## 1. Supervised Learning

## Models Experimented

Model Name	Reason
DenseNet	The intuition behind choosing this model is that DenseNet tends to preserve the input features as depth of model increases due to skip connection, which eventually gives really great results in medical domain
ResNet	This is standard model used in the medical deep learning literature and is known to be achieve good results when fine tuned on medical images
EfficientNet	Recently, this model was one of the state of the art models on ImageNet. I wanted to test the performance of this model on the datasets in comparison to other models. Hence, I chose this as one of the models.

## **Assignment - 2**

**Semi-Supervised Learning** 

Main Paper implemented on ChestXRay dataset - <a href="https://arxiv.org/abs/1905.02249">https://arxiv.org/abs/1905.02249</a> (MixMatch)

## Additional papers read

- a) Self-Training
  - i) https://arxiv.org/abs/1911.04252
  - ii) <a href="https://arxiv.org/abs/1911.04252">https://arxiv.org/abs/1911.04252</a>
- b) Consistency Regularization
  - i) https://arxiv.org/abs/1610.02242
  - ii) https://arxiv.org/abs/1703.01780
- c) Hybrid Models
  - i) https://arxiv.org/abs/2001.07685