

## Simple reasoning question (Precision & Recall)

**(Question)** Suppose you have to create a machine learning model that predicts whether or not a certain human has a particular type of fatal cancer. Is Precision or Recall a more important metric to optimize in this case? Explain your reasoning.

**(Answer)** The preferable evaluation metric is Recall for this problem. Suppose we want to predict whether or not a certain human has a particular type of fatal cancer only if we're very confident so we want to avoid False negatives but if the patient actually has cancer and we fail to flag it, then it could result in a fatality, stakes are high here for making such mistakes hence we want to settle down for Recall as an evaluation metric because flagging some patients as having cancer that actually does not have the disease is less consequential as compare to flagging someone as not having cancer and actually have it.