Results of ml without up-sampling (smote) give acc high reason:

**Link:** <https://deepchecks.com/how-to-check-the-accuracy-of-your-machine-learning-model/#:~:text=Accuracy%20is%20a%20metric%20used,the%20total%20number%20of%20predictions>.

The situation is a typical example of the accuracy paradox. While you achieve a high accuracy value, it gives you a false premise as your dataset is highly imbalanced, and mis-predicting the minority class is costly.

In such situations, you try to predict rare but critical risks with systemic consequences. Examples are serious medical illnesses, economic crises, terrorist attacks, meteors.

It does not matter if your model achieves 99.99% accuracy if missing a single case is enough to sabotage the whole system. Relying on accuracy is not enough and can even be misleading.