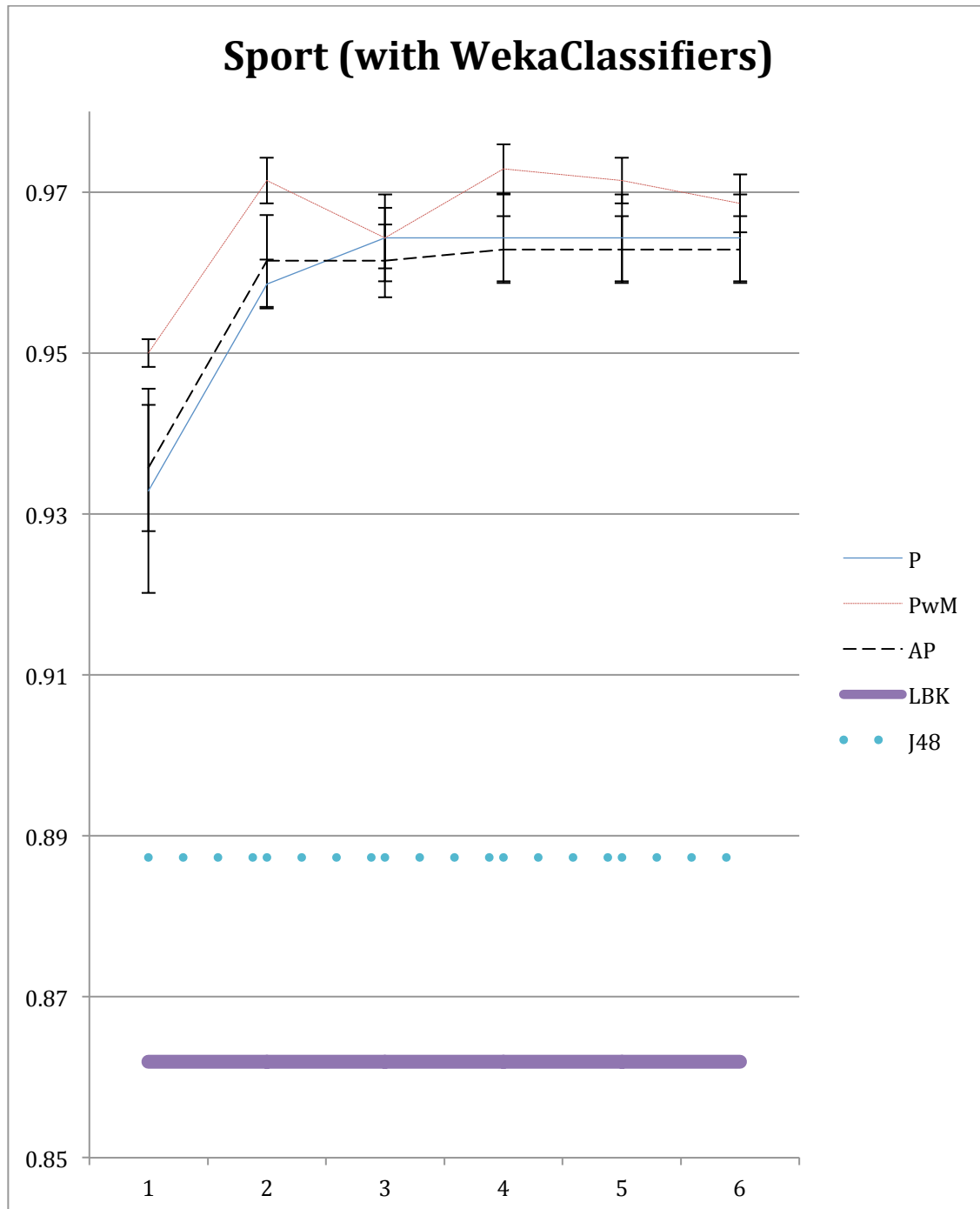
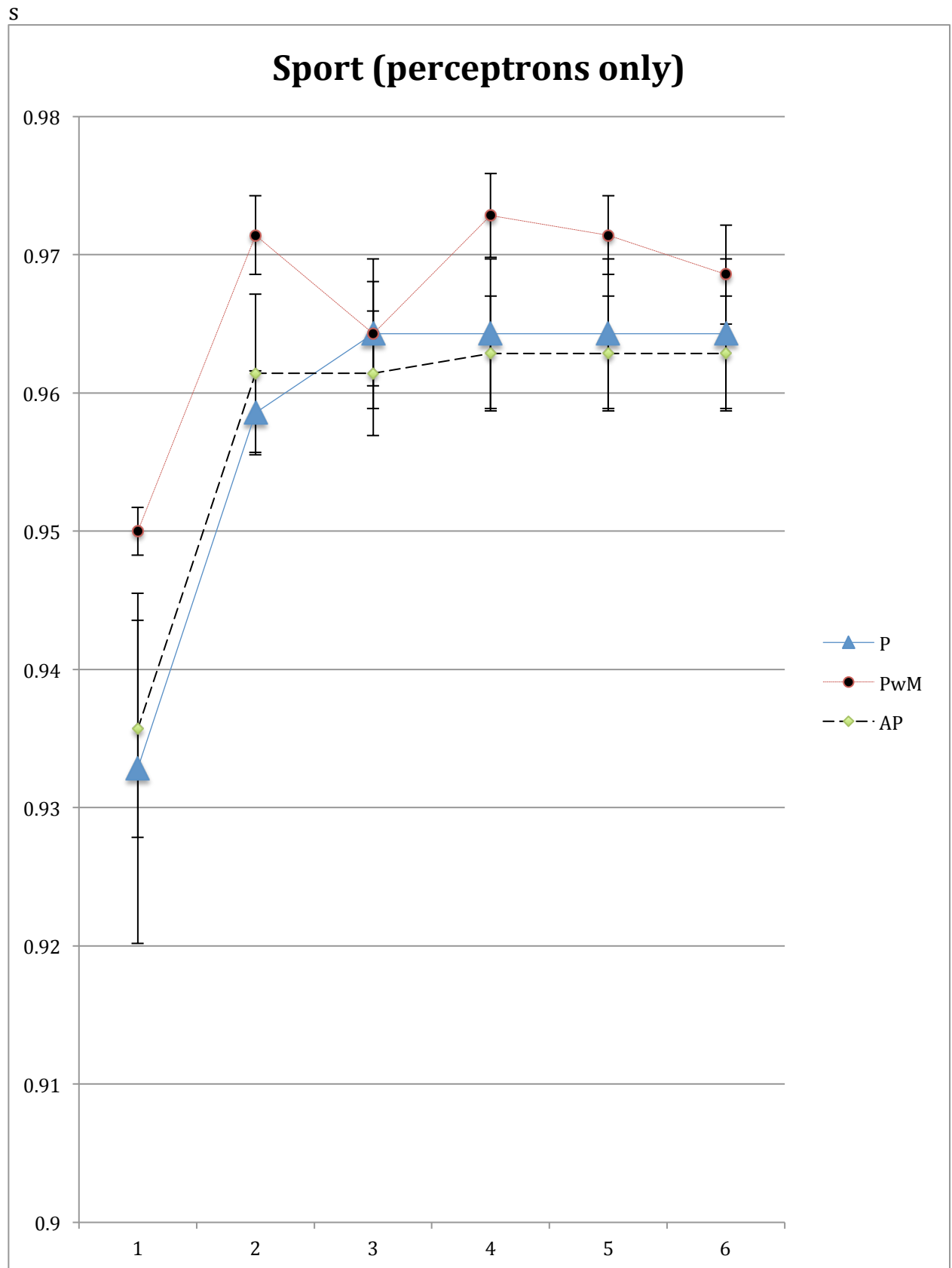
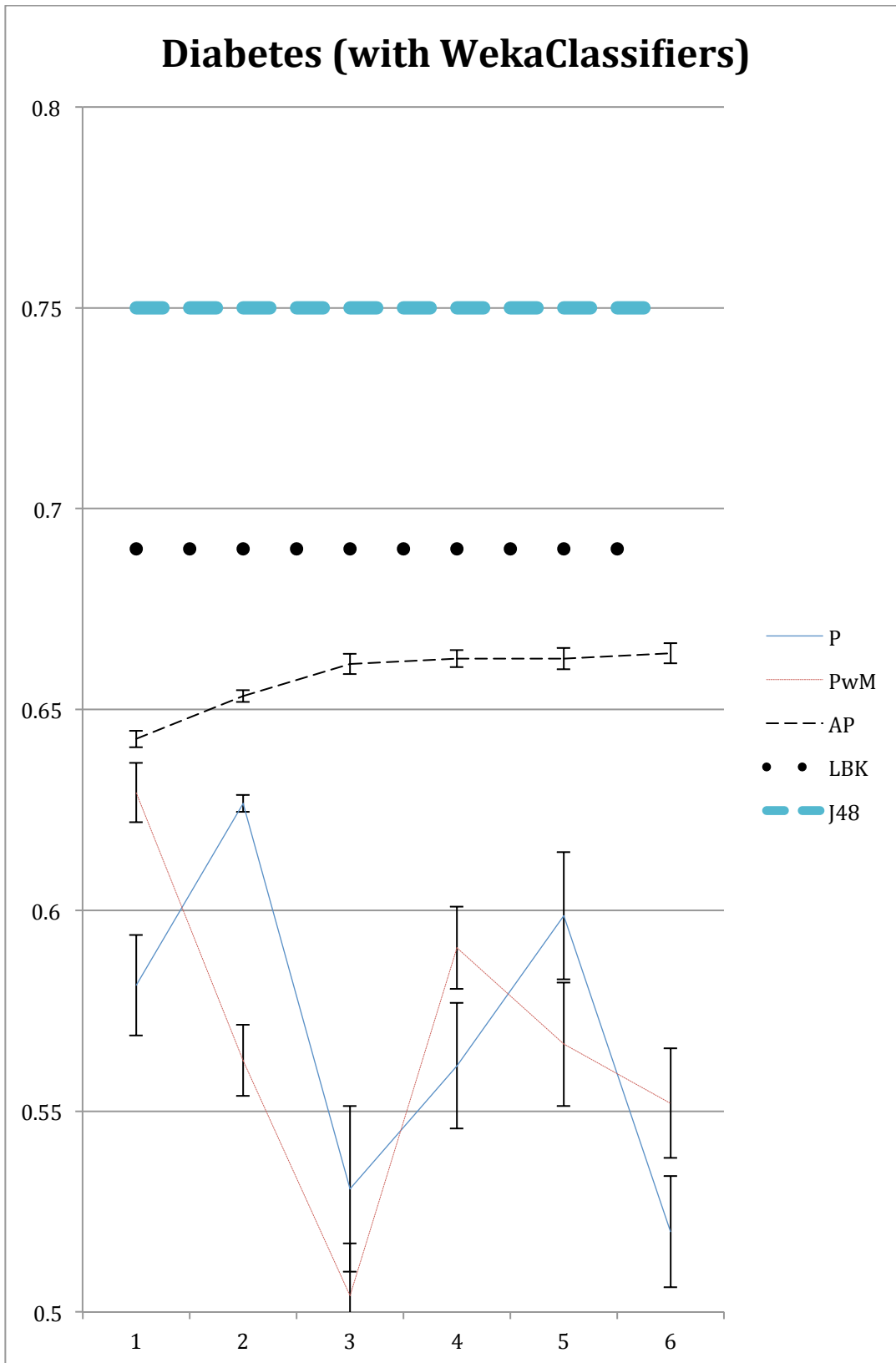
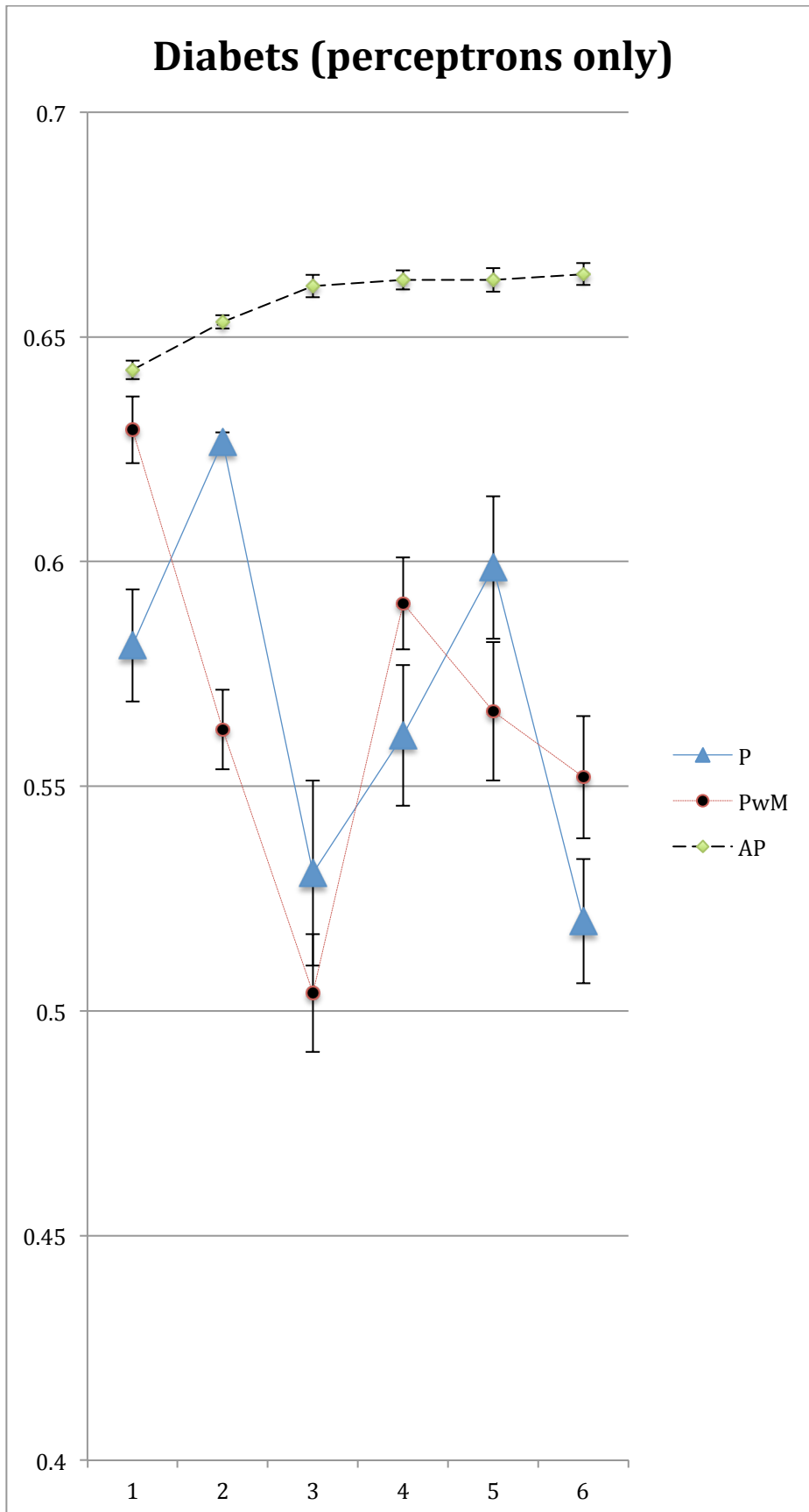


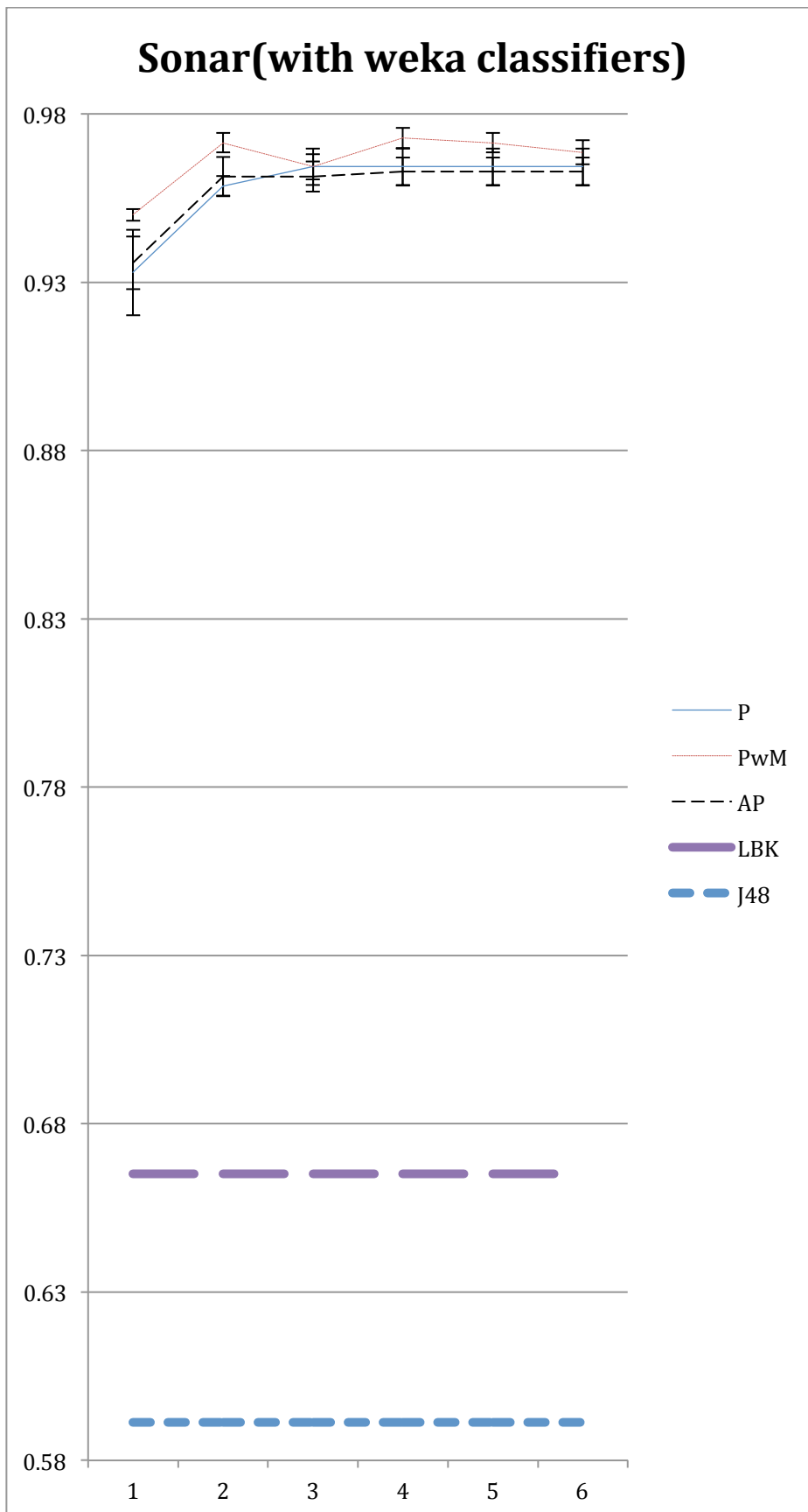
**NOTE\*\*\*** Values on the X axis of 1,2,3,4,5,6 correspond to iterations of 1,5,10,15,20,25

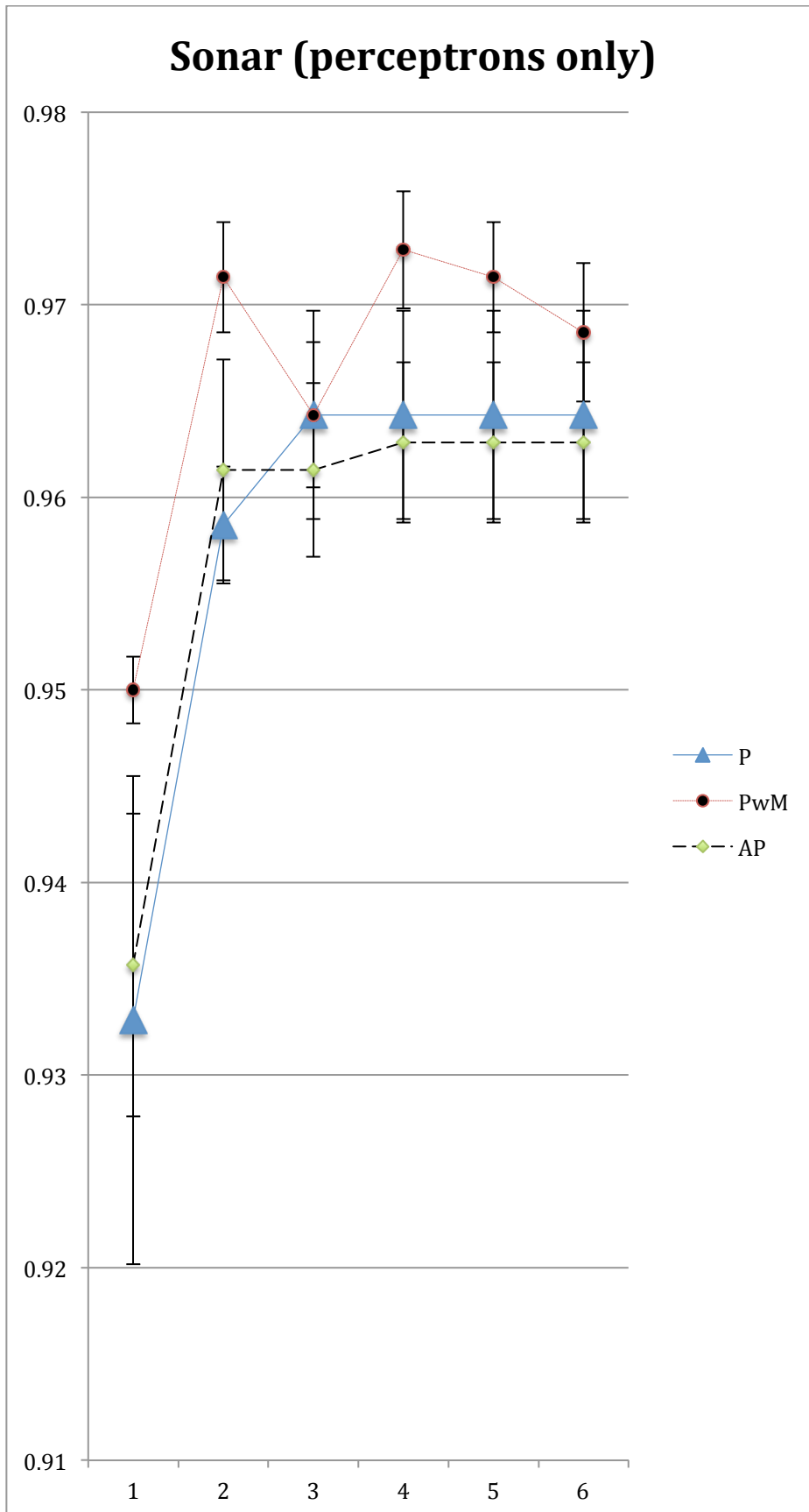












### Brief Summary of Results:

#### Broad Statements:

Overall with perceptron, we can see that the more iterations, the better the accuracy gets.

The larger the range of the values in the features results in a poorer result

Poor clustering results in bad accuracy

#### Sports and Sonar:

Both performed excellently with the perceptron and handily beat the weka classifiers. This could be true for a number of reasons

- a. the number of attributes in each dataset was far larger than the diabetes dataset
- b. the distribution of data was in such a way there were agreeable splits
- c. the range of values in the data was minimal and therefore was able to be classified with more certainty

#### Diabetes:

Perceptron on Diabetes underperformed both the weka classifiers and gave bad accuracies with large deviations. The weka classifiers were better suited at dealing with the type of values seen in diabetes: large ranges and larger variations. It is possible that the features in this set were linearly inseparable which would result in bad results.