Table 1: Characteristics of included studies

First author, year	Study design	Country	Timeframe	Participants	Exposure/interaction	Outcomes	Funding /COI declared
Category 1: Studies investigating the prevalence of industry exposure among cancer physicians in general							
Behdarvand 2019 (13)	Cross-sectional (for subgroup data).	Australia	Oct 2011 – Sep 2015	- Attendees of sponsored NOAC-related events (n=635 events for haematologist-specific events subgroup).	- Industry-sponsored NOAC-related events for haematologists	- Attendance rates of events - Expenditure on events in Australian Dollars.	Funding: none COI: none
Chimonas 2010 (23)	Cross-sectional.	United States (Vermont)	Jul 2002 – Jun 2006	- Top 100 recipients of payments from pharmaceutical industry (n=3 oncologists and n=1 haematologist)	- Non-research industry payments	- Value of paymentsfrom pharmaceutical industry to subgroups of interest	Funding: public COI: none
DeCensi 2018 (18)	Cross-sectional (survey).	Italy	Mar – Apr 2017	- Italian medical oncologists (n=321) (response rate 13%)	- Broad interactions with industry	- Rates of conflicts of interest with the pharmaceutical industry - Perception of conflicts as an outstanding issue	Funding: public COI: none
Fabbri 2017 (14)	Cross-sectional.	Australia	Oct 2011 – Sep 2015	- All pharmaceutical industry-sponsored events during the exposure period, (n=22,987 events for oncologists and n=8,200 events for haematologists)	- Industry-sponsored events	-Direct assessment of event number by clinical area of focus and professional status of attendees.	Funding: public COI: public
Inoue 2019 (25)	Cross-sectional	United States	2015-2017	- All physicians who received industry payments between 2015 and 2017 (n=9369 in haematologists/oncologists subgroup)	- General and research industry payments - Ownership interests	- Frequency and value of payments from industry (general and research), and ownership interests.	Funding: public COI: pharma
Lee 2017 (19)	Cross-sectional (survey).	Australia	Mar – Jun 2015	- Medical oncologists and medical oncology trainees (n=157 [n=120 oncologists and n=37 trainees]) (response rate 24%)	- Industry-sponsored continuing professional development (CPD)	- Funding sources ofCPD - Frequency of attending industry-sponsored CPD - Knowledge of institutional policies around industry-sponsored CPD - Attitudes towards industry-sponsored CPD.	Funding: none COI: none
Marshall 2016 (22)	Cross-sectional.	United States	2014	- All physicians licensed to practice in the United States in 2014 (n=883,438 in total, n=15,494 in medical oncology subgroup).	- General and research industry payments	- Number of physician type receiving payments measured as percentage of total number of physician type. - Median values of payments measured in 2014 US dollars.	Funding: public COI: commercial (not pharma).
Ozaki 2019 (20)	Cross-sectional.	Japan	2016	- All Japan Society of Medical Oncology (JSMO) certified oncology specialists at 1 April 2016 (n=1080)	- Non-research industry payments	- Proportion and value of payments to oncology specialists.	Funding: indirect pharma COI: pharma

Pokorny 2020 (15)	Cross-sectional	Australia	Nov 2018 – Apr 2019	- Cancer physicians who received industry payments for registration fees, travel costs and fees for service during exposure period (n=236 medical oncologists and 189 haematologists)	- Non-research industry payments	- Proportion of physicians who received payments. - Value of payments in Australian dollars. - Comparison to other specialties.	Funding: public COI: none
Robertson 2009 (21)	Cross-sectional.	Australia	Jul – Dec 2007	- Attendees at events sponsored by industry, as disclosed by industry (n= 3377 events total, n=514 oncology events subgroup)	- Industry-sponsored events	- Proportion of events attended by oncologists - Average cost per head spent on hospitality (for oncology subgroup).	Funding: none COI: public
Tao 2017 (24)	Cross-sectional.	United States	2014	- Haematologist-oncologists who were active on Twitter at Aug 2016 (n=634)	- General and research industry payments	- Proportion of participants who received payments - Descriptive statistics of payment values	Funding: Not stated COI: professional (not pharma)
Category 2: Studies investigating financial ties among influential cancer physicians specifically (authors of clinical trials and guidelines)							
Cherla 2017 (36)	Cross-sectional.	United States	Jan 2014 – Jun 2016	- Authors of clinical literature during the study period from five pre-specified specialty groups 500 randomly chosen articles (100 articles (n=737 authors), for haematology subgroup)	- COI with industry, including general and research payments	- Discordance between self-disclosed COI and industry disclosures on Open Payments website during the same period - Median rate of payments to full disclosure and incomplete disclosure groups.	Funding: public COI: none
Jagsi 2009 (28)	Cross-sectional.	United States (assessed journals), Not defined (study authors)	2006	- Authors of oncology-related studies in eight high-impact medical journals (n=1534 oncology studies)	- COI with industry, including general and research payments	- Percent of studies with COI - Percent of funding sources for trials - Comparative outcomes of trials by presence of conflicts of interest.	Funding: not stated COI: none
Haque 2020 (35)	Cross-sectional	United States (location of editors)	2013-2018	- Oncology physician editors of 26 medical oncology journals (n=433)	- Non-research industry payments	- Frequency and extent of payments to US oncologist journal editors - Correlation of extent of payments with journal impact factor.	Funding: not stated COI: none
Harada 2021 (37)	Cross-sectional	Japan	2016-2017	- Authors of Japanese haematology clinical practice guidelines of two professional organisations from 2015 to 2018 (n=74)	- Non-research industry payments (limited to speaking, writing or consulting fees)	- Frequency and extent of payments made to clinicians by members of the Japanese Pharmaceutical Manufacturers Association	Funding: pharma COI: pharma
Lexchin 2019 (29)	Cross-sectional.	Canada	Oct 2016 – Feb 2019	- Clinicians making submissions to pan-Canadian Oncology Drug Review (pCODR) for	- FCOI with industry, including general and research payments	- Primary outcome: number of submissions withFCOI.	Funding: none

				funding of oncology drugs. (n=261 submissions, n=125 individual clinicians).		- Secondary outcome: frequency of clinicians agreeing or disagreeing with pCODR recommendation, and how this associates with their FCOI.	COI: mixed (public)
Liu 2017 (30)	Cross-sectional.	United States (assessed journals and editors)	2014	- Editors of 52 high-impact US medical journals (n=67 editors for oncology subgroup who are eligible for payments (i.e. cancer physicians), consisting of two analysed journals (J Clin Oncol (n=8) and JNCI (n=59)))	- General and research industry payments	-Level of general and research payments made to editors during study period (2014 US Dollars) (Open Payments database).	Funding: public COI: none
Mitchell 2016 (JAMA Oncol) (31)	Cross-sectional.	United States	2014	- Physician members of National Comprehensive Cancer Network (NCCN) guideline committees for four guidelines (lung, breast, prostate and colorectal cancer) at the end of 2014 (n=125 individual authors).	- General and research industry payments	-Proportion of authors with FCOI (Open Payments database) and the average amount of payments received by authors from industry (2014 US Dollars)	Funding: not stated COI: none
Moynihan 2020 (16)	Cross-sectional	United States	2017-2019	- Leaders (eg board members) of professional medical associations (exact number not stated, but n=approx. 37 oncologists)	- General and research industry payments	- Frequency and extent of industry payments among leaders	Funding: public COI: public
Riechelmann 2007 (32)	Cross-sectional.	United States (assessed journals), Not defined (study authors)	Jan 2005 to Jan 2006	- Authors of clinical trials and editorials of anticancer and supportive care drugs published in the Journal of Clinical Oncology (JCO) (n=332 studies (n=289 clinical trials and n=43 editorials). - First authors, senior authors and other authors analysed separately.	- COI with industry, including general and research payments	- Proportion of authors with self-declared COI and the nature of these COI. - Likelihood of COI based on geographic location and funding source of study.	Funding: not stated COI: none
Saito 2019 (33)	Cross-sectional.	Japan	Jan 2016 to Sep 2017	- Authors of six prominent oncology clinical practice guidelines in Japan (gastric, colorectal, hepatocellular, lung, pancreatic and breast cancers) (n=326).	- Non-research industry payments	- Proportion of authors with industry payments Payment values (disclosed by industry members of the Japan Pharmaceutical Manufacturers Association (JPMA)) in US dollars (converted from Japanese Yen).	Funding: indirect pharma COI: pharma
Wayant 2018 (34)	Cross-sectional.	United States	Jan 2016 – Aug 2017	- Oncologist authors of clinical trials of cancer drugs receiving FDA approval. (n=344)	- General, research and associated research industry payments	- Descriptive statistics of payments in US dollars	Funding: not stated COI: none
Category 3: Studies investigating associations between industry exposure and prescribing							
Bandari 2017	Cross-sectional.	United States	2012 (prescription	- Prescribers of degarelix and denosumab (n=7 for	- Non-specific payments received by prescribers from	- Total Medicare reimbursement from specified prescription	Funding: none

(Urol Pract) (27)			claims) and 2013 (period of Open Payments disclosures)	degarelix and n=1336 for denosumab in the oncologists subgroup).	industry (Open Payments database).	codes, as a surrogate measure of prescribing information.	COI: none
Bandari 2017 (Cancer) (38)	Cross-sectional.	United States	2013 (prescription claims) and 2014 (period of Open Payments disclosures)	- Prescribers of abiraterone and enzalutamide (n=1715 for abiraterone and n=680 for enzalutamide in the oncologists subgroup).	- Non-specific payments received by prescribers from industry (Open Payments database).	- Prescription counts of enzalutamide and abiraterone, as recorded in Medicare Part D public use file.	Funding: none COI: none
Eisenberg 2020 (40)	Cross-sectional	United States	2013-2016	- Prescribers of opioids at 85 US academic medical centres (n= approx. 2360 oncologists)	- Introduction of marketing restriction policies around gifts and meals, speaking or consulting, visits by sales representatives, and disclosure requirement	- Percentage difference in days prescribing opioids between first year of policy introduction and later years	Funding: not stated COI: not stated
Hadland 2018 (42)	Retrospective cohort. Research letter.	United States	2014 (year of payments), 2015 (year of opioid prescribing).	- All opioid prescribers in the US with Medicare Part D data (n=8,053 for haematology/oncology subgroup).	- Absolute number of non-research opioid-related payments received from industry per individual (≥1 payment compared to no payment) (Open Payments database)	- Mean number of opioid prescriptions for individuals in each group (i.e. no payments vs ≥1 payment).	Funding: mixed (public) COI: none
Hollander 2019 (44)	Cross-sectional	United States	2014-2016	- Physicians who prescribed opioids more than 11 times in 2015 and 2016 (n=17,323 in haematologists/oncologists subgroup)	- Quartile of value of opioid-related gifts (including meals, travel, accommodation) in a year ($0, >$0-<$20, ≥$20-<$100, and >$100)	- Odds of prescribing by quartile of gifts value, compared to non-recipients.	Funding: not stated COI: none
Mitchell 2019 (Oncologist) (41)	Cross-sectional.	United States	2013 – 2015 (period of time for payments received), 2015 (period of prescriptions).	- Prescribers of "orally administered cancer drugs for four cancers: prostate (abiraterone, enzalutamide), renal cell (axitinib, everolimus, pazopanib, sorafenib, sunitinib), lung (afatinib, erlotinib), and chronic myeloid leukaemia (CML; dasatinib, imatinib, nilotinib)." N=2766 total for consistent prescribers from 2013-2015 (n=1483 for prostate, n=674 for renal, n=966 for lung and n=367 for CML).	- Non-research industry payments (specific to manufacturers of the studied drugs).	- Relative prescribing of drugs made by companies making payments to the prescriber compared to other drugs for that cancer.	Funding: not stated COI: pharma (spousal)

Mitchell 2018 (JAMA Internal Med) (43)	Cross-sectional. Research letter.	United States	2013 (year of payments), 2014 (year of prescriptions).	- Prescribers of on-patent drugs used to treat metastatic renal cell cancer (mRCC) (sorafenib, sunitnib, pazopanib) and chronic myeloid leukaemia (CML) (dasatinib, imatinib, nilotinib), listed as provider type 'oncologist' (n=354 for mRCC group and n=2,225 for CML group).	- General and research payments from industry received during 2013 from specific drugs' manufacturers (dichotomous, yes or no) (Open Payments database).	- Prescriptions made in 2014 for drugs of interest (Medicare Part D).	Funding: mixed (public) COI: none
Perlis 2016 (26)	Cross-sectional.	United States	2013 (full year for prescriptions, Jul - Dec for industry payments)	- All prescribers in the US with Medicare Part D data in 2013 (n=10,985 for haematology/oncology subgroup).	- Non-research industry payments per individual during the period July-December 2013.	- Cost of prescriptions per beneficiary.	Funding: none COI: commercial (not pharma)
Zezza 2018 (39)	Retrospective cohort.	United States	2013-2015 (payments and prescriptions, depending on cohort group).	- Prescribers of opioids during exposure period. - Cohort 1: Payments in 2014 and 2015, but not 2013, with matched comparison prescribers who did not receive payments in any year (n=310 (received payments) and n=5,299 (no payments) for oncology subgroup). - Cohort 2: Payments in 2015, but not 2013 and 2014, with matched comparison prescribers who did not receive payments in any year (n=461 (received payments) and n=2,081 (no payments) for oncology subgroup).	- Any opioid-related payment from industry in any given year. Categorized as dichotomous (yes or no), as well as total amount in four subgroups (less than 33rd centile, 33rd-66th centile, 66th to 95th centile, greater than 95th centile) for Cohort 1 (Open Payments database)	- Opioid prescribing described in three ways: 1. Mean opioid expenditures (prescriptions filled) during study period, in 2015 US dollars (Medicare Part D). 2. Number of daily doses filled 3. Mean daily dose expenditure in 2015 US dollars.	Funding: public COI: none

Abbreviations: NOAC: novel oral anticoagulants; COI: conflicts of interest; FCOI: financial conflicts of interest; pharma: pharmaceutical industry.