

## **Supplementary informations**

**Validation of plasma microRNAs as biomarkers for myotonic dystrophy type 1.**

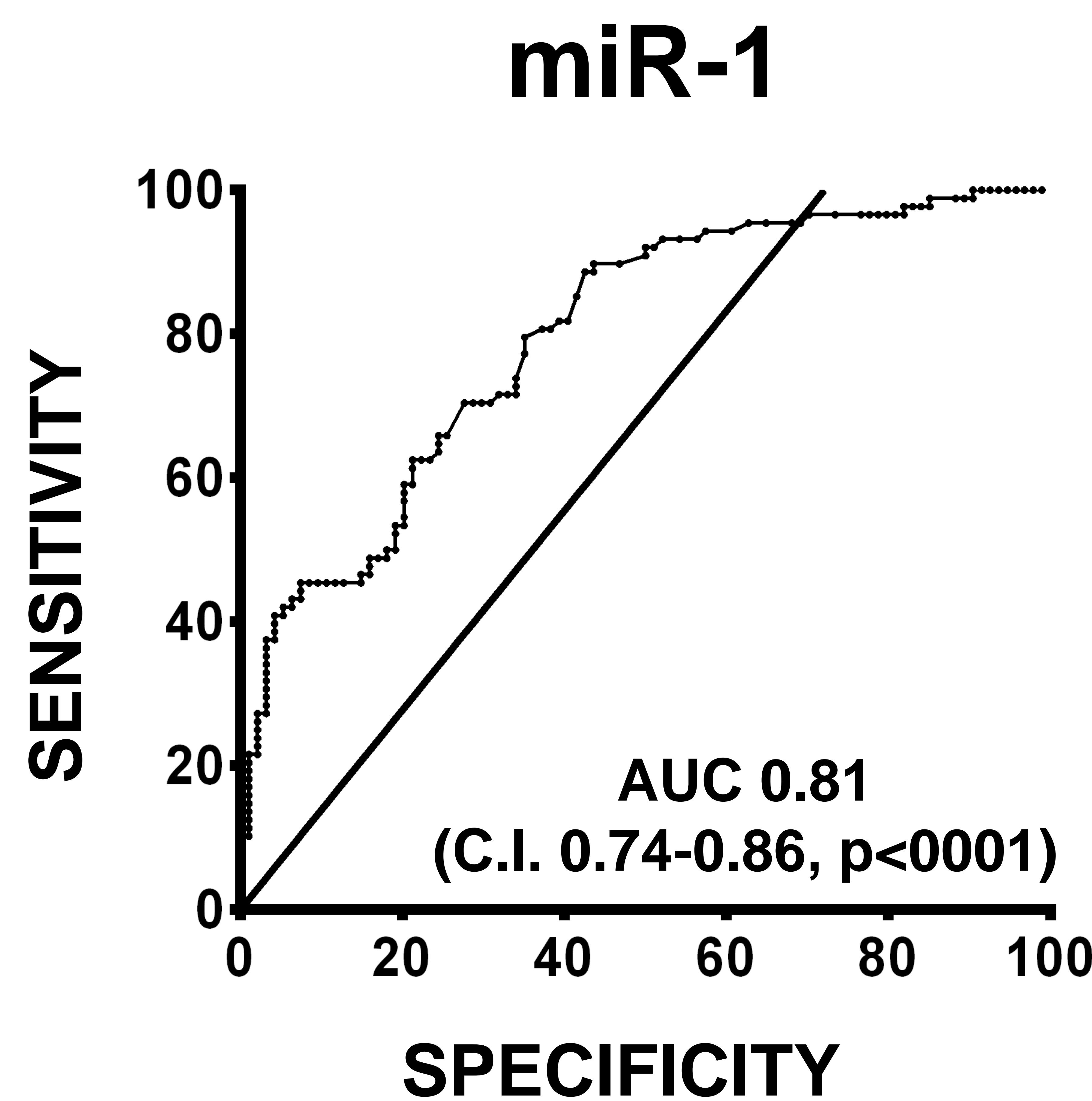
Perfetti A., Greco S., Cardani R., Fossati B., Cuomo G., Valaperta R., Ambrogi F.,

Cortese A., Botta A., Mignarri A., Santoro M., Gaetano C., Costa E., Dotti M.T.,

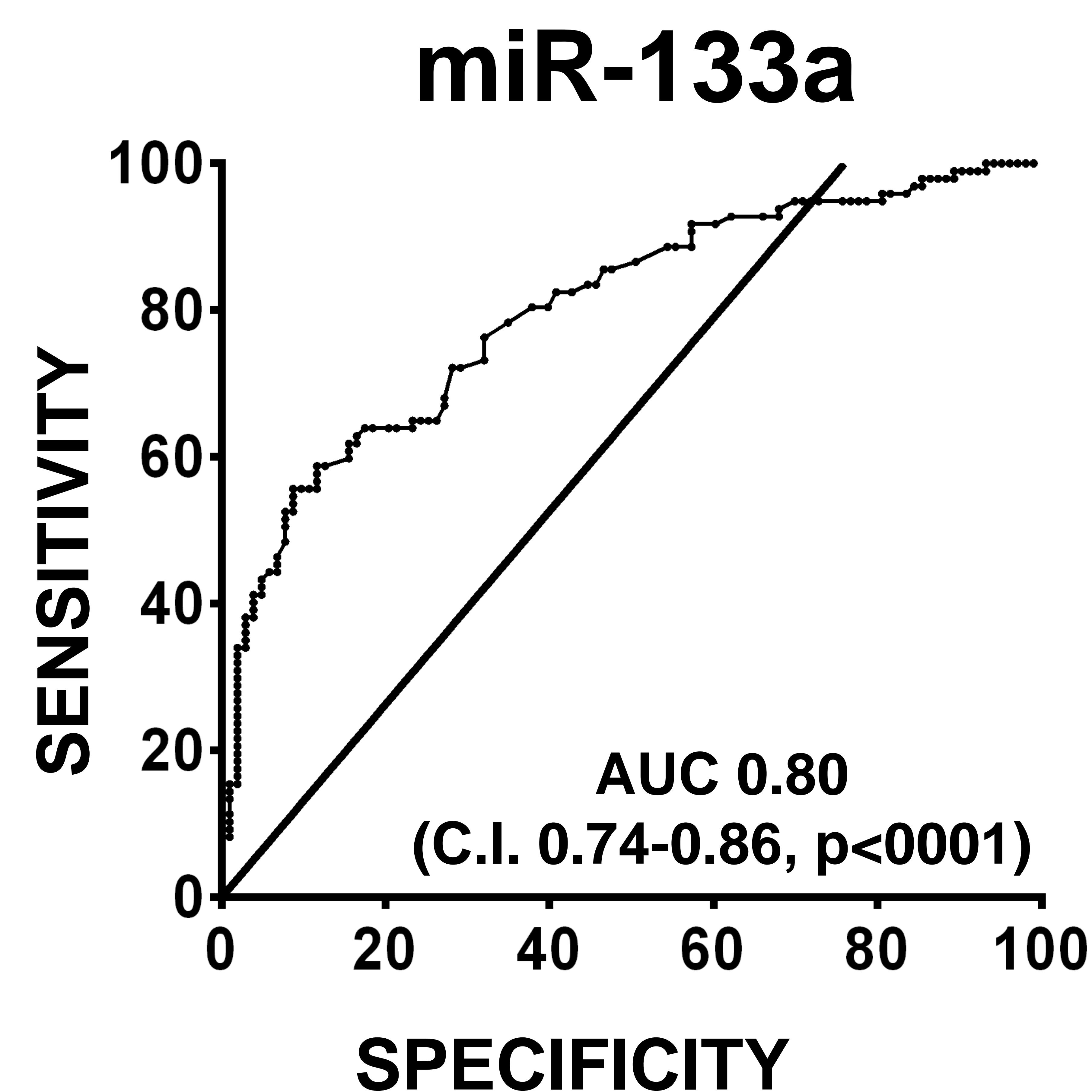
Silvestri G., Massa R., Meola G., Martelli F.

**Supplementary figure S1**

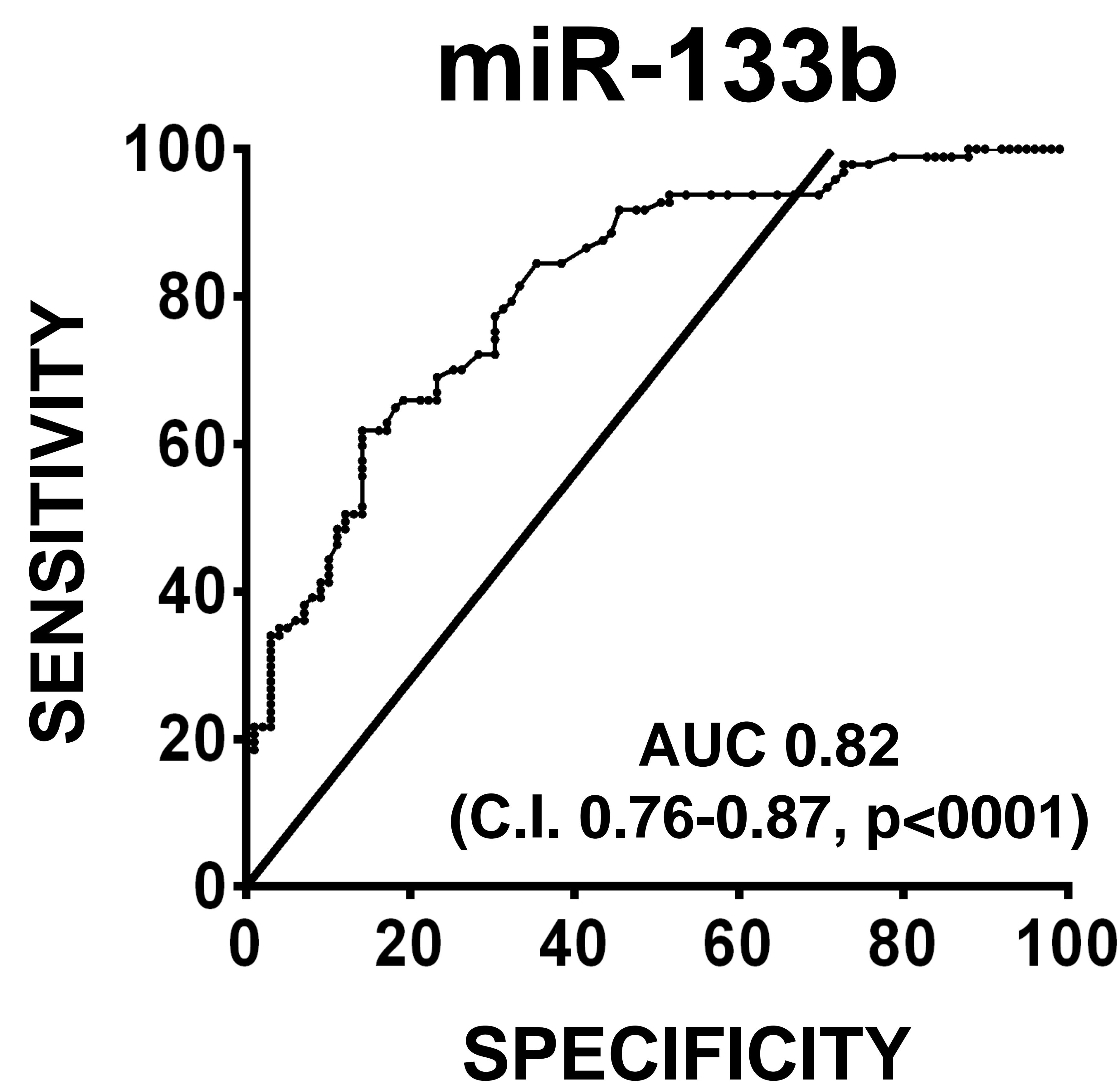
**a**



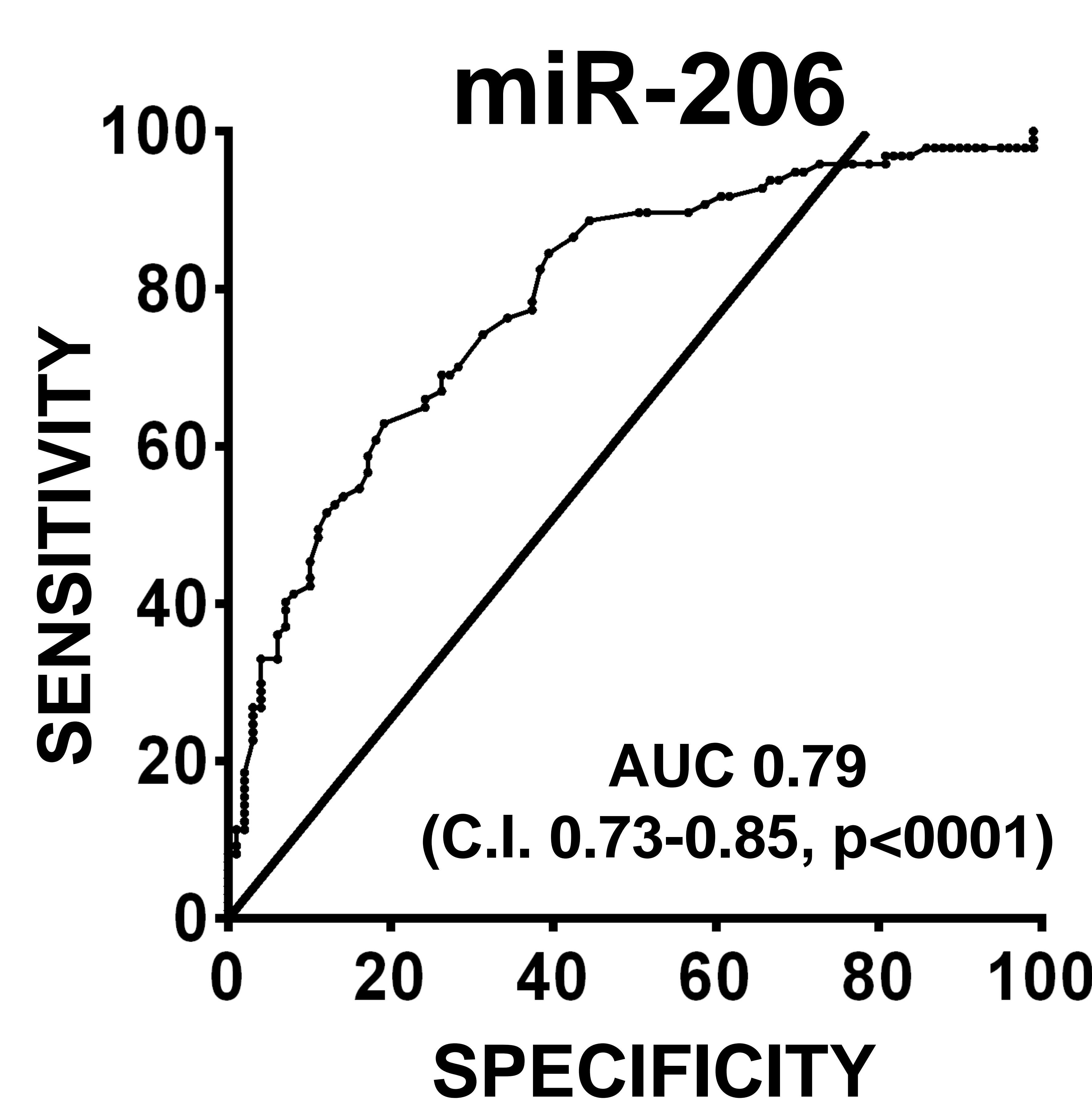
**b**



**c**

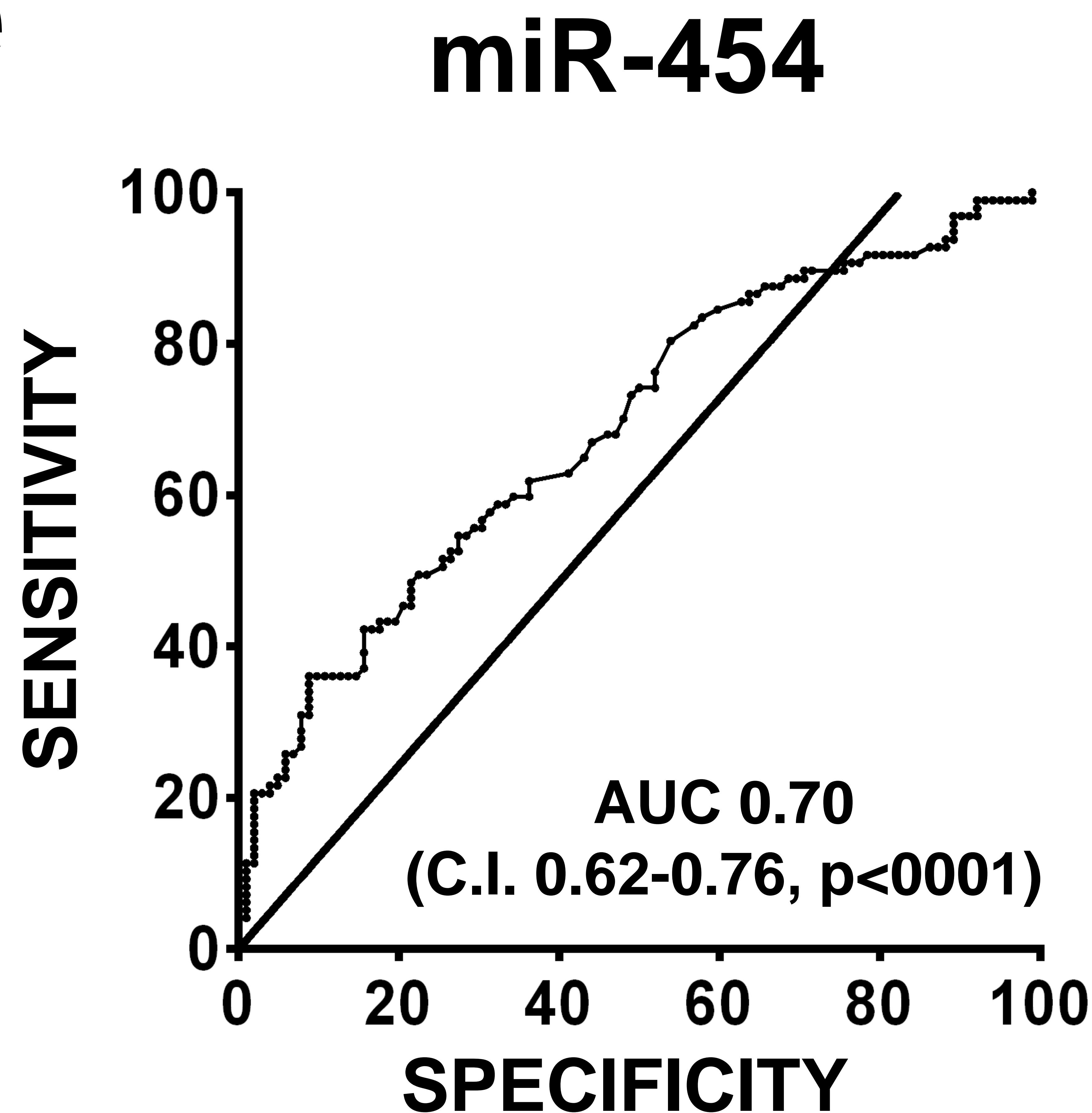


**d**

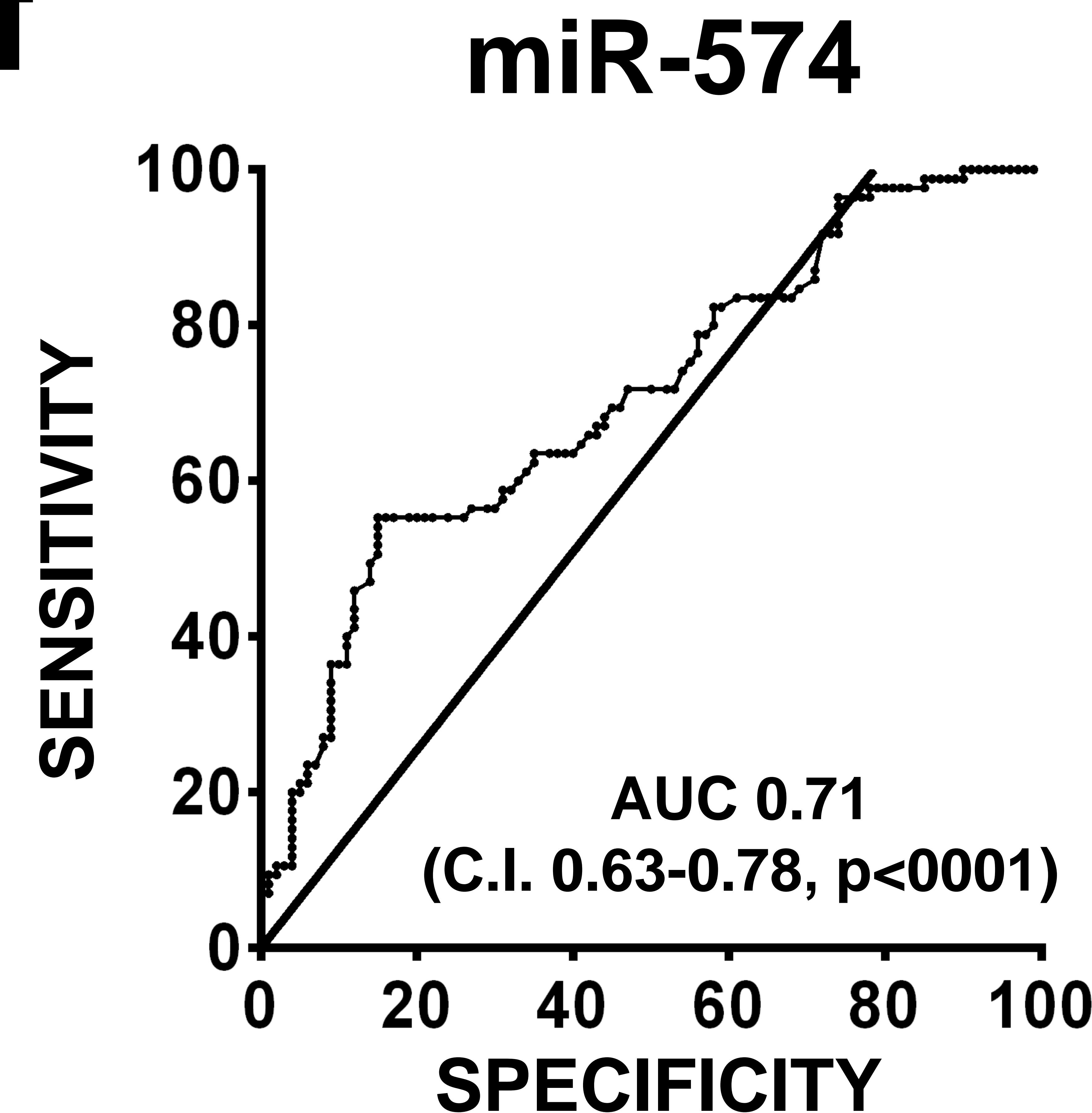


# Supplementary figure S1

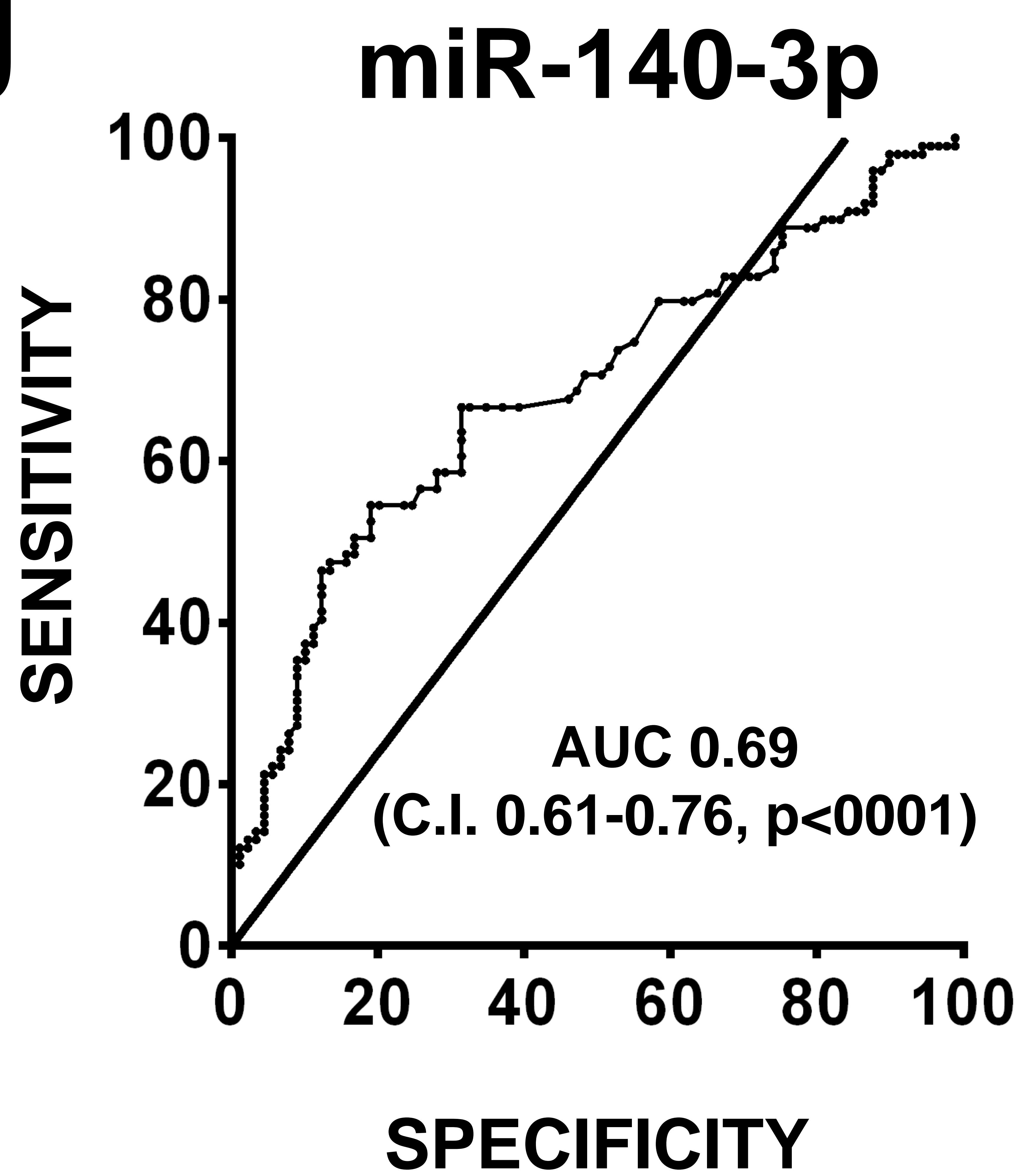
e



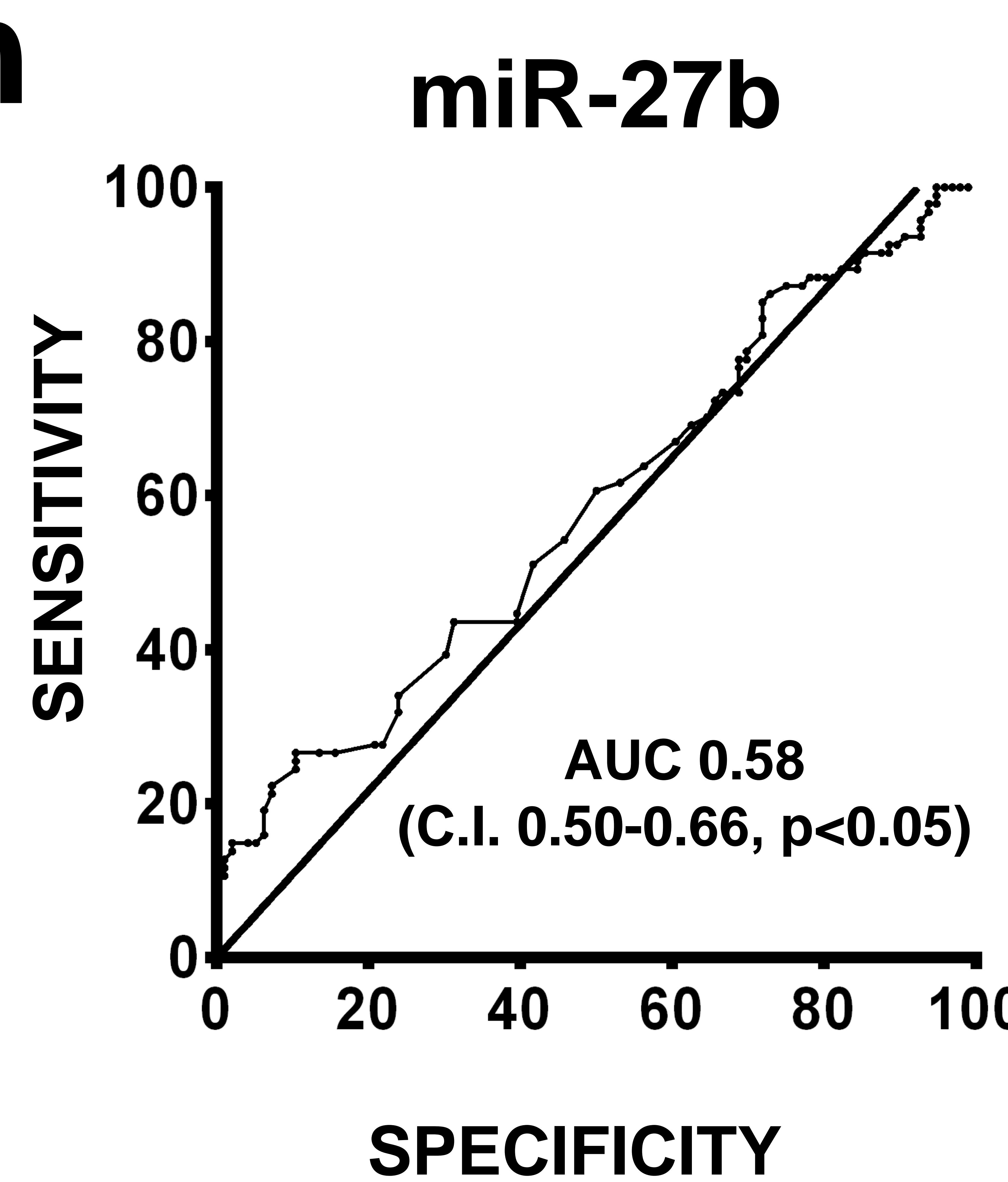
f



g

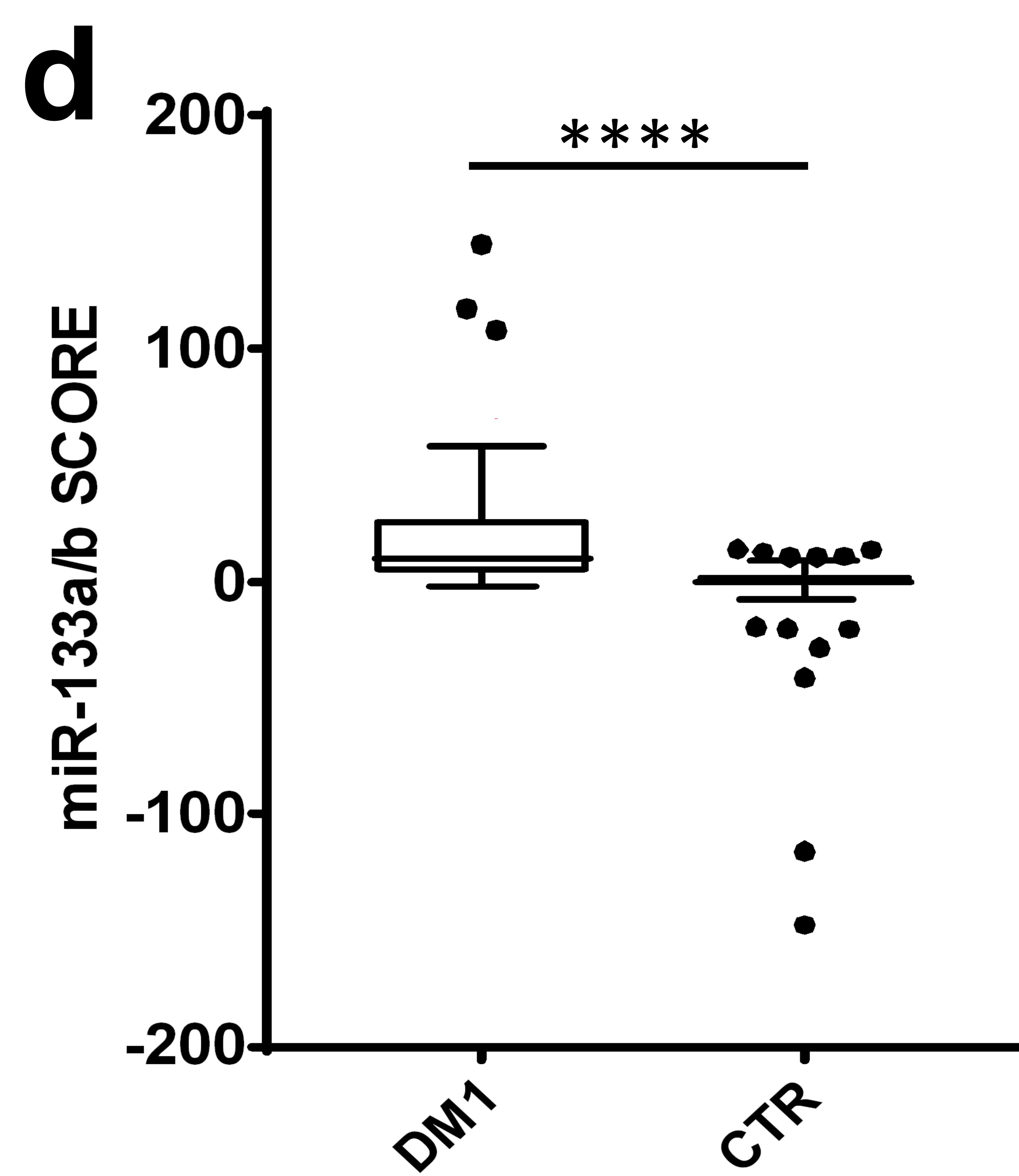
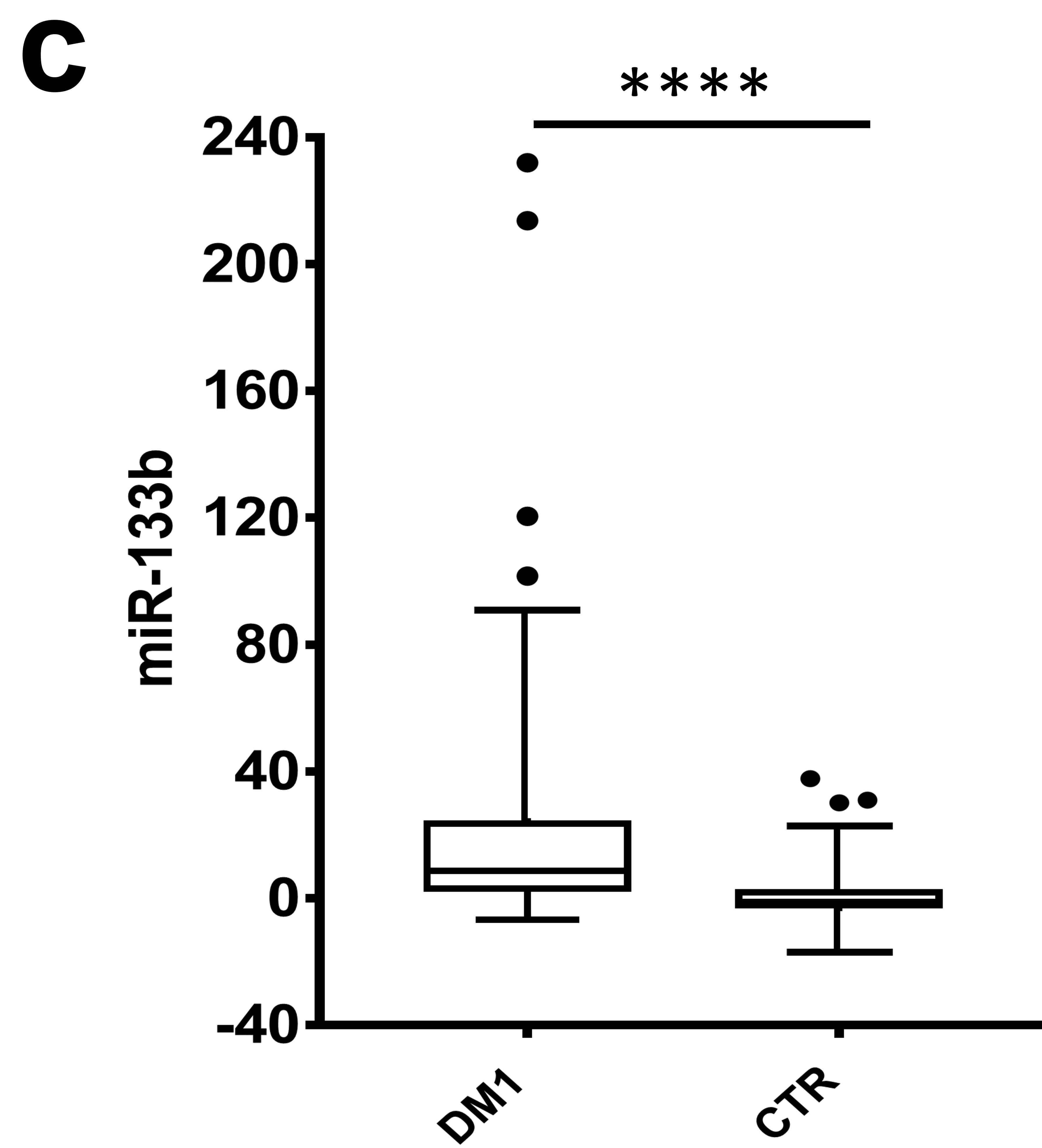
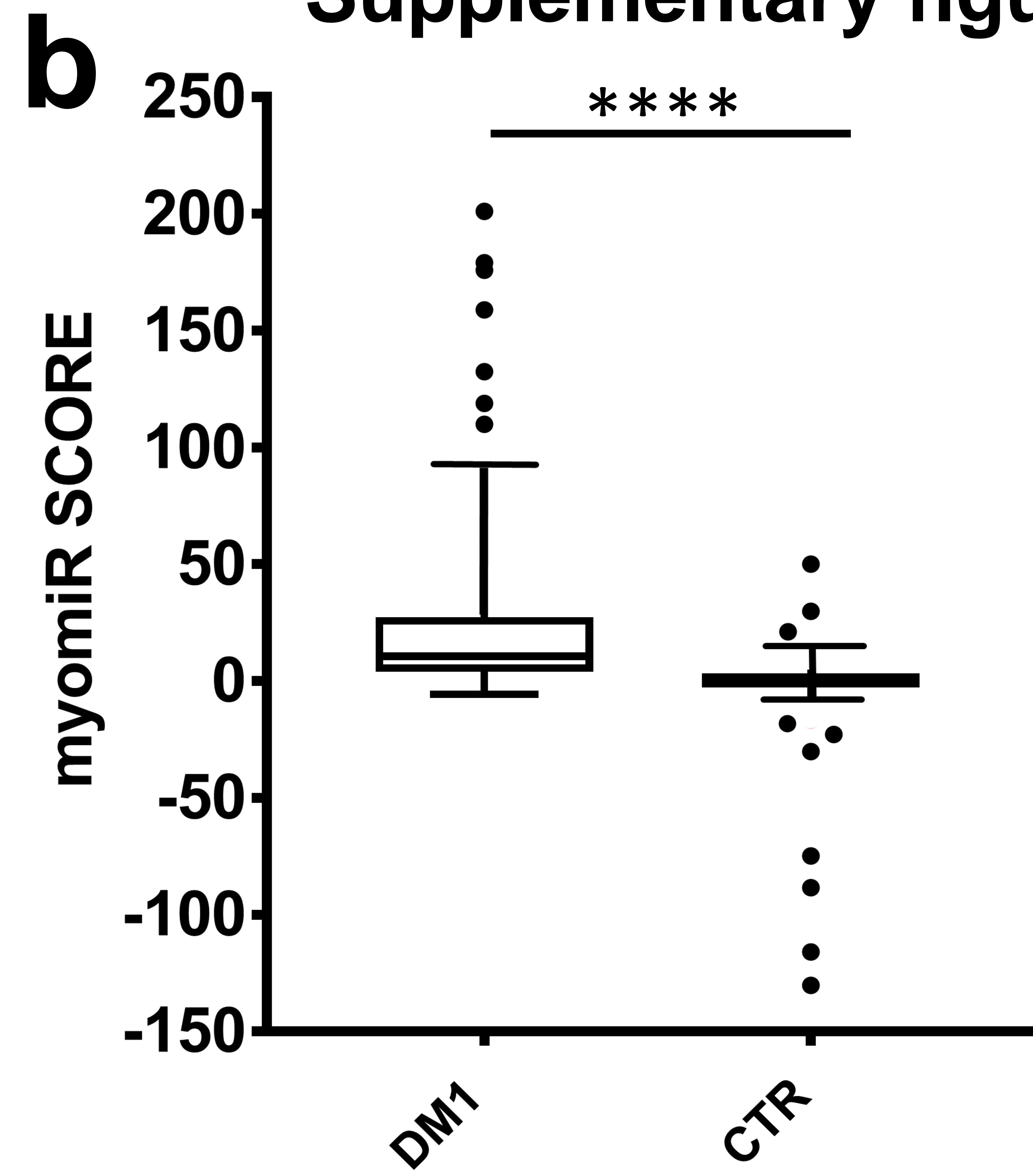
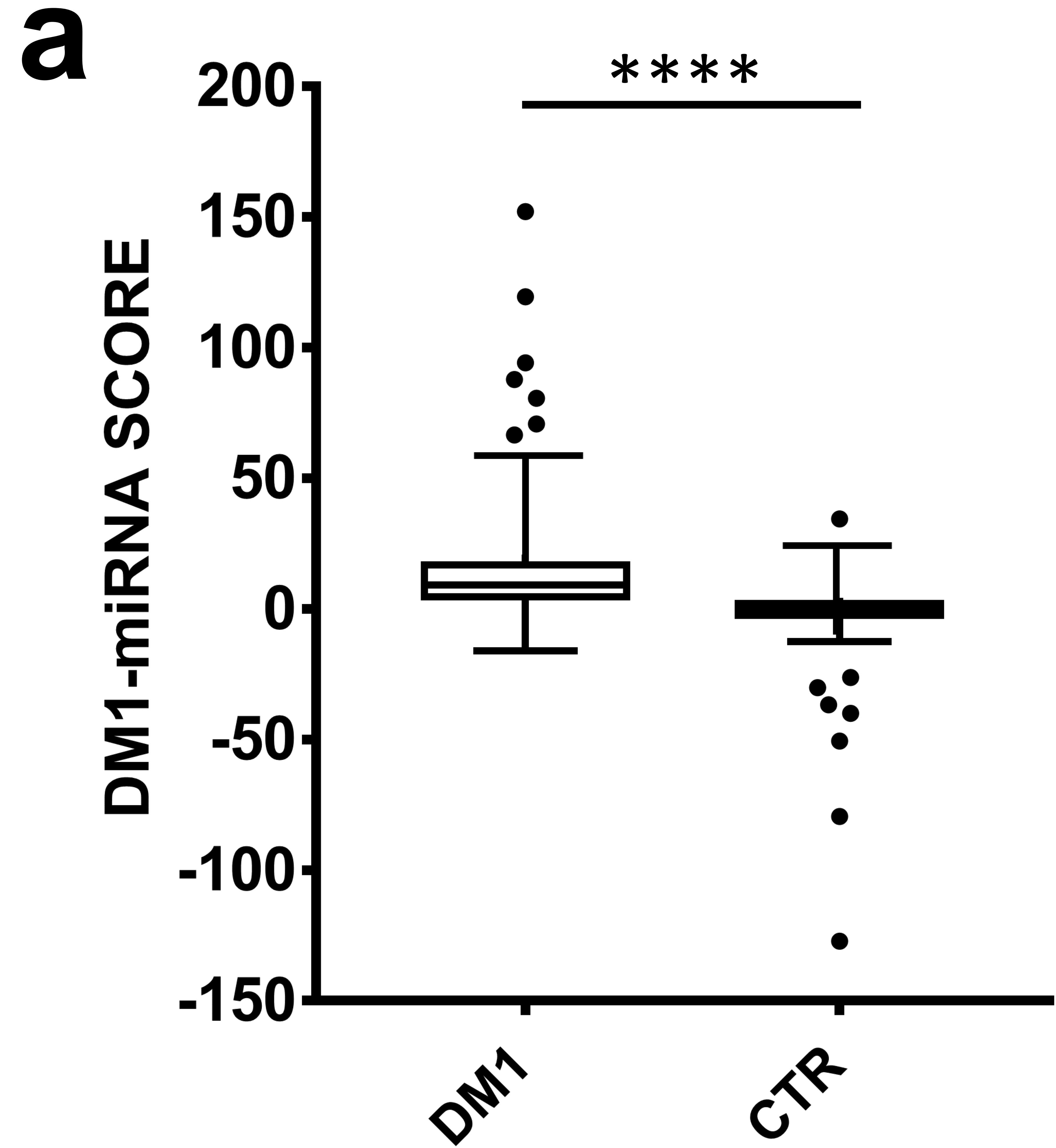


h



Supplementary figure S1. ROC curves of each validated miRNA. Area under the curve (AUC) is indicated for each modulated miRNA (DM1 n=103, CTR n=111).

## Supplementary figure S2



**Supplementary figure S2. Outliers identification by Tukey's test .** DM1-miRNA score (a), myomiR score (b), miR-133b (c) and miR-133a/b score (d) are represented after exclusion of outlier samples (individual dots) identified by Tukey's test. After outliers exclusion all differences were statistically significant (\*\*p<0.0001).

**Supplementary table S3**

<b>CLINICAL CHARACTERISTICS</b>	<b>DM2, n=30</b>
<b>Age at sampling (average ± se)</b>	54.7 ± 2.7
<b>Age of onset (average ± se)</b>	41.5 ± 2.4
<b>Sex (male/female)</b>	13/17
<b>MRC megascore</b>	143.5 ± 1.4
<b>Myotonia (%)</b>	54
<b>Glucose (70-110 mg/dl)</b>	112.3 ± 13.6
<b>Cholesterol (&lt;200 mg/dl)</b>	230.1± 9.6
<b>CK (male&lt;190 mg/dl, female &lt;125 mg/dl)</b>	Male: 313.9±86.6 Female: 353.6.6 ±95.0
<b>Arrhythmia (%)</b>	12
<b>Cataract (%)</b>	32
<b>ECG-QRS duration (60-110 ms)</b>	99.1±4.5

**Supplementary table S5****Intra-assay coefficients of variability (CV)**

	AVERAGE CV %
miR-1	1,5
miR-133a	1,1
miR-133b	1,2
miR-140	1,0
miR-206	1,2
miR-27b	1,9
miR-454	1,2
miR-574	1,3
miR-39	1,7
miR-106a	2,0
mi-17-5p	1,9

*DM1, n=103; CTR, n=111*