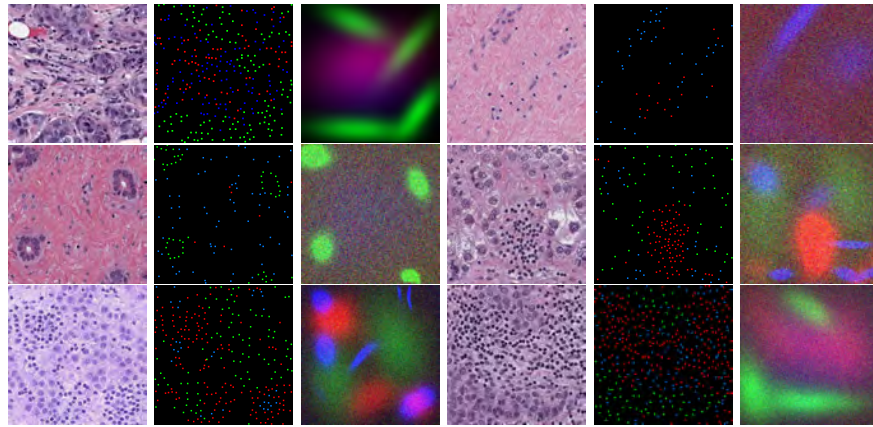


Fig. 4: The three image pairs in the left top, right top, left medium, right medium, left bottom, and right bottom are from the training set, the generation of counting categories 0, 1, 2, 3, and 4, respectively. The images in 1st and 4th columns are pathology images. The cell layouts are in 2nd and 5th columns. The generated spatial density maps are in 3rd and 6th columns.