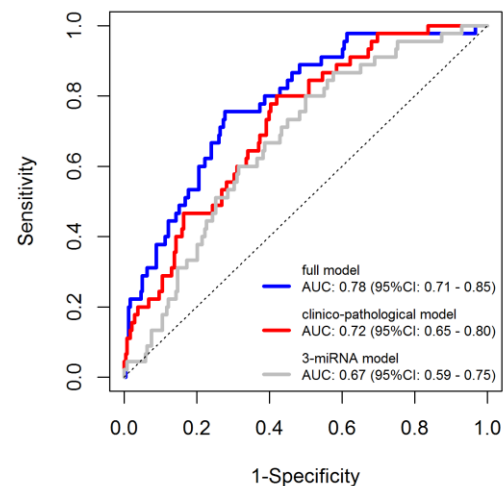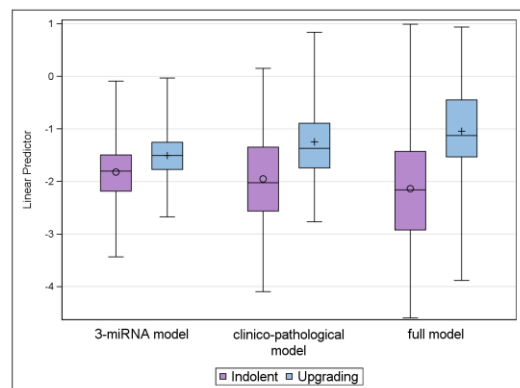**Supplementary Figure 1**

Supplementary Figure 1. Heatmap depicting the level of significance of the candidate miRNAs arising from the different univariate analysis in the TRS. Color intensity is proportional to the significance, from the lowest p-value (red), to the highest p-value (yellow). AUC: area under the curve; OR: odds ratio; KW: Kruskal-Wallis test.
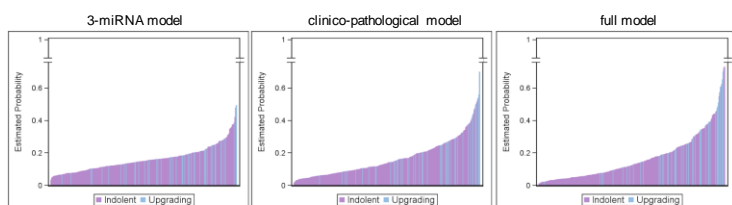
Supplementary Figure 2

Supplementary Figure 2. Results obtained by considering all the available variables in the clinico-pathological model.
(A) ROC curves in the overall series of AS patients**.** ROC curves from 3-miRNA (gray line), clinico-pathological (red line) and full (blue line) models. **(B)** Distribution of the linear predictors estimated for the 3 fitted models according to the upgrading (light-blue) and indolent (purple) status, in the overall series. Each box indicates the 25th and 75th percentiles. The horizontal line inside the box indicates the median, and whiskers indicate the extreme measured values. **(C)** Bar plots showing the estimated probabilities for each patient according to the upgrading (light-blue) and indolent (purple) status for the 3 fitted models (from left to right: 3-miRNA, clinico-pathological and full model, respectively).