



SESSIONE I – Stato dell'arte e pratica clinica: Oncologia di genere



NUOVE SFIDE DELLA SALUTE E MEDICINA DI GENERE

Le diversità di genere si manifestano nei comportamenti e stili di vita, nello stato di salute, con diversa espressione sintomatologica di molte malattie, nella risposta alle terapie, ma anche nel ricorso ai servizi sanitari orientati alla prevenzione e nel vissuto e percezione della malattia. L'adozione di cure appropriate presuppone la presa in carico della "persona" valutata sia sulla base delle caratteristiche biologiche e cliniche della malattia, sia su tutti i fattori personali-culturali e sociali che ne caratterizzano il "vissuto". La medicina di genere costituisce una sfida per la formazione di tutti i professionisti della salute, formazione che rappresenta un fatto "culturale" nel senso più ampio del termine. Il progetto intende rappresentare un momento di condivisione a livello aziendale sull'impatto delle differenze di genere nell'accesso-erogazione delle cure e costituisce un momento di riflessione collettiva sulla medicina di genere quale "valore aggiunto" nella presa in carico della persona che si rivolge ai nostri servizi. La formazione, come si legge nel "Piano per l'applicazione e la diffusione della medicina di genere", diventa quindi uno degli strumenti per combattere disuguaglianze e discriminazioni nell'accesso alle cure.



18 novembre 2022
ore 9.00- 17.30

AULA MAGNA
Agenzia per la formazione
Sovigliana Vinci (FI), Via Oberdan 13/19

PROGRAMMA

Francesca Martella

Direttore SOC Oncologia Medica e Centro Donna
Empoli e Coordinatore Breast Unit Firenze
Dipartimento Oncologico – Azienda UsI Toscana
Centro - Direttore: L. Fioretto



ISPRO

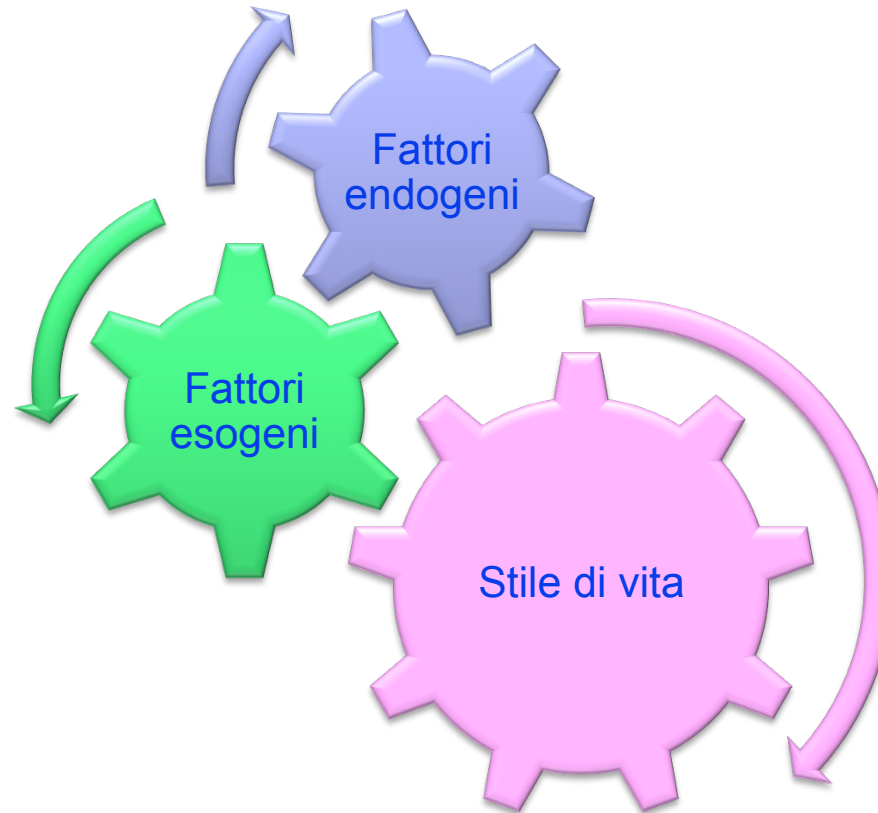
Istituto per lo studio, la prevenzione
e la rete oncologica



Azienda
USL
Toscana
centro

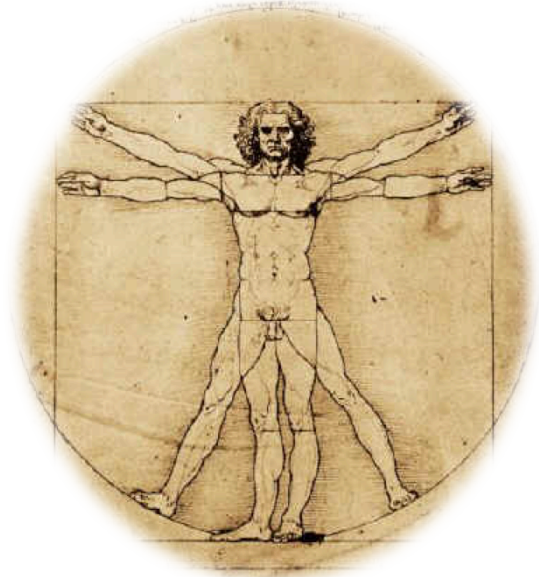
Servizio Sanitario della Toscana

Cancro: una patologia multifattoriale

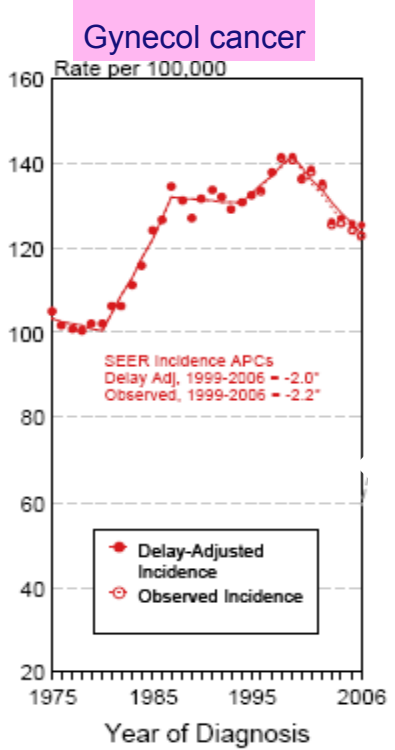
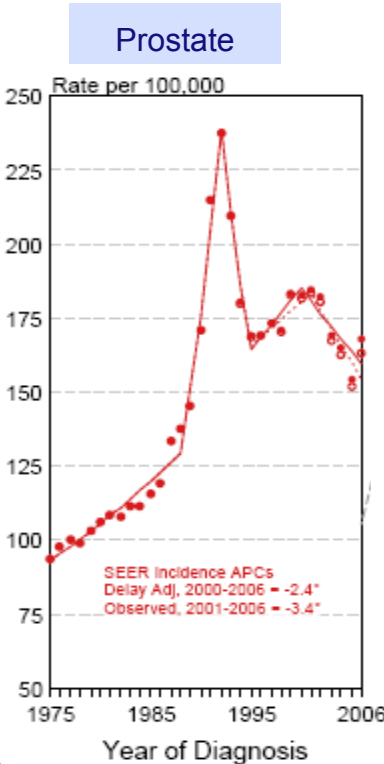


Nelle patologie oncologiche non è facile fare una distinzione fra differenze prettamente biologiche e differenze socioculturali

Cancro e genere

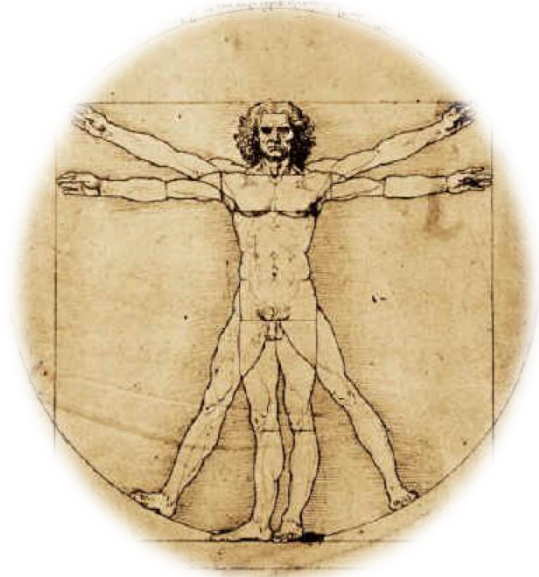


"L' uomo", Leonardo 1509



"La ragazza con l' orecchino di perla",
Johannes Vermeer 1665

Cancro e genere



“L’ uomo”, Leonardo 1509



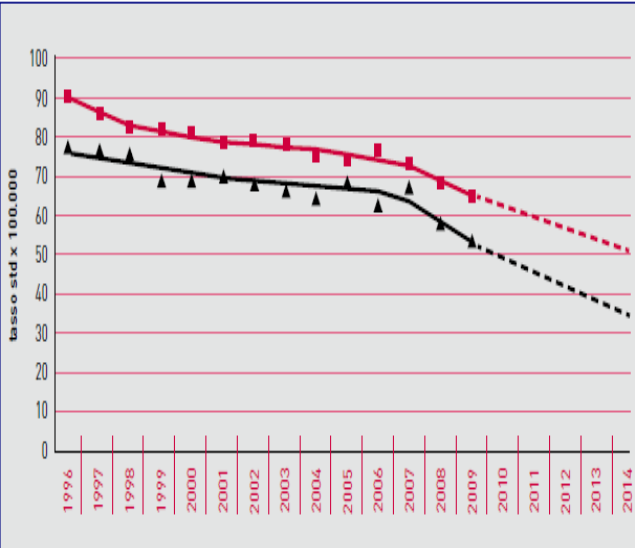
Sede	Maschi	Femmine
Vie aerodigestive superiori*	7.000	2.300
Esofago	1.500	500
Stomaco	8.400	5.900
Colon_Retto**	27.000	22.000
Fegato	8.000	4.600
Colecisti vie biliari	2.400	3.000
Pancreas	6.800	6.700
Polmone	29.500	13.000
Osso	550	500
Melanomi	6.700	5.600
Mesotelioma	1.300	500
Kaposi	700	400
Tessuti_molli	1.400	1.000
Mammella	500	53.000
Ovaio	-	5.300
Utero_cervice	-	2.700
Utero_corpo	-	8.700
Prostata	37.000	-
Testicolo	2.200	-
Rene, vie urinarie***	8.100	4.500
Vescica	24.000	5.700
SNC	3.100	3.200
Tiroide	3.200	9.000
LH	1.300	1.000
LNH	7.200	5.200
Mieloma	3.000	2.700
Leucemie	5.000	3.600
Totale	196.000	175.000

TABELLA 5. Numero di nuovi casi tumorali, totale e per alcune delle principali sedi, stimati per il 2019 (popolazione italiana residente da previsioni ISTAT - www.demo.istat.it)



“La ragazza con l’ orecchino di perla”, Johannes Vermeer 1665

Carcinoma polmonare



Revue des Maladies Respiratoires (2014) 31, 805–816



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ARTICLE ORIGINAL

Évolution en 10 ans du cancer bronchique non à petites cellules en fonction du sexe. Résultats de l'étude KBP-2010-CPHG du Collège des pneumologues des hôpitaux généraux



Ten-year evolution in non-small-cell lung cancer according to sex. Results of the KBP-2010-CPHG study by the College of General Hospital Respiratory Physicians

D. Debieuvre^{a,*}, C. Locher^b, A.-C. Neidhardt^a, F. Goupil^c, B. Lemaire^d, A.-S. Blanchet-Legens^e, D. Renault^f, J.-Y. Tavernier^g, P. Tagu^h, H. Mahmoudⁱ, M. Figueredo^j, M. Grivieux^b

KEYWORDS

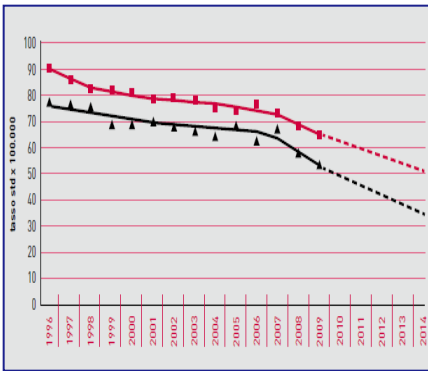
Adenocarcinoma;
Non-small-cell lung cancer (NSCLC);
Epidemiology;
France;
Sex

Summary

Introduction. – Comparison by sex and presenting features between 2000 and 2010 of the characteristics of new cases of non-small-cell lung cancer (NSCLC).
Methods. – Observational KBP-2010-CPHG study similar to KBP-2000-CPHG. Both studies were promoted by the French College of General Hospital Respiratory Physicians (CPHG). KBP-2010-CPHG collected data for 6083 NSCLC diagnosed between January 1st and December 31st, 2010, and followed in the respiratory departments of 119 French general hospitals.
Results. – In 2010, 24.4% of the patients were women (16% in 2000, $p < 0.0001$). Compared to men, women were more commonly non-smokers (34.2 vs 4.7%) or lighter consumers (37.2 vs 43.7 pack per years) ($p < 0.0001$). Their tumours (mostly adenocarcinoma: 64.6 vs 48.7%, $p < 0.0001$) were more frequently diagnosed at stage IV (62.4 vs 56.9%, $p = 0.0008$). EGFR mutation research was more frequently performed (48.5 vs 31.0%, $p < 0.0001$) and positive (20.6 vs 5.2%, $p < 0.0001$) in women than men. Their treatment more frequently included targeted therapy (13.4 vs 5.7%, $p < 0.0001$). Compared to 2000, the percentage of non-smokers increased in men (4.7 vs 2.5%, $p < 0.0001$) while remaining stable in women (36.1 vs 34.2%, $p = 0.32$). The percentage of adenocarcinomas increased, particularly in men (48.7 vs 31.5%, $p < 0.0001$).
Conclusions. – The percentage of women with NSCLC has increased in 10 years in France. In 2010, the main gender differences persist, but have decreased with the increasing proportion of non-smokers and adenocarcinomas in men. Various hypotheses to explain these changes are discussed.

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Carcinoma polmonare



Revue des Maladies Respiratoires (2014) 31, 805–816



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Women are more susceptible than men to oxidative stress and chromosome damage caused by polycyclic aromatic hydrocarbons exposure

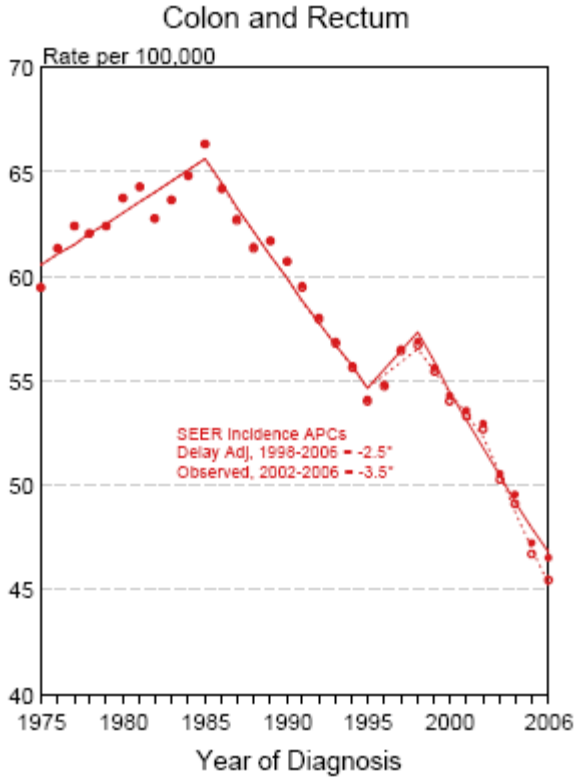
Huan Guo^{1,*}, Kun Huang¹, Xiao Zhang¹, Wangzhen Zhang², Lei Guan¹, Dan Kuang¹, Qifei Deng¹, Huaxin Deng¹, Xiaomin Zhang¹, Meian He¹, David Christiani³ and Tangchun Wu¹



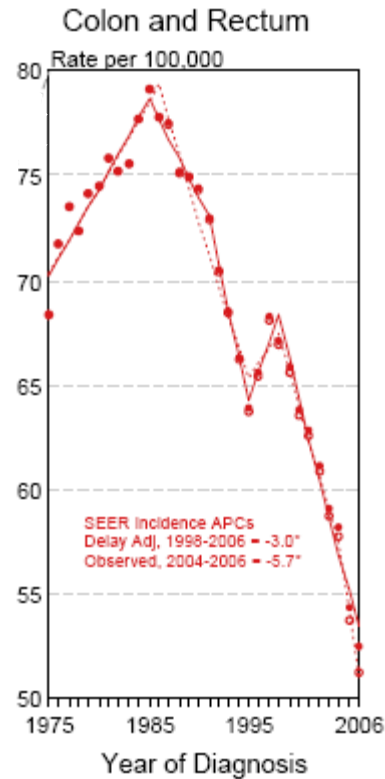
Environmental and Molecular Mutagenesis
Volume 55, Issue 6,
pages 472–481, July 2014

Carcinoma del colon retto

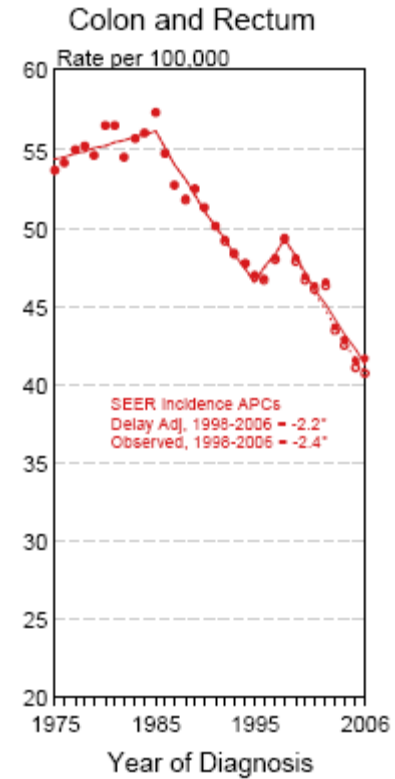
SEER Observed Incidence and Delay Adjusted Incidence Rates*
Both Sexes



Males



Females



Screening e cultura

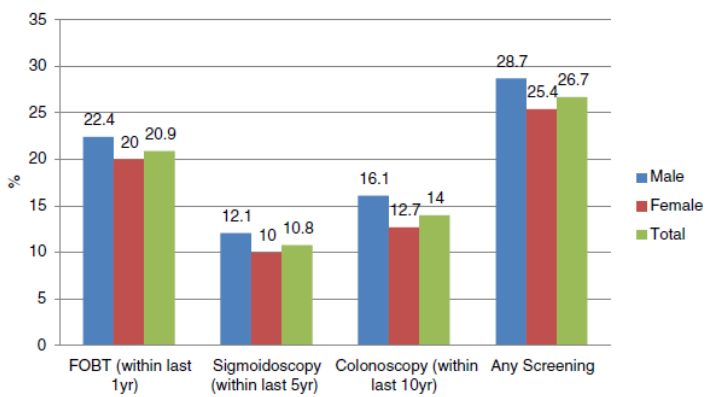
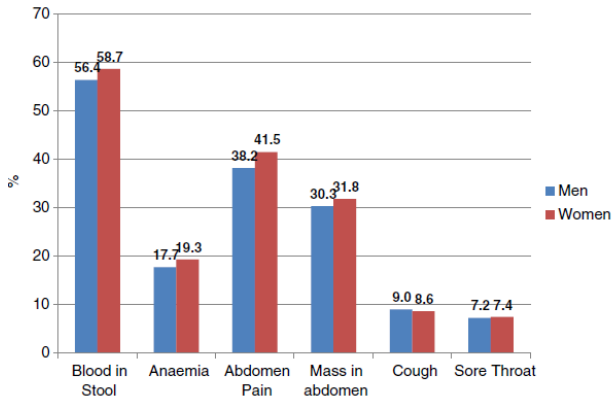


[Journal of Community Health](#)
 April 2014, Volume 39, [Issue 2](#), pp 230-238
 Date: 28 Dec 2013

The influence of gender on colorectal cancer knowledge, screening intention, perceived risk and worry among African Americans in South Florida.

[McKinney SY](#)¹, [Palmer RC](#).

The aim of this study was to examine if gender differences exist for colorectal cancer (CRC) knowledge, intention to screen, perceived risk and cancer worry among African Americans for CRC. African American males and females (N = 336) aged 45 years or older living in southeast Florida were recruited to participate in a cross-sectional survey that assessed intentions to screen as well as CRC knowledge, cancer worry, perceived risk. **No significant differences were found between men and women in their intention to screen for CRC or in their worry about cancer.** Results did suggest that men and women differed significantly about their understanding of CRC knowledge. Findings also showed that **there were differences in perceived risk between genders, with female study participants possessing lower levels of risk than men.** Study results suggest that future interventions need to ensure that females understand their risk for CRC and understand the benefits associated with CRC screening. Findings also suggest that interventions promoting CRC screening may need to be tailored if increased participation in CRC screening is to be achieved for women.

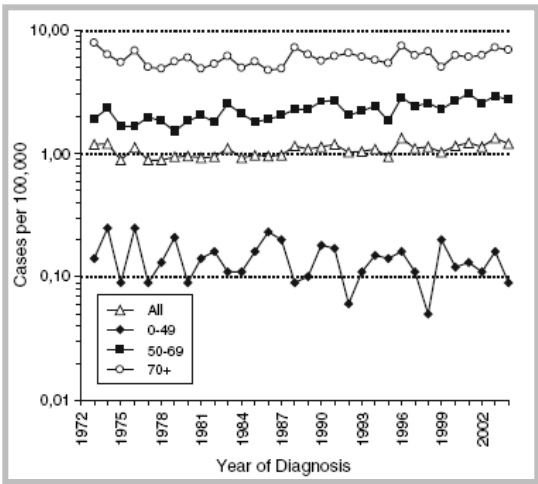


Neoplasia mammaria

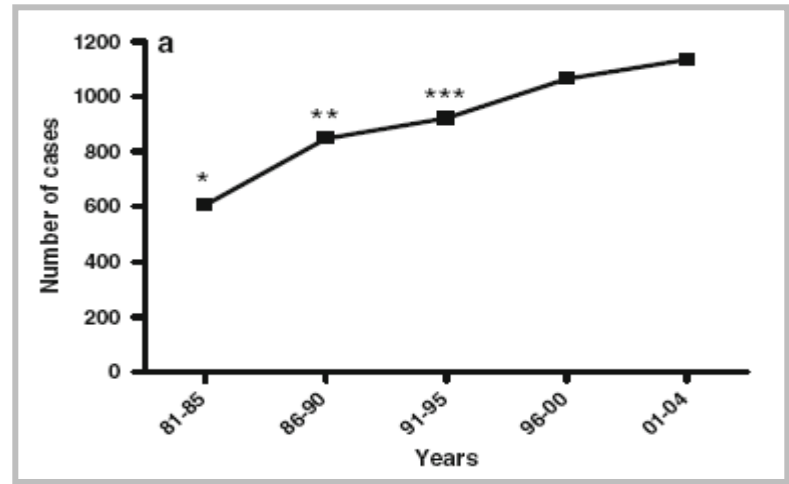


- ❑ Paesi Occidentali 1: 100' 000 men
- ❑ Africa 5-15: 100 men
- ❑ Giappone 5: 1' 000' 000 men

L'incidenza di questa neoplasia è aumentata da 1 a 1.4 : 100'000 uomini



SEER program NCI



UKACR

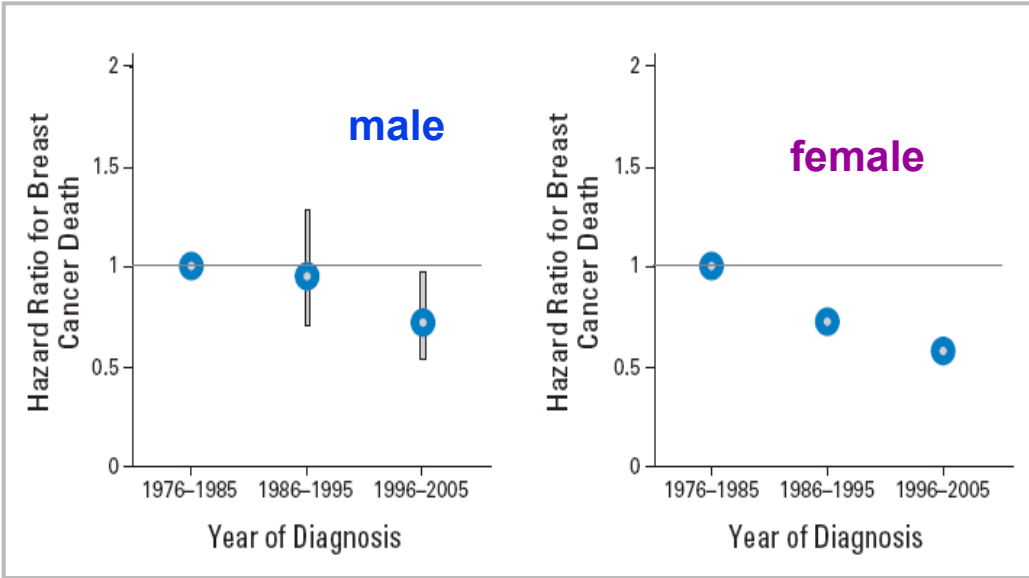
Neoplasia mammaria

Multidisciplinary Meeting on Male Breast Cancer: Summary and Research Recommendations

Larissa A. Korde, Jo Anne Zujewski, Leah Kamin, Sharon Giordano, Susan Domchek, William F. Anderson, John M.S. Bartlett, Karen Gelmon, Zeina Nahleh, Jonas Bergh, Bruno Cutuli, Giancarlo Pruneri, Wortia McCaskill-Stevens, Julie Gralow, Gabriel Hortobagyi, and Fatima Cardoso

Systemic treatment must be administered according to the tumor biology:

- Tamoxifen is the recommended therapeutic option for hormone sensitive MaleBCs, either as adjuvant or metastatic first-line treatment. Data on the efficacy of other hormonal therapies are not yet definitive, even though positive experiences have been reported.



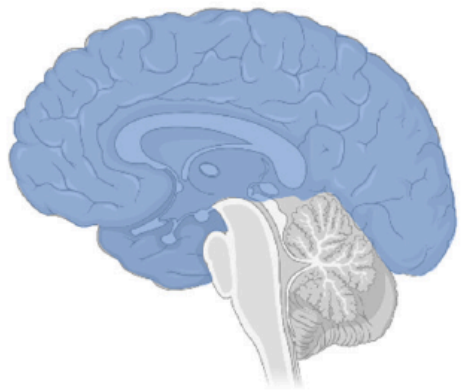


Review

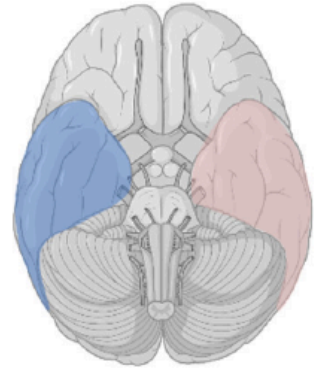
Sex-Specific Differences in Glioblastoma

INCIDENCE BY BRAIN AREA

■ higher in men
■ higher in women



(a) Chakrabarti et al.



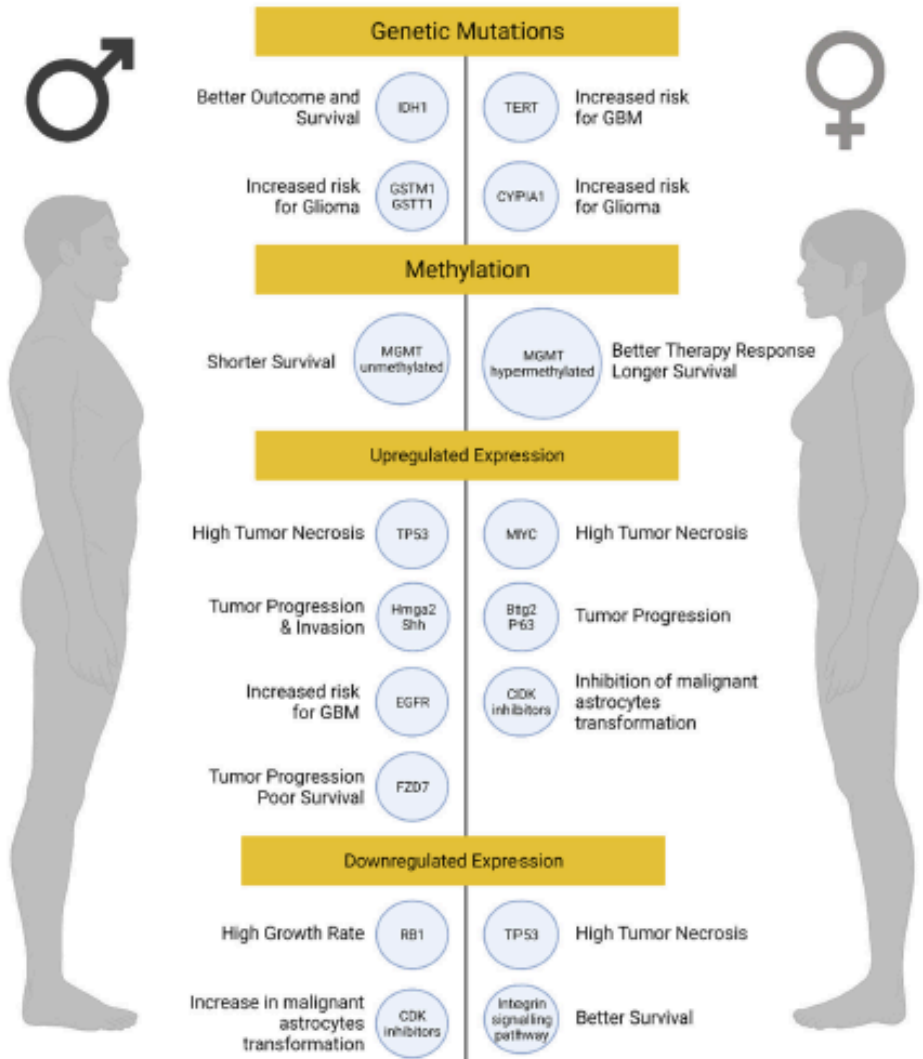
(b) Bilello et al.



(c) Li et al.

SEX DIFFERENCES IN GBM

MOLECULAR AND GENETIC MECHANISMS



Glioblastoma Multiforme

Table 1. Sex Differences in GBM.

	Men	Women
Clinical Features	Location: Left temporal lobe and periventricular frontal region [21]; higher incidence in frontal than temporal lobe [22] Subtype: Primary tumors [3,15]	Location: Right temporal lobe and periventricular frontal region [21]; higher incidence in temporal than frontal lobe [22] Subtype: Secondary tumors [3,15]
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Neurogenic Niche	Greater incidence proximal to the ventricle [22] Testosterone \rightarrow transcriptional effect on NSCs [42]	Estrogens mobilize NSCs \rightarrow neuroprotective effect [43]

Abbreviations: CDK, cyclin-dependent kinase; DM2, type 2 diabetes; GBM, glioblastoma multiforme; IL, interleukin; MGMT, O⁶-methylguanine-DNA methyltransferase; NSCs, neural stem cells; TNF, tumor necrosis factor.

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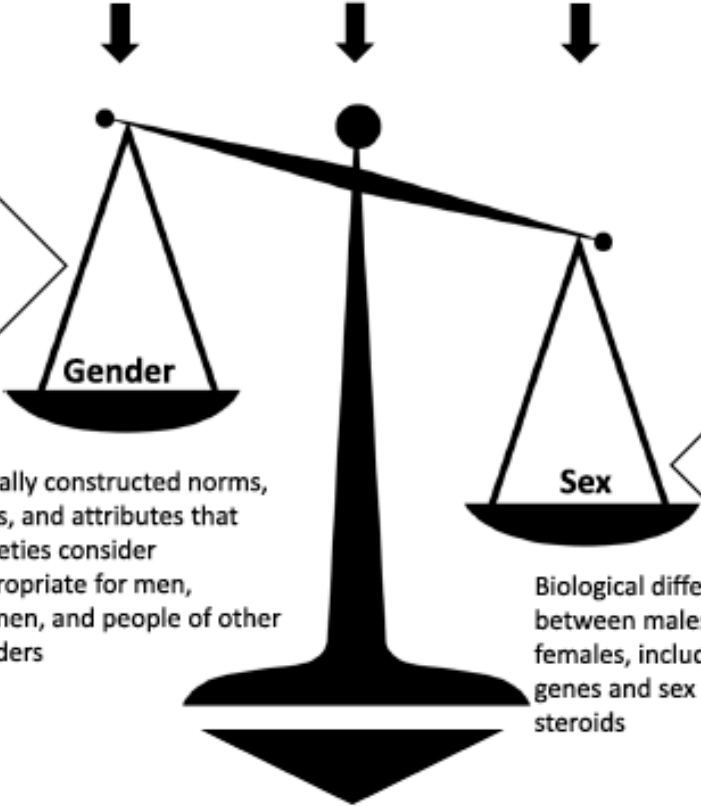
GBM is a **sexually dimorphic disease**, sex specific targetting

It is of great importance that the **treatment approach** for patients with GBM **include distinction between men and women** with the purpose of **creating sex-specific therapies** to improve the overall outcome for each patient

Immunoterapia in oncologia: una differente risposta di genere

Other biological and social stratifiers (e.g., age, race, or socioeconomic status)

- Gendered Effects:**
- Inclusion in biomedical and clinical studies
 - Engagement in behavioral risk factors
 - Access to care/ treatment
 - Health-seeking behavior
 - Acceptance of biologic therapies
 - Treatment received
 - Adherence to biologic therapies
 - Response to adverse reactions
 - Reporting of outcomes by patients/ respondents and health providers/ researchers

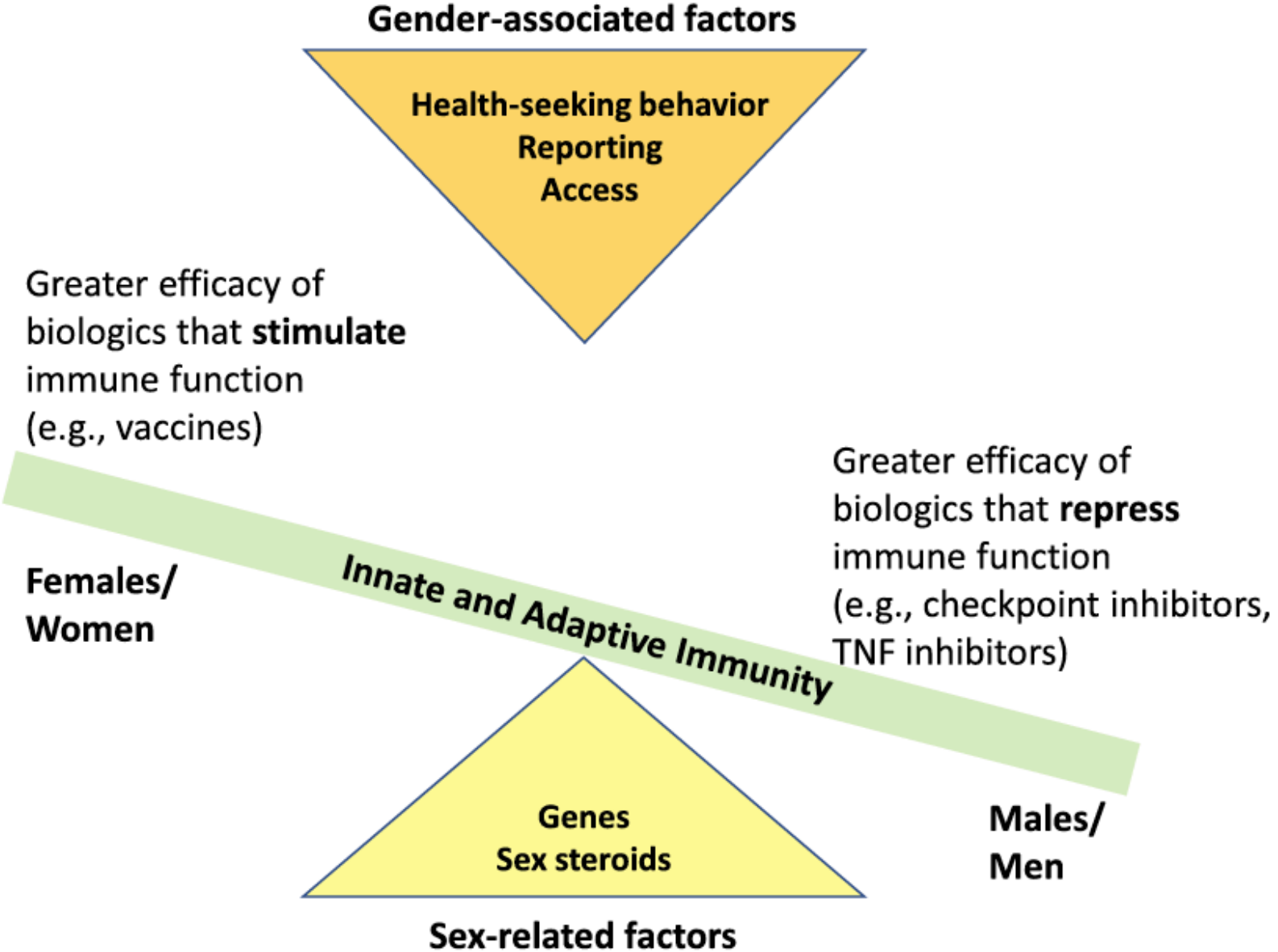


Socially constructed norms, roles, and attributes that societies consider appropriate for men, women, and people of other genders

Biological difference between males and females, including genes and sex steroids

- Biological Effects:**
- Disease presentation
 - Disease progression
 - Innate and adaptive immunity
 - Efficacy of biologics that stimulate or repress immune function
 - Adverse reactions
 - Treatment responses
 - Remission

Immunoterapia in oncologia: una differente risposta di genere



The role of gender in biologic therapies for autoimmune diseases, infectious diseases, and cancers continues to remain an under researched area. This may be partly due to gender being socio-culturally constructed and highly context-specific, making it difficult to observe and measure. Gender norms, roles, relations, and resulting inequities, however, can lead to health disparities between men and women [79]. Further, gender is intertwined with sex—to the point that it can be difficult to distinguish one from the other.

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RESEARCH Open Access

Health outcomes of sexual and gender minorities after cancer: a systematic review

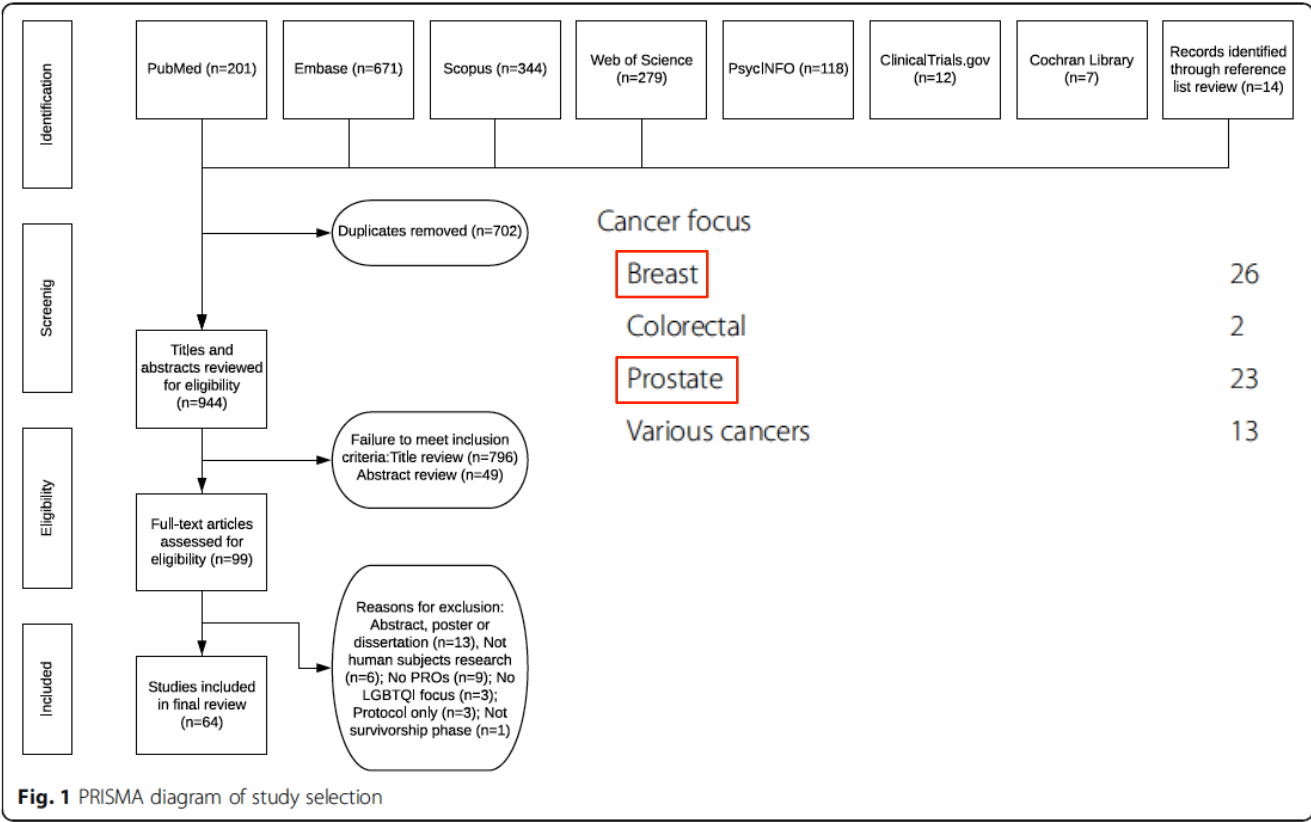
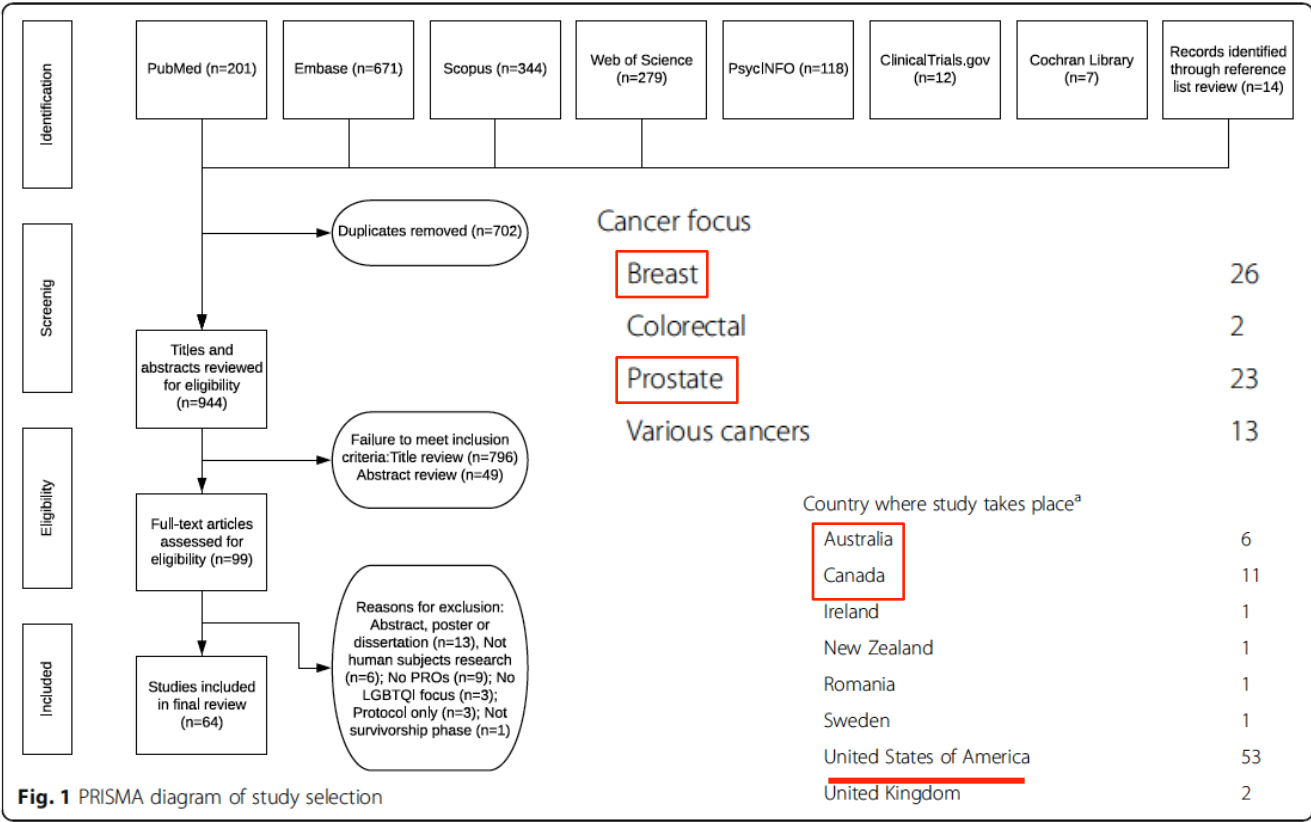


Fig. 1 PRISMA diagram of study selection

Health outcomes of sexual and gender minorities after cancer: a systematic review



Patient Reported Outcome in sex and gender minorities (SGM)

Women who have sex with women

The majority of studies found on SGM people with a history of cancer focused on those who had been diagnosed with breast cancer, mostly comparing lesbians to heterosexual counterparts. Half of the studies on breast cancer were quantitative and analyzed a variety of outcomes from the same two cohorts or subsets of those cohorts [10–17] and [12, 18–20]. Given that half of the analyses were conducted in the same two samples of women, extrapolating findings from these studies on SGM with a history of breast cancer should be done with caution. Nevertheless, studies from these two cohorts combined with additional qualitative studies and two mixed methods studies yielded important insights [21–24].

Participants studied were mostly White, educated, employed, and identified as women. Women who have sex with women (WSW, a term used to be inclusive of lesbian, bisexual, and queer women, and women who do not identify in these ways but partner with women) and heterosexual peers had similar quality of life (QOL) [11, 25] with a few exceptions. WSW with less financial means and those who experienced greater discrimination were more likely to have poorer physical health and increased anxiety and depression [11, 20]. WSW also reported greater stress [26] and less satisfaction with care [24]. In one study, discrimination was associated with anxiety, but resilience and social

support buffered this association [26]. Thematic analysis from another study also noted the importance of recognition of partners for psychological wellness, the need for SGM-specific support groups, and the negative impacts of breast cancer treatment on relationships including sexual intimacy [22].

WSW in these studies and their caregivers also showed greater dyadic effects on quality of life compared to heterosexual couples [19]. WSW reported more adaptive coping and improved health behaviors in response to a cancer diagnosis. After cancer diagnoses, WSW with BMI greater than 25 were more likely to lose weight compared with heterosexual counterparts, eliminating a statistically significant pre-diagnosis difference [10]. WSW reported less avoidant coping and anxious preoccupation than heterosexual peers [13, 27] and had similar rates of anxiety and depression [28]. For WSW, having a partner was associated with better sexual function, greater sexual desire, better mental and physical health, and less fear of recurrence compared to heterosexual counterparts [12–14]. WSW also reported that female partners were a singular and valuable source of support and were able to perceive partner distress, manage home and caretaking, and share a life beyond cancer [24]. In addition, WSW reported being less focused on body image, suffered fewer identity issues due to breast cancer and chose not to have reconstruction more often than heterosexual peers

[22, 29, 30]. However, WSW reported more challenges with access to care [31] and experienced more physical complications related to mastectomy and radiation than heterosexual peers [15]. Overall, WSW displayed more resilient behaviors than heterosexual peers, although one study indicated there were no between-group differences in resilience based on sexual practices (WSW vs. heterosexual women) [32].

Counter to other studies, one study demonstrated an association between degree of “outness” (defined in the study as the number of relationships in which people were open about their identity) and higher distress [26], which may suggest increased experiences of stigmatization when people were open about their identities. While WSW did not perceive they were treated differently based on sexual orientation, 39% of WSW in one study said they were assumed to be heterosexual by their health care team [25, 33]. Whether level of outness is linked to discriminatory experiences has not been explored

Patient Reported Outcome in sex and gender minorities (SGM)

Men who have sex with men

Studies on people with a history of prostate cancer primarily focused on genitourinary and relationship changes for men who have sex with men (MSM). Overall, MSM reported more genitourinary challenges than heterosexual peers, including worse urinary and bowel function, lack of ejaculation, changes to erectile function, climacturia, pain during anal sex, penile shortening, loss of libido, and less frequency of sexual activity, although one study demonstrated better sexual function in MSM diagnosed with prostate cancer than that reported in the literature [34–37]. MSM with HIV reported more significant detrimental effects of treatment than MSM without HIV [38]. One study showed that MSM had greater sexual dysfunction after bicalutamide monotherapy compared to heterosexual peers [39]. One novel study assessed the discussions between MSM and their clinicians regarding sexual and urinary effects of prostate cancer and the treatments offered and noted that while the most common problems reported were loss of ejaculate (93.8%), erectile difficulties (89.6%), change in sense of orgasm (87.0%), loss of sexual confidence (76.7%), changes to the penis (65.8%), increased pain in receptive anal sex (64.8%), urinary incontinence not related to sex (64.2%), and urinary incontinence during sex (49.2%), only loss of ejaculate, erectile difficulties, and nonsexual urinary problems were commonly discussed by clinicians during prostate cancer treatment. Satisfaction with specific rehabilitation options varied widely [40].

In qualitative studies, people with a history of prostate cancer reported fearing rejection and sexual abstinence after treatment: “Afterward I felt like I would never find another partner again and there was a depression” [41].

to see in the gay & bear community that I never used to think of, ever. It was just wham, bam, thank you, man. You were much more free. Now, all the spontaneity is gone, which is a shame” [42].

Several studies reported changes to participants’ sense of identity as gay men, resulting in changes to relationships and worse mental health [36, 42–44]. In one qualitative study, MSM participants describe erectile dysfunction as a persistent problem that is paramount to being “sexually inferior” or “leading to a sense of ‘disqualification’ of the sexual experience” [36]. Another study reported MSM participants feeling unattractive or even disabled [34]. Sexual changes were reported to adversely affect the mental health and identities of MSM. In Ussher et al.’s [36] study, a gay interviewee reported that erectile dysfunction was “the most horrific thing that I’ve ever been through psychologically.” Another respondent indicated decisional regret, preferring to “take my risks with the cancer” if he could go back in time. One MSM interviewee explained his loss of libido as “a profound change in identity” and another said he felt “outside the sexual community” after the change in his sexual function [36]. Two qualitative studies found that renegotiation of exclusivity was one strategy that couples used to cope with physical symptoms and reduced sexual interest of the survivor. Specifically, survivors in this study encouraged partners to obtain sexual satisfaction outside of their relationship [42, 45]. In contrast, some MSM reported more profound intimacy with their partner [36, 42] after cancer diagnosis and treatment.

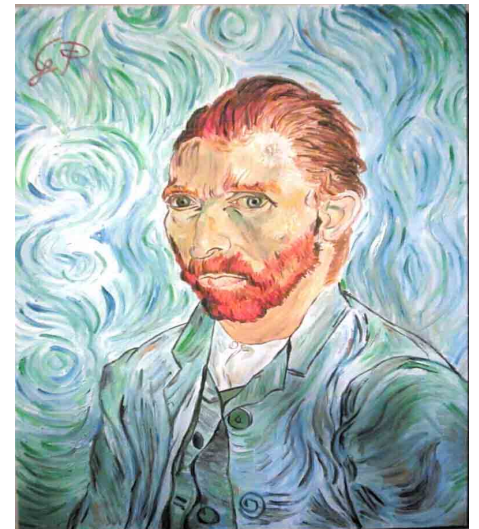
Several studies demonstrated benefits of MSM’s disclosure of sexual identity to their providers. In one study, MSM who were comfortable disclosing their sexual orientation had greater masculine self-esteem scores, which was linked

to greater mental health [46]. Another study demonstrated reduced anxiety and less illness intrusiveness for MSM who had shared their sexual orientation with providers [35].

Studies also highlighted lack of resources and support tailored for MSM [44, 47]. In Ussher et al.'s qualitative study [36], one MSM respondent summarized the issue like this: "Most health care professionals and others working in the prostate cancer field have no understanding of the different ways that prostate cancer can affect gay and bisexual men. Not just sexually, but in the nonsexual side of relationships. It's as though we're invisible." Other MSM described discomfort with a support group that was mostly attended by heterosexual people: "It's horrifying because there's this old man talking about sex with the wife. They don't want to hear about my problem. I didn't want to hear about theirs. It didn't work for me" [41]. In the same study, single MSM expressed the need to be extremely independent and not seek out support: "I was alone to recover... I didn't really want a lot of company. I mean, I'm walking around the house with a catheter tube sticking out of me, it wasn't really the time" [41]. Other participants noted that they did not want to bother their friends or chose to hire staff to help them rather than seek help from their friends [41].



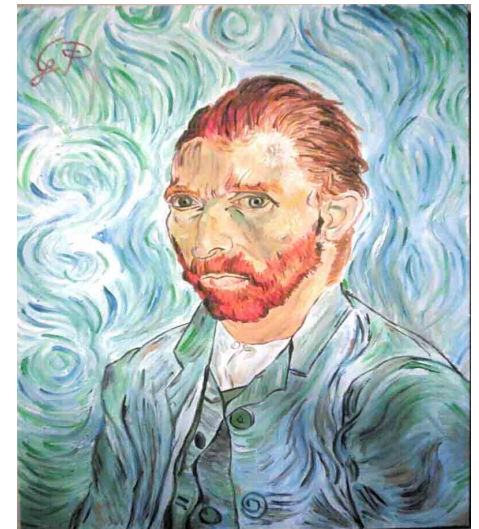
COMUNICARE
diagnosi, prognosi e terapia in
ONCOLOGIA





DISTRESS

- giovani donne affette da tumore mammari vs più anziane
- apatia e pensiero di morte vs aggressività e dipendenza
 - chemioterapia vs non-chemioterapia
 - informazione adeguata vs inadeguata
 - donne vs uomini



Aspetti emotivi: percezione (1)

La **PERCEZIONE** dell'intensità del dolore non è proporzionale al tipo o all'estensione del danno tissutale ma dipende dall'interazione tra fattori

Aspetti emotivi: percezione (1)

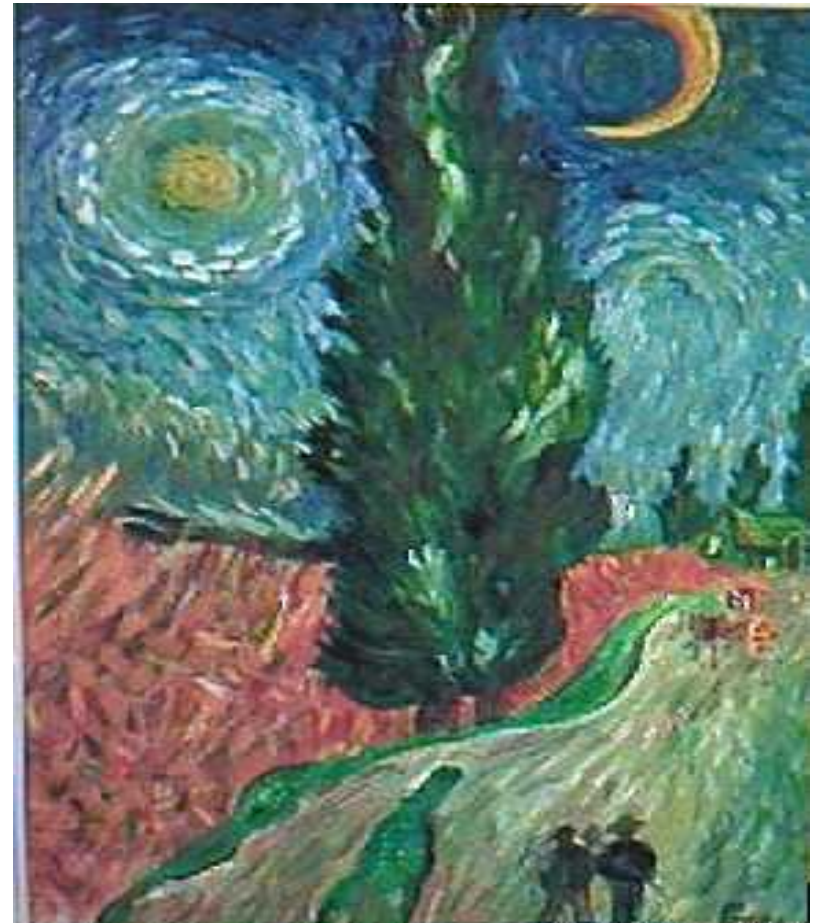
La **PERCEZIONE** dell'intensità del dolore non è proporzionale al tipo o all'estensione del danno tissutale ma dipende dall'interazione tra fattori



Aspetti emotivi: percezione (1)

La **PERCEZIONE** dell'intensità del dolore non è proporzionale al tipo o all'estensione del danno tissutale ma dipende dall'interazione tra fattori

BACKGROUND: Few studies have explored demographic variations in symptom patterns. **METHODS:** Symptom scores by the **Edmonton Symptom Assessment System (ESAS)** were collected for patients attending the Oncology Palliative Care Clinics at Princess Margaret Hospital from 2005 to 2007. Symptom intensity was compared between individuals aged ≤ 60 and >60 years and between males and females. Principal component analysis (PCA) was performed to determine inter-relationships of the nine ESAS symptoms and to compare symptom clusters within age and gender subgroups. **RESULTS:** From a total of **1,358 patients**, 49.8% were male and 50.2% were female. The median age was 64 (range 19 to 99); 39.6% were ≤ 60 and 60.4% were >60 . The most common primary cancer sites were gastrointestinal (27%), lung (15%), and breast (11%). Younger patients reported worse pain (4.9 vs. 4.5, $p = 0.02$) and better appetite (4.7 vs. 5.3, $p = 0.002$) than older patients. **Females reported poorer scores than males for nausea (2.6 vs. 2.2, $p = 0.02$).** Analyses of symptom clusters revealed that fatigue and drowsiness were included in the cluster of pain, nausea, and appetite in younger but not older patients. **In men, pain clustered together with depression and anxiety; for women, physical and psychological symptoms formed separate clusters.** **CONCLUSIONS:** In patients with advanced cancers, symptom patterns differ according to age and gender. Palliative interventions tailored for symptoms that are more prominent in specific patient subgroups may offer greater therapeutic benefit.



Aspetti emotivi: percezione (2)



BACKGROUND: This study investigated gender differences concerning work ability in working cancer survivors (CSs) and compared them to those of matched population-based controls.

METHODS: A mailed questionnaire was completed by **446 Norwegian CSs** (226 breast cancer, 166 testicular and 54 prostate cancer) **with good prognosis 2-6 years after primary treatment and 588 controls** (319 females and 269 males). **Overall current work ability (OCWA) was the primary outcome measure**, and ten indices of the physical, mental and social skill aspects of work ability (WA) were also studied.

RESULTS: **The mean OCWA score was higher amongst male CSs compared to females** ($p = 0.04$). **The mean OCWA score was similar in male CSs and controls** ($p = 0.17$), **whilst female CSs had significantly lower mean OCWA score than controls** ($p < 0.001$). Mental WA neuroticism was higher amongst women in both CSs ($p = 0.009$) and controls ($p = 0.001$), and the same pattern was found for physical WA concerning the symptom score ($p = 0.003$ and <0.001 , respectively). Sex had no significant association with OCWA in multivariate analyses. Significant associations were observed for physical and mental WA, but not for social skills.

CONCLUSIONS: OCWA was significantly better in male CSs than in female CSs. Male CSs did not differ from their controls, whilst female CSs scored significantly poorer than their controls. CSs with reduced overall work ability should be identified, and their mental and physical work ability should be examined independent of sex.

Compliance alla chemioterapia: uniformità fra generi

COATES et al 1983	GRIFFIT et al 1993
Nausea	Alopecia
Vomito	Nausea
Alopecia	Astenia
Preoccupazione per la CT	Preoccupazione per la CT
Preoccupazione per la durata	Depressione
Paura degli aghi	Preoccupazione per famiglia/partner
Dispnea	Sentirsi ansioso o teso
Stanchezza	Preoccupazione per lavoro/attività domestica
Insonnia	Vomito
Preoccupazione per famiglia/partner	Diuresi frequente
Preoccupazione per lavoro/attività domestica	Secchezza della cute
Sentirsi ansioso o teso	Insonnia
Depressione	Disgeusia

CARELLE et al 2000
Preoccupazione per famiglia/partner
Alopecia
Astenia
Preoccupazione per lavoro/attività domestica
Effetti sulla vita di relazione
Calo del desiderio sessuale
Vertigine
Diarrea
Aumento ponderale
Dispnea
Vomito
Depressione
Irritabilità

Complementary and Alternative Medicine Use among Norwegian Cancer Survivors: Gender-Specific Prevalence and Associations for Use

Hindawi Publishing Corporation
Evidence-Based Complementary and Alternative Medicine
Volume 2013, Article ID 318781, 10 pages
<http://dx.doi.org/10.1155/2013/318781>

Agnete E. Kristoffersen, Arne J. Norheim, and Vinjar M. Fønnebo

Department of Community Medicine, National Research Center in Complementary and Alternative Medicine (NAFKAM), University of Tromsø, N-9037 Tromsø, Norway

Correspondence should be addressed to Agnete E. Kristoffersen; agnete.kristoffersen@uit.no

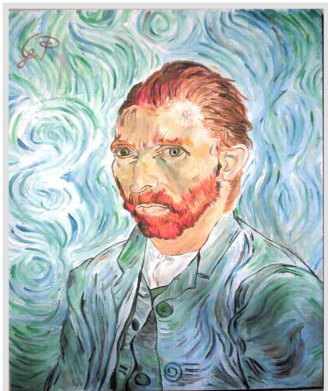
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The associations for CAM use are only occasionally differentiated by gender in populations where both male and female cancer survivors occur. The aim of this study is to describe the prevalence of CAM use in individuals with a previous cancer diagnosis and to investigate gender differences regard to factors associated with use. A total of 12982 men and women filled in a questionnaire with questions about life style and health issues. Eight hundred of those had a previous cancer diagnosis of whom 630 answered three questions concerning CAM use in the last 12 months. A total of 33.8% of all cancer survivors reported CAM use, 39.4% of the women and 27.9% of the men ($P < 0.01$). The relationship between the demographic variables and being a CAM user differed significantly between men and women with regard to age ($P = 0.03$), education ($P = 0.04$), and income ($P < 0.01$). Female CAM users were more likely to have a university degree than the nonusers, while male CAM users were more likely to have a lower income than the nonusers. According to this study, prevalence and factors associated with CAM use differ significantly between male and female survivors of cancer.

- Maggiore utilizzo nel sesso femminile (40% vs 28%)
- Alto livello di istruzione e patologia mammaria si associano all'utilizzo nelle donne
- Basso livello socio-economico si associa all'utilizzo nel maschio



- Adeguata rappresentazione dei due generi negli studi
- Studi specifici su gruppi minoritari (modello malattie rare)
- Qualità di vita e genere
- Analisi farmaco-economiche e genere
- Misure e politiche sanitarie genere-correlate



Invited Commentary | Oncology

Ongoing Gender Inequity in Leadership Positions of Academic Oncology Programs The Broken Pipeline

Laila A. Gharzal, MD, LL.M.; Reshma Jaggi, MD, DPhil

March 11, 2020

Reaching gender parity in medical school enrollment this year should have come as no surprise—women have represented more than 40% of the US medical student body since 1995. What should surprise us is the marked underrepresentation of women in more senior positions in medicine, even now, despite women's long-standing near-parity among medical school enrollees. The study by Chowdhary et al¹ adds to the increasing body of knowledge documenting this concerning fact with a comprehensive overview of gender distribution in the leadership of academic oncology programs in the United States, providing important benchmarking data for the field.

In an analysis of 6030 faculty from 265 Accreditation Council for Graduate Medical Education-accredited oncology programs, they have confirmed findings seen across medicine demonstrating that the gender distribution of leadership of academic oncology programs remains overwhelmingly unequal. Women faculty represented 35.9% of the total faculty body in medical oncology, radiation oncology, and surgical oncology programs, consistent with representation of women in the body of all actively practicing physicians as well as academia at large. However, representation of women in leadership positions was lower, at only 24.4% overall (medical oncology, 31.4%; radiation oncology, 17.4%; and surgical oncology, 11.1%). Additionally, representation of women in chair positions was even worse, with only 16.3% of departments chaired by a woman (medical oncology, 21.7%; radiation oncology, 11.7%; and surgical oncology, 3.8%).



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BMJ Open Trends in gender of authors of original research in oncology among major medical journals: a retrospective bibliometric study

Lee SF, et al. *BMJ Open* 2021;

Shing Fung Lee ,^{1,2} Daniel Redondo Sánchez,^{3,4,5} María-José Sánchez,^{3,4,5,6}

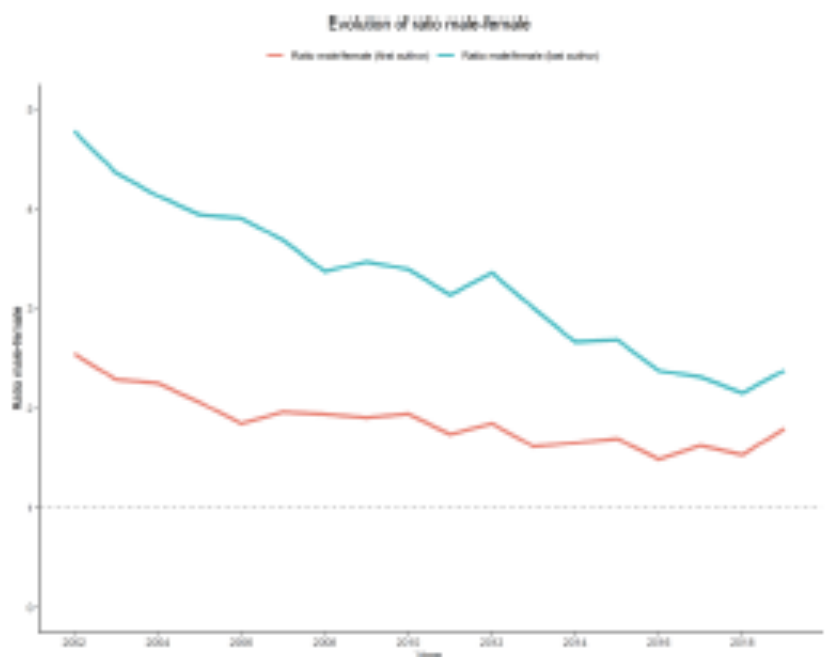
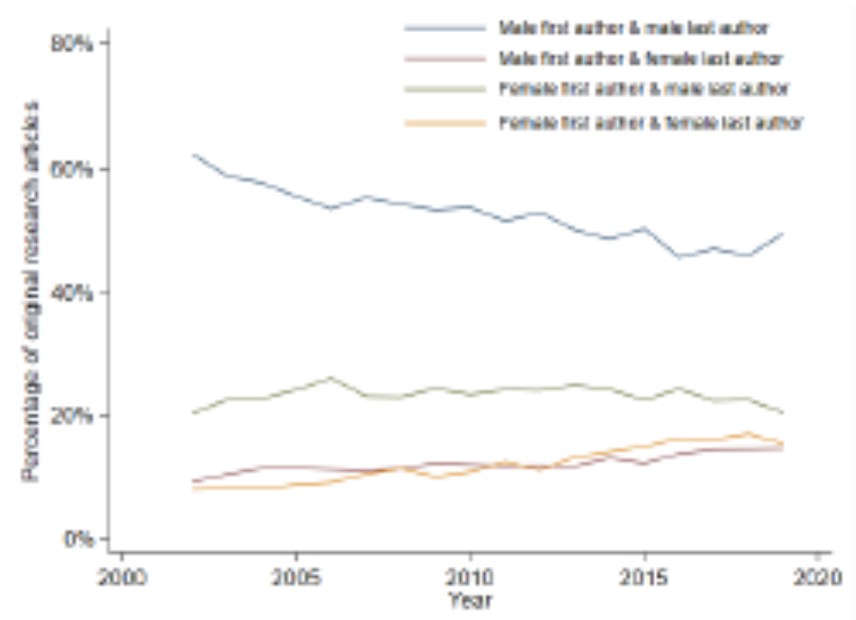


Figure 1 Gender ratios of first authors and last authors from 2002 to 2019, all journals.



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Original research

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Table 1 Author gender percentages by journal (2002–2019)

Journal abbreviations*	Articles (n)	Women as first authors, n (%)	Men as first authors, n (%)	Undetermined gender of first authors, n (%)	P value†	Women as last authors, n (%)	Men as last authors, n (%)	Undetermined gender of last authors, n (%)	P value†
Total	34 624	11 650 (33.6)	21 723 (62.7)	1 251 (3.6)	<0.001	7 908 (22.8)	25 683 (74.2)	1 033 (3.0)	<0.001
<i>The BMJ</i>	531	219 (41.2)	301 (56.7)	11 (2.1)		179 (33.7)	344 (64.8)	8 (1.5)	
<i>Cancer</i>	8971	3213 (35.8)	5392 (60.1)	366 (4.1)		2264 (25.2)	6409 (71.4)	298 (3.3)	
<i>Int J Radiat Oncol Biol Phys</i>	7870	2275 (28.9)	5270 (67.0)						
<i>JAMA</i>	705	275 (39.0)	414 (58.7)						
<i>J Clin Oncol</i>	7942	2680 (33.7)	5012 (63.1)						
<i>J Natl Cancer Inst</i>	2209	962 (43.6)	1154 (52.2)						
<i>Lancet</i>	521	129 (24.8)	373 (71.6)						
<i>Lancet Oncol</i>	1442	388 (26.9)	1013 (70.3)						
<i>NEJM</i>	903	236 (26.1)	646 (71.5)						
<i>Radiother Oncol</i>	3530	1273 (36.1)	2148 (60.9)						

*Journals are arranged in alphabetical order.
 †χ² p value.
 Int J Radiat Oncol Biol Phys, International Journal of Radiation Oncology; J Natl Cancer Inst, Journal of the National Cancer Institute; Lancet Oncol.

Table 2 Author gender percentages by year (2002–2019)

Years	Articles (n)	Women as first authors, n (%)	Men as first authors, n (%)	Undetermined gender of first authors, n (%)	P value*	Women as last authors, n (%)	Men as last authors, n (%)	Undetermined gender of last authors, n (%)	P value*
Total	34 624	11 650 (33.6)	21 723 (62.7)	1 251 (3.6)	<0.001	7 908 (22.1)	24 812 (71.7)	1 033 (3.0)	<0.001
2002	1862	496 (26.6)	1259 (67.6)	107 (5.7)		302 (16.2)	1453 (78.0)	107 (5.7)	
2003	1856	545 (29.1)	1231 (66.3)	80 (4.3)		330 (17.8)	1446 (77.9)	80 (4.3)	
2004	1873	541 (28.9)	1216 (64.9)	116 (6.2)		342 (18.3)	1415 (75.5)	116 (6.2)	
2005	2452	764 (31.2)	1555 (63.4)	133 (5.4)		469 (19.1)	1850 (75.4)	133 (5.4)	
2006	2069	690 (33.3)	1269 (61.3)	110 (5.3)		399 (19.3)	1560 (75.3)	110 (5.3)	
2007	2167	686 (31.7)	1358 (62.3)	123 (5.7)		439 (20.3)	1605 (74.1)	123 (5.7)	
2008	2282	732 (32.1)	1399 (61.3)	151 (6.6)		484 (21.2)	1647 (72.2)	151 (6.6)	
2009	2372	763 (32.2)	1455 (61.3)	154 (6.5)		494 (20.8)	1724 (72.7)	154 (6.5)	
2010	2434	774 (31.8)	1487 (61.1)	173 (7.1)		516 (21.2)	1745 (71.7)	173 (7.1)	
2011	2412	822 (34.1)	1423 (59.0)	167 (6.9)		544 (22.6)	1701 (70.5)	167 (6.9)	
2012	1970	647 (32.8)	1191 (60.5)	132 (6.7)		423 (21.5)	1415 (71.8)	132 (6.7)	
2013	1731	616 (35.6)	1001 (57.8)	114 (6.6)		403 (23.3)	1214 (70.1)	114 (6.6)	
2014	1759	632 (35.9)	1019 (57.9)	108 (6.1)		448 (25.5)	1203 (68.4)	108 (6.1)	
2015	1804	627 (34.8)	1049 (58.1)	128 (7.1)		455 (25.2)	1221 (67.7)	128 (7.1)	
2016	1733	668 (38.5)	979 (56.5)	86 (5.0)		494 (28.5)	1153 (66.5)	86 (5.0)	
2017	1770	631 (35.6)	1010 (57.1)	129 (7.3)		501 (28.3)	1140 (64.4)	129 (7.3)	
2018	1577	576 (36.5)	881 (55.9)	120 (7.6)		459 (29.1)	998 (63.3)	120 (7.6)	
2019†	501	165 (32.9)	295 (58.9)	41 (8.2)		138 (27.5)	322 (64.3)	41 (8.2)	

- Tumori **sezzo-specifici** (*prostata vs ginecologici*)

Oncologia e genere: conclusioni

- Tumori sesso-specifici (*prostata vs ginecologici*)
- **Incidenza** differente fra **sexo, genere e fattori esterni** (*es. tumore polmonare vs rapporto fra tumore del colon e screening*)

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Oncologia e genere: conclusioni

- Tumori sesso-specifici (*prostata vs ginecologici*)
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- Tumori di genere come modello di malattia rara o infrequente (*es. tumore della mammella maschile*)
- Tumori sessualmente dimorfici con necessità di sviluppo di terapie sesso-specifiche (*es. GMB*)
- Terapie con **differenti attività** (o *tossicità*) **per sesso** (*es. immunoterapia*)

Oncologia e genere: conclusioni

- Tumori sesso-specifici (*prostata vs ginecologici*)
- Incidenza differente fra sesso, genere e fattori esterni (*es. tumore polmonare vs rapporto fra tumore del colon e screening*)
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- **Orientamento sessuale e identità di genere** influiscono profondamente sugli **outcome dei *cancer-survivals*** con conseguente necessità di studi specifici e PDTA differenziati

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- Differenze di genere nella **leadership**



***Thank
you!***

