**Variables Dictionary**

Ten real-valued features are computed for each cell nucleus:

a) Radius (mean of distances from center to points on the perimeter)

b) Texture (standard deviation of gray-scale values)

c) Perimeter

d) Area

e) Smoothness (local variation in radius lengths)

f) Compactness (perimeter^2 / area - 1.0)

g) Concavity (severity of concave portions of the contour)

h) Concave points (number of concave portions of the contour)

i) Symmetry

j) Fractal dimension ("coastline approximation" - 1)

The mean, standard error and "worst" or largest (mean of the three largest values) of these features were computed for each image, resulting in 30 features.