

Supplemental Table 1.1: Prostate cancer prognostic tools

Features	ANN[^]	BioChemical	Capra[^]	CSQS	EBRT	Han
Outcomes						
Overall Survival/Mortality						
<i>Cancer Specific</i>	-	-	+*	+	-	-
<i>Non-Cancer Specific</i>	-	-	-	+	-	-
DFS/PFS	+*	+*	+*	-	+*	+*
Clinical Response	-	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-	-
Cancer characteristics	+	+	+	+	+	+
Demographic characteristics	-	+	+	+	-	-
Co-morbidities	-	-	-	+	-	-
Therapy impact	-	+	-	-	+	+*
Genetic factors	-	-	-	-	-	-
Modifiable factors	-	-	-	-	-	-
Patient user recommended	ND	+	-	-	-	-
Data source	Johns Hopkins Medical Institutions	Duke Prostate Center Database	Cancer of the Prostate Strategic Urologic Research Endeavor (CaPSURE).	SEER	ND	James Buchanan Brady Urological Institute, Johns Hopkins Hospital.
Validation	+	+	+	+	+	+
Funder	IDEA, ANNs, NCI	ND	UCSF	NCI	ND	ND
Modality						
Web-based	+	+	+	+	+**	+
Other modality	-	-	-	-	-	-
Updated	October 2007	2011	2010	2010	ND	2011

Supplemental Table 1.1 cont'd: Prostate cancer prognostic tools

Features	Lerner[^]	MSK[^]	Nomograms[^]	Prognostigram	Roswell Park
Outcomes					
Overall Survival/Mortality					
<i>Cancer Specific</i>	+*	+*	+*	+	+
<i>Non-Cancer Specific</i>	-	-	-	-	-
DFS/PFS	+*	+*	+*	-	-
Clinical Response	-	+*	-	-	-
Therapy Induced Side Effects	-	-	-	-	-
Cancer characteristics	+	+	+*	+	+
Demographic characteristics	+*	-	+*	+	-
Co-morbidities	+*	+*	+	+	-
Therapy impact	+*	+*	+*	+	-
Genetic factors	-	-	-	-	-
Modifiable factors	-	-	-	-	-
Patient user recommended	-	+	+	-	ND
Data source	Memorial Sloan-Kettering Cancer Center	Memorial Sloan-Kettering Cancer Center	Quebec Health Plan	SEER	Social Security Life Tables; Connecticut tumor registry; clinic data
Validation	+	+	+*	+	+
Funder	ND	ND	University of Montreal	ND	ND
Modality					
Web-based	+	+*	+	+	+
Other modality	-	-	-	-	-
Updated	ND	ND	ND	ND	ND

[^] indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

** excel version downloadable

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.2: Colon, rectal, and colorectal cancer prognostic tools

Features	Adjuvant	CancerMath	CSQS	KCI	Lerner^	MAASTRO^
Outcomes						
Overall Survival/Mortality						
<i>Cancer Specific</i>	+	+	+	+	+*	+*
<i>Non-Cancer Specific</i>	+	+	+	-	-	-
DFS/PFS	+*	-	-	-	+*	+*
Clinical Response	-	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-	-
Cancer characteristics	+	+	+	+	+	+
Demographic characteristics	+	+	+	+	+	+*
Co-morbidities	+	-	+	-	-	-
Therapy impact	+	-	-	-	+*	+*
Genetic factors	-	-	-	-	-	-
Modifiable factors	-	-	-	-	-	-
Patient user recommended	-	-	-	-	-	-
Data source	San Antonio Database	SEER; Partners Hospitals; other datasets	SEER	SEER	Memorial Sloan-Kettering Cancer Center	107 LARC patients in Italy
Validation	+	+	+	+	+	+
Funder	Astra Zeneca The Greenberg Breast Cancer Foundation	ND	NCI	Knights Cancer Institute	ND	ND
Modality						
Web-based	+	+	+	+	+	+
Other modality	+	-	-	-	-	-
Updated	June 2006	November 2007	2010	ND	ND	July 2011

Supplemental Table 1.2 cont'd: Colon, rectal, and colorectal cancer prognostic tools

Features	MD Anderson	MSK	Numeracy	Prognostigram
Outcomes				
Overall Survival/Mortality				
<i>Cancer Specific</i>	+	-	-	+
<i>Non-Cancer Specific</i>	-	-	-	-
DFS/PFS	-	+*	+*	-
Clinical Response	-	-	-	-
Therapy Induced Side Effects	-	-	-	-
Cancer characteristics	+	+	+	+
Demographic characteristics	+	+	+	+
Co-morbidities	-	-	-	+
Therapy impact	-	+	+	+
Genetic factors	-	-	-	-
Modifiable factors	-	-	-	-
Patient user recommended	-	+	-	-
Data source	SEER	Memorial Sloan-Kettering Cancer Center	Seven trial groups	SEER
Validation	+	+	+	+
Funder	ND	ND	ND	ND
Modality				
Web-based	+	+	+	+
Other modality	-	-	-	-
Updated	ND	ND	August 2011	ND

^ indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

LARC – Locally Advanced Rectal Cancer

ND – Not defined

Supplemental Table 1.3: Breast cancer prognostic tools

Features	Adjuvant^	CancerMath	FinProg	IBTR	Lerner^
Outcomes					
Overall Survival/Mortality					
<i>Cancer Specific</i>	+	+	+	-	-
<i>Non-Cancer Specific</i>	+	+	-	-	-
DFS/PFS	+	-	+	+	+
Clinical Response	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-
Cancer characteristics	+	+	+	+	+
Demographic characteristics	+	+	+	+	+
Co-morbidities	+	-	-	-	-
Therapy impact	+	+	+	+	-
Genetic factors	+	-	+	-	-
Modifiable factors	-	-	-	-	-
Patient user recommended	-	-	-	-	-
Data source	San Antonio Database	SEER; Partners Hospitals; other datasets	Finnish nationwide registry	Two large institutional data sets	Memorial Sloan-Kettering Cancer Center; Breast Cancer Sentinel lymph node database
Validation	+	+	+	+	+
Funder	Astra Zeneca The Greenberg Breast Cancer Foundation	ND	Helsinki University Research Funds, the Academy of Finland, the Cancer Society of Finland	ND	ND
Modality					
Web-based	+	+	+	+	+
Other modality	+	-	-	-	-
Updated	June 2006	April 2009	ND	ND	ND

Supplemental Table 1.3 cont'd: Breast cancer prognostic tools

Features	MD Anderson[^]	MSK[^]	Prognostigram
Outcomes			
Overall Survival/Mortality			
<i>Cancer Specific</i>	-	-	+
<i>Non-Cancer Specific</i>	-	-	-
DFS/PFS	+*	+*	-
Clinical Response	+*	-	-
Therapy Induced Side Effects	-	-	-
Cancer characteristics	+	+	+
Demographic characteristics	+*	+*	+
Co-morbidities	-	-	+
Therapy impact	+*	-	+
Genetic factors	-	+	-
Modifiable factors	-	-	-
Patient user recommended	-	+	-
		Memorial Sloan- Kettering Cancer Center	SEER
Data source	ND		
Validation	+*	+	+
Funder	ND	ND	ND
Modality			
Web-based	+	+	+
Other modality	-	-	-
Updated	ND	ND	ND

[^] indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.4: Other genitourinary cancer prognostic tools

Features	CancerMath	Lerner^	MSK^	Nomograms^	Prognostigram	QxMD
Cancer Sites						
Bladder	-	+	+	+	+	-
Kidney	-	+	-	+	+	-
Renal Cell	+	-	+	-	+	+
Penile	-	+	-	+	+	-
Other Genitourinary	-	-	-	+	+	-
Outcomes						
Overall Survival/Mortality						
<i>Cancer Specific</i>	+	+*	-	+*	+	+
<i>Non-Cancer Specific</i>	+	-	-	-	-	-
DFS/PFS	-	+*	+*	+*	-	-
Clinical Response	-	-	-	-	-	-
Therapy Induced Side Effects	-	+*	-	-	-	-
Cancer characteristics	+	+	+	+	+	+
Demographic characteristics	+	+*	+*	+*	+	-
Co-morbidities	-	+*	-	+*	+	+
Therapy impact	-	-	-	+*	+	-
Genetic factors	-	-	-	-	-	-
Modifiable factors	-	-	-	+	-	-
Patient user recommended	-	-	+	+	-	-
Data source	SEER	12 centers of excellence	12 centers worldwide	Univ. of Texas Southwestern, Johns Hopkins Hospital, Baylor College of Medicine (bladder); 12 institutions in Canada, Austria, France, Italy, Netherlands; 9	SEER	ND

				SEER registries (penile)		
Validation	+	+	+	+	+	ND
Funder	ND	ND	ND	University of Montreal	ND	ND
Modality						
Web-based	+	+	+	+	+	-
Other modality	-	-	-	-	-	+
Updated	August 2007	ND	ND	ND	ND	December 2011

^ indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.5: Melanoma prognostic tools

Features	AJCC	CancerMath [^]	Lerner	MSK	Numeracy	Prognostigram
Outcomes						
Overall Survival/Mortality						
<i>Cancer Specific</i>	+	+	-	-	+	+
<i>Non-Cancer Specific</i>	-	+	-	-	-	-
DFS/PFS	-	+*	+*	+*	-	-
Clinical Response	-	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-	-
Cancer characteristics	+	+	+	+	+	+
Demographic characteristics	+	+	+	+	-	+
Co-morbidities	-	-	-	-	-	+
Therapy impact	-	-	-	-	-	+
Genetic factors	-	-	-	-	-	-
Modifiable factors	-	-	-	-	-	-
Patient user recommended	ND	ND	-	+	-	-
Data source	American Joint Committee on Cancer Melanoma Database	SEER; Partners Hospitals; other datasets	Memorial Sloan-Kettering Cancer Center	Memorial Sloan-Kettering Cancer Center Clinic	Meta-analysis of Eastern Comparative Oncology group studies	SEER
Validation	+	+	+	+	+	+
Funder	ND	ND	ND	ND	ND	ND
Modality						
Web-based	+	+	+	+	+	+
Other modality	-	-	-	-	-	-
Updated	ND	August 2007	ND	ND	August 2011	ND

[^] indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.6: Other gastrointestinal cancer prognostic calculators

Features	KCI[^]	Lerner[^]	MD Anderson	MSK[^]	Prognostigram
Cancer Sites					
Pancreas	+	+	-	+	+
Esophageal	-	-	+	-	+
Other GI	+	+	-	+	+
Outcomes					
Overall Survival/Mortality					
<i>Cancer Specific</i>	+	+	-	+*	+
<i>Non-Cancer Specific</i>	-	-	-	-	-
DFS/PFS	-	-	+*	+*	-
Clinical Response	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-
Cancer characteristics	+	+	+	+	+
Demographic characteristics	+	+	-	+*	+
Co-morbidities	-	-	-	-	+
Therapy impact	-	-	-	-	+
Genetic factors	-	-	-	-	-
Modifiable factors	-	-	-	-	-
Patient user recommended	-	-	-	+*	-
Data source	Oregon Health & Science University	Memorial Sloan-Kettering Cancer Center	MD Anderson Cancer Center; Univ. of Rochester School of Medicine and Dentistry	Dutch gastric cancer trial; Memorial Sloan-Kettering Cancer Center; Spanish group for research on sarcomas; Mayo Clinic	SEER
Validation	+*	+	+	+	+
Funder	Knight Cancer Institute	ND	ND	ND	ND

Modality						
Web-based	+	+	+	+*	+	
Other modality	-	-	-	+*	-	
Updated	ND	ND	ND	ND	ND	

^ indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.7: Thoracic cancer prognostic tools

Features	Adjuvant	KCI	MAASTRO[^]	Prognostigram	QxMD
Cancer Sites					
Lung	+	+	+	+	+
Other Respiratory	-	-	-	+	-
Outcomes					
Overall Survival/Mortality					
<i>Cancer Specific</i>	+	+	+*	+	+
<i>Non-Cancer Specific</i>	+	-	-	-	-
DFS/PFS	-	-	+*	-	-
Clinical Response	-	-	-	-	-
Therapy Induced Side Effects	-	-	+*	-	-
Cancer characteristics	+	+	+*	+	+
Demographic characteristics	+	+	+	+	-
Co-morbidities	+	-	+	+	-
Therapy impact	+	-	+*	+	-
Genetic factors	-	-	-	-	-
Modifiable factors	-	-	+	-	-
Patient user recommended	-	-	-	-	-
Data source	San Antonio Database	SEER	322 NSCLC patients treated at MAASTRO clinic	SEER	Recent sample of American patients with lung cancer
Validation	+	ND	+	+	ND
Funder	Astra Zeneca The Greenberg Breast Cancer Foundation	Knight Cancer Institute	ND	ND	ND
Modality					
Web-based	+	+	+	+	-
Other modality	-	-	-	-	+
Updated	June 2006	ND	July 2011	ND	December 2011

[^] indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival
PFS – Progression Free Survival
SEER – Surveillance Epidemiology and End Results
NSCLC – Non-small cell lung cancer
ND – Not defined

Supplemental Table 1.8: Head and neck cancer prognostic tools

Features	CancerMath	KCI [^]	Lerner	MAASTRO	Prognostigram
Cancer Sites					
Larynx	+	-	-	+	+
Oral	+	+	+	-	+
Other	+	+	-	-	+
Outcome of Interest					
Overall Survival/Mortality					
<i>Cancer Specific</i>	+	+	-	+	+
<i>Non-Cancer Specific</i>	+	-	-	-	-
DFS/PFS	-	+	+	+	-
Clinical Response	-	-	-	-	-
Therapy Induced Side Effects	-	-	-	-	-
Cancer Characteristics	+	+	+	+	+
Demographic Characteristics	+	+	+	+	+
Co-morbidities	-	-	+	-	+
Therapy Impact	-	-	-	+	+
Genetic factors	-	-	-	-	-
Modifiable factors	-	-	-	-	-
Patient user recommended	-	-	-	-	-
Data source	SEER	SEER; Database from Memorial Sloan-Kettering Cancer Center and the Hospital do Cancer AC Camargo, Sao Baulo Brazil	Database from Memorial Sloan- Kettering Cancer Center and the Hospital do Cancer AC Camargo, Sao Baulo Brazil	994 patients with squamous cell laryngeal carcinoma treated at MAASTRO clinic	SEER
Validation	+	+	+	+	+
Funder	ND	Knight Cancer Institute		ND	ND
Modality					
Web-based	+	+	+	+	+
Other modality	-	-	-	-	-

Updated	August 2007	ND	ND	July 2011	ND
----------------	-------------	----	----	-----------	----

^ indicates multiple calculators for cancer sites in the tool

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.9: Gynecologic cancer prognostic tools

Features	Lerner	MSK	Prognostigram
Cancer Sites			
Endometrial	-	+	+
Ovarian	+	-	+
Other	-	-	+
Outcome of Interest			
Overall Survival/Mortality			
<i>Cancer Specific</i>	+	+	+
<i>Non-Cancer Specific</i>	-	-	-
DFS/PFS	-	-	-
Clinical Response	-	-	-
Therapy Induced Side Effects	-	-	-
Cancer Characteristics	+	+	+
Demographic Characteristics	+	+	+
Co-morbidities	-	-	+
Therapy Impact	-	-	+
Genetic factors	-	+	-
Modifiable factors	-	-	-
Patient user recommended	-	+	-
Data source	Virginia K. Pierce gynecological service database	Memorial Sloan- Kettering Cancer Center	SEER
Validation	+	+	+
Funder	ND	ND	ND
Modality			
Web-based	+	+	+
Other modality	-	-	-
Updated	ND	ND	ND

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.10: Soft tissue cancer prognostic tools

Features	Lerner[^]	MSK[^]	Prognostigram
Cancer Sites			
Sarcoma	+	+	+
Other	-	+	+
Outcome of Interest			
Overall Survival/Mortality			
<i>Cancer Specific</i>	+	+	+
<i>Non-Cancer Specific</i>	-	-	-
DFS/PFS	-	-	-
Clinical Response	-	-	-
Therapy Induced Side Effects	-	-	-
Cancer Characteristics	+	+	+
Demographic Characteristics	+	+	+
Co-morbidities	-	-	+
Therapy Impact	-	-	+
Genetic factors	-	-	-
Modifiable factors	-	-	-
Patient user recommended	-	+	-
Data source	Memorial Sloan-Kettering Cancer Center	Memorial Sloan-Kettering Cancer Center	SEER
Validation	+	+	+
Funder	ND	ND	ND
Modality			
Web-based	+	+	+
Other modality	-	-	-
Updated	ND	ND	ND

[^] indicates multiple calculators for cancer sites in the tool

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.11: Endocrine cancer prognostic tools

Features	Nomograms	Prognostigram
Cancer Sites		
Adrenal	+	-
Other	-	+
Outcome of Interest		
Overall Survival/Mortality		
<i>Cancer Specific</i>	+	+
<i>Non-Cancer Specific</i>	+	-
DFS/PFS	-	-
Clinical Response	-	-
Therapy Induced Side Effects	-	-
Cancer Characteristics	+	+
Demographic Characteristics	+	+
Co-morbidities	-	+
Therapy Impact	-	+
Genetic factors	-	-
Modifiable factors	-	-
Patient user recommended	+	-
Data source	9 SEER registries	SEER
Validation	+	+
Funder	University of Montreal	ND
Modality		
Web-based	+	+
Other modality	-	-
Updated	ND	ND

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

ND – Not defined

Supplemental Table 1.12: Hematologic cancer prognostic tools

Features	Prognostigram	QxMD
Cancer Sites		
Lymphoma	+	+
Other	+	+
Outcome of Interest		
Overall Survival/Mortality		
<i>Cancer Specific</i>	+	+*
<i>Non-Cancer Specific</i>	-	-
DFS/PFS	-	+*
Clinical Response	-	-
Therapy Induced Side Effects	-	-
Cancer Characteristics	+	+
Demographic Characteristics	+	+*
Co-morbidities	+	+*
Therapy Impact	+	-
Genetic factors	-	+
Modifiable factors	-	-
Patient user recommended	-	-
Data source	SEER	Data from the MIPI Study Cohort
Validation	+	ND
Funder	ND	ND
Modality		
Web-based	+	-
Other modality	-	+
Updated	ND	December 2011

* indicates that at least one but not all calculators has the feature

DFS – Disease Free Survival

PFS – Progression Free Survival

SEER – Surveillance Epidemiology and End Results

MIPI – Mantle Cell Lymphoma International Prognostic Index

ND – Not defined

Supplemental Table 1.13: Nervous system cancer prognostic tools

Features	GBM	Prognostigram
Cancer Sites		
Brain	+	+
Other Nervous System	-	+
Outcome of Interest		
Overall Survival/Mortality		
<i>Cancer Specific</i>	+	+
<i>Non-Cancer Specific</i>	-	-
DFS/PFS	-	-
Clinical Response	-	-
Therapy Induced Side Effects	-	-
Cancer Characteristics	-	+
Demographic Characteristics	+	+
Co-morbidities	+	+
Therapy Impact	+	+
Genetic factors	-	-
Modifiable factors	-	-
Patient user recommended	+	-
	EORTC; NCIC Clinical Trials	
Data source	Group	SEER
Validation	+	+
Funder	ND	ND
Modality		
Web-based	+	+
Other modality	-	-
Updated	ND	ND

DFS – Disease Free Survival

PFS – Progression Free Survival

EORTC – European Organisation for Research and Treatment of Cancer

NCIC – National Cancer institute of Canada

SEER – Surveillance Epidemiology and End Results

ND – Not defined