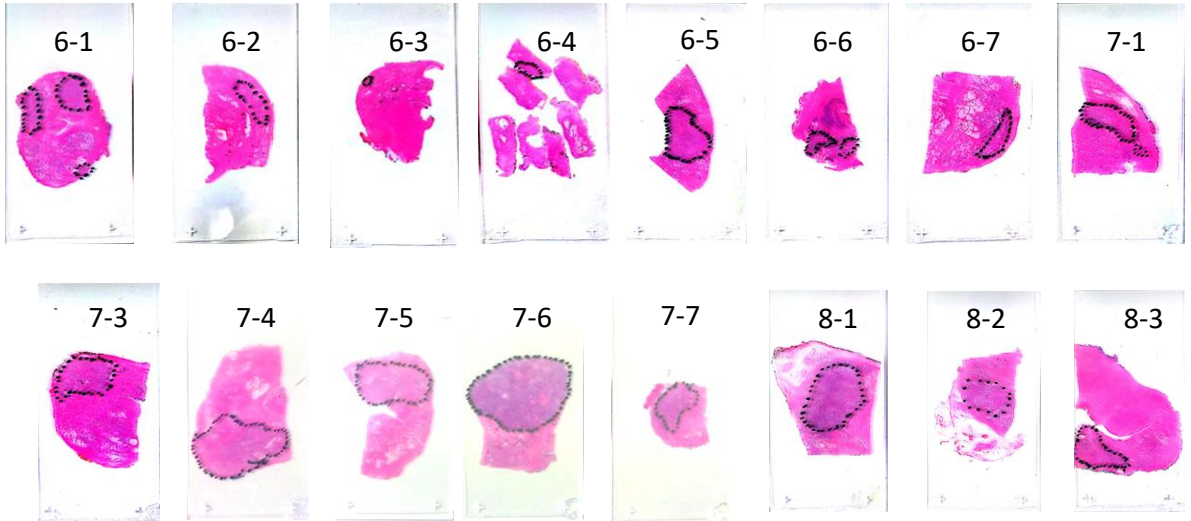


Supplemental Materials

Supplemental Table 1: Dimensions of prostate slices and tumors for prostates shown in Figure 1

Figure 1A				Figure 1B			
	prostate slice (cm)	Tumor size(s) (mm)			prostate slice (cm)	Tumor size(s) (mm)	
		Right	Left			Right	Left
Level A	3.1 x 3.0	9 x 7		Level A	2.9 x 1.8		4 x 4, 1.6 x 0.8
Level B	3.3 x 3.0	15 x 7		Level B	3.4 x 1.9	7 x 6, 9 x 7, 7 x 7	15 x 9
Level C	3.7 x 3.2	6 x 1.5, 13 x 9		Level C	2 x 2.4	15 x 9, 11 x 10	16 x 10, 9 x 6
Level D	4.1 x 2.9	0.8 x 0.2	10 x 7	Level D	3.8 x 2.4	14 x 5, 1.8 x 1, 11 x 5	12 x 5, 10 x 4
Level E	3.8 x 2.9			Level E	3.8 x 2.4	1 x 1, 0.8 x 0.3	13 x 6, 12 x 6
				Level F	3.3 x 2.0		2 x 1.6, 1 x 0.1

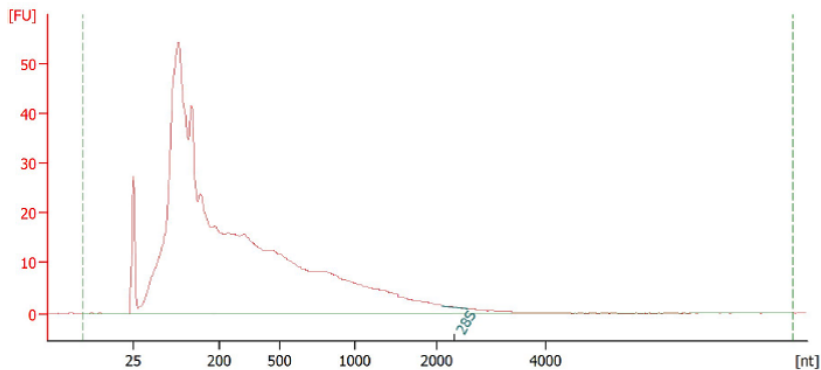


Supplemental Figure 1: H&E slides for each tumor

Supplemental Table 2: RNA extraction

ID	RNA conc. (ng/ul)	Total RNA (ug)	A260/A280	A260/A230
6-1	128.8	3.86	1.91	1.28
6-2	44.6	1.34	1.9	0.84
6-3	16.5	0.50	1.99	0.43
6-4	24.2	0.73	1.92	0.56
6-5	143.5	4.31	1.93	1.3
6-6	50.5	1.52	1.95	0.92
6-7	53.8	1.61	1.87	0.56
7-1	93.4	2.80	1.9	1.06
7-3	119	3.57	1.92	1.22
7-4	550.3	16.51	2.03	1.95
7-5	349.3	10.48	2	1.62
7-6	282.7	8.48	1.91	1.37
7-7	103.8	3.11	1.96	1.24
8-1	633.2	19.00	1.98	1.93
8-2	176.2	5.29	1.96	1.55
8-3	116.7	3.50	1.9	0.92

6-1 [1:5]



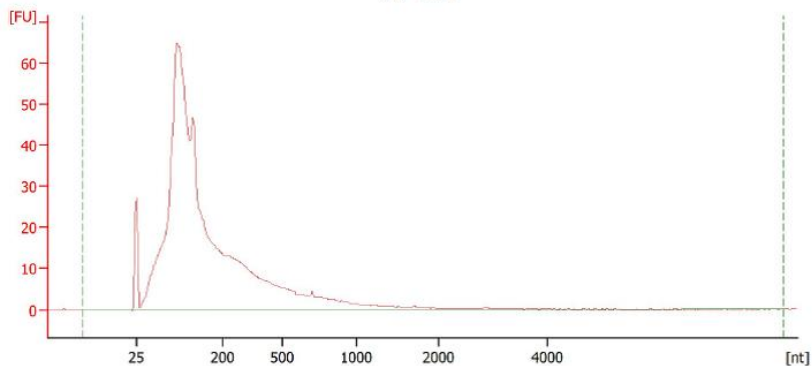
Overall Results for sample 5 : 6-1

RNA Area:	867.7	RNA Integrity Number (RIN):	2.2 (B.02.07)
RNA Concentration:	2,319 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.20

Fragment table for sample 5 : 6-1

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
28S	2,105	2,565	0.3	0.0

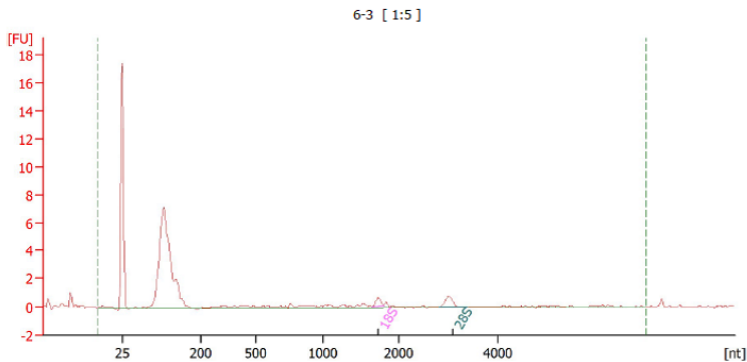
6-2 [1:5]



Overall Results for sample 6 : 6-2

RNA Area:	746.2	RNA Integrity Number (RIN):	2.4 (B.02.07)
RNA Concentration:	1,995 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.40

Supplemental Figure 2: RNA quality determined by Agilent 2100 Bioanalyzer

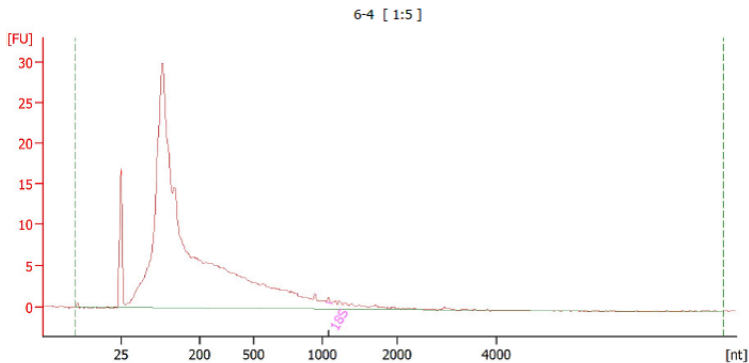


Overall Results for sample 7 : 6-3

RNA Area:	35.9	RNA Integrity Number (RIN):	2.9 (B.02.07, Anomaly Threshold(s) manually adapted)
RNA Concentration:	96 pg/ μ l	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.8	Result Flagging Label:	RIN: 2.90

Fragment table for sample 7 : 6-3

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,644	1,801	0.6	1.8
28S	2,815	3,379	1.2	3.2



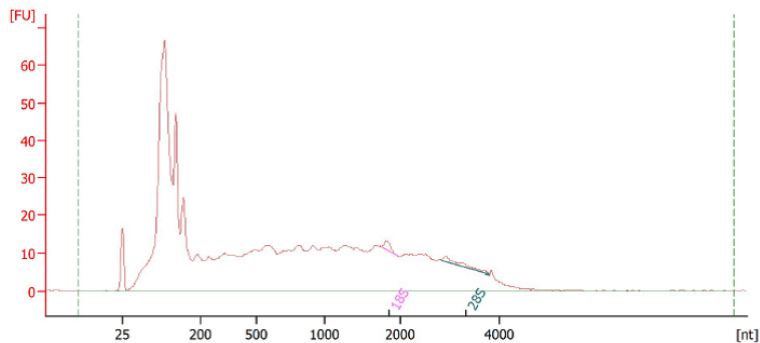
Overall Results for sample 8 : 6-4

RNA Area:	294.8	RNA Integrity Number (RIN):	2.4 (B.02.07)
RNA Concentration:	788 pg/ μ l	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.40

Fragment table for sample 8 : 6-4

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,058	1,127	0.3	0.1

6-5* [1:5]

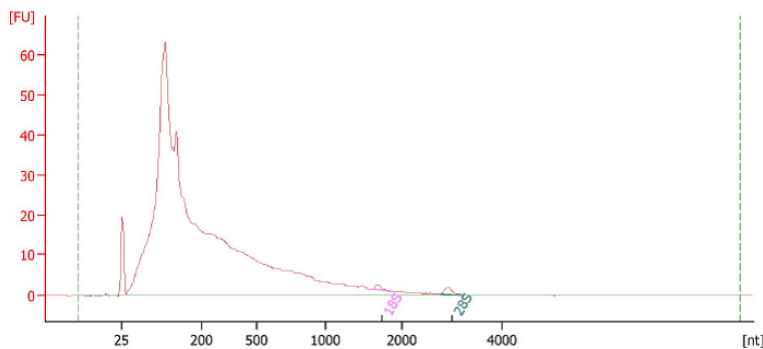
**Overall Results for sample 9 : 6-5***

RNA Area: 966.6 RNA Integrity Number (RIN): 2.2 (B.02.07)
 RNA Concentration: 2,584 pg/μl Result Flagging Color:
 rRNA Ratio [28S / 18S]: 1.1 Result Flagging Label: RIN: 2.20

Fragment table for sample 9 : 6-5*

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,751	1,962	3.2	0.3
28S	2,845	3,800	3.6	0.4

6-6* [1:5]

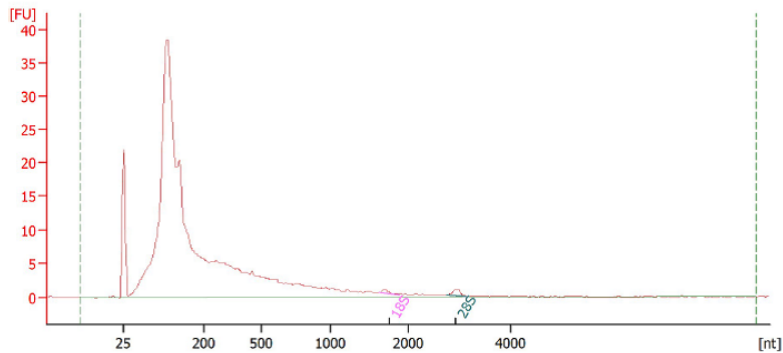
**Overall Results for sample 10 : 6-6***

RNA Area: 794.5 RNA Integrity Number (RIN): 2.3 (B.02.07)
 RNA Concentration: 2,124 pg/μl Result Flagging Color:
 rRNA Ratio [28S / 18S]: 1.6 Result Flagging Label: RIN: 2.30

Fragment table for sample 10 : 6-6*

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,618	1,864	1.5	0.2
28S	2,766	3,218	2.3	0.3

6-7* [1:5]



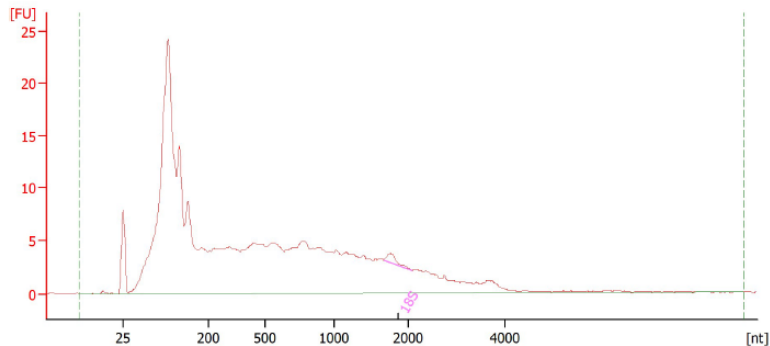
Overall Results for sample 11 : 6-7*

RNA Area:	345.6	RNA Integrity Number (RIN):	2.4 (B.02.07)
RNA Concentration:	924 pg/ul	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.6	Result Flagging Label:	RIN: 2.40

Fragment table for sample 11 : 6-7*

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,615	1,880	0.9	0.2
28S	2,753	3,141	1.4	0.4

7-1 [1:5]



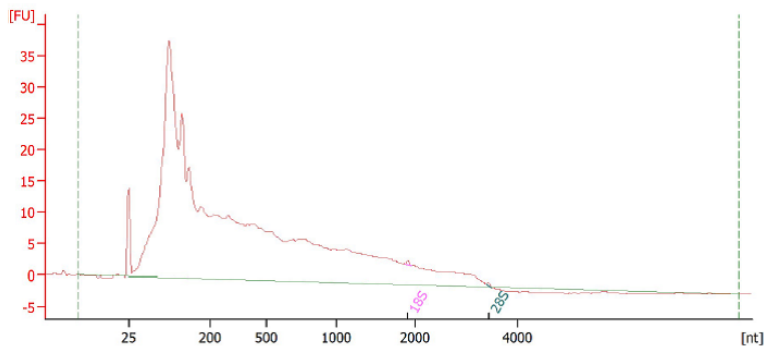
Overall Results for sample 4 : 7-1

RNA Area:	352.2	RNA Integrity Number (RIN):	2.2 (B.02.07)
RNA Concentration:	2,901 pg/ul	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.20

Fragment table for sample 4 : 7-1

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,669	2,055	1.6	0.4

7-3 [1:5]

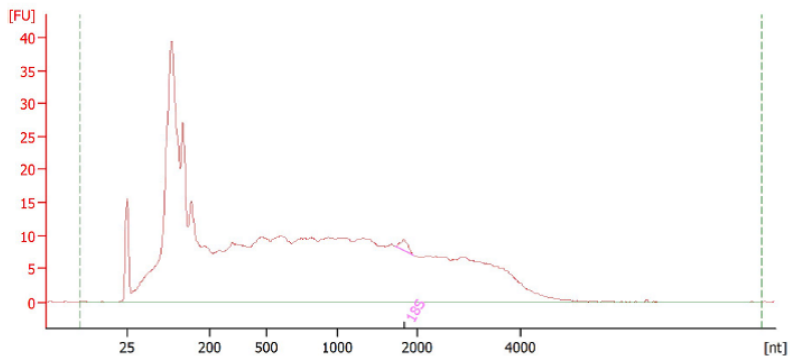
**Overall Results for sample 4 :** 7-3

RNA Area: 603.3 RNA Integrity Number (RIN): 2.1 (B.02.07)
 RNA Concentration: 1,770 pg/μl Result Flagging Color:
 rRNA Ratio [28s / 18s]: 0.6 Result Flagging Label: RIN: 2.10

Fragment table for sample 4 : 7-3

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,876	1,944	0.3	0.1
28S	3,394	3,498	0.2	0.0

7-4* [1:5]

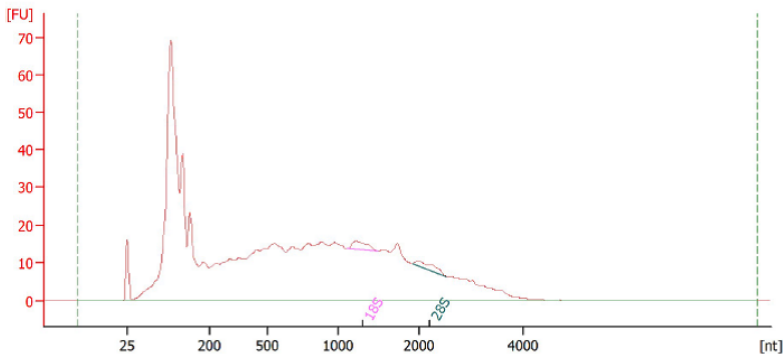
**Overall Results for sample 5 :** 7-4*

RNA Area: 741.2 RNA Integrity Number (RIN): 2.2 (B.02.07)
 RNA Concentration: 2,175 pg/μl Result Flagging Color:
 rRNA Ratio [28s / 18s]: 0.0 Result Flagging Label: RIN: 2.20

Fragment table for sample 5 : 7-4*

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,731	1,954	2.5	0.3

7-5* [1:5]



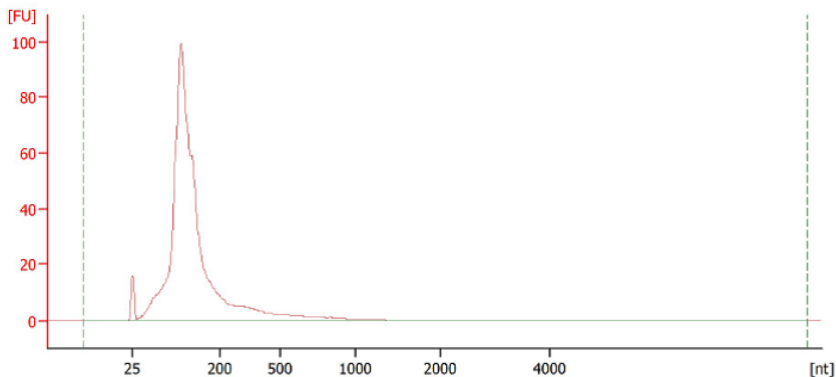
Overall Results for sample 6 : 7-5*

RNA Area:	994.3	RNA Integrity Number (RIN):	2.3 (B.02.07)
RNA Concentration:	2,918 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.8	Result Flagging Label:	RIN: 2.30

Fragment table for sample 6 : 7-5*

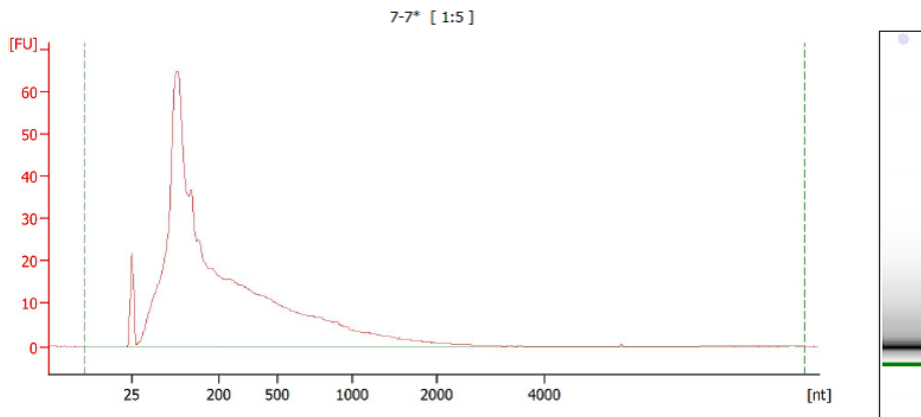
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,105	1,488	6.6	0.7
28S	1,915	2,529	5.2	0.5

7-6* [1:5]



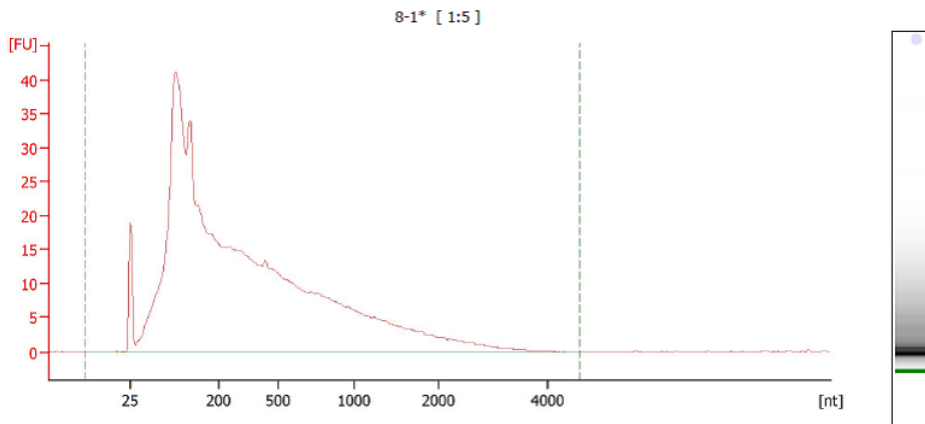
Overall Results for sample 7 : 7-6*

RNA Area:	693.1	RNA Integrity Number (RIN):	2.5 (B.02.07)
RNA Concentration:	2,034 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.50



Overall Results for sample 8 : 7-7*

RNA Area:	845.2	RNA Integrity Number (RIN):	2.2 (B.02.07)
RNA Concentration:	2,480 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.20

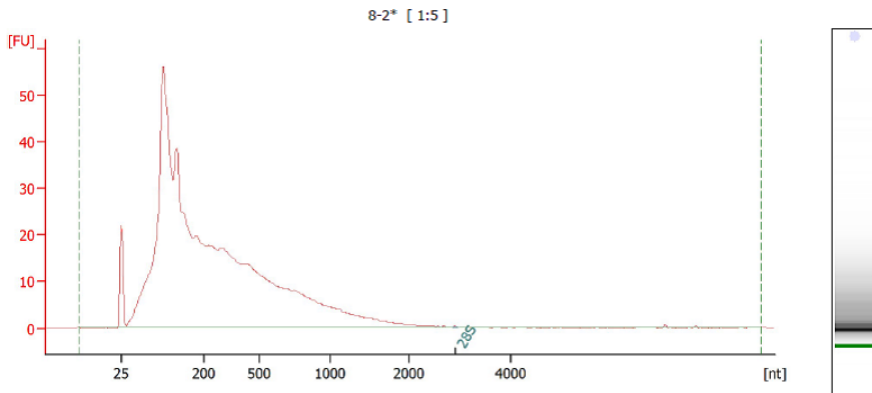


Setpoint Deviations for sample 9 : 8-1*

End Analysis Time Range [s] : 53

Overall Results for sample 9 : 8-1*

RNA Area:	773.9	RNA Integrity Number (RIN):	2.4 (B.02.07)
RNA Concentration:	2,271 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.40

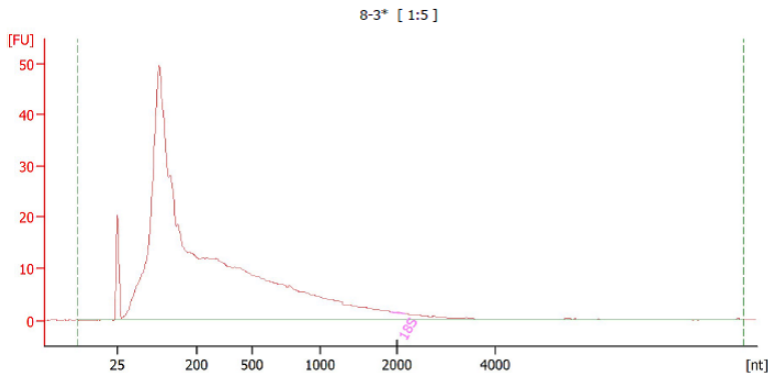


Overall Results for sample 10 : 8-2*

RNA Area:	785.9	RNA Integrity Number (RIN):	2.1 (B.02.07)
RNA Concentration:	2,306 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.10

Fragment table for sample 10 : 8-2*

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
28S	2,855	2,963	0.2	0.0



Overall Results for sample 11 : 8-3*

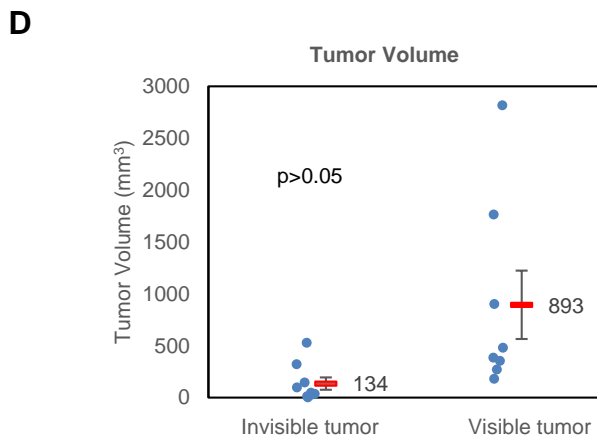
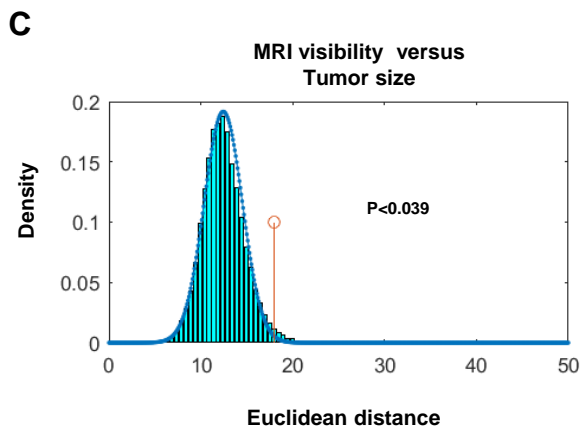
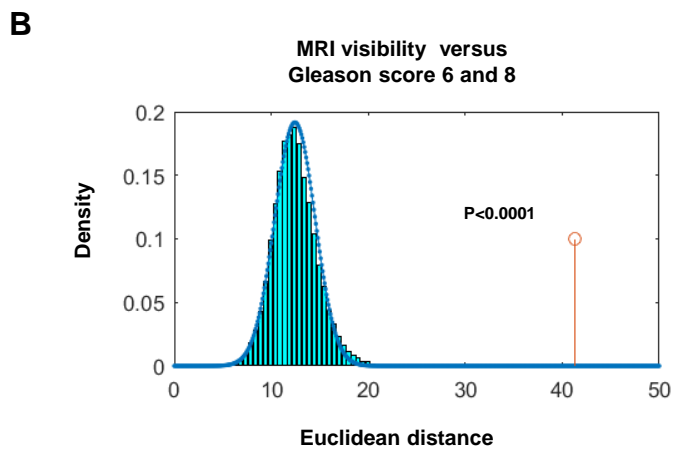
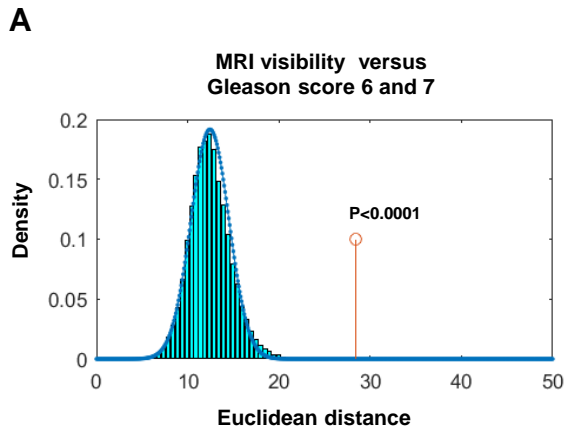
RNA Area:	671.8	RNA Integrity Number (RIN):	2.1 (B.02.07)
RNA Concentration:	1,971 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.10

Fragment table for sample 11 : 8-3*

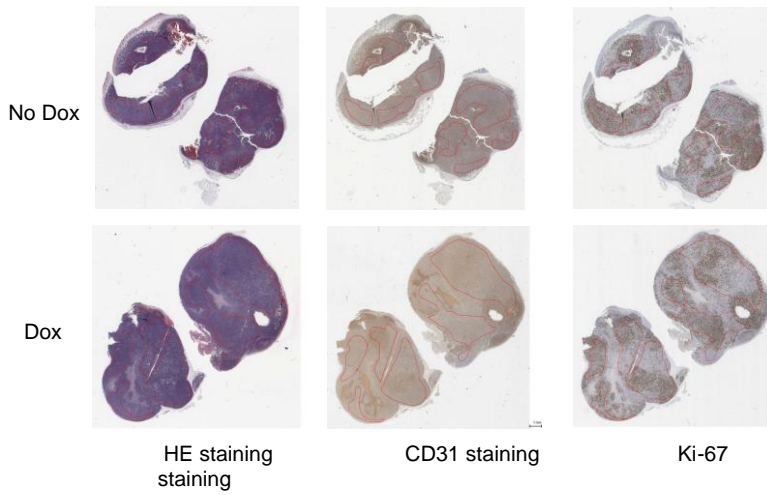
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,922	2,151	0.2	0.0

Supplemental Table 4
Patient Characteristics

	MRI visible	MRI invisible
Mean PSA (sd)	7.5 (4.8)	5.3 (1.8)
PSA range	2.6-17.5	3.3-8.8
Clinical Stage		
T1c	3	6
T2a	2	1
T2b	3	
Clinical Gleason Score		
3+3	1	6
3+4	2	
4+3	3	1
3+5		1
4+5	2	
Pathologic Stage		
T2a		1
T2c	3	7
T3a	2	
T3b	3	
Pathologic Gleason Score		
3+3	1	6
3+4	2	2
4+3	2	
4+5	3	



Supplemental Figure 3



Supplemental Figure 4