

The tables below show the comparison of various machine learning models in T1D vs. CTL comparison across all cells (unannotated). The mean scores were computed based on one hundred iterations performed for XGBoost and ten iterations for support vector machines (SVM) and naïve Bayes.

**Table 1.** Comparison of machine learning models across all cells (unannotated) in T1D vs. CTL

<b>Method</b>	<b>Accuracy Mean (SD)</b>	<b>Sensitivity Mean (SD)</b>	<b>Specificity Mean (SD)</b>
XGBoost	99.10 (0.04)	99.71 (0.04)	96.94 (0.20)
SVM Linear	97.56 (0.06)	98.51 (0.09)	94.15 (0.27)
SVM Radial	97.03 (0.10)	99.88 (0.12)	86.82 (0.40)
Naïve Bayes			

SD- Standard Deviation.

The tables below show the comparison of various machine learning models in T1D vs. CTL comparison across cell types. The mean scores were computed based on one hundred iterations performed for XGBoost and ten iterations for SVM and naïve Bayes.

**Table 2.** Comparison of machine learning models across major cell types in T1D vs. CTL

<b>Method</b>	<b>Cell Types</b>	<b>Accuracy Mean (SD)</b>	<b>Sensitivity Mean (SD)</b>	<b>Specificity Mean (SD)</b>
XGBoost	Acinar	99.20 (0.10)	99.69 (0.08)	98.08 (0.25)
SVM Linear	Acinar	98.42 (0.11)	99.16 (0.07)	96.70 (0.38)
SVM Radial	Acinar	94.78 (0.18)	99.78 (0.04)	83.33 (0.64)
Naïve Bayes	Acinar	76.54 (0.51)	97.75 (0.33)	27.92 (1.39)
XGBoost	Alpha	99.13 (0.09)	99.71 (0.06)	96.93 (0.36)
SVM Linear	Alpha	98.76 (0.11)	99.51 (0.05)	95.92 (0.48)
SVM Radial	Alpha	97.41 (0.15)	99.85 (0.04)	88.08 (0.72)
Naïve Bayes	Alpha	75.64 (1.28)	77.77 (2.30)	67.48 (2.98)
XGBoost	Beta	99.60 (0.07)	99.98 (0.02)	85.31 (2.32)
SVM Linear	Beta	99.69 (0.09)	100.0 (0.01)	88.16 (3.09)
SVM Radial	Beta	98.67 (0.13)	100.0 (0.00)	48.32 (3.17)

Naïve Bayes	Beta	2.56 (0.17)	0 (0.00)	100.0 (0.00)
XGBoost	Delta	98.08 (0.39)	99.42 (0.27)	92.08 (1.72)
SVM Linear	Delta	97.83 (0.46)	99.65 (0.16)	89.63 (1.93)
SVM Radial	Delta	93.17 (0.62)	99.94 (0.05)	62.63 (2.30)
Naïve Bayes	Delta	21.29 (2.39)	4.09 (2.50)	99.04 (0.99)
XGBoost	Ductal	98.86 (0.17)	99.71 (0.12)	97.79 (0.37)
SVM Linear	Ductal	98.80 (0.19)	99.50 (0.09)	98.09 (0.41)
SVM Radial	Ductal	95.32 (0.47)	99.34 (0.20)	90.19 (0.91)
Naïve Bayes	Ductal	61.65 (0.64)	99.65 (0.15)	13.00 (2.06)
XGBoost	Immune	94.18 (1.21)	97.67 (1.00)	85.94 (3.48)
SVM Linear	Immune	93.13 (1.60)	98.67 (0.57)	79.67 (5.03)
SVM Radial	Immune	72.89 (2.37)	100.0 (0.00)	6.10 (3.84)
Naïve Bayes	Immune	39.26 (6.81)	16.07 (12.53)	95.87 (4.25)

SD- Standard Deviation.