**• Summary of the report**

The authors use DCGAN and PCA to generate the images of tumor and stroma. Then they use InceptionV3 to classify the two categories of tissue.

**• Describe the strengths of the report**

They use different image generation methods and compare the performance of classification model.

**• Describe the weaknesses of the report**

1) The image generated by DCGAN is bad. The generated tumor or stroma did may represent the features of the corresponding image. The classification model may not distinguish between tumor and stroma but the artifacts from DCGAN. They can use PSNR or SSIM to compare the image quality.

2) The classification process has not improved by feeding the generated image to the InceptopnV3. Because the size of image is the same, so the inference time is the same and the accuracy is not much better than the original image. If they want to improve the inference speed and maintain classification accuracy, they can try to use manifold learning methods to reduce the dimension of data or use pretrain VGG16 to extract the feature.

**• Evaluation on Clarity and quality of writing: 4**

**• Evaluation on presentation: 4**

**• Evaluation on creativity: 3**

They can use Pix2Pix or CycleGAN as baseline. The DCGAN is old and not the state of art GAN model for image generation. The generator of DCGAN has few layers may cause the bad performance for generated images.

**• Confidence on your assessment: 3**