



PROSTATE CANCER **BIOREPOSITORY NETWORK**

Datasheet No: 005 - **217 Case Biochemical Recurrence TMA** (217BCRTMA)

Created: Version 1.0: September 2013

Data Update: Version 1.4: January 2021

TMA Name	217 Case Biochemical Recurrence		
Description	An intermediate-density tissue microarray for testing biomarkers strongly associated with known prognostic factors. This TMA contains tumor and non-neoplastic samples from localized prostate cancer cases as well as benign samples from benign prostatic hyperplasia (BPH) cases. All cases were obtained from the NYU Prostate Cancer Biorepository Network and collected under institutional review board approval.		
Cases	Total of 217 cases - 204 localized prostate cancer from radical prostatectomy (RP) and 13 BPH from suprapubic prostatectomy.		
Sample Selection	Tumor cores are sampled from RP specimens, from areas of largest grade and focus. Non-neoplastic (normal) cores are sampled from RP specimens, from areas at least 1cm away from cancer. Benign cores are sampled from BPH suprapubic prostatectomy specimens.		
Construction	The TMA was assembled using a motorized version of the MTA I microarrayer (Beecher Instruments, Sun Prairie, Wisconsin) and constructed over 5 blocks (Block A-E). Each case selected for the cohort is represented over each of the blocks A-D. There is one tumor core per case, a non-neoplastic core for 24/204 (12%) cases and one core per BPH case in each block (A-D).		
Replicates	Each case was arrayed in quadruplicate to address tissue heterogeneity. Total of 3 tumor cores per case over TMA set. Total of 3 non-neoplastic ("normal") cores for 24 cases over TMA set. Total of 3 cores per BPH case over TMA set.		
Cores	Block A – total 41 cores (5x orienting liver, 36x tumor cores) Block B – total 244 cores (2x orienting liver, 6x prostate cell lines, 236x tumor/benign cores) Block C – total 260 cores (3x orienting liver, 6x prostate cell lines, 251x tumor/benign cores) Block D – total 266 cores (4x orienting liver, 6x prostate cell lines, 256x tumor/benign cores)		
Diameter	0.6 mm	Thickness	5 μ m
Layout	18 cols x 19 rows (<i>cols 6, 12 and rows 4, 9, 14, 15 intentionally left blank</i>)		
Quality Control	Initial section and every 20 th section thereafter is stained with hematoxylin and eosin p27 reactivity confirmed (Whole slide image of H&E slides available for review)		
TMA Slide Types	Unstained: unstained paraffin TMA slide for final analysis (>90% cores present). Trial: unstained paraffin TMA slide for trial analysis/ optimization (titrating Ab and experiment conditions) or control (10-25% cores missing)		
Data	Data derived from electronic medical records (HIS & LIS) & tumor registry. Vital status cross checked with social security death index.		





PROSTATE CANCER **BIOREPOSITORY NETWORK**

Datasheet No: 005 - **217 Case Biochemical Recurrence TMA (217BCRTMA)**

Created: Version 1.0: September 2013

Data Update: Version 1.4: January 2021

SUMMARY TABLE		217 BCR TMA (n=204)	
Age (y)	Mean (Std. Dev.)	60.5 ± 6.9	
PSA at diagnosis (ng/mL)	Mean (Std. Dev.)	7.6 ± 6.3	
		Number (n)	Percentage (%)
Race	African American	6	3%
	Asian	5	2%
	Caucasian	187	92%
	Other	6	3%
		Number (n)	Percentage (%)
Gleason Sum	6	72	35%
	7	102	50%
	8	14	7%
	9	16	8%
		Number (n)	Percentage (%)
Outcome	Biochemical + Clinical Recurrence*	4	2%
	Biochemical Recurrence*	37	18%
	<i>Excluded due to Adjuvant Tx**</i>	2	1%
	<i>Low Detectable PSA**</i>	7	3%
	Nil Relapse	142	70%
	Persistent Disease *	10	5%
	Persistent Disease + Clinical Recurrence*	2	1%
		Number (n)	Percentage (%)
Vital Status	Alive	147	72.1%
	Dead - Evidence of Prostate Cancer*	21	10.2%
	Dead - No Evidence of Prostate Cancer	33	16.2%
	Dead - Unknown Cause	3	1.5%
		Number (n)	Range
Length of Follow-up	Mean (months)	142.7	2.16 - 267.96
RP to Biochemical Recurrence	Mean (months)	60	4.01 - 249.7
RP to Clinical Recurrence	Mean (months)	161.5	110.71 - 223.5
<i>Frequencies calculated from November 2020 Dataset</i>			
<i>* - Aggressive Disease, ** - Potentially aggressive - natural history not fully determined</i>			

