

## SUPPLEMENTARY MATERIAL

**Supplementary Table S1.** Changes in prostate volume, IPSS and QOL in the entire cohort.

Endpoint	Mean $\pm$ SD	Median [Q1-Q3] (min-max)	No. Of missing values
<b>QOL</b>			
Initial QOL before PAE	4.7 $\pm$ 1.1	5 [4 - 6] (1 - 6)	1
QOL at M3	2.1 $\pm$ 1.6	2 [1 - 3] (0 - 6)	1
QOL at last FU	2.5 $\pm$ 1.8	3 [1 - 4] (1 - 4)	2
Absolute change in QOL from baseline to M3	-2.6 $\pm$ 1.6	-3 [-4 - -1] (-6 - 0)	1
Relative change in QOL from baseline to M3 (%)	-54.8 $\pm$ 31.4	-60 [-77.5 - -25] (-100 - 0)	1
Absolute change in QOL from baseline to last FU	-2.2 $\pm$ 2	-2 [-4 - -0.2] (-6 - 4)	2
Relative change in QOL from baseline to last FU (%)	-43.5 $\pm$ 47.2	-50 [-80 - -4.2] (-100 - 200)	2
<b>IPSS</b>			
Initial IPSS before PAE	18.7 $\pm$ 6.3	19 [13 - 23] (8 - 32)	0
IPSS at M3	8.9 $\pm$ 6.8	7 [4 - 12] (1 - 33)	0
IPSS at last FU	11.4 $\pm$ 7.6	10 [5 - 15] (0 - 28)	1
Absolute change in IPSS from baseline to M3	-9.8 $\pm$ 7.4	-10 [-15 - -4] (-31 - 5)	0
Relative change in IPSS from baseline to M3 (%)	-50.8 $\pm$ 31.7	-59.1 [-75.3 - -30.2] (-96.9 - 21.7)	0
Absolute change in IPSS from baseline to last FU	-7.3 $\pm$ 7.8	-7 [-13 - -2.5] (-24 - 17)	1
Relative change in IPSS from baseline to last FU (%)	-36.6 $\pm$ 45.9	-43.8 [-66.7 - -16.1] (-100 - 212.5)	1
<b>Prostate volume</b>			
Initial volume before PAE	92.1 $\pm$ 40.7	80 [60 - 122.5] (38 - 200)	0
Volume at M3	74.3 $\pm$ 31.8	65 [50 - 99] (25 - 162)	0
Absolute change in volume from baseline to M3	-17.7 $\pm$ 22	-11 [-25 - -3] (-120 - 15)	0
Relative change in volume from baseline to M3 (%)	-17.2 $\pm$ 16.4	-17.4 [-25.5 - -5.6] (-61.5 - 25.4)	0

NOTE.- Abbreviations: FU: follow-up (at least 2 years), IPSS: international prostate score symptom, no.: number, M3: at 3 months after prostate artery embolization, PAE: prostate artery embolization, QOL: quality of life

**Supplementary Table S2.** Reproducibility analysis of the radiomics features  
(i.e., intraclass correlation coefficient [ICC] and 95% confidence interval [CI])

Radiomics features	ICC (95%CI)	P-value
ADC_GLRLM_LowGreyLevelRunEmphasis	1 (1 - 1)	<0.0001***
ADC_GLSZM_LowGrayLevelZoneEmphasis	1 (1 - 1)	<0.0001***
ADC_GLCM2_AngularSecondMoment	1 (1 - 1)	<0.0001***
ADC_GLCM_AngularSecondMoment	1 (1 - 1)	<0.0001***
ADC_GLCM4_AngularSecondMoment	1 (1 - 1)	<0.0001***
ADC_GLCM2_JointMaximum	1 (1 - 1)	<0.0001***
ADC_GLCM_JointMaximum	1 (1 - 1)	<0.0001***
ADC_GLCM4_JointMaximum	1 (1 - 1)	<0.0001***
ADC_GLSZM_NormalisedGreyLevelNonUniformity	1 (1 - 1)	<0.0001***
ADC_INTENSITY-HISTOGRAM_UniformityIBSI	1 (1 - 1)	<0.0001***
ADC_GLCM2_InverseDifferenceMoment	1 (0.999 - 1)	<0.0001***
ADC_INTENSITY-BASED_75thPercentile	1 (0.999 - 1)	<0.0001***
ADC_GLCM_InverseDifferenceMoment	1 (0.999 - 1)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram75thPercentile	0.999 (0.999 - 1)	<0.0001***
ADC_GLCM2_InverseDifference	0.999 (0.999 - 1)	<0.0001***
ADC_GLRLM_RunPercentage	0.999 (0.999 - 1)	<0.0001***
ADC_GLCM2_JointAverage	0.999 (0.999 - 1)	<0.0001***
ADC_GLCM2_SumAverage	0.999 (0.999 - 1)	<0.0001***
ADC_GLCM_InverseDifference	0.999 (0.999 - 1)	<0.0001***
ADC_GLCM_JointAverage	0.999 (0.999 - 0.999)	<0.0001***
ADC_GLCM_SumAverage	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_RootMeanSquare	0.999 (0.999 - 0.999)	<0.0001***
ADC_GLCM4_JointAverage	0.999 (0.999 - 0.999)	<0.0001***
ADC_GLCM4_SumAverage	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_Median	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_50thPercentile	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_Mean	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_AreaUnderCurve	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-HISTOGRAM_AreaUnderCurveCsh	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMean	0.999 (0.999 - 0.999)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMedian	0.999 (0.998 - 0.999)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram50thPercentile	0.999 (0.998 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_90thPercentile	0.999 (0.998 - 0.999)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram90thPercentile	0.999 (0.998 - 0.999)	<0.0001***
ADC_GLCM2_Autocorrelation	0.999 (0.998 - 0.999)	<0.0001***
ADC_GLCM_Autocorrelation	0.999 (0.998 - 0.999)	<0.0001***
ADC_GLRLM_ShortRunsEmphasis	0.998 (0.997 - 0.999)	<0.0001***
ADC_GLRLM_LongRunHighGreyLevelEmphasis	0.998 (0.997 - 0.999)	<0.0001***
ADC_GLRLM_HighGreyLevelRunEmphasis	0.998 (0.997 - 0.999)	<0.0001***
ADC_GLRLM_ShortRunHighGreyLevelEmphasis	0.998 (0.997 - 0.999)	<0.0001***
ADC_INTENSITY-BASED_25thPercentile	0.998 (0.997 - 0.999)	<0.0001***
ADC_GLCM4_Autocorrelation	0.998 (0.996 - 0.998)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram25thPercentile	0.998 (0.996 - 0.998)	<0.0001***
ADC_GLCM_DifferenceEntropy	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLCM_JointEntropyLog2	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLCM_JointEntropyLog10	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLCM2_JointEntropyLog2	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLCM2_DifferenceEntropy	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLCM2_JointEntropyLog10	0.997 (0.996 - 0.998)	<0.0001***
ADC_GLSZM_ZoneSizeEntropy	0.997 (0.995 - 0.998)	<0.0001***
ADC_GLSZM_HighGrayLevelZoneEmphasis	0.997 (0.995 - 0.998)	<0.0001***
ADC_GLSZM_SmallZoneEmphasis	0.996 (0.994 - 0.998)	<0.0001***
T2_GLSZM_LargeZoneLowGreyLevelEmphasis	0.996 (0.994 - 0.997)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramEntropyLog2	0.996 (0.994 - 0.997)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramEntropyLog10	0.996 (0.994 - 0.997)	<0.0001***
ADC_GLSZM_ZonePercentage	0.994 (0.992 - 0.996)	<0.0001***
T2_GLSZM_LargeZoneHighGreyLevelEmphasis	0.994 (0.991 - 0.996)	<0.0001***
ADC_GLSZM_SmallZoneHighGreyLevelEmphasis	0.994 (0.991 - 0.996)	<0.0001***
ADC_INTENSITY-BASED_10thPercentile	0.994 (0.991 - 0.996)	<0.0001***
T2_GLCM2_Autocorrelation	0.993 (0.99 - 0.996)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram10thPercentile	0.993 (0.99 - 0.995)	<0.0001***
T2_GLCM4_Autocorrelation	0.993 (0.989 - 0.995)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramModel	0.993 (0.989 - 0.995)	<0.0001***
T2_GLSZM_ZoneSizeVariance	0.993 (0.989 - 0.995)	<0.0001***

T2_GLCM_Autocorrelation	0.992 (0.989 - 0.995)	<0.0001***
T2_GLSZM_LargeZoneEmphasis	0.992 (0.989 - 0.995)	<0.0001***
ADC_GLSZM_NormalisedZoneSizeNonUniformity	0.992 (0.989 - 0.995)	<0.0001***
T2_GLCM2_JointAverage	0.992 (0.989 - 0.995)	<0.0001***
T2_GLCM2_SumAverage	0.992 (0.989 - 0.995)	<0.0001***
T2_GLCM4_JointAverage	0.992 (0.988 - 0.995)	<0.0001***
T2_GLCM4_SumAverage	0.992 (0.988 - 0.995)	<0.0001***
ADC_GLCM4_DifferenceEntropy	0.992 (0.987 - 0.994)	<0.0001***
ADC_GLCM4_JointEntropyLog2	0.992 (0.987 - 0.994)	<0.0001***
ADC_GLCM4_JointEntropyLog10	0.992 (0.987 - 0.994)	<0.0001***
T2_INTENSITY-BASED_Median	0.991 (0.987 - 0.994)	<0.0001***
T2_INTENSITY-BASED_50thPercentile	0.991 (0.987 - 0.994)	<0.0001***
T2_INTENSITY-BASED_75thPercentile	0.991 (0.987 - 0.994)	<0.0001***
T2_GLCM_JointAverage	0.991 (0.987 - 0.994)	<0.0001***
T2_GLCM_SumAverage	0.991 (0.987 - 0.994)	<0.0001***
T2_GLRLM_LongRunHighGreyLevelEmphasis	0.991 (0.986 - 0.994)	<0.0001***
T2_INTENSITY-BASED_90thPercentile	0.991 (0.986 - 0.994)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMedian	0.991 (0.986 - 0.994)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogram50thPercentile	0.991 (0.986 - 0.994)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogram75thPercentile	0.991 (0.986 - 0.994)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogram90thPercentile	0.99 (0.985 - 0.993)	<0.0001***
T2_INTENSITY-BASED_RootMeanSquare	0.99 (0.985 - 0.993)	<0.0001***
T2_GLRLM_HighGreyLevelRunEmphasis	0.99 (0.985 - 0.993)	<0.0001***
T2_GLRLM_ShortRunHighGreyLevelEmphasis	0.989 (0.984 - 0.993)	<0.0001***
T2_GLRLM_LongRunsEmphasis	0.988 (0.982 - 0.992)	<0.0001***
T2_GLRLM_RunPercentage	0.988 (0.982 - 0.992)	<0.0001***
T2_INTENSITY-BASED_AreaUnderCurve	0.988 (0.981 - 0.992)	<0.0001***
T2_INTENSITY-BASED_Mean	0.988 (0.981 - 0.992)	<0.0001***
T2_GLSZM_ZonePercentage	0.988 (0.981 - 0.992)	<0.0001***
T2_INTENSITY-HISTOGRAM_AreaUnderCurveCsh	0.988 (0.981 - 0.992)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMean	0.988 (0.981 - 0.992)	<0.0001***
T2_GLRLM_ShortRunsEmphasis	0.987 (0.981 - 0.991)	<0.0001***
T2_GLCM_InverseDifference	0.987 (0.98 - 0.991)	<0.0001***
T2_GLCM_InverseDifferenceMoment	0.987 (0.98 - 0.991)	<0.0001***
T2_GLSZM_HighGrayLevelZoneEmphasis	0.987 (0.98 - 0.991)	<0.0001***
T2_GLCM2_Contrast	0.987 (0.98 - 0.991)	<0.0001***
T2_GLCM_DifferenceAverage	0.986 (0.979 - 0.991)	<0.0001***
T2_GLCM_Dissimilarity	0.986 (0.979 - 0.991)	<0.0001***
T2_GLCM4_Contrast	0.986 (0.979 - 0.99)	<0.0001***
T2_INTENSITY-BASED_25thPercentile	0.986 (0.978 - 0.99)	<0.0001***
T2_GLCM2_DifferenceAverage	0.985 (0.978 - 0.99)	<0.0001***
T2_GLCM2_Dissimilarity	0.985 (0.978 - 0.99)	<0.0001***
T2_GLSZM_SmallZoneHighGreyLevelEmphasis	0.985 (0.978 - 0.99)	<0.0001***
T2_GLCM_Contrast	0.985 (0.977 - 0.99)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramModel	0.984 (0.977 - 0.99)	<0.0001***
T2_GLCM2_JointVariance	0.984 (0.976 - 0.99)	<0.0001***
ADC_GLCM_DifferenceAverage	0.984 (0.976 - 0.989)	<0.0001***
ADC_GLCM_Dissimilarity	0.984 (0.976 - 0.989)	<0.0001***
T2_GLCM2_DifferenceVariance	0.984 (0.976 - 0.989)	<0.0001***
T2_GLCM4_DifferenceVariance	0.984 (0.976 - 0.989)	<0.0001***
T2_GLCM_JointVariance	0.984 (0.976 - 0.989)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogram25thPercentile	0.983 (0.975 - 0.989)	<0.0001***
T2_GLCM2_InverseDifference	0.983 (0.975 - 0.989)	<0.0001***
T2_GLCM4_JointVariance	0.983 (0.974 - 0.989)	<0.0001***
T2_GLCM2_InverseDifferenceMoment	0.983 (0.974 - 0.989)	<0.0001***
T2_INTENSITY-HISTOGRAM_MaximumHistogramGradientGreyLevel	0.982 (0.974 - 0.988)	<0.0001***
T2_GLCM_SumVariance	0.982 (0.974 - 0.988)	<0.0001***
T2_GLCM_ClusterTendency	0.982 (0.974 - 0.988)	<0.0001***
ADC_GLCM2_Correlation	0.982 (0.972 - 0.988)	<0.0001***
T2_GLCM4_DifferenceAverage	0.981 (0.971 - 0.987)	<0.0001***
T2_GLCM4_Dissimilarity	0.981 (0.971 - 0.987)	<0.0001***
ADC_INTENSITY-HISTOGRAM_MaximumHistogramGradientGreyLevel	0.981 (0.971 - 0.987)	<0.0001***
T2_GLCM2_SumVariance	0.98 (0.971 - 0.987)	<0.0001***
T2_GLCM2_ClusterTendency	0.98 (0.971 - 0.987)	<0.0001***
ADC_GLCM2_DifferenceAverage	0.979 (0.969 - 0.986)	<0.0001***
ADC_GLCM2_Dissimilarity	0.979 (0.969 - 0.986)	<0.0001***
T2_GLCM_DifferenceVariance	0.978 (0.967 - 0.985)	<0.0001***
T2_GLCM4_SumVariance	0.978 (0.967 - 0.985)	<0.0001***
T2_GLCM4_ClusterTendency	0.978 (0.967 - 0.985)	<0.0001***
ADC_GLCM4_InverseDifferenceMoment	0.978 (0.966 - 0.985)	<0.0001***

ADC_GLRLM_LongRunLowGreyLevelEmphasis	0.978 (0.966 - 0.985)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramRobustMeanAbsoluteDeviation	0.977 (0.965 - 0.985)	<0.0001***
ADC_GLRLM_LongRunsEmphasis	0.977 (0.965 - 0.985)	<0.0001***
ADC_INTENSITY-BASED_InterquartileRange	0.976 (0.964 - 0.984)	<0.0001***
ADC_INTENSITY-BASED_RobustMeanAbsoluteDeviation	0.976 (0.963 - 0.984)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramRobustMeanAbsoluteDeviation	0.974 (0.961 - 0.982)	<0.0001***
T2_GLCM4_InverseDifference	0.973 (0.96 - 0.982)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramInterquartileRange	0.973 (0.959 - 0.982)	<0.0001***
T2_INTENSITY-BASED_InterquartileRange	0.973 (0.96 - 0.982)	<0.0001***
T2_INTENSITY-BASED_RobustMeanAbsoluteDeviation	0.973 (0.959 - 0.982)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramVariance	0.972 (0.959 - 0.981)	<0.0001***
T2_INTENSITY-BASED_Variance	0.972 (0.959 - 0.981)	<0.0001***
T2_GLCM4_InverseDifferenceMoment	0.972 (0.958 - 0.981)	<0.0001***
ADC_GLCM_Correlation	0.97 (0.955 - 0.98)	<0.0001***
T2_GLCM_ClusterShade	0.97 (0.955 - 0.98)	<0.0001***
ADC_GLCM4_InverseDifference	0.97 (0.954 - 0.98)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramQuartileCoefficientOfDispersion	0.969 (0.953 - 0.979)	<0.0001***
T2_INTENSITY-BASED_MeanAbsoluteDeviation	0.967 (0.951 - 0.978)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMeanAbsoluteDeviation	0.967 (0.951 - 0.978)	<0.0001***
T2_GLCM_JointMaximum	0.967 (0.951 - 0.978)	<0.0001***
T2_GLCM2_ClusterShade	0.966 (0.949 - 0.977)	<0.0001***
T2_GLCM_ClusterProminence	0.966 (0.949 - 0.977)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogram10thPercentile	0.965 (0.948 - 0.977)	<0.0001***
T2_GLSZM_NormalisedZoneSizeNonUniformity	0.965 (0.948 - 0.977)	<0.0001***
T2_GLCM4_JointMaximum	0.964 (0.947 - 0.976)	<0.0001***
ADC_INTENSITY-HISTOGRAM_RootMeanSquare	0.964 (0.946 - 0.977)	<0.0001***
T2_INTENSITY-BASED_MedianAbsoluteDeviation	0.964 (0.947 - 0.976)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMedianAbsoluteDeviation	0.964 (0.947 - 0.976)	<0.0001***
T2_INTENSITY-BASED_10thPercentile	0.964 (0.946 - 0.976)	<0.0001***
T2_GLCM2_ClusterProminence	0.964 (0.946 - 0.976)	<0.0001***
T2_GLCM4_ClusterShade	0.963 (0.946 - 0.976)	<0.0001***
T2_INTENSITY-BASED_QuartileCoefficientOfDispersion	0.963 (0.945 - 0.975)	<0.0001***
T2_GLCM_JointEntropyLog10	0.963 (0.945 - 0.975)	<0.0001***
T2_GLCM_JointEntropyLog2	0.963 (0.945 - 0.975)	<0.0001***
T2_GLCM_DifferenceEntropy	0.963 (0.945 - 0.975)	<0.0001***
T2_GLSZM_SmallZoneEmphasis	0.963 (0.945 - 0.975)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMedianAbsoluteDeviation	0.963 (0.944 - 0.975)	<0.0001***
ADC_INTENSITY-BASED_MedianAbsoluteDeviation	0.963 (0.944 - 0.975)	<0.0001***
T2_NGTDm_Contrast	0.962 (0.944 - 0.975)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMeanAbsoluteDeviation	0.962 (0.943 - 0.975)	<0.0001***
T2_GLCM4_ClusterProminence	0.962 (0.944 - 0.975)	<0.0001***
ADC_INTENSITY-BASED_MeanAbsoluteDeviation	0.962 (0.943 - 0.975)	<0.0001***
T2_GLCM_SumEntropy	0.962 (0.943 - 0.974)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramInterquartileRange	0.961 (0.941 - 0.974)	<0.0001***
T2_GLCM2_JointEntropyLog2	0.96 (0.941 - 0.974)	<0.0001***
T2_GLCM2_DifferenceEntropy	0.96 (0.941 - 0.974)	<0.0001***
T2_GLCM2_JointEntropyLog10	0.96 (0.941 - 0.974)	<0.0001***
T2_GLCM2_SumEntropy	0.96 (0.94 - 0.973)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMaximumGreyLevel	0.959 (0.938 - 0.973)	<0.0001***
ADC_GLCM2_InverseVariance	0.959 (0.938 - 0.973)	<0.0001***
ADC_GLCM_InverseVariance	0.959 (0.938 - 0.973)	<0.0001***
T2_GLCM_AngularSecondMoment	0.959 (0.938 - 0.972)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramStandardDeviation	0.959 (0.938 - 0.972)	<0.0001***
T2_INTENSITY-BASED_StandardDeviation	0.959 (0.938 - 0.972)	<0.0001***
ADC_INTENSITY-BASED_MaximumGreyLevel	0.957 (0.935 - 0.971)	<0.0001***
T2_GLSZM_GreyLevelVariance	0.957 (0.936 - 0.971)	<0.0001***
T2_GLCM2_JointMaximum	0.957 (0.935 - 0.971)	<0.0001***
T2_GLCM4_JointEntropyLog10	0.956 (0.935 - 0.971)	<0.0001***
T2_GLCM4_JointEntropyLog2	0.956 (0.935 - 0.971)	<0.0001***
T2_GLCM4_DifferenceEntropy	0.956 (0.935 - 0.971)	<0.0001***
T2_GLCM4_SumEntropy	0.956 (0.934 - 0.97)	<0.0001***
T2_GLCM4_AngularSecondMoment	0.954 (0.932 - 0.969)	<0.0001***
T2_GLCM2_AngularSecondMoment	0.954 (0.932 - 0.969)	<0.0001***
ADC_GLSZM_SmallZoneLowGreyLevelEmphasis	0.954 (0.931 - 0.97)	<0.0001***
ADC_GLRLM_ShortRunLowGreyLevelEmphasis	0.95 (0.925 - 0.967)	<0.0001***
ADC_GLSZM_ZoneSizeVariance	0.95 (0.925 - 0.967)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramCoefficientOfVariation	0.947 (0.921 - 0.965)	<0.0001***

ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramStandardDeviation	0.947 (0.92 - 0.965)	<0.0001***
ADC_INTENSITY-BASED_StandardDeviation	0.947 (0.92 - 0.965)	<0.0001***
T2_MORPHOLOGICAL_IntegratedT2_INTENSITY	0.946 (0.92 - 0.964)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramQuartileCoefficientOfDispersion	0.946 (0.92 - 0.964)	<0.0001***
T2_MORPHOLOGICAL_Compacity	0.943 (0.915 - 0.962)	<0.0001***
T2_INTENSITY-HISTOGRAM_UniformityIBSI	0.942 (0.914 - 0.961)	<0.0001***
ADC_INTENSITY-HISTOGRAM_MaximumHistogramGradient	0.941 (0.911 - 0.961)	<0.0001***
ADC_INTENSITY-HISTOGRAM_MinimumHistogramGradient	0.938 (0.907 - 0.959)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramEntropyLog2	0.937 (0.906 - 0.957)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramEntropyLog10	0.937 (0.906 - 0.957)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramCoefficientOfVariation	0.936 (0.905 - 0.957)	<0.0001***
T2_INTENSITY-BASED_CoefficientOfVariation	0.936 (0.905 - 0.957)	<0.0001***
T2_NGTD_M_Complexity	0.935 (0.904 - 0.956)	<0.0001***
ADC_NGTD_M_Busyness	0.935 (0.899 - 0.958)	<0.0001***
ADC_GLCM_Contrast	0.934 (0.901 - 0.956)	<0.0001***
T2_MORPHOLOGICAL_Volume	0.933 (0.9 - 0.955)	<0.0001***
ADC_INTENSITY-BASED_QuartileCoefficientOfDispersion	0.93 (0.895 - 0.953)	<0.0001***
ADC_NGTD_M_Strength	0.929 (0.894 - 0.953)	<0.0001***
T2_INTENSITY-HISTOGRAM_MaximumHistogramGradient	0.928 (0.894 - 0.951)	<0.0001***
T2_INTENSITY-BASED_Energy	0.924 (0.889 - 0.949)	<0.0001***
T2_GLCM_Correlation	0.924 (0.888 - 0.949)	<0.0001***
ADC_GLCM2_NormalisedInverseDifference	0.923 (0.885 - 0.949)	<0.0001***
T2_MORPHOLOGICAL_Maximum3DDiameter	0.919 (0.881 - 0.945)	<0.0001***
T2_MORPHOLOGICAL_SurfaceToVolumeRatio	0.918 (0.88 - 0.945)	<0.0001***
T2_MORPHOLOGICAL_Sphericity	0.918 (0.879 - 0.945)	<0.0001***
ADC_GLRLM_GreyLevelNonUniformity	0.918 (0.878 - 0.945)	<0.0001***
ADC_GLCM_NormalisedInverseDifference	0.918 (0.877 - 0.945)	<0.0001***
T2_MORPHOLOGICAL_SphericalDisproportion	0.917 (0.878 - 0.944)	<0.0001***
T2_MORPHOLOGICAL_Asphericity	0.917 (0.878 - 0.944)	<0.0001***
ADC_INTENSITY-BASED_Energy	0.916 (0.874 - 0.944)	<0.0001***
T2_MORPHOLOGICAL_Compactness1	0.915 (0.876 - 0.943)	<0.0001***
ADC_GLCM2_Contrast	0.915 (0.873 - 0.944)	<0.0001***
T2_INTENSITY-HISTOGRAM_MinimumHistogramGradient	0.913 (0.872 - 0.941)	<0.0001***
ADC_GLCM4_SumVariance	0.912 (0.869 - 0.941)	<0.0001***
ADC_GLCM4_ClusterTendency	0.912 (0.869 - 0.941)	<0.0001***
ADC_NGTD_M_Contrast	0.909 (0.86 - 0.941)	<0.0001***
T2_MORPHOLOGICAL_SurfaceArea	0.908 (0.866 - 0.938)	<0.0001***
ADC_GLSZM_GreyLevelNonUniformity	0.908 (0.863 - 0.939)	<0.0001***
T2_MORPHOLOGICAL_Compactness2	0.904 (0.859 - 0.935)	<0.0001***
T2_GLCM2_Correlation	0.9 (0.853 - 0.932)	<0.0001***
T2_GLRLM_GreyLevelNonUniformity	0.895 (0.847 - 0.929)	<0.0001***
ADC_GLCM_DifferenceVariance	0.894 (0.843 - 0.929)	<0.0001***
ADC_GLCM2_JointVariance	0.892 (0.84 - 0.928)	<0.0001***
ADC_GLCM_JointVariance	0.889 (0.835 - 0.925)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramRange	0.888 (0.834 - 0.925)	<0.0001***
ADC_INTENSITY-BASED_MinimumGreyLevel	0.887 (0.832 - 0.924)	<0.0001***
T2_GLSZM_GreyLevelNonUniformity	0.885 (0.831 - 0.922)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMinimumGreyLevel	0.884 (0.829 - 0.922)	<0.0001***
ADC_INTENSITY-BASED_Range	0.883 (0.826 - 0.921)	<0.0001***
ADC_GLCM4_InverseVariance	0.881 (0.824 - 0.921)	<0.0001***
T2_GLCM4_NormalisedInverseDifference	0.879 (0.824 - 0.918)	<0.0001***
ADC_INTENSITY-BASED_CoefficientOfVariation	0.879 (0.821 - 0.919)	<0.0001***
T2_GLCM4_NormalisedInverseDifferenceMoment	0.878 (0.822 - 0.917)	<0.0001***
T2_GLCM2_NormalisedInverseDifference	0.878 (0.822 - 0.917)	<0.0001***
T2_GLCM2_NormalisedInverseDifferenceMoment	0.877 (0.82 - 0.916)	<0.0001***
T2_GLSZM_NormalisedGreyLevelNonUniformity	0.877 (0.82 - 0.916)	<0.0001***
ADC_GLRLM_RunLengthNonUniformity	0.875 (0.816 - 0.916)	<0.0001***
ADC_GLSZM_ZoneSizeNonUniformity	0.874 (0.813 - 0.915)	<0.0001***
ADC_GLCM4_JointVariance	0.872 (0.811 - 0.914)	<0.0001***
ADC_GLCM2_DifferenceVariance	0.871 (0.809 - 0.913)	<0.0001***
T2_MORPHOLOGICAL_CentreOfMassShift	0.871 (0.811 - 0.912)	<0.0001***
T2_NGTD_M_Busyness	0.87 (0.81 - 0.911)	<0.0001***
T2_GLCM_NormalisedInverseDifference	0.868 (0.808 - 0.91)	<0.0001***
T2_GLSZM_ZoneSizeNonUniformity	0.866 (0.806 - 0.909)	<0.0001***
T2_INTENSITY-BASED_Skewness	0.863 (0.801 - 0.907)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramSkewness	0.862 (0.8 - 0.906)	<0.0001***
T2_GLCM_NormalisedInverseDifferenceMoment	0.859 (0.796 - 0.904)	<0.0001***
T2_NGTD_M_Strength	0.859 (0.796 - 0.904)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramVariance	0.851 (0.782 - 0.9)	<0.0001***

ADC_INTENSITY-BASED_Variance	0.851 (0.781 - 0.9)	<0.0001***
T2_GLCM4_Correlation	0.848 (0.78 - 0.897)	<0.0001***
T2_GLRLM_RunLengthNonUniformity	0.84 (0.769 - 0.891)	<0.0001***
T2_MORPHOLOGICAL_ApproximateVolume	0.838 (0.766 - 0.889)	<0.0001***
T2_MORPHOLOGICAL_voxelsCounting	0.838 (0.766 - 0.889)	<0.0001***
ADC_GLSZM_GreyLevelVariance	0.835 (0.759 - 0.889)	<0.0001***
T2_INTENSITY-BASED_Kurtosis	0.831 (0.757 - 0.885)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramKurtosis	0.83 (0.755 - 0.883)	<0.0001***
T2_INTENSITY-BASED_MaximumGreyLevel	0.824 (0.747 - 0.88)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMaximumGreyLevel	0.823 (0.746 - 0.879)	<0.0001***
T2_GLSZM_LowGrayLevelZoneEmphasis	0.823 (0.745 - 0.879)	<0.0001***
ADC_GLCM2_SumVariance	0.82 (0.738 - 0.878)	<0.0001***
ADC_GLCM2_ClusterTendency	0.82 (0.738 - 0.878)	<0.0001***
T2_GLRLM_LongRunLowGreyLevelEmphasis	0.82 (0.741 - 0.876)	<0.0001***
T2_GLRLM_LowGreyLevelRunEmphasis	0.815 (0.734 - 0.873)	<0.0001***
T2_GLSZM_SmallZoneLowGreyLevelEmphasis	0.814 (0.733 - 0.873)	<0.0001***
T2_GLRLM_ShortRunLowGreyLevelEmphasis	0.813 (0.731 - 0.871)	<0.0001***
ADC_INTENSITY-BASED_Skewness	0.81 (0.725 - 0.871)	<0.0001***
ADC_GLCM_SumVariance	0.809 (0.723 - 0.871)	<0.0001***
ADC_GLCM_ClusterTendency	0.809 (0.723 - 0.871)	<0.0001***
ADC_GLCM4_ClusterProminence	0.808 (0.722 - 0.87)	<0.0001***
ADC_GLSZM_LargeZoneLowGreyLevelEmphasis	0.807 (0.721 - 0.869)	<0.0001***
ADC_GLSZM_LargeZoneEmphasis	0.807 (0.721 - 0.869)	<0.0001***
ADC_GLSZM_LargeZoneHighGreyLevelEmphasis	0.804 (0.716 - 0.867)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramSkewness	0.797 (0.699 - 0.866)	<0.0001***
T2_INTENSITY-BASED_Range	0.785 (0.694 - 0.852)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramRange	0.785 (0.694 - 0.852)	<0.0001***
ADC_GLCM2_NormalisedInverseDifferenceMoment	0.782 (0.686 - 0.852)	<0.0001***
ADC_NGTDm_Coarseness	0.782 (0.677 - 0.855)	<0.0001***
ADC_GLCM4_NormalisedInverseDifference	0.779 (0.681 - 0.849)	<0.0001***
T2_INTENSITY-HISTOGRAM_RootMeanSquare	0.773 (0.677 - 0.843)	<0.0001***
ADC_GLCM_SumEntropy	0.771 (0.67 - 0.844)	<0.0001***
ADC_GLCM2_SumEntropy	0.766 (0.664 - 0.84)	<0.0001***
ADC_GLCM_NormalisedInverseDifferenceMoment	0.758 (0.653 - 0.835)	<0.0001***
ADC_GLCM4_SumEntropy	0.753 (0.647 - 0.831)	<0.0001***
T2_NGTDm_Coarseness	0.74 (0.634 - 0.82)	<0.0001***
ADC_NGTDm_Complexity	0.725 (0.609 - 0.811)	<0.0001***
T2_GLSZM_ZoneSizeEntropy	0.723 (0.61 - 0.806)	<0.0001***
T2_INTENSITY-BASED_MinimumGreyLevel	0.694 (0.573 - 0.786)	<0.0001***
T2_INTENSITY-HISTOGRAM_INTENSITYHistogramMinimumGreyLevel	0.691 (0.569 - 0.783)	<0.0001***
ADC_GLCM4_DifferenceAverage	0.63 (0.486 - 0.741)	<0.0001***
ADC_GLCM4_Dissimilarity	0.63 (0.486 - 0.741)	<0.0001***
ADC_INTENSITY-BASED_Kurtosis	0.613 (0.464 - 0.728)	<0.0001***
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramKurtosis	0.603 (0.439 - 0.727)	<0.0001***
ADC_GLCM_ClusterShade	0.603 (0.451 - 0.72)	<0.0001***
ADC_GLCM4_ClusterShade	0.593 (0.44 - 0.713)	<0.0001***
ADC_GLCM2_ClusterShade	0.577 (0.42 - 0.701)	<0.0001***
ADC_GLCM_ClusterProminence	0.549 (0.385 - 0.679)	<0.0001***
ADC_GLCM2_ClusterProminence	0.518 (0.348 - 0.656)	<0.0001***
T2_GLCM4_InverseVariance	0.45 (0.274 - 0.597)	<0.0001***
T2_GLCM2_InverseVariance	0.434 (0.256 - 0.585)	<0.0001***
ADC_GLCM4_NormalisedInverseDifferenceMoment	0.428 (0.242 - 0.584)	<0.0001***
ADC_GLCM4_DifferenceVariance	0.41 (0.221 - 0.569)	<0.0001***
T2_GLCM_InverseVariance	0.405 (0.222 - 0.561)	<0.0001***
ADC_GLCM4_Contrast	0.372 (0.178 - 0.538)	0,0002***
ADC_GLCM4_Correlation	0.158 (-0.051 - 0.354)	0,0688

NOTE.- \*\*\*:  $P < 0.0001$

**Supplementary Table S3.** Understanding unsupervised radiomics clusters

Characteristics	Cluster T2		adjusted <i>P</i> -value	Cluster ADC			adjusted <i>P</i> -value	Cluster T2+ADC		adjusted <i>P</i> -value
	Group T2-1	Group T2-2		Group ADC-1	Group ADC-2	Group ADC-3		Group T2+ADC-1	Group T2+ADC-2	
<b>Initial prostate volume</b>	89.6 ± 38.6	99.8 ± 43.2	0.3104	85.1 ± 40.6	96.6 ± 35.1	97.2 ± 44.4	0.4560	86.4 ± 39.1	99.9 ± 41.8	0.1866
<b>Initial IPSS</b>	19.2 ± 6.1	18.5 ± 6.1	0.5936	19.7 ± 4.63	17.5 ± 6.86	19.2 ± 6.07	0.4960	19.3 ± 6.5	18.6 ± 5.8	0.6562
<b>Initial QOL</b>	4.8 ± 1.3	4.7 ± 1.2	0.8714	4.8 ± 1.4	4.7 ± 1.0	4.74 ± 1.2	0.807	4.6 ± 1.2	4.8 ± 0.8	0.4558
<b>Wasserman classification</b>			0.2170				0.2274			0.2170
Type 1	17/35 (48.6)	12/37 (32.4)	<b>0.0291*</b>	8/13 (61.5)	6/20 (30)	15/39 (38.5)	0.3290	14/27 (51.9)	15/45 (33.3)	0.2363
Type 2	7/35 (20)	4/37 (10.8)		2/13 (15.4)	5/20 (25)	4/39 (10.3)		5/27 (18.5)	6/45 (13.3)	
Type 3	11/35 (31.4)	21/37 (56.8)		3/13 (23.1)	9/20 (45)	20/39 (51.3)		8/27 (29.6)	24/45 (53.3)	
<b>adBPH</b>										
No	21/35 (60)	10/37 (27)	0.8590	8/13 (61.5)	8/20 (40)	15/39 (38.5)	1	15/27 (55.6)	16/45 (35.6)	0.8590
Yes	14/35 (40)	27/37 (73)		5/13 (38.5)	12/20 (60)	24/39 (61.5)		12/27 (44.4)	29/45 (64.4)	
<b>Clinical success at M3</b>			0.8590				1			0.8590
No	6/35 (17.1)	7/37 (18.9)	1	2/13 (15.4)	4/20 (20)	7/39 (17.9)	1	6/27 (22.2)	7/45 (15.6)	1
Yes	29/35 (82.9)	30/37 (81.1)		11/13 (84.6)	16/20 (80)	32/39 (82.1)		21/27 (77.8)	38/45 (84.4)	
<b>Clinical success at Y2</b>			1				1			1
No	14/35 (40)	15/37 (40.5)	1	5/13 (38.5)	10/20 (50)	14/39 (35.9)	1	13/27 (48.1)	16/45 (35.6)	1
Yes	21/35 (60)	22/37 (59.5)		8/13 (61.5)	10/20 (50)	25/39 (64.1)		14/27 (51.9)	29/45 (64.4)	

NOTE.- \*: adjusted  $P < 0.05$  (according to Benjamini-Hochberg procedure). All tests were non-parametric tests, either unpaired Mann-Whitney test, or Kruskal-Wallis test, or Chi-square test.

For continuous variables (volume, IPSS and QOL) data are mean ± standard deviation. For categorical, they are number of patients with percentage in parentheses.

Abbreviations: adBPH: adenomatous dominant benign prostate hypertrophy, ADC: apparent diffusion coefficient, IPSS: international prostate score symptom M3: at 3 months after prostate artery embolization, QOL: quality of life, Y2: at 2 years after prostate artery embolization.

**Supplementary Table S4.** Radiomics features selected by Elasticnet

<b>Selected radiomics features</b>	<b>Coefficients</b>
T2_GLSZM_ZoneSizeVariance	5.655
ADC_GLCM_InverseVariance	5.644
ADC_GLCM_Correlation	5.307
T2_MORPHOLOGICAL_SurfaceToVolumeRatio	4.087
ADC_GLCM_NormalisedInverseDifference	3.428
T2_MORPHOLOGICAL_Volume	3.859
T2_INTENSITY-BASED_Skewness	2.687
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogram10thPercentile	2.346
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramMinimumGreyLevel	2.149
ADC_INTENSITY-HISTOGRAM_INTENSITYHistogramQuartileCoefficientOfDispersion	1.435
T2_INTENSITY-BASED_50thPercentile	0.037
T2_GLSZM_LargeZoneLowGreyLevelEmphasis	-0.056
T2_MORPHOLOGICAL_CentreOfMassShift	-0.225
T2_MORPHOLOGICAL_Compactness2	-0.275
T2_GLCM_NormalisedInverseDifferenceMoment	-0.283
ADC_GLSZM_ZoneSizeVariance	-0.510
T2_GLCM2_ClusterShade	-0.695
T2_NGTD_M_Busyness	-1.229
T2_NGTD_M_Strength	-1.280
T2_GLCM2_Correlation	-1.329
ADC_NGTD_M_Strength	-1.369
T2_INTENSITY-HISTOGRAM_MaximumHistogramGradientGreyLevel	-1.467

NOTE.- The selected radiomics features are ordered in descending order according to their coefficient (i.e., strength in the final model)