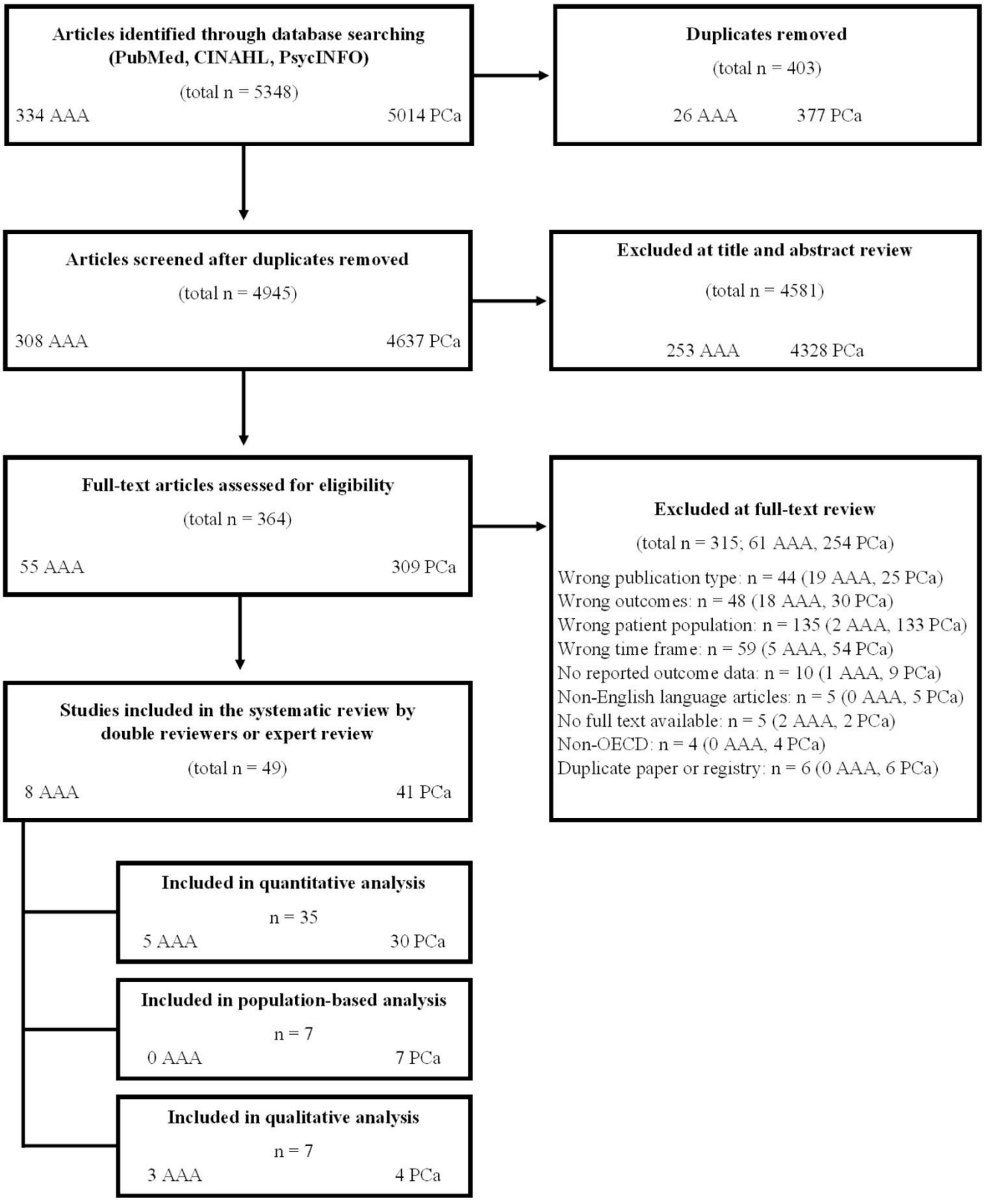
Appendix A: Population-based Study Search

	Prostate Cancer Studies	**Abdominal Aortic Aneurysm Studies**
Search date	03/23/2015 for studies published from 01/01/2002 to 12/31/2014	09/10/2015 for studies published from 01/01/2002 to 08/31/2015
Bridge searches	09/10/2015 for studies published from 01/01/2015 to 08/31/2015 01/23/17 for studies published from 09/01/2015 to 01/23/17 on PubMed and CINAHL 03/08/2017 for studies published from 09/01/2015 to 01/31/17 on PsycINFO	01/23/17 for studies published from 09/01/2015 to 01/23/17 on PubMed and CINAHL 03/08/2017 for studies published from 09/01/2015 to 01/23/17 on PsycINFO
PubMed search string	(Prostate cancer*[tw] OR prostatic cancer*[tw] OR Prostatic Neoplasms[Mesh] OR prostate specific antigen[tw] OR PSA[tw]) AND (screening*[tw] OR diagnos*[tw] OR early diagnosis[tw] OR early detection[tw] OR biops*[tw] OR surveillance[tw] OR watchful waiting[tw] OR overdiagnos*[tw] OR over diagnos*[tw] OR overdetect*[tw] OR over detect*[tw] OR insignifican*[tw]) AND (depress*[tw] OR distress[tw] OR stress*[tw] OR worry[tw] OR fear*[tw] OR anxiet*[tw] OR quality of life[tw] OR mental health[tw] OR mental disorders[tw] OR psycholog*[tw] OR psychosocial[tw] OR wellbeing[tw] OR well-being[tw] OR emotion*[tw] OR false positive*[tw] OR stigma[tw] OR shame[tw] OR label*[tw] OR suicid*[tw])	(Abdominal aortic aneurysm[tw] OR Aortic Aneurysm, Abdominal[Mesh]) AND (screening*[tw] OR diagnos*[tw] OR early diagnosis[tw] OR early detection[tw] OR biops*[tw] OR surveillance[tw] OR watchful waiting[tw] OR overdiagnos*[tw] OR over diagnos*[tw] OR overdetect*[tw] OR over detect*[tw] OR insignifican*[tw]) AND (depress*[tw] OR distress[tw] OR stress*[tw] OR worry[tw] OR fear*[tw] OR anxiet*[tw] OR quality of life[tw] OR mental health[tw] OR mental disorders[tw] OR psycholog*[tw] OR psychosocial[tw] OR well being[tw] OR false positive*[tw] OR emotion*[tw] OR stigma[tw] OR shame[tw] OR label*[tw] OR suicid*[tw])
CINAHL via EBSCO	(MH "Prostatic Neoplasm*" OR “Prostate cancer*” OR “prostatic	(MH "Aortic Aneurysm, Abdominal” OR “abdominal aortic aneurysm*”)

search string	cancer*" OR "prostate specific antigen" OR PSA) AND (screening* OR diagnos*[tw] OR "early diagnosis" OR "early detection" OR biops* OR surveillance OR "watchful waiting" OR overdiagnos* OR "over diagnos*" OR overdetect* OR "over detect*" OR insignifican*) AND (depress* OR distress OR stress* OR worry OR fear* OR anxiet* OR "quality of life" OR "mental health" OR "mental disorders" OR psycholog* OR psychosocial OR "well being" OR emotion* OR "false positive*" OR stigma OR shame OR label* OR suicid*)	AND (screening* OR diagnos*[tw] OR "early diagnosis" OR "early detection" OR biops* OR surveillance OR "watchful waiting" OR overdiagnos* OR "over diagnos*" OR overdetect* OR "over detect*" OR insignifican*) AND (depress* OR distress OR stress* OR worry OR fear* OR anxiet* OR "quality of life" OR "mental health" OR "mental disorders" OR psycholog* OR psychosocial OR "well being" OR emotion* OR "false positive*" OR stigma OR shame OR label* OR suicid*)
PsycINFO via EBSCO search string	("Prostatic Neoplasm*" OR "Prostate cancer*" OR "prostatic cancer*" OR "prostate specific antigen" OR PSA) AND (screening* OR "early diagnosis" OR "early detection" OR biops* OR surveillance OR "watchful waiting" OR overdiagnos* OR "over diagnos*" OR overdetect* OR "over detect*" OR insignifican*) AND (depress* OR distress OR stress* OR worry OR fear* OR anxiet* OR "quality of life" OR "mental health" OR "mental disorders" OR psycholog* OR psychosocial OR "well being" OR emotion* OR "false positive*" OR stigma OR shame OR label* OR suicid*)	("Aortic Aneurysm, Abdominal" OR "abdominal aortic aneurysm*") AND (screening* OR diagnos*[tw] OR "early diagnosis" OR "early detection" OR biops* OR surveillance OR "watchful waiting" OR overdiagnos* OR "over diagnos*" OR overdetect* OR "over detect*" OR insignifican*) AND (depress* OR distress OR stress* OR worry OR fear* OR anxiet* OR "quality of life" OR "mental health" OR "mental disorders" OR psycholog* OR psychosocial OR "well being" OR emotion* OR "false positive*" OR stigma OR shame OR label* OR suicid*)

Appendix B: PRISMA Diagram
PC = prostate cancer; AAA = abdominal aortic aneurysm



Appendix C. Quantitative abdominal aortic aneurysm studies

First Author (Year)	Study design	Number of subjects	Population (Sex; age; region)	Type of sample of subjects/Recruitment	Time of psychological assessment	Outcomes & Instruments	Main results; comparisons made	Evidence of psychological harm from screening
Lederle (2003)[18]	RCT of treatment	1136 participants with AAA, 567 randomized to imaging surveillance	99% men; mean age 68; U.S.	Clinical. Patients were recruited over 5 years at 16 Veterans Affairs medical centers and randomized to immediate open surgical repair or surveillance.	Within 12 weeks of diagnosis but not before diagnosis; no comparison group	Outcomes: QoL Instruments: SF-36, a general measure of QoL;	Psychologic status from self-reported mental component of SF-36 before treatment (approximately 53), difficult to interpret as no comparison measure and only mean score given. No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
De Rango (2011)[19]	RCT of treatment	360 enrolled / 339 analyzed with AAA	96% men; age 50-79, 10 European centres	Clinical. 10 European clinical centres	At the time of enrollment into RCT of surgery, after but not before diagnosis; no comparison group	Outcomes: QoL Instruments: SF-36, a general measure of QoL;	Mental health component of SF-36 before treatment (71.8, administered by clinician), difficult to interpret as no comparison measure and only mean score given. No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Knops (2014)[20]	RCT of decision aid concerning treatment after diagnosis	178 participants with AAA	87% men; age 74 (8) and 72 (9) in the two groups (decision aid and no decision aid); Netherlands	Clinical. Six center, randomized clinical trial in the Netherlands in outpatient clinics between Nov 2008 and June 2011	At study enrollment i.e. First clinic visit, before treatment decision, time since diagnosis not reported; no measure before diagnosis	Outcomes: Anxiety Instruments: HADS, a general measure	Before treatment, anxiety score on HADS 4.9 in one treatment group and 5.7 in the other, difficult to interpret as no comparison measure and only mean score given. No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
The Multicentre Aneurysm Screening Study Group (2002)[21]	RCT of screening	599 with AAA, 631 screen-negatives, 726 non-screened controls	Men; 65-74; four centers in the UK	Community-based. Subjects were randomly allocated to either receive an invitation for an abdominal ultrasound scan or not.	6 weeks after screening among those who were invited for screening; also had a measure before screening and diagnosis	Outcomes: Depression, anxiety, QoL Instruments: HADS, STAI, SF-36, all are general measures	Mean anxiety (p = 0.02) and depression scores (p = 0.09) were higher in screen positive compared with screen negative 6 weeks after screening,, although the magnitude of mean difference was small. Mental health component of SF-36 better in screen negative than screen positive at 6 weeks (p = 0.003) and EQ-5D self-rated quality of life score lower in screen positive) than in screen negative (p = 0.0003 after 6 weeks, both with somewhat larger mean differences.	Definite evidence of harm; only mean results; general measures only

							Compared only means, not percentage of patients with clinically-important changes Only comparison is screen positive vs screen negative	
Eisenstein (2013)[22]	RCT of treatment	728 patients with AAA, 362 received surveillance / 350 analyzed	83.7% male in surveillance group, median age 70 (25^{th}-75^{th} percentiles 66.0-76.0); U.S.	Clinical. 70 sites - The Cleveland Clinic coordinating center managed the study.	Within 3 months of screening but not before diagnosis; no comparison group	Outcomes: QoL Instruments: EQ-5D, a general measure	Anxious or depressed: 86/350 = 24.6% soon after diagnosis; difficult to interpret as no comparison measure and only mean score given. No relevant comparisons	Possible evidence of harm; moderate frequency, uncertain severity; general measures only

Results reported as mean (standard deviation) unless otherwise stated. Abbreviations: AAA, abdominal aortic aneurysm; EQ-5D, EuroQol- 5 Dimension; HADS, Hospital Anxiety and Depression Scale; QoL, quality of life; RCT, randomized controlled trial; SF-36, The Short Form (36) Health Survey; STAI, State-Trait Anxiety Inventory

Appendix C. Quantitative prostate cancer studies

First Author (Year)	Study design	Number of subjects	Population (Age; region)	Type of sample and subjects/Recruitment	Time of psychological assessment	Outcomes & Instruments	Main results; Comparisons made	Evidence of psychological harm from screening
Selli (2014)[23]	Cohort	672 enrolled, 603 analyzed	Mean 65.0 (5.73), median 66.0 (range 50–75) Pan-European (Germany, France, Spain, Italy, Sweden)	Clinical. Prospective, 1-year, observational, pan-European study of men with prostate cancer of low-to-moderate risk of progression	All questionnaires were completed at baseline (within 2 months of diagnosis and before treatment); no measure before diagnosis	Outcomes: QoL, anxiety, depression Instruments: EORTC QLQ-C30, EQ-5D, HADS, all general measures	QLQ-C30: Emotional functioning scale (n=396) 80.1 (3.88). Compared with age-matched normative data (UK general population), anxiety was significantly lower ($p< 0.001$) in the study population, while depression was similar. Only comparison is with population norms	No evidence of harm; only comparison is with population norms; only mean results; general measures only
Torvinen (2013)[24]	Cross-sectional	630 total, 47 had localized disease	68.5 (8.2), range 44-93; Southern Finland	Clinical. Recently diagnosed patients were enrolled when visiting the hospital.	Within 6 months of diagnosis (mean time 1.7 months); no measure before diagnosis	Outcomes: QoL Instruments: 15D dimensions: depression, distress, vitality), a general measure	15D mean scores for localized PCa compared with population norm: depression 0.032; distress 0.003; vitality 0.036, none of these statistically different from population norms Only comparison is with population norms	No evidence of harm; only comparison is with population norms; only mean results; general measures only
Vasarainen (2012)[25]	Cohort	124 low risk PCa patients, 105 returned baseline questionnaire	Median 64, range 55-74; Finland	Clinical. Recruitment according to the PRIAS protocol.	At the start of surveillance; no measure before diagnosis	Outcomes: QoL Instrument: SF-36; a general measure	SF-36 components: role emotional 82 (Finnish male population 74); vitality 76 (vs 70); mental health 81 (vs 75); all 3 comparisons $p < 0.005$ Only comparison is with population norms	No evidence of harm; only comparison with general population norms; only mean results; general measures only
Ishihara (2006)[26]	Cohort	141 PCa patients with high PSA detected by screening, scheduled for prostate biopsy, 73 had PCa.	Men; 71.8 (7.4); Japan	Outpatients who were suspected to have prostate cancer as a result of screening	Before biopsy and after diagnosis; no measure before screening	Outcomes: QoL Instrument: SF-36 , a general measure	SF-36 component mean mental health score post diagnosis ages 60-69: 68.9 (vs 74.7 national norm), $p < 0.05$; for age 70+, 63.2 (vs 73.3 national norm), $p < 0.005$ Only comparison is with population norms.	Definite evidence of harm using population norm comparison; only mean results; general measures only

Oba (2014)[27]	Cohort	184 participants, 99 with localized PCa, 85 without PCa	Men, 50s - 80+ (mean 68.8, sd 6.5); Japan/Gunma	Patients referred for biopsy, cancer clinic-based recruitment before prostate biopsy	Before biopsy and 1 month after informed of diagnosis; no measure before screening	Outcomes: Kessler psychological distress scale (K6), a general measures	K-6: Primary comparison given is between PCa patients vs no-PCa patients before biopsy and at 1 month after diagnosis: Scores 4.1 and 4.5 (PCa) vs 2.7 and 2.6 (non-PCa); although distress was higher for PC patients, it was higher both before and after biopsy, with no statistically significant change in either group. Higher distress in PCa group vs no PCa group, but both before and after biopsy; some increase in PCa relative to no-PCa patients.	Uncertain evidence of harm as higher distress in PCa vs no-PCa patients both before and after biopsy; only mean results; general measure only
Acar (2014)[28]	Cohort	263 with localized PCa, receiving Active Surveillance; 50 analyzed	63.8 (6.9), 49–85; Amsterdam, the Netherlands	Clinical selection of patients from a prospective prostate cancer database.	Baseline before treatment initiation; no pre-diagnosis measure	Outcomes: QoL Instruments: EORTC-QLQ-C30-domain 15, a general measure	Means compared between treatment groups, but no clear means for pre-treatment group as a whole on psychological state alone, without other physical factors. No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Berry (2006)[29]	Cross-sectional	260 with localized PCa	63.2 (8.1) range 43-83; Puget Sound region, Washington	Clinical. Invited in clinic after diagnosis at 3 treatment centers + men with PCa who called the Cancer Information Service for information	At the time of of the "options talk" - before treatment decision	Outcomes: Anxiety Instrument: STAI	State anxiety mean 32.74 (range 20-71); Trait anxiety 31.19 (range 20-62) Possible harm with large range; frequency not given No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Chhatre (2011)[30]	Cohort	198 with PCa	64.1 (8.6) and 63.0 (7.9) for white and black, respectively; Philadelphia, PA	Clinical. Urology clinics of urban healthcare system and VA Medical Center	Within 4 months of diagnosis	Outcomes: QoL Instruments: FACT-P, emotional well-being score	Baseline emotional well-being mean score on FACT was 19.4 (Caucasian) and 20.6 (African-American), means only No relevant comparisons with other groups or with pre-diagnosis state	Uncertain evidence of harm; only mean results; general measures only
Couper (2009)[31]	Cohort	211 with PCa recruited; 193 completed the baseline questionnaire, 61 chose WW	Mean age 66.15 (range 43-92); Melbourne, Australia	Clinical. Recruitment by urologists and oncologists-PCa pts attending clinics in public hospitals and private practices.	Close to initial diagnosis and close to treatment; no pre-diagnosis measure	Outcomes: Depression and anxiety, QoL Instruments: Brief Symptom Inventory, SF-36	Watchful waiting group mean Brief Symptom Inventory: depression score 0.147; anxiety 0.246 SF-36 mental health mean 80.59 Comparisons only among treatment groups; no relevant comparisons	Uncertain evidence of harm; only mean results; general measures only

Jayadevappa (2012)[32]	Cohort	214 with PCa enrolled / 195 analyzed	69.87 (4.5) and 71.25 (4.1) for white and black, respectively; Philidelphia, PA	Clinical. Urban academic hospital and a VA hospital	Caucasian vs. AA. Timepoints: baseline, 3, 6, 12 months; no measure before diagnosis	Outcomes: QoL Instrument: SF-36, a general measure	Baseline mental health mean score (SF-36), Caucasian 81.8, African-American 75.8 No comparisons with other groups or with these groups before diagnosis, therefore no relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Jayadevappa (2012)[33]	Cohort	602 with PCa at baseline	63.3 (8.0); Pennsylvania	Clinical. Urban academic hospital and a VA hospital	Baseline before treatment initiation; no measure before diagnosis	Outcomes: QoL Instruments: SF-36	Baseline SF-36 mental health mean score 76.4 No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Loiselle (2010)[34]	Cohort	45 with PCa, to undergo an intervention, broken into 2 groups, measures at baseline	62.3 (7.7) and 67.7 (9.6) for the two groups; Quebec, Canada	Clinical. Convenience sample recruited from four oncology ambulatory clinics and large teaching hospitals	At enrollment; no pre-diagnosis measure	Outcomes: Anxiety, QoL Instruments: STAI, SF-36, CESD	Mean CESD depression score 15.8 and 19.8 Mean STAI anxiety 30.1 and 36.1 Mean SF-36 mental health 58.7 and 53.0 No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Siston (2003)[35]	Cohort	Of the PCa patients enrolled (n = 140), 70% (n = 98) had localized disease, 39 chose WW	Mean 69, range 47–84; United States	Clinical. All patients with newly diagnosed PCa who met the eligibility criteria at five VA Medical Centers across the United States	Median time from diagnosis was 1.2 months, with 85% enrolled within 2 months of diagnosis; no pre-diagnosis measure	Outcomes: QoL Instruments: EORTC-QLQ-C30+3	Watchful waiting baseline mean emotional score 83.5 Comparisons only among treatment groups No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Korfage (2006)[36]	Cohort	Screen arm of prostate cancer screening trial, 52 diagnosed with PCa	Men; 67.3 (4.4), range 60-74; Rotterdam, Netherlands	Registry based participants from ERSPC screening trial	Before screening and median 31 days after diagnosis	Outcomes: QoL Instrument: SF-36, a general measure	SF-36 mental health mean score 2 months before diagnosis: 83.2; 1 month after diagnosis 75.8, $p < .001$ Comparison is before and after diagnosis in screening study	Definite evidence of harm; only mean results; general measures only
Perczek (2002)[37]	Cohort	101 scheduled for biopsy completed	Men; 66.7 (7.5), 46-87; Miami, FL and Palo Alto, CA	Patients scheduled for a prostate biopsy at the urology clinics	Before biopsy and 2 weeks after biopsy and	Outcomes: Distress Instruments: POMS	Prebiopsy Mean POMS distress score in men diagnosed with PCa increased from 0.61 to 0.79; in men not diagnosed with cancer mean	Definite evidence of harm; only mean

		interviews, 37.6% (n =38) received a PCa diagnosis			diagnosis or non-diagnosis; no measure before screening		scores decreased after biopsy from 0.72 to 0.62 All $p < 0.05$ Comparison is before biopsy and after diagnosis in men diagnosed with PCa	results; general measures only
Mohan (2009)[38]	Cross-sectional	184 with localized PCa total; 23 (12.5%) patients chose WW.	68.2 (5.9); Norfolk, Virginia.	Clinical. All patients were recruited from a large, private urology practice.	Baseline within 6 months of diagnosis; no pre-diagnosis measure	Outcomes: Depression and anxiety, life satisfaction Instruments: SF-36, HADS, Life satisfaction scale	3.4% at least mild depression; 20.8% at least mild anxiety; mental health mean (SF-36): 44.1 (+/- 6.8) No relevant comparison	Uncertain evidence of harm; gives some frequencies and severity, but mostly mean results; general measures only
Bisson (2002)[39]	Cross-sectional	88 with PCa	64.5 (6.7, 48–78); Wales UK	Clinical. Patients were consecutive referrals with a new diagnosis of clinically localized prostate cancer to a clinic	Before first clinic appointment. "Newly diagnosed patients"; no pre-diagnosis measure	Outcomes: QoL, distress, anxiety, depression, psychological response to diagnosis Instruments: SF-36, GHQ30, HADS, IES-R, EORTC-QLQ-C30	From 8% to 14% showed high anxiety levels No relevant comparisons	Possible evidence of harm as gives frequencies and severity; general measures only
Chambers (2014)[40]	Cohort	740 with PCa	63.4 (7.5), range 43.3-83.6; South East and North Queensland, Australia	Clinical. Men were referred to the project by their urologists if they had localized prostate cancer suitable for treatment with curative intent.	Median time since diagnosis 19 days; mean 25.6 days (SD 26.9); no pre-diagnosis measure	Outcomes: Distress Instruments: DT, scale 0-10; IES-R: a cut-off of >33 out of a total possible score of 88 indicates high distress	10% were distressed by IES-R measure No relevant comparisons	Possible evidence of harm as gives frequency and severity; general measures only
Mohamed (2012)[41]	Cohort	986 with PCa enrolled / 869 analyzed	65.45 (7.57), 39 - 83 years; Northeast of the US	Clinical. Patients, tertiary cancer center; patients entering treatment.	Within 4 to 6 weeks of diagnosis; no pre-diagnosis measure	Outcomes: Depression Instruments: CES-D, cut-off score 9 indicating elevated depressive symptoms	19.7% had clinically elevated levels of depressive symptoms at baseline, after diagnosis but before treatment No relevant comparisons	Possible evidence of harm as gives frequency and severity; general measures only
Punnen (2013)[42]	Cohort	679 total with PCa, 122 chose AS	60.1 (6.7) for all, 60.5 (6.5) for AS; Department of Urology at The University of	Clinical. Prospective cohort of newly diagnosed patients.	Before initial clinic visit, not specified how soon after diagnosis; no	Outcomes: Depression, anxiety, distress Instruments: PHQ-9 (depression) and GAD-7 (anxiety); Distress thermometer (DT)	Moderate to severe anxiety and depression frequencies < 5%; Elevated distress was 14% to 20%. No relevant comparisons	Possible evidence of harm as gives frequencies and severity; general measures only

			California, San Francisco (UCSF)		pre-diagnosis measure			
Soloway (2005)[43]	Cross-sectional	103 with PCa	Mean 62, median (range) 62 (43–80); Miami, Florida, US.	Clinical. Following methods of convenience sampling, consecutive untreated referrals were identified in the academic outpatient setting.	85% of the patients had been diagnosed within the last 3 months; no pre-diagnosis measure	Outcomes: Depression, distress Instruments: BDI, POMS, VAS of distress	Frequency of depression according to BDI cutoffs: mild-moderate 19.2%; moderate-severe, 2%; and severe 0%. The mean BDI score (5.63) and mean POMS total mood disturbance score (51.52) were within normal range. No relevant comparisons	Possible evidence of harm as gives frequency and severity; general measures only
van den Bergh (2009)[44]	Cross-sectional	129 with PCa	64.9 (6.89); the Netherlands	Clinical. Between May 2007 and May 2008, all Dutch men (N = 150) who had a recent (<6 months) diagnosis of PCA and who were included in the PRIAS study received a QoL questionnaire at their home address.	Within 6 months of diagnosis, mean 2.7 months (SD 1.7); no pre-diagnosis measure	Outcomes: Depression, anxiety, QoL Instruments: CES-D: clinical threshold 16, STAI-6: clinical threshold 44, MAX-PC (PCA-specific anxiety)	8% scored above clinical cut-point for depression, 17% for anxiety (both general measures); 7% scored high on prostate cancer –specific anxiety (condition – specific measure) No relevant comparisons	Possible evidence of harm as gives frequency and severity; one condition-specific measure for anxiety
Love (2008)[45]	Cohort	211 with early-stage PCa; 169 community comparison group (unclear how selected)	Men; 66.15 (8.26), 43-92; Victoria, Australia	Recruited from hospitals, with a matched group of community volunteers (n=169)	Measures after diagnosis but before treatment compared with similar community controls without cancer	Outcome instrument: SF-36	Mean role emotional score SF-36: early-stage PCa 79.41 vs community controls 88.49, $p < 0.001$ Mean mental health SF-36: early-stage 77.78 vs community controls 80.92, not statistically significant Comparison is between men with early-stage PCa and community controls	Definite evidence of harm; means only; has relevant control group; general measures only
Wade (2013)[46]	Cohort	1144 scheduled for biopsy returned questionnaire, 405 diagnosed with prostate cancer	Men; 62.3 (5.2), range 50-59 United Kingdom	Asymptomatic men in primary care	T1: initial PSA testing T2: before biopsy T3: 7 days after biopsy T4: 35 days after biopsy (after receipt of biopsy results)	Outcomes: Anxiety, depression Instruments: HADS Anxiety, HADS Depression ; general measures	Clinical anxiety in 12.9% of men after diagnosis of PCa, compared with 6% before biopsy (but after elevated PSA); $p < 0.05$ Clinical depression in 3.4% of men after diagnosis of PCa, compared with 1.4% before biopsy (but after elevated PSA); $p < 0.05$ Comparison between men diagnosed with PCa before and after learning of diagnosis.	Definite evidence of harm; has relevant comparison and frequency and severity; general measures only

Bellardita (2013)[47]	Cohort	154 with PCa enrolled / 103 analyzed	67 (7), Milan, Italy	Clinical. Enrolled via clinic if eligible	At study entry, after PCa diagnosis, no pre-diagnosis measure	Outcomes: QoL, coping with cancer Instruments: FACT-P, condition-specific measure; Mini-MAC, general cancer measure	28% had low score on emotional well-being; 11% had high score on helplessness/hopelessness; 11% increased anxious preoccupation score; No relevant comparisons	Possible evidence of harm; gives frequency and severity; one condition-specific measure
Bill-Axelson (2013)[48]	RCT	272 total with localized PCa, 136 with WW, 99 analyzed	64.5 (4.7) for WW group and 64.4 (4.7) for RP group; 14 centers in Sweden, Finland, Iceland.	Clinical. Multi-center trial.	Time of baseline questionnaire from diagnosis is not reported; no pre-diagnosis measure	Outcomes: QoL Instruments: Questionnaire developed by the authors, unvalidated	Almost all men reported that PCA negatively influenced daily activities and relationships. Health-related distress, worry, feeling low, and insomnia were consistently reported by approximately 30-40%. No relevant comparisons	Possible evidence of harm; gives frequency and severity; no relevant comparison; condition-specific but unvalidated measures
Steginga (2004)[49]	Cohort	111 with PCa	61.5 (8.1). Queensland, Australia.	Clinical. The participants were men newly diagnosed with localized prostate cancer recruited from two hospital urology clinics and four urologists' private practices	Time since diagnosis 4.3 (4.6) weeks; no pre-diagnosis measure	Outcomes: Psychological response to diagnosis, life satisfaction Instruments: IES-R, Constructed Meaning Scale, Satisfaction with Life Scale.	24% had high and 41% had moderate levels of avoidance, 16% had high and 43% had moderate levels of intrusion No relevant comparisons	Possible evidence of harm; gives frequencies and severity; general measures only
First Author (Year)	**Study design**	**Number of subjects**	**Population (Age; region)**	**Type of sample and subjects/Recruitment**	**Time of psychological assessment**	**Outcomes & Instruments**	**Main results; Comparisons made**	**Evidence of psychological harm from screening**
Alexander (2015)[50]	Cross-sectional	1291 approached, 923 consented, 724 included Community Controls without PCa: 1492 contacted, 623 consented, 552 included	55-75+ Queensland, Australia	Clinical. Referred by urologists to the Prostate Cancer Supportive Care and Patient Outcomes Project (ProsCan), a randomized control trial, between Apr 2005 and July 2007. Excluded if not European ethnicity. or had brother in study. Controls: men with no history of PC from the Queensland Men's Health Study cross-sectional population-based study	4 weeks after diagnosis Controls: at recruitment	Outcomes: QoL Instruments: SF-36v2	Mental health summary measure, mean (SD): PCa (n = 704): 48.05 (9.95) Controls (n = 466): 50.70 (9.99) p<0.001 Mental Health score, mean (SD): PCa (n = 718): 48.54 (10.20) Controls (n = 529): 49.85 (10.20) p=0.024 Community comparison group	Definite evidence of harm; community comparison group; only mean results; general measures only

Parker (2016)[51]	Cross-sectional	180 men with low risk PCa	Range 40-87 Mean 67.2 (8.9) Houston, TX (University of Texas MD Anderson Cancer Center)	Clinical. Hospital enrollment if met criteria, enrolled during 2006-2012 into AS protocol within 6 months of diagnosis. Inclusion criteria amended in 2007 to include biopsy done within 6 months of diagnosis at enrollment. No control group.	Within 6 months of diagnosis (baseline values applicable only)	Outcomes: Mental health and anxiety component summary score of SF-12 Instruments: SF-12, STAI	At T1: SF-12, Mental component summary score, mean: 53.2 Baseline STAI, mean: 30.9, compared with a normative sample of males was in the 40th percentile No relevant comparisons	Uncertain evidence of harm; only mean results; general measures only
Kent (2016)[52]	Registry based cohort	1,311 men diagnosed with PCa in registry	Before diagnosis majority between 65-74 yo (68.0%), after diagnosis even split between 65-74 (46.8%) and 75-84 (46.1%) SEER-MHOS linkage data collection years 1998-2011 which involved Medicare Advantage enrollees with and without cancer	Registry: SEER-MHOS linkage data collection years 1998-2011	comparison between 1st survey before dx and 1st survey after diagnosis (specific time not given) and comparison between population participants with vs without PCa	Outcomes: SF 36 (short form): Mental component summary score	Mental component summary score mean +SD Before dx: 53.7 +/- 9.0 1st survey after dx: 52.0 +/- 10.2 Community participants without cancer: 52.1 +/- 10.3 Has 2 relevant comparison groups	No evidence of harm; only mean results; general measures only

Results reported as mean (standard deviation) unless otherwise stated. Abbreviations: PCA, prostate cancer; WW, watchful waiting, AS, active surveillance; RCT, randomized controlled trial; QoL, quality of life; HRQL, health-related quality of life, EORTC QLQ-C30, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Cancer 30; FACT-P, Functional Assessment of Cancer Therapy Prostate version; Mini-MAC, Mini-Mental Adjustment to Cancer; STAI, State-Trait Anxiety Inventory; SF-36, The Short Form (36) Health Survey; SF-12, Medical Outcomes Study 12-item short-form health survey; MCS, mental component summary; GHQ30, the 30-Item General Health Questionnaire; HADS, Hospital Anxiety and Depression Scale; IES-R, the Impact of Event Scale-Revised; DT, Distress Thermometer; 15D, 15 Dimensions index; CES-D, Center for Epidemiological Studies Depression scale; Patient Health Questionnaire (PHQ-9); GAD-7, General Anxiety Disorder scale 7; VAS, Visual analogue scale; EQ-5D, EuroQol- 5 Dimension; BDI, Beck Depression Inventory, POMS, The Profile of Mood States; MAX-PC, Memorial Anxiety Scale for Prostate Cancer; BCWI, Brief Cancer-related Worry Inventory; K-6, Kessler psychological distress scale; CIDI, Composite International Diagnostic Interview; BSI-53, Brief Symptom Inventory; STAI, Spielberger State-Trait Anxiety Inventory for Adults.

Appendix D

Evidence Tables: AAA Qualitative Studies

Author, Year, Title, Journal	Recruitment, Research Design, Study Population	Time Points	Themes Concerns about bias
Gunasekera et al., 2014[4] **Patient recruitment and experiences in a randomised trial of supervised exercise training for individuals with abdominal aortic aneurysm** J.Vasc.Nurs.	Research Design: Randomized controlled trial Recruitment: -Identified from surveillance list from a large hospital trust in Sheffield, UK, and Rotherham, UK -Patients invited by letter (81.7% response rate to letter, 6.4% declined due to disinterest, overall recruitment rate 5.1%) -Recruited patients between Jan 2010 and Sep 2011 Population meeting criteria: N = 28 completed baseline (overall recruitment rate of 5.1%) -86% male (24/28) Age: mean 72 years old (50-85 years old) Location: U.K.	Time Points: Baseline 12 weeks follow-up Outcomes: -SF-36 was used, but data not presented in this	**Shock** **Fatalism** **Uncertainty** **No effect or Ambivalence** Concerns about Bias: -Qualitative -Recruitment rate of only 5.1%
Petersson et al., 2013[5] **To be under control: a qualitative study of patients' experiences living with the diagnosis of abdominal aortic aneurysm** J.Cardiovasc.Nurs.	Research Design: Interview Recruitment: -Telephone calls -Outpatient clinic -Spoke Swedish Population meeting criteria: -n = 10 patients interviewed -80% men (8 male, 2 female) -interviews conducted between April 2007-Dec 2008	Time Points: Only 1 was newly diagnosed, but all were asked to reflect back on their diagnosis	**Shock** **Anxiety** **Fatalism** **Distress** **Burden about protecting others from worrying (especially family members)** **Guilt/Regret** **Helplessness/Powerlessness** **Uncertainty**

	-undergoing conservative treatment (but reflecting back) Age: mean 72.4 years old (range 63-82 years old) Location: Sweden		Concerns about Bias: -Recall: only 1 was newly diagnosed, but all were asked to reflect back on their diagnosis -Participants did not verify the interpretations reflected by the paper's selected themes and subthemes
Hansson et al., 2012[9] **Opening Pandora's box: The experiences of having an asymptomatic aortic aneurysm under surveillance** Health Risk Soc.	Research Design: Interview Recruitment: -Participating in AAA screening started in 2009 Population meeting criteria: N = 15 participants (24 were invited, 9 declined due to lack of interest, transport problems, other preoccupying illness) -All men Age: 65 years old Location: Vastra Gotaland, Sweden	Time Points: 2 to 4 months after initial screen for AAA	Themes: **Anxiety** **Fatalism** **Burden about protecting others from worrying (especially family members)** **Guilt/Regret** **No effects or ambivalence** Concerns about bias: -Qualitative content analysis -Selection bias: declining to participate

Evidence Tables: PCa Qualitative Studies

Author, Year, Title, Journal	Recruitment, Research Design, Study Population	Time Points	Themes Concerns about bias
Kronenwetter et al., 2005[10] **A qualitative analysis of interviews of men with early stage prostate cancer: the Prostate Cancer Lifestyle Trial** Cancer Nurs.	Research Design: semi-structured, face-to-face interviews, 45 to 60 minutes long each Recruitment: sub-sample amongst the 44 experimental participants in Prostate Cancer Lifestyle Trial (PCLT) -enrolling was rolling (different time points) Population meeting criteria: N = 26 analyzed (29 enrolled but 3 interviews lost) -90% had specialized training or college or above -over 90% were Caucasian Age: range 50-85 years old, mean 67 Location: Unclear, UCSF IRB approval given	Time Points: Time from enrollment in PCLT to face-to-face interview varied from 8 to 64 months, but participants were asked to reflect back on their diagnosis	**Depression** **Anxiety** **Fatalism** **Denial** **Distress** **Loneliness** Concerns about bias: Participants were prescribed an intensive lifestyle program Enrollment was rolling (different time points)
Ervik et al., 2010[6] **Hit by waves-living with local advanced or localized prostate cancer treated with endocrine therapy or under active surveillance** Cancer Nurs.	Research design: Interview, 60-90min interviews (at home, workplace, or during follow-up at outpatient services at hospital) Recruitment: Outpatient service of a University hospital Population meeting criteria: N = 10 (47%) were included in the study 21 invited, 12 (57%) gave approval, (1 excluded because interview was too distressing due to his current life situation, 1 did not meet inclusion criteria); only 3 were active surveillance, but themes were pooled from the 10 included -diagnosed within previous 3 years -must speak and understand Norwegian Age: median 71 (range 59-83) Location: North Norway	Time points: Diagnosed within the prior 3 years Time since diagnosis at interview (range 3-36mo, median 9.5mo)	**Shock** **Anxiety** **Fatalism** **Psychological impact of sexual dysfunction** **Burden about protecting others from worrying (especially family members)** **Loneliness** Limitations: -All had lost at least 1 close family member or friend to cancer -Only 10/21 invited (47%) participated -Recall: participants were asked to reflect back on their diagnosis -Exclusion of 1 participant because the interview would be "too distressing"
Wall et al.,2013[7] **Responding to a diagnosis of localized prostate cancer: men's experiences**	Research Design: Semistructured interview Recruitment:	Time Points: Interviewed within the first 3 months of diagnosis	**Shock** **No effects or ambivalence** Concerns about bias: -Only 1 patient was watchful waiting and met inclusion criteria

of normal distress during the first 3 postdiagnostic months Cancer Nurs.	-Recruited by urology clinics Comparison Groups and Time Points: BUT all but 1 received treatment 12 pts recruited from2 urologists in metropolitan area, 1 from urologist in Western Australia Population meeting criteria: n = 10 included in analysis (13 originally but 2 withdrew and 1 incorrectly recruited) -all but 1 received treatment -diagnosed with localized prostate cancer within the last 4 weeks -spoke English -Anglo-Celtic participants Age: Average age 63.4 years old, range 48-77 years old Location: Western Australia		-Selection bias: Urologists did not report the number of men who were approached to participate in the study or why they were excluded or declined to participate
Wallace and Storms, 2007[8] **The needs of men with prostate cancer: results of a focus group study** 2007 Appl.Nurs.Res.	Research Design: Focus group Recruitment: -Open enrollment until each focus group had a minimum of 10 participants -Newspaper, ads, direct mailing to former/current support program users, flyers via affiliated urology -Convenience sampling design -English speaking Population meeting criteria: N = 17 total (but men were at various stages of treatment for prostate cancer) Age: 49-81 years old (mean = 66.75 years old) Location: not specified	Time Points: -Diagnosed between 6 months and 12 years earlier -Average time since diagnosis at interview: 4.3 years -Patients were asked to reflect back on their diagnosis	**Shock** **Fatalism** **Loneliness** Concerns about bias: -Qualitative - focus group design -Selection bias - volunteer to participate in focus group; ads explained the study and encouraged participants to contact the researcher if they had questions or were interested in participating in the study -Small number of participants -Patients had to reflect back on their diagnosis experience

Appendix E:

Evidence Tables: Population Based Studies Prostate Cancer

Article	Population	Recruitment, Comparison Group, Time Point, Outcome Measures	Outcomes and reported results Concerns about bias
Fall et al, 2009[11] **Immediate risk for cardiovascular events and suicide following a prostate cancer diagnosis: prospective cohort study** PLoS Med.	Database: • **Nationwide Swedish Cancer Register and Inpatient registers** • All men born in Sweden who were 30 years old or older between **01/01/1961 to 12/31/2004** Population meeting criteria • n = 168,584 with prostate cancer analyzed *(173,701 diagnosed with prostate cancer during the study period, but 5,117 of these diagnoses occurred at autopsy)* Study Design: Cohort Age: mean 73.4 years old, range 31.6-102.5 years old Location: Sweden	Comparison groups: Cancer-free registry members meeting the same criteria Time points: • 1 week since diagnosis • 2-4 weeks since diagnosis • 5-26 weeks since diagnosis • 27-52 weeks since diagnosis Follow-up ended at whichever came first: • 1 year after diagnosis • Cardiovascular event or suicide • Death from another cause • Emigration out of Sweden • 12/31/2004 Extended follow-up was also performed Outcomes: Suicide, Cardiovascular events	**Themes:** **Suicide:** risk of suicide was highest during **1st week after diagnosis** (RR 8.4, 95% CI: 1.9-22.7) then declined with time since diagnosis (after 1st year of follow-up: RR 1.8, 95% CI: 1.6, 2.0); especially among men 54 years old or younger **Cardiovascular events:** risks were highest closer to diagnosis (**during 1st week after diagnosis** from 1961-1986, RR 11.2, 95% CI: 10.4, 12.1; and from 1987-2004: RR 2.8, 95% CI: 1.3, 1.3), but declined over time (after 1st year: RR 1.1; 95% CI: 1.1, 1.1), even after adjusting for cardiovascular events before diagnosis; especially among men 54 years old or younger. **Concerns about bias:** • Register initiated for administrative purposes in 1964. Only 60% national coverage in 1969, but this increased to 100% in 1987 • Underreporting of suicides (suggests bias toward underestimating suicide rates) • Treatment anticipation unknown
Fang et al, 2010[12] **Immediate risk of suicide and cardiovascular death after a prostate cancer diagnosis: cohort study in the United States** 2010 J.Natl.Cancer Inst.	Database: **SEER (Surveillance, Epidemiology, and End Results Program)** Diagnosed with Prostate Cancer **From 01/01/1979 to 12/31/2004** Population meeting criteria • n = 345,384 enrolled 342,497 analyzed registry • n = 288,077 who had local or regional prostate cancer Age: mean 70.2 years old Location: United States population	Time Points: follow-up until 1 year after diagnosis Comparison group: US male population Outcome: Suicides	**Themes:** **Suicide:** Higher rates of suicide in the **first year** after diagnosis (SMR 1.4; 95% CI: 1.2, 1.6), especially during the **first 3 months** after diagnosis (SMR 1.9; 95% CI: 1.4, 2.6) • Being single, separated or divorced, or widowed was associated with a higher risk of suicide than being married • 148 suicides in the first year; expected 105.2 suicides based on age in US male population • Also increased risk in earlier calendar years: in pre-PSA and peri-PSA eras **Cardiovascular events:** The risk of cardiovascular death was slightly elevated during the first year (SMR = 1.09, 95% CI = 1.06 to 1.12), with the highest risk in the **first month** (SMR = 2.05, 95% CI = 1.89 to 2.22), after diagnosis. **Concerns about bias:** • **No cancer-free group was available as reference** • **No information about comorbid illness rates**

Dalela et al., 2015[13] **Suicide and accidental deaths among patients with non-metastatic prostate cancer** BJU Int.	**Database**: **SEER** (Surveillance, Epidemiology, and End Results Program), all men diagnosed with prostate cancer from **1/1/88 to 12/31/10** (only 4.9% metastatic) in the United States Population meeting criteria: 524,965 with adenocarcinoma of prostate Age: 40-54yo (54679, 10.4%) 55-69yo (274812, 52.3%) 70+ yo (195474, 37.2%) Clinical disease: Localized (425,335, 81.0%) Regional (68873, 13.1%) Metastatic (25945, 4.9%) Unknown (4812, 0.9%) Location: U.S.	**Time point**: Years after diagnosis **Outcome**: Suicides **Comparison Group**: SEER men prostate cancer vs. men diagnosed with all other solid cancers	**Results and Themes:** **Suicide:** Men with prostate cancer were at significantly higher risk of suicidal and accidental deaths within the **first year of diagnosis** than individuals diagnosed with other solid cancers o Within **3 months** of diagnosis: ARR 3.98 (95% CI: 3.02, 5.23) **Concerns about bias**: None • The use of men diagnosed with other solid cancers helps to decrease the confounding of potential pre-existing comorbidities and higher rates of psychiatric disorders among cancer patients
Carlsson et al., 2013[14] **Risk of suicide in men with low-risk prostate cancer** Eur.J.Cancer	**Database:** Prostate Cancer data Base Sweden (**PCBaSe**) **2.0** (nation-wide, population based database, comparing 105,736 men diagnosed with prostate cancer between **01/01/1997 to 12/31/2009** *PCBaSE 2.0 differs from PCBaSE because longer follow up, selection of control series of those without prostate cancer* Population meeting criteria: 27,502 were watchful waiting (out of 105,736 men diagnosed with prostate cancer) Expectancy group = watchful waiting Location: Sweden	**Comparison Groups**: Compared to 528,658 matched men without prostate cancer **Time points:** Within 6 months of diagnosis **Outcomes:** • Looks at prescription filings as a proxy for mental health • Suicide ICD10 code	**Suicide:** Within 6mo of diagnosis: RR 3.2 among M0 PCa men Within 6mo of diagnosis: RR 6.5 (95%CI 4-10) among all PCa men ▪ 38 suicides among PCa (26 detected by sx; IR 0.73 per 1000P-Y; vs. 30 suicides among PrCa-) Among expectancy (WW) group: 3 deaths (8%) within 6mo; 49 deaths (23%) compared to all Pca group 27,502 suicides (26%) Within 6 months of diagnosis among men with low risk prostate cancer: 7 suicides out of 12612 people Within 6 months of diagnosis among those detected by health control: 5 suicides out of 12,140 people Low risk group: 7 deaths (18%) within 6mo; 49 deaths (23%) compared to all PCa group 25,297 suicides (24%) **Themes:** **Suicide:** Men diagnosed with PC (also low risk) had increased risk of suicide especially shortly after diagnosis. But, patients receiving watchful waiting had a lower risk of suicide in first 6 months than other treatment modalities. Higher absolute risk of suicide in ever uses of **prescription mental health** than never users (this is an attempt to guess at a history of mental illness) **Concerns about bias:** • Registry data • The use of prescription mental health medications as a proxy is not necessarily accurate. No historical data about psychiatric hospitalizations, non-prescription treatment, etc.

Bill-Axelson et al., 2010[15]
 	
Suicide risk in men with prostate-specific antigen-detected early prostate cancer: a nationwide population-based cohort study from PCBaSe Sweden
 	
Eur.Urol.
	Database: **PCBaSe** Sweden, includes all cases registered in the National Prostate Cancer Register (NPCR) of Sweden following a diagnosis of prostate cancer from **01/01/1997 to 12/31/2006**
	
	Population meeting criteria
	• n = 77,439 prostate cancer cases in the Swedish NPCR
	  ○ *22,405 had T1c tumors*
	  ○ *22,929 had locally advanced disease*
	  ○ *8,350 had distant metastases*
	• 23.4% had expectancy as planned initial treatment
	
	Location: Sweden
		Comparison group: background population, prostate cancer patients who received treatment, metastatic disease
		
		Time points:
		• Follow-up among patients who died due to intentional self-harm: mean 2.1 years, SD 1.8 years
		• Among full prostate cancer cohort: mean 3.4 years, SD 2.5 years
		
		Outcomes: Suicides
			Outcomes and Results
			• Pooled data: significantly increased risk of suicide during the first and second years after diagnosis (SMR: 2.2; 95% CI: 1.5, 3.0)
			  ○ 128 suicides among the 77,439 prostate cancer cases in the NPCR compared with an expected number of 85 (SMR: 1.5; 95% CI, 1.3–1.8)
			• Statistically significantly increased risk of suicide among men with locally advanced or metastatic disease
			  ○ Among the 22,929 men with locally advanced nonmetastatic tumors: the risk of suicide was statistically significantly increased (SMR: 2.2; 95% CI, 1.6–2.9)
			  ○ Among the 8,350 men with distant metastases: the risk of suicide was statistically significantly increased (SMR: 2.1; 95% CI, 1.2–3.6)
			• BUT among the 22,405 men with PSA-detected T1c tumors: the risk of suicide was not increased (SMR: 1.0; 95% CI, 0.6–1.5)
			
			Themes:
			Suicide: Pooled data showed significantly increased risk of suicide during the **first and second years** after diagnosis (SMR: 2.2; 95% CI: 1.5, 3.0)
			  ○ 128 suicides among the 77,439 prostate cancer cases in the NPCR compared with an expected number of 85 (SMR: 1.5; 95% CI, 1.3–1.8)
			• **Statistically significantly increased risk of suicide among men with locally advanced or metastatic disease**
			  ○ Among the 22,929 men with locally advanced nonmetastatic tumors: the risk of suicide was statistically significantly increased (SMR: 2.2; 95% CI, 1.6–2.9)
			  ○ Among the 8,350 men with distant metastases: the risk of suicide was statistically significantly increased (SMR: 2.1; 95% CI, 1.2–3.6)
			
			Concerns about bias:
			• Most data is pooled – not always the specific population we want to identify (no information on treatment or disease stage for those within 0-6mo of diagnosis)
			• Registry-based (suicide based on ICD code), cannot determine causality, modest rates of study enrollment and racial differences, unknown potential effects of comorbid medical and psychiatric conditions small numbers of suicides
			• BUT among the 22,405 men with PSA-detected T1c tumors: the risk of suicide was not increased (SMR: 1.0; 95% CI, 0.6–1.5) – may be because opportunistic screen, health-conscious men were more willing to accept the results

Klaassen et al., 2015[16] **Factors associated**	**Database:** SEER (Surveillance, Epidemiology, and End Results Program), **1988 through 2010**	Comparison Group: Compared to the general U.S. population based on data from CDC and Prevention's National center for Injury Prevention and Control (1999-2010)	**Results and Themes:**

with suicide in patients with genitourinary malignancies Cancer	**Population meeting criteria**: • Exact number of prostate cancer patients not specified, but 5,111,975 person-years • 1,239,522 individuals with genitourinary malignancies	**Time points**: Years after diagnosis **Outcome**: Suicide Calculated standardized mortality ratios (SMR)	Suicide: Prostate cancer patients had higher rates of suicide, especially ≥15 years since diagnosis Prostate cancer patients overall (all stages of disease): 1613 (SMR 1.37; 95% CI: 0.99 – 1.86) • Locoregional PC had similar suicide rates (969 suicides, SMR 1.16 (95% CI: 0.81-1.60) • Unstaged PC: 46 suicides with SMR 1.62 (95% CI 1.20-2.16) • Unknown PC stage: 540 suicides with SMR 1.83 (95% CI 1.39-2.41) Suicide rates stratified by time since diagnosis (pooled Prostate Cancer data) • 0-5 years: SMR is 1.33 (95% CI: 0.95, 1.81) • 5-10 years: SMR 1.42 (95% CI: 1.02-1.91) • 10 to 15 years: SMR 1.39 (95% CI: 0.99-1.86) • ≥15 years: SMR 1.84 (95% CI: 1.39-2.41) **Concerns about bias:** • No clarification of whether patients received treatment or not – we aren't sure if these patients are watchful waiting
Bill-Axelson et al., 2011[17] **Psychiatric treatment in men with prostate cancer--results from a Nation-wide, population-based cohort study from PCBaSe Sweden** Eur.J.Cancer	**Database: PCBaSe Sweden 01/01/1997 to 12/31/2006** -PCBaSe Sweden is derived from the National Prostate Cancer Register (NPCR) of Sweden, which started in 1996 and covers more than 97% of all registered incident prostate cancers. Population meeting criteria: N = 18,924 are watchful waiting (expectancy category) out of the total 72,613 men with prostate cancer -68.6% were married (12,986) Age: mean 73.5, SD 7.8	**Comparison Group**: Compared to 217,839 men without prostate cancer Number of pre-study hospitalizations for depression: • 1: 86 (0.5) vs. men without prostate 896 (0.4) • 2+: 54 (0.3) vs. men without prostate 558 (0.3) Number of pre-study hospitalizations for anxiety: • 1: 21 (0.1) vs. men without prostate 263 (0.1) • 2+: 9 (<0.1) vs. men without prostate 71 (<0.1) Number of pre-study hospitalizations for stress: • 1: 13 (0.1) vs. men without prostate 275 (0.1) • 2+: 2 (<0.1) vs. men without prostate 42 (<0.1) **Time Points:** Years of f/u (mean, sd): 3.9, SD 2.6 **Outcomes:** -Hospitalization for depression, anxiety, or PTSD -Outpatient treatment for depression, anxiety, or PTSD -Use of antidepressant medication.	**Results and Themes:** **Psychiatric outcomes:** Significantly more psychiatric hospitalizations due to depression (RR 1.34, 95% CI: 1.11-1.62) and use of antidepressant medications (OR 1.38, 95% CI: 1.22-1.56) after diagnosis of PCa • Psychiatric hospitalization due to anxiety (RR 1.15, 95% CI: 0.75, 1.75) • Psychiatric hospitalization due to depression (RR 1.34, 95% CI: 1.11-1.62) • Psychiatric outpatient visits due to PTSD (RR 1.30, 95% CI 0.72, 2.37) • Use of antidepressant medications (OR 1.38, 95% CI: 1.22-1.56) **Concerns about bias:** Short follow-up time (mean 3.9yrs, SD 2.6yrs for men with prostate cancer)